

**FORM 20-F**

- OR**

- For the fiscal year ended December 31, 2022**

**OR**

- OR**

- Commission file number 001-15102**

**(Exact name of Registrant as specified in its charter)**

**(Translation of Registrant's name into English)**

**Avenida Dra. Ruth Cardoso, 8501, 30th floor (part),  
Pinheiros, São Paulo, SP, 05425-070, Brasil  
(Address of principal executive offices)**

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(Name, Telephone, E-mail and/or facsimile number and Address of Company Contact Person)

## Securities registered or to be registered pursuant to Section 12(b) of the Act

**Securities registered or to be registered pursuant to Section 12(g) of the Act**

None.

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act**

None.

**Number of outstanding shares of each of the issuer's classes of capital or common stock as of December 31, 2022:**

734,632,806 common shares, without par value

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☒ No ☐

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of “large accelerated filer,” “accelerated filer” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer

☒

Accelerated Filer

☐

Non-accelerated filer

☐

Emerging growth company

☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

☐

† The term “new or revised financial accounting standard” refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant’s executive officers during the relevant recovery period pursuant to §240.10D-1(b).

☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

☐

International Financial Reporting Standards as issued by the International Accounting Standards Board

☒

Other

☐

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17

☐

Item 18

☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

## TABLE OF CONTENTS

### PART I

<b>Item 1.</b>	<a href="#"><u>IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS</u></a>	3
<b>Item 2.</b>	<a href="#"><u>OFFER STATISTICS AND EXPECTED TIMETABLE</u></a>	3
<b>Item 3.</b>	<a href="#"><u>KEY INFORMATION</u></a>	4
A.	<a href="#"><u>[Reserved]</u></a>	4
B.	<a href="#"><u>Capitalization and Indebtedness</u></a>	4
C.	<a href="#"><u>Reasons for the Offer and Use of Proceeds</u></a>	4
D.	<a href="#"><u>Risk Factors</u></a>	4
<b>Item 4.</b>	<a href="#"><u>INFORMATION ON THE COMPANY</u></a>	20
A.	<a href="#"><u>History and Development of the Company</u></a>	20
B.	<a href="#"><u>Business Overview</u></a>	23
C.	<a href="#"><u>Organizational Structure</u></a>	57
D.	<a href="#"><u>Property, Plants and Equipment</u></a>	57
4A.	<a href="#"><u>Unresolved Staff Comments</u></a>	60
<b>Item 5.</b>	<a href="#"><u>OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u></a>	61
A.	<a href="#"><u>Operating Results</u></a>	61
B.	<a href="#"><u>Liquidity and Capital Resources</u></a>	73
C.	<a href="#"><u>Research and Development, Patents and Licenses, etc.</u></a>	77
D.	<a href="#"><u>Trend Information</u></a>	80
E.	<a href="#"><u>Critical Accounting Estimates</u></a>	84
<b>Item 6.</b>	<a href="#"><u>DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u></a>	85
A.	<a href="#"><u>Directors and Senior Management</u></a>	85
B.	<a href="#"><u>Compensation</u></a>	90
C.	<a href="#"><u>Board Practices</u></a>	93
D.	<a href="#"><u>Employees</u></a>	97
E.	<a href="#"><u>Share Ownership</u></a>	97
<b>Item 7.</b>	<a href="#"><u>MAJOR SHAREHOLDERS AND RELATED-PARTY TRANSACTIONS</u></a>	97
A.	<a href="#"><u>Major Shareholders</u></a>	97
B.	<a href="#"><u>Related Party Transactions</u></a>	98
C.	<a href="#"><u>Interests of Experts and Counsel</u></a>	100
<b>Item 8.</b>	<a href="#"><u>FINANCIAL INFORMATION</u></a>	100
A.	<a href="#"><u>Consolidated Statements and Other Financial Information</u></a>	100
B.	<a href="#"><u>Significant Changes</u></a>	105
<b>Item 9.</b>	<a href="#"><u>THE OFFER AND LISTING</u></a>	105
A.	<a href="#"><u>Offer and Listing Details</u></a>	105
B.	<a href="#"><u>Plan of Distribution</u></a>	105
C.	<a href="#"><u>Markets</u></a>	105
D.	<a href="#"><u>Selling Shareholders</u></a>	108
E.	<a href="#"><u>Dilution</u></a>	108
F.	<a href="#"><u>Expenses of the Issue</u></a>	108
<b>Item 10.</b>	<a href="#"><u>ADDITIONAL INFORMATION</u></a>	108
A.	<a href="#"><u>Share Capital</u></a>	108
B.	<a href="#"><u>Memorandum and Articles of Association</u></a>	108
C.	<a href="#"><u>Material Contracts</u></a>	123
D.	<a href="#"><u>Exchange Controls</u></a>	123

E.	<a href="#">Taxation</a>	124
F.	<a href="#">Dividends and Paying Agents</a>	132
G.	<a href="#">Statements by Experts</a>	132
H.	<a href="#">Documents on Display</a>	132
I.	<a href="#">Subsidiary Information</a>	132
Item 11.	<a href="#">QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</a>	133
Item 12.	<a href="#">DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</a>	137
A.	<a href="#">Debt Securities</a>	137
B.	<a href="#">Warrants and Rights</a>	137
C.	<a href="#">Other Securities</a>	137
D.	<a href="#">American Depositary Shares</a>	137
<b>PART II</b>		
Item 13.	<a href="#">DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</a>	138
Item 14.	<a href="#">MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS</a>	138
Item 15.	<a href="#">CONTROLS AND PROCEDURES</a>	139
Item 16.	<a href="#">Reserved</a>	140
16A.	<a href="#">AUDIT COMMITTEE FINANCIAL EXPERT</a>	140
16B.	<a href="#">CODE OF ETHICS</a>	140
16C.	<a href="#">PRINCIPAL ACCOUNTANT FEES AND SERVICES</a>	140
16D.	<a href="#">EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES</a>	141
16E.	<a href="#">PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</a>	141
16F.	<a href="#">CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANT</a>	142
16G.	<a href="#">CORPORATE GOVERNANCE</a>	142
16H.	<a href="#">MINE SAFETY DISCLOSURE</a>	144
16I.	<a href="#">DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS</a>	144
<b>PART III</b>		
Item 17.	<a href="#">FINANCIAL STATEMENTS</a>	145
Item 18.	<a href="#">FINANCIAL STATEMENTS</a>	145
Item 19.	<a href="#">EXHIBITS</a>	145

## INTRODUCTION

In this annual report, “Embraer,” “we,” “us,” “our” or the “Company” refer to Embraer S.A. and its consolidated subsidiaries. All references herein to the “*real*,” “*reais*” or “R\$” are to the Brazilian *real*, the official currency of Brazil. All references to “US\$,” “dollars” or “U.S. dollars” are to United States dollars. All references to the “Brazilian government” are to the federal government of Brazil.

### Presentation of Financial and Other Data

#### *Financial Data*

Our audited consolidated financial statements as of December 31, 2022 and 2021 and for the three years ended December 31, 2022, or 2022 audited consolidated financial statements, are included in this annual report.

Our consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB.

After analyzing our operations and businesses on a standalone basis with regard to the applicability of International Accounting Standards, or IAS 21 – The Effects of Changes in Foreign Exchange Rates, particularly in relation to the factors involved in determining our functional currency, management concluded that our functional currency is the U.S. dollar. This conclusion was based on an analysis of the following factors, as set forth in IAS 21: (i) the currency that most influences sale prices of goods and services; (ii) the currency of the country whose competitive forces and regulations most determine the sale prices of our goods and services; (iii) the currency that most influences the costs of providing goods and services; and (iv) the currency in which the funds for financial operations are largely obtained. Our audited consolidated financial statements included elsewhere in this annual report are presented in U.S. dollars, which is our presentation currency.

For certain purposes, including providing reports to our Brazilian shareholders, filing financial statements with the *Comissão de Valores Mobiliários* (Brazilian securities commission), or CVM, and determining dividend payments and other distributions and tax liabilities in Brazil, we have prepared, and will continue to be required to prepare, financial statements in accordance with Law No. 6,404 of December 15, 1976, as amended, or the Brazilian Corporate Law.

#### *Other Data and Backlog*

In this annual report:

- some of the financial data reflects the effect of rounding;
- aircraft ranges are indicated in nautical miles;
- one nautical mile is equal to approximately 1.15 ordinary or “statute” miles, or approximately 1.85 kilometers;
- aircraft speeds are indicated in nautical miles per hour, or knots, or in Mach, which is a measure of the speed of sound;
- “ANAC” means *Agência Nacional de Aviação Civil*, the Brazilian aviation regulatory authority;
- “EASA” means European Union Aviation Safety Agency;
- “FAA” means the Federal Aviation Administration;
- the term “eVTOL” means electric vertical takeoff and landing aircraft;

- the term “regional jet” refers to commercial jet aircraft in the 35-120 seat-segment;
- the term “commercial aircraft” as it applies to Embraer, refers to our aircraft in the up to 150 seat-segment, which includes our regional jets;
- the term “EMBRAER 170/190 jet family” refers to aircraft models EMBRAER 170 (E170), EMBRAER 175 (E175), EMBRAER 190 (E190) and EMBRAER 195 (E195);
- the term “E-Jets E2 family of jets” refers to aircraft models E175-E2, E190-E2 and E195-E2;
- the terms “entry-level jet” and “light jet” refer to executive jets that usually carry from four to eight passengers and up to nine passengers, respectively, that are designed for short take-off distances;
- the term “medium cabin jet” refers to executive jets that usually carry up to 12 passengers and can cover distances ranging from 1,700 to 3,900 nautical miles;
- the term “large jet” refers to executive jets that usually carry up to 19 passengers and can cover distances greater than 4,000 nautical miles;
- the term “ultra-large jet” refers to executive jets that usually have longer ranges and over-sized cabin spaces and can carry up to 19 passengers;
- the term “executive jets,” as it applies to us, refers to our aircraft sold to companies, including fractional ownership companies, charter companies and air-taxi companies and high-net-worth individuals;
- the term “Boeing Transaction” refers to the Master Transaction Agreement (the “MTA” or “Master Transaction Agreement”) entered into by us on January 24, 2019, collectively with certain other transaction documents with Boeing and certain subsidiaries of Embraer or Boeing, which were wrongfully terminated by Boeing, pursuant to which a subsidiary of Boeing would acquire a controlling stake in Embraer’s Commercial Aviation segment and Embraer, or a subsidiary of Embraer, and Boeing, or a subsidiary of Boeing, would form a joint venture for the promotion and development of new markets and applications for the C-390 Millennium multi-mission transport aircraft; and
- the term “Business Combination” refers to the business combination agreement entered into by Eve UAM, LLC and Zanite Acquisition Corp. on December 21, 2021, which was completed on May 9, 2022.

We calculate our backlog as the sum of the contract values of all firm orders (i) for any aircraft that have not yet been delivered, (ii) for services and support contracts for all business segments, including repair services and spare parts contracts for a period of more than one year, and (iii) for services and technologies contracted and not yet performed in our Defense & Security segment. A firm order is a firm commitment from a customer, represented by a signed contract. Options to acquire aircraft are not considered as part of our backlog.

#### **Special Note Regarding Forward-Looking Statements**

This annual report includes forward-looking statements, within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, principally in Items 3 through 5 and Item 11 of this annual report. We have based these forward-looking statements largely on our current expectations and projections about future events and industry and financial trends affecting our business. These forward-looking statements are subject to risks, uncertainties and assumptions, including, among other things:

- general economic, political and business conditions in Brazil and in our other markets;

- political, economic or financial instability, as well as geopolitical instability abroad, including in relation to the United States or the Russian invasion of Ukraine and related developments and effects;
- changes in competitive conditions and in the general level of demand for our products;
- management’s expectations and estimates concerning our future financial performance, financing plans and programs, and the effects of competition;
- the effects of customers canceling, modifying or rescheduling orders;
- the effect on our revenues of changing priorities or reductions in the Brazilian government or international government defense budgets;
- our level of indebtedness;
- our capital expenditure plans;
- inflation and fluctuations in exchange rates;
- the impact of volatile fuel prices and the airline industry’s response;
- our ability to develop and deliver our products on a timely basis;
- availability of sales financing for our existing and potential customers;
- existing and future governmental regulations, including economic policies of the Brazilian government;
- our relationship with our workforce;
- the outbreak of communicable diseases in Brazil and other countries; and
- other risk factors, including those set forth under “Item 3. Key Information—D. Risk Factors.”

The words “believe,” “may,” “will,” “forecast,” “estimate,” “plan,” “continue,” “anticipate,” “intend,” “expect” and similar words herein are intended to identify forward-looking statements. We undertake no obligation to update publicly or revise any forward-looking statements because of new information, future events or other factors. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this annual report might not occur. Our actual results and performance could differ substantially from those anticipated in our forward-looking statements. As a result of various factors, including those risks described in “Item 3. Key Information—D. Risk Factors,” undue reliance should not be placed on these forward-looking statements.

**Part I**

**Item 1.        IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**  
Not applicable.

**Item 2.        OFFER STATISTICS AND EXPECTED TIMETABLE**  
Not applicable.

**Item 3. KEY INFORMATION**

- A. [Reserved]**
- B. Capitalization and Indebtedness**

Not applicable.
- C. Reasons for the Offer and Use of Proceeds**

Not applicable.
- D. Risk Factors**

**Business Operations and Contracts**

*Our aircraft sales are subject to cancellation and rescheduled delivery provisions that may reduce our future income, profitability, backlog and cash flow.*

A portion of our aircraft firm orders is subject to significant contingencies before delivery. Prior to delivery, some of our purchase contracts may be terminated, or all or a portion of a particular firm order may be canceled, for different reasons, including (i) extended delays in delivering aircraft or failure to obtain certification of the aircraft or otherwise meet performance milestones and other requirements, (ii) the failure of a customer to honor its aircraft purchases or (iii) production rate shortfalls.

Our customers may also reschedule deliveries or cancel orders, particularly during an economic downturn. In 2022, we had income of US\$17.8 million related to contractual fines paid by customers due to contract cancellations compared to contractual fine income of US\$7.1 million in 2021 and US\$15.1 million in 2020. Material cancellations, delays or decreases in the number of aircraft delivered in any year would reduce our sales and revenue, and, consequently, our profitability, cash flow and backlog.

*We may be required to refund cash contributions in connection with the production or development of our aircraft if certain milestones for our aircraft are not reached.*

We have arrangements with our risk-sharing partners, pursuant to which they have contributed to us, in cash over the years, a total of US\$1,369.5 million since the beginning of the development of the EMBRAER 170/190, Phenom 100/300, Legacy 450/500 jet families and the E2 jet family through December 31, 2022. Cash contributions would have to be refunded by us to the risk-sharing partners to the extent that we had failed to fulfill certain agreed-upon milestones. In 2022, we met all the required milestones, and as a result, the full amount of the cash contributions was nonrefundable.

Although, currently, no cash contributions from our risk-sharing partners are refundable, we may enter into similar arrangements, and if we are unable to meet certain milestones agreed upon with our risk-sharing partners, we may be required to refund cash contributions for which we have not established provisions.

*We work with a limited number of key suppliers.*

We do not manufacture all of the parts and components used in the production of our aircraft. As of December 31, 2022, 74.9% of our consolidated production costs in our Commercial Aviation, Executive Aviation and Defense & Security segments consisted of materials and equipment purchased from our risk-sharing partners and other major suppliers. Risk-sharing arrangements are those in which suppliers are responsible for the design, development and manufacture of major components or systems of our aircraft. In some cases, the aircraft are designed specifically to accommodate a particular component, which cannot be substituted by another manufacturer without significant investments. In addition, there exist only a limited number of suppliers of certain key components of aircraft globally. We work closely with our main suppliers in order to mitigate any potential supply chain risk, but we cannot assure you that these risks, which could negatively and adversely affect our operating and financial performance, will not materialize.



In addition, as a result of post-pandemic economic recovery which resulted in a global increase in demand, our suppliers may not have the ability to fully meet such increasing demands of their customers, including us, especially because of the reductions in workforce and other measures taken in response to the pandemic. Therefore, we cannot assure you that we will not be adversely affected by this change in the global supply-chain dynamics, which is still affecting the industry world-widely.

***Any accidents or catastrophic events involving our aircraft could adversely affect us.***

We believe that our reputation and the safety record of our aircraft are important selling points for our products. However, the safe operation of our aircraft depends to a significant degree on a number of factors largely outside our control, including our customers’ proper maintenance and repair of our aircraft and pilot skill. The occurrence of one or more accidents or catastrophic events involving one of our aircraft could adversely affect our reputation and future sales, as well as the market price of our common shares and the ADSs.

***Any decrease in Brazilian government-sponsored customer financing or increases in government-sponsored financing that benefits our competitors, may decrease the competitiveness of our aircraft.***

Traditionally, aircraft original equipment manufacturers, or OEMs, from time to time, have received support from governments through governmental export credit agencies, or ECAs, in order to offer competitive financing conditions to their customers, especially in periods of credit tightening from the traditional lending market.

Official government support may constitute unofficial subsidies causing market distortions, which may rise to disputes among governments at the World Trade Organization, or WTO. Since 2007, an agreement known as the Aircraft Sector Understanding, or ASU, developed by the Organization for Economic Co-operation and Development, or OECD, has provided guidelines for the predictable, consistent and transparent use of government-supported export financing for the sale or lease of civil aircraft, in order to establish a “level-playing field.” ECAs from signatory countries are required to offer terms and conditions no more favorable than those contained in the ASU’s base financial agreement when financing sales of aircraft that compete with those produced by the OEMs of their respective countries. The effect of the agreement is to encourage aircraft purchasers to focus on the price and quality of aircraft products offered by OEMs rather than on the financial packages offered by their respective governments.

The Brazilian ECA, Brazilian Social and Economic Development Bank (*Banco Nacional de Desenvolvimento Econômico e Social*), or BNDES, together with the Brazilian National Treasury Export Guarantee Fund, offer financing and export credit insurance to our customers under terms and conditions required by the ASU. Any reduction or restriction to the Brazilian export financing program, and any increase in our customers’ financing costs for participation in this program, above those provided in the ASU’s base financial agreement, may cause the cost-competitiveness of our aircraft to decline. Other external factors may also impact our competitiveness in the market, including, but not limited to, aircraft OEMs from countries which are not signatories to the ASU agreement offering attractive financing packages, or any new government subsidies supporting any of our major competitors.

From 2005, when we first delivered EMBRAER 170/190 jet family, through 2022, 29% of our Commercial Aviation deliveries was subject to official export credits. In 2022 and 2021, 26% and 38%, respectively, of our Commercial Aviation deliveries were supported by the Brazilian export financing program. We cannot assure you that the Brazilian government, for policy reasons or otherwise, will not reduce or discontinue this type of funding for the financing of our aircraft or that other sources of funding will be available to our customers. The loss or significant reduction of funds available to our customers, without an adequate substitute, could lead to a reduction in sales of our aircraft or to an increase of eventual aircraft financing arrangements.

**Industry and Competition**

*A downturn in our key markets may reduce our sales and revenue, and, consequently, our profitability.*

A substantial portion of our results are comprised of sales of aircraft, which have historically been cyclical due to a variety of factors that are both external and internal to the air travel industry, including general economic conditions, and the outbreak of communicable diseases, which we cannot fully foresee as of the date of this Annual Report.

Economic downturns in our industry, such as the one caused by the COVID-19 pandemic, may reduce air travel demand and corporate and personal spending, and investments by governments in new assets, which may negatively impact our Commercial Aviation, Executive Aviation, Defense & Security and Services & Support segments. These downturns have led in the past and may also lead in the future, to a decrease in the volume of financing available to our customers for aircraft purchases, particularly in the aforementioned segments. A continued downturn in general economic conditions could result in further reductions in air travel and decreased orders for our aircraft. Our customers could also continue to defer or to cancel their purchases of our aircraft. We cannot predict the magnitude or duration of the impact that the events could not only have on the air transport industry as a whole, but also on our business in particular.

*We depend on key customers.*

In our Commercial Aviation segment, as of December 31, 2022, 88.9% of our firm orders in backlog for the current EMBRAER 170/190 jet family were from Republic Airlines and Horizon Air / Alaska. Our E-Jets E2 family backlog mainly comprises orders from the companies Azul, AerCap, AirCastle, AirPeace, Porter, and Azorra, which represent 83.1% of our E-Jets E2 family orders. We believe we will continue to depend on a select number of key customers, and the loss of or difficulty in maintaining the relationship with any one of them would significantly reduce our sales and market share.

In the Executive Aviation segment, we have been increasingly relying on individual orders as the share of fleet orders in the backlog has been diminishing. Despite the fact that we occasionally sell Praetors and Phenoms to large fractional operators, we believe that fleet renewal demand will occur at a constant and moderate rate over a longer period as the current operator’s fleet ages.

In our Defense & Security segment, the Brazilian government is our largest customer of defense products. Revenue from sales to the Brazilian government accounted for 42.5% of the segment revenue for the year ended December 31, 2022. We cannot assure you that the Brazilian government will continue to acquire defense products and services from us in the future at the same rate or at the same level. For instance, in November 2021, the Brazilian Air Force decided to unilaterally reduce the total value of their KC-390 Millennium aircraft agreement with us, which caused a reduction in our backlog and a decrease in revenue. In February 2022, we and the Brazilian Air Force engaged in negotiations, which resulted, among other matters, in the reduction of the total number of KC-390 Millennium aircraft to be delivered under the terms of the agreement from 28 to 22. In October 2022, we and the Brazilian government engaged in further negotiations which resulted, among other matters, in the reduction of the total number of KC-390 Millennium aircraft to be delivered under the terms of the agreements from 22 to 19, with no possibility of unilateral reductions.

We cannot assure you that the Brazilian government will not take similar actions in the future. For further information, see Note 1.1.1 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

*We may face a number of challenges resulting from the development of new products and the possible pursuit of strategic opportunities and transactions.*

We cannot assure you that our products will be accepted by our customers and the market, and if any of our new products do not meet customer expectations or market demand, our business would be adversely affected. In addition, as we continue to develop new products, we may need to reallocate existing resources and coordinate with new suppliers and risk-sharing partners. Finally, cost overruns and delays in the development and delivery of new products would adversely affect us.

We may pursue strategic opportunities and transactions, just as we have in the past, including joint ventures, partnerships, acquisitions or divestitures. We may face a number of challenges, including difficulties in identifying appropriate partners, assimilating with or adjusting to our partners’ or targets’ operations and personnel, maintaining internal standards and controls, as well as the diversion of our management’s focus from our ongoing business.

For instance, in 2021, we, through our subsidiary Eve UAM, LLC, or EVE, entered into a business combination agreement with Zanite Acquisition Corp., or Zanite, to further develop EVE’s urban air mobility (“UAM”) solution, through design and production of eVTOL, service and support, fleet operations and urban air traffic management. The business combination was completed in May 2022. The expected results from this business combination are subject to risks, such as the establishment of the UAM market, the adoption by consumers of an entirely new form of mobility offered by eVTOL aircraft and the UAM market, possible underperformance of the UAM solutions developed by Eve Holding, including the eVTOL aircraft, among others. We cannot assure you that our long-term estimates with respect to the prospects, operations, growth potential, integration and other factors related to this business combination, as well as on the process of integration of the acquired assets, will materialize.

We cannot assure you that we will be able to meet challenges related to strategic opportunities and transactions. Accordingly, cannot assure you that our business or the trading price of our common shares or ADSs. will not face disruptions as a result of future opportunities or transactions or the markets’ perception thereof.

***We face significant international competition, which may adversely affect us.***

The worldwide commercial aircraft manufacturing industry is highly competitive. Along with other large international companies, we are one of the world’s leading manufacturers of commercial aircraft. Although we have attained a significant market share for our commercial aircraft products, we cannot assure you that we will be able to maintain it. In order to remain competitive in the commercial aircraft manufacturing market in the long-term, we must continue to make technological, efficiency and performance enhancements to our aircraft.

As a relatively new entrant to the executive jets market, we face significant competition from companies with longer operating histories and established reputations in the industry. Some of our competitors in the executive jets market have a longer track record and a more established customer base. In addition, the level of pre-owned aircraft for sale in the market may continue to pressure the demand for new aircraft. This may impact the value of the pre-owned aircraft in our portfolio, despite a recent decrease in the level of pre-owned aircraft for sale in the market. We cannot assure you that we will increase our market share in the executive aviation market, that we will not experience a reduction in our current market share of this business segment, especially taking into account competitors’ growth and investments and possible limitations in our supply chain capacity.

Protectionist measures adopted by the governments of specific countries could adversely affect us. Our production is spread globally, with parts manufactured in one or more countries and assembled in another, and as a result any limitations to trade, including quotas, tariffs, subsidies or local content requirements, may increase our production costs and affect our capacity to compete in equal terms in the market for our products.

In addition, geopolitical factors also impact the defense and security industry in general, as sovereign countries have discretion on how, when and how much to invest in military equipment. Accordingly, not always the best technical and commercial solutions are chosen by these sovereign countries, due to the many geopolitical factors involved.

Moreover, the defense and security industry is subject to trade compliance requirements, as well as export control rules and regulations. Our defense and security products are mainly affected by North American and European rules and regulations on trade compliance and export controls. Accordingly, if any of these governments, or the governments of the countries where we have operations, decide to impose restrictions on trade and export activities, we may be unable to sell or deliver aircraft to some countries for a period of time, which may adversely affect our results of operation and financial condition.

**Regulatory, Compliance and Legal**

***Legal proceedings pertaining to the now terminated strategic partnership with Boeing, including arbitration proceedings related to Boeing’s termination of and failure to close the MTA and/or the Contribution Agreement, may adversely impact our business, financial condition and results of operations.***

We have incurred and continue to incur additional costs in connection with the prosecution, defense or settlement of the currently pending and any future legal proceedings relating to the Boeing Transaction and/or Boeing’s termination of and failure to close the Boeing Transaction. Such legal proceedings include, among other matters, the ongoing arbitration proceedings between Embraer and Boeing that have commenced in connection with the wrongful termination of the MTA and/or the Contribution Agreement by Boeing. Both Embraer and Boeing have commenced arbitrations in connection with the termination. Such legal proceedings may also include litigation brought by our stockholders and holders of our ADRs related to the Boeing Transaction and/or Boeing’s termination of, and failure to consummate the transactions contemplated by, the MTA and the Contribution Agreement. We continue to strongly believe that Boeing wrongfully terminated the MTA and the Contribution Agreement, that Boeing was under an obligation to continue to comply with the terms of the MTA and the Contribution Agreement, that Embraer was in full compliance with its obligations under the MTA and the Contribution Agreement and that our pending arbitration proceedings against Boeing and its affiliates are a valid enforcement of our rights under the MTA and the Contribution Agreement.

We cannot predict the outcome of any such legal proceedings. Such legal proceedings may also create a distraction for our management team and board of directors and require time and attention. In the case of an adverse determination in the arbitration proceedings, we may not recover any damages from Boeing and we may be required to pay significant monetary damages to Boeing. In addition, even if we ultimately succeed in such legal proceedings, there may be negative publicity attached to such legal proceedings, which may materially and adversely affect our reputation and brand names. As a result, any legal proceedings relating to the Boeing Transaction or Boeing’s termination of and failure to close the Boeing Transaction could, among other things, adversely affect our business, financial condition and results of operations.

***Intellectual property violations may adversely affect us.***

We rely on patent, copyright, trademark and trade secret laws, and agreements with our employees, customers, suppliers and other parties, to establish and maintain our intellectual property rights in technology and products used in our operations. Despite these efforts to protect our intellectual property rights, any of our direct or indirect intellectual property rights could be challenged, invalidated or circumvented. In addition, although we believe that we lawfully comply with the intellectual property rights granted to others, we may be accused of infringement on occasion and could have claims asserted against us in the future. These claims could harm our reputation, lead to fines and penalties and prevent us from offering certain products or services. Any claims or litigation in this area, whether we ultimately win or lose, could be time-consuming and costly, hurt our reputation and/or require us to enter into licensing arrangements. We may not be able to enter into these licensing arrangements on acceptable terms. If any infringement brought against us is successful, an injunction may also be ordered against us to stop infringing the alleged rights, which could adversely affect us, our research and/or production.

***We benefit from certain tax and other government-granted benefits and the suspension, cancellation or non-renewal of those benefits would have a material adverse effect on us.***

Similarly to other Brazilian companies across multiple industries, we receive certain tax and other government-granted benefits, including incentives related to our export and research and development activities. To take advantage of the tax benefits, we must meet certain requirements, such as making investments in research and development, record taxable profits, among others. For additional information, see “Item 5. Operating and Financial Review and Prospects—A. Operating Results—Tax Incentives.”

Moreover, these incentives may be cancelled or suspended by the Brazilian government at any time without prior notice, and the maintenance of such incentive plans by the Brazilian government depends on factors we cannot control or predict. We cannot assure you that these incentives will be maintained or renewed or that we will be able to obtain new incentives.

***We are subject to stringent certification and regulatory requirements, which may adversely affect us.***

Our civil aviation products are subject to regulation in Brazil and in each jurisdiction where our customers are located. The aviation authority in Brazil, known as the National Civil Aviation Agency (*Agência Nacional de Aviação Civil*, or ANAC), or the Brazilian Aviation Authority, as well as authorities in other countries in which our customers are located, most notably the FAA and the European Aviation Safety Agency, or the EASA, must certify our civil aviation products before we can deliver them to our customers. We cannot assure you that we will be able to obtain certification of our aircraft on a timely basis or at all. In addition, complying with the requirements of regulatory authorities can be both expensive and time-consuming. If we fail to obtain a required certification from an aviation authority for any of our aircraft, that aviation authority can prohibit the registration of that aircraft within its jurisdiction until certification has been obtained. Changes in government regulations and certification procedures could also delay our start of production as well as entry of a new product into a new market. Despite our continuous efforts to strictly observe and comply with all aviation certification and other regulatory requirements, we cannot predict how future laws or changes in the interpretation, administration or enforcement of those laws will affect us. We may be required to incur significantly more costs to comply with these laws and/or to respond to these changes.

**Internal Controls**

***We have identified material weaknesses in our internal controls over financial reporting. If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, our ability to operate our business and our reputation.***

As part of management’s assessment of its internal controls over financial reporting for the fiscal year ending December 31, 2022, management identified material weaknesses as defined under the Exchange Act and by the U.S. Public Company Accounting Oversight Board, or PCAOB, in our internal controls over financial reporting, as a result of the material weaknesses identified at the consolidated financial statements of EVE, one of our subsidiaries. A material weakness is a deficiency, or a combination of deficiencies, in internal controls over financial reporting, such that there is a reasonable possibility that a material misstatement of the company’s annual financial statements will not be prevented or detected on a timely basis. The material weaknesses identified relate specifically to sufficiency of personnel with appropriate qualifications, experience and training related to certain complex accounting matters.

While we have remediated these material weaknesses, we cannot assure you that our subsidiaries will not identify significant deficiencies or material weaknesses in their internal controls nor that there will not be material weaknesses or significant deficiencies in our internal controls over financial reporting in the future. Our failure to maintain internal controls over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. In addition, we may not be able to prevent or detect a material misstatement in our financial statements on a timely basis or at all. Such misstatements could result in a future restatement of our financial statements, could cause us to fail to meet our reporting obligations or material adverse effect on our business financial condition, and results of operations.

The material weaknesses did not result in a restatement of our prior year financial statements. For more information, see “Item 15. Controls and Procedures.”

**Labor and Workforce**

***We may suffer from a lack of qualified personnel.***

From time to time, there is significant competition within the aviation industry for skilled personnel in general and engineers in particular. To the extent this competition re-emerges, we may be unable to recruit and retain the necessary number of highly skilled engineers and other personnel we require. Failure to coordinate our resources in a timely manner or to attract and retain skilled personnel could slow down our development efforts and cause delays in production and deliveries of our aircraft, which would adversely affect us.

***Scope clause restrictions in airline pilot contracts may limit demand for commercial aircraft in the U.S. market.***

A key limiting factor in demand for regional jets is the existence of scope clauses contained in airline pilot contracts. These scope clauses, which are more prevalent in North America, but also exist in other important regions, including Europe, are negotiated between the airlines and the pilot unions, usually every three years, for purposes of imposing restrictions relating to the (i) number of aircraft that a regional carrier may operate; (ii) number of seats in an aircraft that a regional carrier may operate; and (iii) the weight of the aircraft that a particular regional carrier may operate. The most recent rounds of negotiations between the major carriers in the United States were concluded in 2022 with no significant changes. As a result, our opportunities for near-term growth in the U.S. regional jets market in the 76-seat jet category may be limited. In this context and considering that the United States is the most important market for the E175 aircraft, on February 18, 2022, we announced a three-year pause on the development of the E175-E2 jet which is expected to entry into service between 2027 and 2028. We cannot assure you that current restrictions will be reduced, or that they will not be expanded, including by amending these scope clauses to cover larger-sized commercial aircraft.

***The supply of pilots to the airline industry may be limited.***

U.S. Federal Aviation Administration, or FAA, regulations may negatively impact the supply of qualified pilot candidates eligible to be hired in the airline industry. A first officer in U.S. domestic operations must hold an airline transport pilot certificate and an aircraft type rating to fly the aircraft. An airline transport pilot certificate requires that a pilot be 23 years of age and have 1,500 hours total time as a pilot. Due to these requirements, there may be a growing scarcity of new entrant pilots who meet the experience qualifications, mainly affecting regional carriers which are the usual entry airlines for new pilots (major airlines are expected to hire many of their experienced pilots).

In order to mitigate this issue, certain airlines, for example American Airlines, Jet Blue, and United Airlines, especially in the United States, have adopted internal measures, including but not limited to creating professional pilot programs and providing financing alternatives. However, any inability to recruit, train and retain qualified pilots may materially affect our customers’ operations.

As a result of the COVID-19 pandemic, many professional pilots were laid-off and may choose to pursue another career. Additionally, the uncertainty related to the future development of the aviation industry, may decrease newcomers’ interest for the profession.

**Cybersecurity**

*Failure to adequately protect against risks relating to cybersecurity could materially and adversely affect us.*

We, like all business organizations in the digital world, are subject to a broad range of cyber threats, with varying levels of sophistication. These cyber threats are related to the confidentiality, availability and integrity of our systems and data, including our customers’ confidential, classified or personal information. In addition, because we have access to certain information technology systems of some of our customers, any successful cyberattacks on our systems may tamper with or expose our customers’ systems and their data.

We maintain extensive technical security controls, policy enforcement mechanisms, monitoring systems and management oversight in order to address these threats. While these measures are designed to prevent, detect and respond to unauthorized activity in our systems, certain types of threats, including cyber-attacks, could materially and adversely affect our business and reputation. A successful cyberattack may result in unavailability of our services, leak or compromise of the integrity of information and could give rise to the loss of significant amounts of client data, other sensitive information and loss of funds as well as damage to our reputation, directly affecting our clients and business partners.

Furthermore, some of our business partners, such as our suppliers, have access to some limited confidential and strategic information regarding our projects and engineering data. As many of these suppliers face similar security threats, any attacks on their systems could result in unauthorized access to our systems or data.

For instance, on November 24, 2020, we suffered a cybersecurity incident in our IT systems, which was later identified as a ransomware attack. The attack resulted in the encryption of an environment of virtual servers hosted in Brazil, prevented access to certain files and resulted in the inadvertent disclosure of data, some of which were made available on the dark web. We have reported the incident to law enforcement authorities.

Immediately after the incident, we employed significant IT resources, took measures to protect and strengthen the security of our systems, isolated the affected environment and repaired our network. As part of our reaction, we hired Tempest Security Intelligence, a leading cybersecurity firm, to investigate the incident and supplement our remediation efforts.

Despite our extensive security controls and measures to prevent the violation of our systems and data storage, we cannot guarantee that other cyberattacks or similar breaches will not happen in the future.

**Environmental, Social and Governance**

*We are subject to environmental, health and safety risks.*

Our products, as well as our manufacturing and service activities, are subject to environmental laws and regulations in each of the jurisdictions in which we operate. These laws regulate product performance or content, energy use, greenhouse gas emissions, air quality, water and noise pollution, hazardous substance management, human health risks arising from the exposure to hazardous or toxic materials, the remediation of soil and groundwater contamination, among other matters.

In addition, environmental regulations related to climate change, including CO<sub>2</sub> emissions standards adopted by the International Civil Aviation Organization, or the ICAO, are one of the main drivers of global aerospace industry research and development investments since they may affect customer preferences. We may incur additional costs to improve or create new compliance programs to meet environmental regulatory requirements. We currently have several comprehensive programs in place to reduce the effects of our operations on the environment. For additional information, see “Item 4. Information on the Company—D. Property, Plant and Equipment.”

Moreover, our services and products must comply with health and safety laws and regulations, as well as substances and preparations. We strive to maintain the highest quality standards and closely follow potential and confirmed changes in laws and regulations to adapt, redesign, redevelop, recertify or eliminate our products to remain compliant with those claims. Seizures of non-compliant products may occur, and we may incur penalties. In the event of an accident or other serious incident involving a product, we may be required to conduct investigations and undertake preventive and remedial actions.

***Climate change may have adverse effects on our business and financial condition.***

Climate change related risks are gaining increasing social, regulatory, economic and political relevance, both in Brazil and internationally. New regulations related to climate change may affect our operations and business strategy, leading us to incur financial costs resulting from: (i) physical risks; and (ii) transition risks, including climate litigation. Physical climate risks are those that arise from changes in weather and climate that impact the economy, including rising global average temperatures, which can cause sea level rise and acute climate risks caused by natural disasters, including but not limited to floods, fires and hurricanes. Such disasters could adversely affect our and our clients' and business partners' operations, including by impairing flight services and aircraft circulation. In addition, physical risks could cause market volatility and negatively affect the trading price of our ADSs. In addition, our facilities and resilience may also suffer physical damages due to severe weather events which may represent increased operational costs.

Transition climate risks are those that arise from the transition to a low-carbon economy. We expect that the market may face significant and rapid developments in terms of new technologies, policy, legal and regulatory demands capable of impacting our activities and the value of our assets.

Effects from both physical and transitional climate risks may also represent losses for our clients and business partners, affecting their profitability as well as their ability to fulfill their obligations.

If we do not adequately identify and embed the risks associated with climate change into our risk framework to appropriately measure, manage and disclose the various financial and operational risks that may result from climate change, or if we fail to adapt our strategy and business model to a changing regulatory and market environment, we could face a material adverse impact on our business growth rates, competitiveness, profitability, capital requirements and financial condition.

***We may not be able to achieve our carbon emissions targets or make progress in other environmental, social, and governance initiatives.***

In August 2021, we announced our intention to reach carbon neutrality in our operations by 2040 reducing Scope 1 and 2 emissions at least by 50%. This commitment relies mostly on the purchase of Sustainable Aviation Fuels (SAF), electricity from renewable sources and carbon offsets. Our estimates concerning the timing and cost of implementing our targets are subject to several risks and uncertainties, such as low availability of SAF, especially in Brazil where the majority of operations is concentrated, and variations in fuels, energy and offset prices. Accordingly, there can be no assurances that our targets will be achieved.

We are setting our strategies and new products aiming to a net-zero emission aviation by 2050. In order to reinforce this commitment, we signed in 2021 with other representatives of the aerospace sector, the commitment "Fly Net Zero." This goal will be supported by accelerated efficiency measures, energy transition and innovation across the aviation sector and in partnership with governments around the world.

We have also committed to certain diversity, inclusion and education targets, such as having 50% diverse hires in all new entry level employee programs by 2025; securing access of more than 80% of the students from Embraer high schools to public universities and private universities with full-tuition scholarships; having 20% of women in senior leadership positions by 2025, among others.



Although we expect that our ESG commitments will improve our operational and financial performance on the long term, our targets may not materialize within the time frame we expect or at all, since they depend on several factors over which we have no control or influence.

**COVID-19**

*COVID-19 has affected and may continue to affect us.*

The COVID-19 pandemic and governmental responses thereto have had, and may continue to have, a severe impact on global and Brazilian macro-economic and financial conditions, including the disruption of supply chains and the closures or interruptions of many businesses, leading to losses of revenues, increased unemployment and economic stagnation and contraction. The COVID-19 pandemic has also resulted in materially increased volatility in both Brazilian and international financial markets and economic indicators, including exchange rates, interest rates and credit spreads. Furthermore, the COVID-19 pandemic has negatively affected the supply of pilots in the United States, many of which decided to change careers or retire as a result of the pandemic.

Measures taken by governmental authorities worldwide, including Brazil, to stabilize markets and support economic growth may not be sufficient to control future volatility or to prevent serious and prolonged reductions in economic activity. While many of the governmental imposed restrictions have since been lifted, there is no way to predict that these policies will not be tightened or that new and different restrictions will not be imposed.

The effects of the COVID-19 pandemic or the outbreak of similar communicable diseases on our business will depend on, among other factors, the ultimate geographic spread of the virus, the duration of the outbreak and the extent and overall economic effects of the governmental response to the pandemic.

For further information on the impact of COVID-19 pandemic on our segments, see Note 1.1.1 to our 2022 audited consolidated financial statements.

**Geopolitical and Macroeconomic Risks**

*Brazilian political and economic conditions have a direct impact on our business and the trading price of our common shares and ADSs.*

The Brazilian government has frequently intervened in the Brazilian economy and occasionally has made drastic changes in policy and regulations. The Brazilian government’s actions to control inflation and affect other policies and regulations have involved, among other measures, increases in interest rates, changes in tax policies, price controls, currency exchange and remittance controls, devaluations, capital controls and limits on imports. Our business, financial condition, results of operations and the trading price of the common shares and the ADSs may be adversely affected by changes in policy or regulations at the federal, state or municipal level involving or affecting factors, such as:

- interest rates;
- currency fluctuations;
- monetary policies;
- inflation;
- liquidity of capital and lending markets;
- tax policies;
- labor regulations;
- energy and water shortages and rationing; and
- other political, social and economic developments in or affecting Brazil.

Uncertainty over whether the Brazilian government would implement changes in policy, regulation or legislation creates instability in the Brazilian economy, increasing the volatility of the Brazilian securities markets. These uncertainties and other future developments in the Brazilian economy may adversely affect our activities, and consequently our operating results, and may also adversely affect the trading price of our common shares and ADSs. We cannot predict which policies the Brazilian government will adopt or if these policies or changes in current policies may have an adverse effect on us or the Brazilian economy. These factors are compounded as Brazil emerges from a prolonged recession after a period of a slow recovery, with GDP contraction in 2020 and small growth in 2021 and 2022.

The gross domestic product, or GDP, had a growth rate of 2.9% in 2022, compared to a growth rate of 4.6% in 2021 and a contraction rate of 4.1% in 2020, driven by the COVID-19 pandemic, compared to growth rates of 1.1% in 2019 and 2018, 1.3% in 2017 and contraction rates of 3.3% in 2016 and 3.5% in 2015. According to the Focus bulletin dated March 24, 2023, the consensus of Brazilian economists was for expectations of Brazilian GDP to increase 0.9% in 2023.

Our results of operations and financial condition have been, and will continue to be, affected by the growth rate of the Brazilian GDP. Developments in the Brazilian economy may affect Brazil’s growth rates and, consequently, the use of our products and services.

***Political instability may adversely affect our business and results of operations, the price of our common shares and our debt instruments.***

Brazil’s political environment has historically influenced, and continues to influence, the performance of the country’s economy. Political crises have affected, and continue to affect, the confidence of investors and that of the public in general, resulting in economic downturn and heightened volatility of securities issued by Brazilian companies.

For instance, in the past, Brazilian markets have experienced heightened volatility due to uncertainties derived from investigations on money laundering and corruption conducted by the Brazilian Federal Police and the Federal Prosecutor’s Office, and the impact of these investigations on the Brazilian economy and political environment. The ultimate outcome of these investigations is uncertain, but they had an adverse impact on the image and reputation of the implicated companies, and on the general market perception of the Brazilian economy. Political instability and uncertainty regarding political developments and the policies the Brazilian federal government may adopt or alter may have material adverse effects on the macroeconomic environment in Brazil, as well as on the operations and financial performance of businesses operating in Brazil, including ours.

***Inflation and government efforts to curb inflation may contribute significantly to economic uncertainty and to heightened volatility in the Brazilian and international securities markets and, consequently, may adversely affect us.***

Inflation and interest rate volatility have in the past caused material adverse effects in the Brazilian and global economy. Sudden increases in prices and long periods of high inflation may cause, among other effects, loss of purchasing power and distortions in the allocation of resources in the economy.

In Brazil, inflation and certain actions taken by the Central Bank to curb it have had significant negative effects on the Brazilian economy. Brazil’s General Price Index (*Índice Geral de Preços – Mercado*), or IGP-M index, recorded inflation of 5.5% in 2022, 17.8% in 2021, 23.1% in 2020 and 7.3% in 2019. Brazil’s National Broad Consumer Price Index (*Índice Nacional de Preços ao Consumidor Amplo*), or IPCA index, recorded inflation of 5.8% in 2022, 10.1% in 2021, 4.5% in 2020 and 4.3% in 2019. Measures to curb high inflation rates include a tightening of monetary policy, with an increase in interest rates, resulting in restrictions on credit and short-term liquidity.

The Brazilian Central Bank’s Monetary Policy Committee, or COPOM, is responsible for setting the Brazilian official interest rate, or the SELIC rate. The COPOM frequently adjusts the official base interest rates in situations of economic uncertainty to meet the economic goals established by the Brazilian government. After reaching a historical low of 2.0% in August 2020, the COPOM began increasing interest rates in March 2021 and, as a result, the SELIC rate reached 9.25% in December 2021 and 13.75% in December 2022.

In the international scenario, inflation is reaching record highs; in the U.S. consumer inflation measured by the Consumer Price Index, or CPI, of the U.S. reached 7.1% in 2021 (the highest level since 1982) and 7.2 in 2022. In Europe, consumer inflation measured by the Harmonised Index of Consumer Prices, or HICP, varied from a negative inflation of 0.3% in 2020, to 5.0% in 2021, and 9.2% in 2022.

The rise in inflation in several developed economies has led the authorities of these countries to being reversing through the strongly stimulating policies implemented during the COVID-19 pandemic. The European Central Bank has increased interest rates from 0.0% in 2020 and (0.5)% in 2021 to 2.0% in 2022 and may reach its peak in 2023. The Fed has increased interest rates from 0.09% in 2020 and 0.08% in 2021 to 4.33% in 2022, and the Fed expects rates to rise closer to 5.00% in 2023.

Increases in interest rates could adversely affect our ability to incur additional debt and increase the cost of service of debt, resulting in an increase in our financial costs, which may reduce our liquidity, thereby adversely affecting our ability to meet our financial obligations. As of December 31, 2022, 5.2% of our consolidated cash and cash equivalents were indexed to the variation of the SELIC and CDI rates. Therefore, fluctuations in Brazilian interest rates and inflation may adversely affect us. On the other hand, a significant decrease in the CDI or inflation rates may adversely affect the revenue we receive from our financial investments.

***Exchange rate volatility may adversely affect us.***

The Brazilian currency has, during the last decades, experienced frequent and substantial variations in relation to the U.S. dollar and other foreign currencies. In 2020, the *real* depreciated against the U.S. dollar in comparison to December 31, 2019, reaching R\$5.1967 per US\$1.00 as of December 31, 2020. In 2021, the *real* depreciated against the U.S. dollar in comparison to December 31, 2020, reaching R\$5.5805 per US\$1.00 as of December 31, 2021. In 2022, the *real* depreciated against the U.S. dollar in comparison to December 31, 2021, reaching R\$5.2177 per US\$1.00 as of December 31, 2022. There can be no assurance that the *real* will not depreciate further against the U.S. dollar.

Depreciation of the *real* against the U.S. dollar creates inflationary pressures in Brazil and causes increases in interest rates, which negatively affects the growth of the Brazilian economy as a whole, curtails access to foreign financial markets and may prompt government intervention, including recessionary governmental policies. Depreciation of the *real* against the U.S. dollar has also, including in the context of an economic slowdown, led to decreased consumer spending, deflationary pressures and reduced growth of the economy as a whole. On the other hand, appreciation of the *real* relative to the U.S. dollar and other foreign currencies could lead to a deterioration of the Brazilian foreign exchange current accounts, as well as dampen export-driven growth. Depending on the circumstances, either depreciation or appreciation of the *real* may materially and adversely affect us.

Although most of our revenue and debt is U.S. dollar-denominated, the relationship of the *real* to the value of the U.S. dollar, and the rate of depreciation of the *real* relative to the prevailing rate of inflation, may adversely affect us, mainly due to the following factors:

- Approximately 11.0% of our total costs are incurred and denominated in *reais*.
- Because taxes on income are largely determined and paid in *reais* based on our Brazilian tax books, the income tax expense line item of our statements of income, which has the U.S. dollar as our functional currency, is significantly impacted by appreciation of the *real* relative to the U.S. dollar to the extent we must record deferred taxes resulting from exchange rate fluctuations on the reported

basis of our nonmonetary assets (mainly property, plant and equipment and intangible assets). If the *real* had devalued or appreciated by 10% against the U.S. dollar in relation to the actual exchange rate as of December 31, 2022, the deferred income tax expense would have been higher or lower by US\$153.0 million. For additional information on the effects of the variation of the *real* against the U.S. dollar, see Notes 23 and 33 to our 2022 audited consolidated financial statements.

- Depreciation of the *real* against the U.S. dollar or other currencies would reduce our real-denominated revenues from our Defense & Security segment, when converted to the U.S. dollar as our functional currency.
- Appreciation of the *real* against the U.S. dollar or other currencies increases the costs of our products when measured in U.S. dollars, and may result in a decrease in our margins.

Depreciations of the *real* relative to the U.S. dollar could also reduce the U.S. dollar value of distributions and dividends on our ADSs and may also reduce the market value of our common shares and ADSs. While our functional currency is the U.S. dollar our shareholders' equity is required under Brazilian Corporate Law to be accounted and maintained in Brazilian *reais*, including amounts to be distributed to shareholders (dividends and interest on own capital). In 2022, while we had retained earnings recorded in U.S. dollars, the foreign exchange losses absorbed these earnings in Brazilian *reais*, causing a loss, which restricted our ability to pay dividends. For more information, see "8. Financial Information—A. Consolidated Statements and Other Financial Information—Dividends and Dividends Policy."

***Developments and the perception of risk in other countries, especially other emerging markets, may adversely affect the market price of Brazilian securities, including our ADSs, our common shares and our debt instruments.***

The market value of securities of Brazilian issuers, including securities issued by us, may be affected by economic and market conditions in other countries, including the United States, European Union and Latin American countries and other emerging market countries. Although economic conditions in those countries may differ significantly from economic conditions in Brazil, investors' reactions to developments in other countries may have an adverse effect on the market value of securities of Brazilian issuers. Crises elsewhere may diminish investor interest in securities of Brazilian issuers, including ours. This could adversely affect the trading price of our securities and could also make it more difficult for us to access the capital markets and finance our operations in the future on acceptable terms, or at all.

***Any further downgrading of Brazil's could adversely affect the market price of our common shares, ADSs and debt instruments.***

Credit ratings affect investors' perceptions of risk and, as a result, the yields required on debt issuances in the financial markets. Rating agencies regularly evaluate Brazil and its sovereign ratings, taking into account a number of factors including macroeconomic trends, fiscal and budgetary conditions, indebtedness and the prospect of change in these factors.

As of the date of this annual report, Brazil's sovereign credit ratings were BB- with a stable outlook, Ba2 with a stable outlook and BB- with a stable outlook by S&P, Moody's and Fitch, respectively, which is below investment grade.

We cannot assure you that rating agencies will maintain Brazil's sovereign credit ratings. Any downgrading in Brazil's sovereign credit ratings could increase the perception of risk of investors and, as a result, adversely affect the price of securities issued by Brazilian companies, including our ADSs.

***Developments related to the conflict between Russia and Ukraine may adversely affect us.***

The global developments relating to Russia's invasion of Ukraine have generated uncertainty in the global economy. As soon as the war was declared, we have suspended parts, maintenance, and technical support services for certain customers to comply with the sanctions imposed on Russia, Belarus, and certain regions of Ukraine by laws of jurisdictions to which we are subject.

As a result of the conflict between Russia and Ukraine, inflation levels have raised and energy prices have also increased, mainly in Europe due to impact in the supply and gas prices. The conflict also had the effect of increasing costs of labor and caused a global shortage of components, affecting our supply chain cycle in 2022.

Russia is one of the largest titanium suppliers in the world, and titanium is a key element for the aircraft manufacturing process. Although there is no concern over the availability of titanium in our supply chain, considering our current inventory position and the existing alternative sources in other countries, we will continue to monitor our supply chain in order to identify any potential constraints. In addition, the conflict between Russia and Ukraine may adversely affect people’s safety and activities of our employees, especially those residing in Europe.

We cannot predict how the developments related to the conflict between Russia and Ukraine will evolve and/or to what extent they may affect us.

**Risks Relating to Our Common Shares and ADSs**

*If holders of our ADSs exchange the ADSs for common shares, they risk losing the ability to remit foreign currency abroad and Brazilian tax advantages.*

The Brazilian custodian for the common shares has obtained an electronic certificate of registration from the Central Bank permitting it to remit foreign currency abroad for payments of dividends and other distributions relating to the common shares or upon the disposition of the common shares. These remittances under an ADR program are subject to a specific tax treatment in Brazil that may be more favorable to a foreign investor if compared to remitting gains originated from securities directly acquired by the investor in the Brazilian regulated stock markets. Therefore, an investor who opts to surrender ADSs in exchange for the underlying common share may be subject to less favorable tax treatment on gains with respect to these investments.

Pursuant to CMN Resolution No. 4,373, in order for the investor to surrender ADSs for the purpose of withdrawing the common shares represented thereby, the investor is required to appoint a Brazilian financial institution duly authorized by the Central Bank of Brazil and CVM to act as its legal representative, who shall be responsible, among other things, for keeping and updating the investors’ certificates of registrations with the Central Bank of Brazil, which entitles registered foreign investors to buy and sell directly on the B3 – *Brasil, Bolsa, Balcão*, or B3. These arrangements may require additional expenses from the foreign investor. Moreover, if the representatives fail to obtain or update the relevant certificates of registration, investors may incur additional expenses or be subject to operational delays which could affect their ability to receive dividends or distributions relating to the common shares or the return of their capital in a timely manner.

The custodian’s certificate of registration or any foreign capital registration directly obtained by the holders may be affected by future legislative or regulatory changes, and we cannot assure the holders that additional restrictions applicable to them, the disposition of the underlying common or preferred shares, or the repatriation of the proceeds from the process will not be imposed in the future.

*The Brazilian government has veto power over the change in our corporate control, and of our name, trademark or corporate purpose and over the creation or alteration of our Defense & Security programs, and its interests could conflict with the interests of the holders of our common shares and ADSs.*

The Brazilian government holds one share of a special class of our common stock called a “golden share,” which carries veto power over certain matters such as change of control, name, trademark or corporate purpose and over the creation or alteration of our Defense & Security programs (whether or not the Brazilian

government participates in those programs). For example, in 2010, we changed our corporate name to Embraer S.A. and altered our bylaws to allow us to enter the defense and security market, which required the approval of the Brazilian government. The Brazilian government may veto transactions that may be in the interest of the holders of our common shares or ADSs. We cannot assure you that we will be able to obtain approvals from the Brazilian government in the future to effect important corporate changes or transactions, or other important corporate changes that may be required.

***Our bylaws contain provisions that could discourage our acquisition or prevent or delay transactions that you may favor.***

Our bylaws contain provisions that have the effect of avoiding the concentration of our common shares in the hands of a small group of investors to promote the dispersed ownership of those shares. These provisions require any shareholder or group of shareholders that acquires or becomes the holder of (i) 35% or more of the total shares issued by us or (ii) other rights over shares issued by us that represent more than 35% of our capital, to submit to the Brazilian government a request for making a public tender offer to purchase all of our shares on the terms specified in our bylaws. If the request is approved, the shareholder or group of shareholders must commence the public tender offer to purchase all of our shares within 60 days of the date of approval. If the request is refused, the shareholder or group of shareholders must sell all of their shares that exceed the 35% limit within 30 days, so that the holding of this shareholder or group of shareholders falls below 35% of our capital stock. These provisions may have anti-takeover effects and may discourage, delay or prevent a merger or acquisition, including transactions in which our shareholders might otherwise receive a premium for their common shares and ADSs. These provisions can only be altered or overridden with the approval of our board of directors and our shareholders in a shareholders’ meeting convened for this purpose and with the consent of the Brazilian government, as holder of the golden share.

***Our bylaws contain provisions that limit the voting rights of certain shareholders, including non-Brazilian shareholders.***

Our bylaws contain provisions that limit the rights of a shareholder or group of shareholders, including brokers acting on behalf of one or more holders of ADSs, to exercise voting rights in respect of more than 5% of the outstanding shares of our capital stock at any general meeting of shareholders. See “Item 10. Additional Information—B. Memorandum and Articles of Association—Voting Rights of Shares—Limitations on the Voting Rights of Certain Holders of Common Shares.”

Our bylaws also contain provisions that limit the right of non-Brazilian shareholders to exercise voting rights in respect of more than two-thirds of the voting rights that may be exercised by Brazilian shareholders present at any general meeting of shareholders. This limitation will effectively prevent our takeover by non-Brazilian shareholders and limit the ability of non-Brazilian shareholders to effect control over us. For additional information on our voting rights, see “Item 10. Additional Information—B. Memorandum and Articles of Association—Voting Rights of Shares—Limitation on the Voting Rights of Non-Brazilian Shareholders.”

***The absence of a single, controlling shareholder or group of controlling shareholders may render us susceptible to shareholder disputes or other unanticipated developments.***

The absence of a single, controlling shareholder or group of controlling shareholders may create difficulties for our shareholders to approve certain transactions, because, among other things, the minimum quorum required by law for the approval of certain matters may not be reached. We and our shareholders may not be afforded the same protections provided by the Brazilian Corporate Law against abusive measures taken by other shareholders and, as a result, may not be compensated for any losses incurred. Any sudden and unexpected changes in our management, changes in our corporate policies or strategic direction, takeover attempts or any disputes among shareholders regarding their respective rights may adversely affect our business and results of operations.

***Holders of ADSs may not be able to exercise their voting rights.***

Holders of ADSs may only exercise their voting rights with respect to the underlying common shares in accordance with the provisions of the deposit agreement governing our ADSs. Under the deposit agreement, ADS holders must vote the common shares underlying their ADSs by giving voting instructions to the depositary. Upon receipt of the voting instructions from the ADS holder, the depositary will vote the underlying common shares in accordance with these instructions. Otherwise, ADS holders will not be able to exercise their voting right unless they surrender the ADS for cancellation in exchange for the common shares.

Pursuant to our bylaws, the first call for a shareholders' meeting must be published at least 30 days in advance of the meeting and the second call must be published at least 15 days in advance of the meeting. When a shareholders' meeting is convened, holders of ADSs may not receive sufficient advance notice to surrender the ADSs in exchange for the underlying common shares to allow them to vote with respect to any specific matter. In addition, the depositary has no obligation to notify ADS holders of an upcoming vote or distribute voting cards and related materials to ADS holders, unless we specifically instruct the depositary to do so. If we ask the depositary to seek voting instructions from ADS holders, the depositary will notify ADS holders of the upcoming vote and will arrange to deliver proxy cards to those holders. We cannot assure you that ADS holders will receive proxy cards in time to allow them to instruct the depositary to vote the shares underlying their ADSs. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for an untimely solicitation of voting instructions. As a result, holders of ADSs may not be able to fully exercise their voting rights.

***The relative illiquidity and volatility of the Brazilian securities markets may substantially limit the ability of holders of our common shares or the ADSs to sell the common shares underlying ADSs at the price and time they desire.***

Investing in securities, including our common shares or the ADSs, of issuers from emerging market countries, including Brazil, involves a higher degree of risk than investing in securities of issuers from more developed countries.

The Brazilian securities markets are substantially smaller, less liquid, more concentrated and more volatile than major securities markets in the United States and other jurisdictions and are not as highly regulated or supervised as some other markets. The relatively small market capitalization and illiquidity of the Brazilian equity markets may substantially limit the ability of holders of our common shares or ADSs to sell the common shares or the ADSs at the price and time desired. For additional information on the B3, see "Item 9. The Offer and Listing—C. Markets—Trading on the B3."

***Holders of our ADSs might be unable to exercise preemptive rights with respect to the common shares.***

Holders of our ADSs may not be able to exercise the preemptive rights relating to the common shares underlying their ADSs unless a registration statement under the Securities Act is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to the shares or other securities relating to these preemptive rights, and we cannot assure holders of our ADSs that we will file any registration statement. Unless we file a registration statement or an exemption from registration applies, holders of our ADSs may receive only the net proceeds from the sale of their preemptive rights by the depositary or, if the preemptive rights cannot be sold, the rights will lapse.

***Judgments of Brazilian courts with respect to our common shares will be payable only in reais.***

If proceedings are brought in the courts of Brazil seeking to enforce our obligations in respect of the common shares, we will not be required to discharge our obligations in a currency other than *reais*. Under Brazilian exchange control limitations, an obligation in Brazil to pay amounts denominated in a currency other than *reais* may only be satisfied in Brazilian currency at the exchange rate, as determined by the Central Bank, in effect on the date the judgment is obtained, and those amounts are then adjusted to reflect exchange rate variations through the effective payment date. The then prevailing exchange rate may not provide non-Brazilian investors with full compensation for any claim arising out of or related to our obligations under the common shares or the ADSs.

**Item 4. INFORMATION ON THE COMPANY**

**A. History and Development of the Company**

**Corporate History**

Embraer S.A. is a publicly held corporation duly incorporated under the laws of Brazil with an indefinite term of duration. Our principal executive office is located at Avenida Dra. Ruth Cardoso, No. 8,501 (formerly known as Avenida Nações Unidas, No. 8,501), 30th floor (part), Eldorado Business Tower, Pinheiros, ZIP Code 05425-070, city of São Paulo, state of São Paulo, Brazil. Our telephone number is 55-11- 3040-6874, and our internet address is *ri.embraer.com.br*. Our agent for service of process in the United States is National Registered Agents, Inc., with offices at 875 Avenue of the Americas, Suite 501, New York, New York 10001.

Originally formed in 1969 by the Brazilian government, we became a publicly held corporation in 1989 and were privatized in 1994. In the privatization process, the Brazilian government created the golden share, a special class of shares to ensure that the Brazilian government has certain veto rights, in particular regarding military programs.

In 2000, we registered with the SEC and listed our American Depositary Receipts in the New York Stock Exchange.

In 2006, we promoted a corporate restructuring process focused on simplifying our capital structure, which since then is comprised of only common shares, and we also joined a special listing segment of the B3 known as *Novo Mercado*, enhancing our corporate governance standards. Since then, we do not have a controlling shareholder or controlling shareholder group.

In 2010, our shareholders approved a change of our corporate name from “Embraer – Empresa Brasileira de Aeronáutica S.A.” to “Embraer S.A.,” as well as the addition of capabilities and the broadening of the scope of our Defense & Security segment to allow this segment to manufacture and trade equipment, materials, systems, software, accessories and components for the defense, security and energy industries, as well as to perform technical activities and services related to these areas. As a result, our bylaws were amended to reflect the addition of these activities to our corporate purposes.

In 2011 and 2012, we made acquisitions and entered into partnerships in the Defense & Security segment, including the acquisition of Atech Negócios em Tecnologias S.A. and Bradar Indústria S.A., or Bradar (which was merged into Embraer in 2018), Savis Tecnologia e Sistemas S.A. (which was merged into Embraer in 2021) and Visiona Tecnologia Espacial S.A.

In 2020, through our subsidiary Embraer Defesa e Segurança Participações S.A., we acquired 61% of Tempest Serviços de Informática S.A. and its subsidiaries, or Tempest, the largest cybersecurity company in Brazil.

On January 1, 2020, we implemented the internal carve-out of our Commercial Aviation segment by means of the contribution by Embraer to Yaborã Indústria Aeronáutica S.A. (“Yaborã”) of the net assets comprising assets, liabilities, properties, rights and obligations (subject to certain exceptions) related to our Commercial Aviation segment, through a capital increase. As a result of the wrongful termination of the Boeing Transaction by Boeing, we decided to reintegrate the Commercial Aviation segment and therefore, on October 28, 2021, our board of directors approved a partial spin-off of Yaborã, whereby Yaborã transferred substantially all of its assets back to Embraer, effective as of January 1, 2022.



In 2021, we, through our subsidiary Eve UAM, LLC, or EVE, entered into a business combination agreement with Zanite Acquisition Corp., or Zanite, to further develop EVE’s comprehensive, practical and capital efficient urban air mobility (“UAM”) solution, through design and production of eVTOL, service and support, fleet operations and urban air traffic management. The transaction closed on May 9, 2022 and Zanite changed its name to Eve Holding, Inc., or Eve Holding, and Eve Holding’s shares were listed on the New York Stock Exchange on May 10, 2022.

**Business Development**

We have grown from a government-controlled company, established to develop and produce aircraft for the Brazilian Air Force, into a publicly held company that produces aircraft for commercial and executive aviation and for defense and security purposes and related services.

As part of our evolution, we have obtained, developed and enhanced our engineering and technological capabilities through our own development of products for the Brazilian Air Force and through joint product development with foreign companies on specific projects. We have applied these capabilities that we gained from our Defense & Security segment to further develop our Commercial Aviation segment.

Our first regional aircraft was EMB-110 the Bandeirante, a 19-passenger twin-engine non-pressurized turboprop aircraft initially designed to service the transport needs of the Brazilian Air Force. This aircraft was certified in 1973. The Bandeirante was followed by the EMB 120 Brasília, which was certified in 1985. The EMB 120 Brasília is a high performance, pressurized turboprop commercial aircraft seating up to 30 passengers and was designed to serve the longer routes and higher passenger traffic of the growing regional aircraft market. Drawing upon the design of the EMB 120 Brasília and the jet technology acquired in our development of the AM-X, a jet strike bomber for the Brazilian Air Force, we developed the ERJ 145 regional aircraft family, our first jet product for commercial use. This family comprises three aircraft, which seat up to 37, 44 and 50 passengers. The first member of the ERJ family, the ERJ 145, was certified in 1996. We have expanded our jet product line with the development of the EMBRAER 170/190 jet family, which has the capacity to seat between 70 and 118 passengers and was designed to serve the aircraft market’s trend towards larger, higher volume and longer-range jets. The first member of this family, the EMBRAER 170, was certified in February 2004, and its derivatives, the EMBRAER 175 and the EMBRAER 190, were certified in December 2004 and August 2005, respectively. The certification of the EMBRAER 195 was granted in June 2006. In June 2013, Embraer launched the second generation of its E-Jets family of commercial aircraft, the E-Jets E2, comprising three new aircraft, the, E190-E2 and E195-E2. The E190-E2 and the E195-E2 entered service in April of 2018 and September of 2019, respectively. Our Commercial Aviation segment accounted for 34.0%, 31.4% and 29.6% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively.

We developed a line of executive jets throughout time, first the Legacy 600, which was discontinued in 2016 to focus on the success of its longer-range successor, the Legacy 650, followed by the Phenom 100, an entry-level jet, and the Phenom 300, a light jet, both launched in 2005. The Lineage 1000, an ultra-large jet, was added in 2006 as the largest executive jet in our executive jets portfolio and an enhanced version was introduced in 2013, the Lineage 1000E. In 2008, we launched the Legacy 450 and Legacy 500, both medium cabin jets. In 2009, we presented the Legacy 650, a large executive jet that is positioned in our portfolio between the Legacy 500 and the Lineage 1000E. The Legacy 500 and the Legacy 450 entered into service in October of 2014 and December 2015, respectively. In 2016, we launched the Phenom 100EV and the Legacy 650E. In 2017, the Phenom 100EV entered into service and we also launched the Phenom 300E, an enhanced version of our Phenom 300, with a revolutionary interior design, which entered into service in October 2017 with a demonstration aircraft. In our latest development, we introduced the new Praetor 500 midsize and Praetor 600 super-midsize business jets in 2018, during a company event in the Orlando Executive Airport. The Praetor 600 and Praetor 500 entered into service in June and in December 2019, respectively. In 2019, we successfully implemented the sunset strategy of the Legacy 650 and Lineage 1000E. In 2020 we concentrated our business efforts on the renewed and highly competitive Phenom and Praetor product lines, sunsetting the Legacy 450 and 500 models. Our Executive Aviation segment accounted for 27.4%, 26.9% and 28.4% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively.

In the defense and security industry, after the success of our first products Bandeirante and Brasília, we entered the military aviation segment with various products for the Brazilian Armed Forces. The first of this group of products were the EMB-312 Tucano, a basic trainer, and the EMB-111 Banderulha, for maritime patrol, both of which have also been exported. During the 1980's, Embraer and Aermacchi jointly developed the AMX, or A-1 attack fighter-bomber aircraft, and on early 2000's we started the production of the newly developed A-29 Super Tucano, or Super Tucano, an advanced training aircraft that entered into service in 2004 and is still under production, with more than 264 units sold to more than 16 countries. Throughout the years, we have developed several other aircraft tailored to our costumers' missions, in particular the C-390 Millennium, the largest aircraft ever manufactured in Brazil. We also entered the market of radars and land systems with the acquisition of Bradar in 2011, which was fully incorporated into Embraer in 2018.

Moreover, we have invested in various companies in the defense and security industry, expanding our portfolio to offer to our customers around the globe a broad line of intelligence, surveillance and reconnaissance aircraft, services, systems and solutions, ground radar, transportation of authorities, tactical military transport and aerial refueling, basic and advanced training and advanced training aircraft, satellite and cyber security solutions. Through our wholly-owned subsidiary Atech, we have been producing complex systems for critical missions, in the area of command and control, communications, computer intelligence, cyber defense, air defense and air traffic control for defense, security and other civil applications. With a 51% equity interest in Visiona Tecnologia Espacial S.A., we also operate in the satellite development, production and support services market, in partnership with relevant private and public institutions in Brazil.

In 2018, Embraer formed the consortium Águas Azuis, with Thyssenkrupp Marine Systems, and our subsidiary Atech. In 2019, this consortium was chosen as the preferred supplier to build four new Tamandaré Class Frigates for the Brazilian Navy. In 2020, we became the majority shareholder of Tempest Security Intelligence, the largest cybersecurity company in Brazil, with local and abroad operations. In 2021, we incorporated Savis Tecnologia e Sistemas S.A., a company focused on the development and production of various land systems, including SENTIR M20, the SABER M60 and the SABER M200 VIGILANTE radars, mockups, anti-aircraft operation centers, as well as on the integration of the Brazilian Army's Integrated Border Monitoring System, or SISFRON program.

As of the date of this annual report, we continue to be the leading supplier of defense aircraft for the Brazilian Air Force, based on number of aircraft sold, and have sold aircraft to armed forces in the United States, Europe, Asia and Latin America. Our Defense & Security segment accounted for 9.9%, 14.2% and 17.3% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively. Revenues from sales to the Brazilian government accounted for 42.5%, 40.7% and 44.5% of this business segment's revenue for the years ended December 31, 2022, 2021 and 2020, respectively.

Embraer Services & Support is a segment focused on providing parts, flight hour solutions, maintenance, training, and engineering products and services for Embraer operators in the Commercial, Executive, Defense & Security segments. Accompanied with OGMA, Embraer's subsidiary in Portugal, which provides agnostic services, and Embraer CAE Training Services (ECTS). With a network of over 76 owned and authorized service centers spread around the world, contact centers dedicated to each market, and a team with more than 4,300 employees overseeing support of over 4,580 Embraer Commercial, Executive and Defense aircraft as well as other OEM aircraft, engines, radars, our Services & Support segment accounted for 27.9%, 27.0% and 24.4% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively.

We also provide fuel systems, structural parts, and mechanical and hydraulic systems to Sikorsky Aircraft Corporation, or Sikorsky, a Lockheed Martin Company, for its production of helicopters. We provide to Sikorsky the services of development and manufacture of the landing gear, fuel system and fuel tanks for the S-92 and H-92 Helibus helicopters. In addition, we developed the Ipanema, a crop duster aircraft pursuant to specifications of the Brazilian Ministry of Agriculture. These aircraft are produced only on demand. Through December 31, 2022, we had delivered a total of 1,541 of these aircraft. Our Other segments accounted for 0.8%, 0.6% and 0.3% of our revenue for the years ended December 31, 2022, 2021 and 2020 respectively.

For additional information on our Other segments, see Note 36.5 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

**B. Business Overview**

We are the leading manufacturer of jets with up to 150 seats in the world, based on the number of jets delivered over the last decade, and we have a franchise footprint represented by our global customer base, according to Cirium. Our focus is to achieve customer satisfaction with a range of products and services addressing the commercial airline, executive jets and defense and security markets. We have developed a customer-centric technology-driven portfolio of commercial aviation products and services that allows us to build long-term relationships with our clients in the commercial aviation, executive jets and defense and security markets. We grew from a government-controlled company that developed and produced products for the Brazilian Armed Forces to a publicly held company that produces aircraft for and provides related services to commercial and executive aviation, as well as for defense and security purposes. Providing high quality customer support is a key element of our customer focus and is critical to our ability to maintain customers with whom we have a long-term relationship.

We have weathered challenges posed by developments relating to the COVID-19 pandemic through our near-term strategy of maintaining lean organization, updating our business plan to adapt to changing conditions, prioritizing health and safety and implementing cash preservation measures.

We are in a position to embark on our long-term strategy of focusing on consistent execution of our strategic business plan and continuous efficiency programs with lean concepts, seeking partnership opportunities to drive growth, investing in innovation as a primary source of future growth and further developing our environmental, social and governance, or ESG program, reinforcing our commitment toward:

- (i) carbon reduction: we expect to reach carbon neutral grown from 2022 onwards, carbon neutrality in our operations by 2040, use 100% renewable electricity by 2030 and produce products to support zero emissions aviation by 2050;
- (ii) social responsibility: we expect to reach 50% of diversity hiring in our entry level programs and 20% of women in senior leadership positions by 2025. We also aim to maintain the approval of more than 80% of Embraer schools’ students into public universities or private universities with full-tuition scholarships; and
- (iii) corporate governance standards: we aim to maintain the highest international governance standards and robust ethics and compliance programs.

Our main market opportunities lie in direct product replacement, the development of regional aviation in select markets, including India, Brazil and Turkey, and in the growth on a global scale of the sub 150 seat segment as a result of airlines rightsizing their fleet.

For the year ended December 31, 2022, we generated revenue of US\$4,540.4 million, of which 92.4% was U.S. dollar denominated. Of our revenue in 2022, 34.0% was from our Commercial Aviation segment, 27.4% was from our Executive Aviation segment, 9.9% was from our Defense & Security segment, 27.9% was from Services & Support segment and 0.8% was from our Other segments.

In the year ended December 31, 2022, 62.9% of our revenue was from clients in North America, followed by clients in Europe (19.5%), Brazil (11.1%), Asia Pacific (2.2%), Latin America (except Brazil) (1.2%) and others (3.1%). As of December 31, 2022 and December 31, 2021, we had a total firm order backlog of US\$17.5 billion and US\$17.0 billion, respectively.

**Our Strengths**

We believe that our primary strengths are:

**Aircraft design and technology; cost and operating efficiency.** We conceive, develop and manufacture clean sheet design aircraft with cutting edge technology that reduce our customers’ operating, maintenance and training costs because of the efficient design of our parts. Within a jet family the parts share similar technology and features, which reduces our design, development and production costs and allow us to offer competitive prices to our customers. For example, the Praetor 500 and Praetor 600 jets have similar characteristics and technologies that enhance our value proposition for the midsize and super-midsize business segments. Our investments in innovative technologies, such as automation design, enable us to increase operational efficiency by reducing engineering, production costs and lowering customers’ maintenance costs. For example, we have invested in cybersecurity solutions by acquiring Tempest in 2020 and using Beacon, which is an innovative platform designed to connect the aviation maintenance system.

**Leading commercial aircraft manufacturer with a global customer base.** Based on the number of aircraft delivered, we are the leading manufacturer of jets with up to 150 seats and have a strong global customer base, according to Cirium. As of the date of this annual report, more than 170 airlines from over 90 countries use our commercial aircraft on five continents. Our customers include some of the largest and most significant network, regional and low-cost carriers in the world.

**Strategic risk-sharing partners.** With respect to our commercial and business aircraft, we developed strategic relationships with key risk-sharing partners. These risk-sharing partners develop and manufacture significant portions of our aircraft’s systems and components with their own funds, thereby reducing our development expenses. These risk-sharing partners also fund a portion of our research and development expenses through direct contributions of cash or materials. These strategic relationships enable us to reduce our development expenses and risks, improve our operating efficiency, enhance the quality of our products and reduce the number of our suppliers, thereby providing us with flexibility in our production process.

**Experienced and highly skilled workforce.** Our employees are experienced and highly skilled. As of December 31, 2022, engineers comprised approximately one-fifth of our workforce. Our employees’ high skill and knowledge levels and our continuous training and incentive programs allow us to efficiently pursue new programs and offer high technical expertise and guidance to our customers.

**Flexibility of production to meet market demands.** We believe the flexibility of our production processes and our operating structure, including our risk-sharing partnerships, allow us to adjust our production in response to market demand.

**Funded development of defense products.** Historically, development expenditures related to defense aircraft have been funded in large part by our Defense & Security segment customers, which mainly comprise governments. These customers have had an important role in our engineering and industrial development. In addition, we use proven civil platforms as a solution for certain defense products.

**High ESG standards.** ESG has been part of our strategy, including in the development of increasingly more eco-efficient aircraft and in the adoption of more sustainable production processes and management of natural resources. We are embedding our business strategy with social responsibility and environmental impacts in everything we do, from our processes and facilities to product development and our supply chain. We work across all our key stakeholder audiences to develop sound strategies, define indicators, and establish targets that are integrated into our corporate sustainability plan. Some of our long-term ESG commitments are: (i) achieve carbon neutrality in operations by 2040, through the acquisition of electricity 100% from renewable sources, the increasing use of sustainable aviation fuel (SAF) and the compensation of residual emissions that are not reduced through efficiency projects, alternative energy available or new technologies, (ii) develop sustainable disruptive products, services and technologies, including electrification, hybrids, biofuels, including SAF and other innovative alternative energies; (iii) launch “eVTOL” aircraft with zero emission by 2026; and (iv) leverage diversity in the hiring of gateway programs, in leadership positions and in the aeronautical specialization program maintained by us

**Highly skilled engineering for defense application and development of market leading products for our Defense & Security segment.** As of December 31, 2022, we had sold more than 1,400 defense aircraft, including government transport aircraft, to more than 60 armed forces and operators worldwide. The

A-29 Super Tucano and the C-390 Millennium are the main products of our Defense & Security segment. We believe the A-29 Super Tucano is the market benchmark in its class because it combines a rugged and reliable turboprop platform with a high-precision-class payloads delivery system. It is the only combat-proven close air support aircraft currently in production. The C-390 Millennium is a multi-role military transport aircraft developed to become a market leader in its category. It has several functions and may be used in adverse situations, such as firefighting and aerial refueling, (KC-390 Millennium version). The C-390 Millennium has flexibility, strength, mobility, easy maintenance and the latest technology. Our workforce is highly capable of understanding our customers’ operational needs and their requirements regarding our defense products and services portfolio. Our team offers capable, flexible and low lifecycle cost products with global applications to our customers. We also have a strong ability to engage with several stakeholders in partnerships, enabling the development of state-of-the-art defense and space solutions within reduced time cycles.

**Business Strategies**

With a view to continue growth of our business and increasing our profitability, we intend to continue to offer our customers cost-effective, high quality, and reliable aircraft and services. The key elements of our strategy are the following:

**Market our commercial aircraft.** We are fully committed to marketing our jets of up to 150 seats. As of December 31, 2022, we had approximately 330 units in the ERJ family and approximately 1,300 units in the EMBRAER170/190 jet family and around 49 units in the E2 generation in active service, according to Cirium. As of December 31, 2022, 69 units of E190/E195 E2 had been delivered to customers worldwide. In February 2022, we announced three-year pause in its E175-E2 jet development program. For more information, see “—Products.” We believe there are market opportunities for the 170/190 jet family and for the E2 generation, especially for airlines seeking to expand their fleet in the mid-density segment and substitute aging aircraft in the below-150 seat category. Additionally, commercial jets will have opportunities with mainline and low-cost carriers that are right sizing their fleets to adjust capacity and will provide us with significant opportunities to increase our competitiveness by offering a full range of jets of up to 150 seats to our customers.

**Maintain the market leadership of our commercial jets up to 150 seats.** Our new generation of commercial aircraft, the E-Jet E2, reinforces our commitment to maintain our market leadership in the segment of commercial jets up to 150 seats. Our commercial aircraft have state-of-the-art engines, aerodynamically advanced wings, full fly-by-wire flight controls and improvements to other systems, which increase efficiency by reducing fuel consumption, maintenance costs, emissions and external noise significantly.

**Develop innovative and sustainable solutions.** To further nurture the future of regional air mobility while also complying with industry-wide sustainable goals, we have announced the Energia Family of aircraft concepts. These four innovative concepts, destined to the 9 to 50 seats market, we believe it will allow the company to further study, explore, and potentially commercialize the cutting-edge technologies that will define the industry of tomorrow through advanced designs and new propulsion systems, while also fostering discussions related to airport infrastructures, passenger convenience, and seamless journeys opportunities.

**Strengthen our position in the executive aviation market.** We believe we are well positioned to grow in the small and medium cabin jet classes. We have streamlined our portfolio to feature the Phenom 100EV, an entry-level jet, the Phenom 300E, a light jet, and the Praetor 500 and Praetor 600, midsize and super-midsize jets, respectively. This renewed portfolio is industry-leading in performance, comfort and technology. We are committed to understanding and responding to market and customer needs and continuously improving our product and customer support for our executive jets. For over a decade, we have introduced disruptive clean sheet design aircraft to the market. In 2022, the Phenom 300E was the most delivered light jet for the eleventh consecutive year and the most delivered twinjet in whole executive jets industry for the third consecutive year.

**Provide complete and integrated solutions to the customers of our Defense & Security segment.** In our Defense & Security segment, we offer a broad range of solutions covering air, land, sea, space and cyber security environments. We are constantly evaluating, developing and efficiently integrating new opportunities to meet our customers’ needs.

***Continue to pursue niche market opportunities in the defense and security market.*** We offer solutions for transportation, close air support, tactical, training, intelligence, surveillance, reconnaissance and cybersecurity, among others. With our products, we provide enhanced capabilities through a defense-integrated portfolio that meets the needs of a wide range of governments’ military needs. This is only possible due to our culture of continuously pursuing market opportunities with our existing and potential customers with whom we work to develop innovative and tailored solutions throughout time.

***Expanding our international sales, while continuing our partnership with the Brazilian Armed Forces in our Defense & Security segment.*** Historically, the Brazilian Armed Forces have been our key partner on the development and acquisition of aircraft and land systems. Since our foundation in 1969, we have developed a state-of-art engineering, operations capability and supply chain management expertise at a level that allows us to not only continue addressing the needs of our Brazilian customers, but also of international customers, providing them with tailored solutions. We are fully committed to expanding our international sales, while consolidating our position as a key partner of the Brazilian Armed Forces.

***Focus on customer satisfaction through established and respected services and support solutions.*** We believe that our focus on customer satisfaction is essential to our entrepreneurial success and our business strategy. Our philosophy is to offer and deliver a comprehensive portfolio of services and support solutions to all customers ensuring best product availability with competitive operational costs. Our high-quality customer service and support is key to our customer focus, as it allows us to maintain long-term relationships with our customers and increase the competitiveness of our products. As the number of our aircraft in operation continues to grow and our business expands, we have increased our commitment to provide quality after-sale support to our customers, including technical assistance, training, maintenance, spare parts, product modifications and other related services. We own and manage over 80 several service centers around the world, strategically located to support our operations with effective, reliable and efficient customized solutions. In addition, our customers may rely on authorized third-party maintenance service centers around the world to comply with their maintenance needs.

***Motivate our employees and improve our production processes and managerial practices.*** We constantly seek to exceed our customers’ expectations. To achieve this goal, we commit to efficient production processes and best managerial practices. The success of our products and services is ultimately a combination of the contribution of our employees and the production processes we have developed over the years. We strive to motivate our employees and refine our production processes. We implement and develop corporate programs, including our Embraer Enterprise Excellence Program, or P3E, based on lean manufacturing philosophy, which consists of reducing production and response times from suppliers to customers.

**Commercial Aviation Segment**

We design, develop and manufacture a variety of commercial aircraft. Our Commercial Aviation segment accounted for 34.0%, 31.4% and 29.6% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively. On December 31, 2022, our firm orders in backlog for our commercial aviation aircraft totaled US\$8.6 billion as compared to US\$9.0 billion on December 31, 2021.

***Products***

*ERJ Jet Family*

We developed the ERJ family, our 37-50-passenger twin jet-powered regional jet, introduced in 1996, to address the growing demand among regional airlines for medium-range, jet-powered aircraft. Until the launch of the EMBRAER 170/190 Jet Family, the ERJ was our most important product, achieving great results and being responsible for consolidating our presence in the United States regional market. As of December 31, 2022, 330 ERJ aircraft remained in service around the world.

EMBRAER 170/190 Jet Family

The EMBRAER 170/190 jet family provides our customers four aircraft models in the regional passenger jet range. The EMBRAER 170 is a 66-78 seat jet and the EMBRAER 175 is a 76-88 seat jet, while the EMBRAER 190 is a 98-114 seat jet and the EMBRAER 195 is a 100-124 seat jet. The EMBRAER 170 was certified by the Brazilian Aviation Authority, the FAA, the Joint Aviation Authority of Europe (the former advisory organization that made certification recommendations to non-European Union national authorities), or the JAA, and the EASA in February 2004, and deliveries of the EMBRAER 170 began in March 2004. The EMBRAER 175 was certified by the Brazilian Aviation Authority in December 2004, by the EASA in January 2005 and by the FAA in August 2006. The EMBRAER 190 was certified by the Brazilian Aviation Authority in August 2005, by the FAA in September 2005 and by the EASA in June 2006. The EMBRAER 195 was certified by the Brazilian Aviation Authority in June 2006, by the EASA in July 2006 and by the FAA in June 2007.

We designed the EMBRAER 170/190 jet family to maximize the benefits of commonality. Aircraft in the family share approximately 86% of the same components. The high level of commonality in this jet family lowered our development expenses and shortened our development period. We believe that this commonality leads to significant savings to our customers in the form of easier training, less expensive parts and maintenance and lower operational costs. Due to differences in size and weight, the EMBRAER 170/190 jet family does not share the same wing design. This new regional jet family has engines fixed under its main wings—a design intended to enhance power, improve fuel economy and minimize turnaround times. All of the aircraft models of this family are powered by engines manufactured by General Electric Aircraft Engines and contain state-of-the-art avionics manufactured by Honeywell International Inc. (Aerospace).

The EMBRAER 170/190 jet family’s principal features are:

- *Performance.* All four jets in the EMBRAER 170/190 jet family have a maximum cruising speed of Mach .82. The EMBRAER 170 and the EMBRAER 175 with all passengers on board have maximum ranges of 1,800 and 1,750 nautical miles, respectively, and each is available in the advanced-range version, with maximum ranges of 2,150 and 2,250 nautical miles, respectively. The EMBRAER 190 and EMBRAER 195 with all passengers on board have maximum ranges of 1,850 and 1,600 nautical miles, respectively, and each is available in the advanced-range version with maximum ranges of 2,450 and 2,300 nautical miles, respectively.
- *Ground servicing.* The underwing engine design and the existence of four doors, two in the front and two in the back, provide for enhanced accessibility and efficiency of ground services.
- *Cabin and cargo space.* We have enhanced passenger safety and comfort in the EMBRAER 170/190 jet family. The aircraft’s “double-bubble” design enables a four-abreast cabin, a wide aisle, greater interior space and headroom, and a larger baggage compartment than the regional jets of our competitors, including those regional jets that are in the development stage.

On September 29, 2022, we reached a new milestone on the E-Jet program, the delivery of the 1700<sup>th</sup> serial number production aircraft. The Aircraftle leased E195- E2 was handed over to KLM Cityhopper at a ceremony at Embraer’s facility in São José dos Campos.

As of December 31, 2022, the EMBRAER 170/190 jet family has 90 orders in backlog and more than 1,650 aircraft have already been delivered to customers worldwide.

*E-Jets E2Family*

In June 2013, we launched the second generation of our E-Jets family of commercial aircraft, named the E-Jets E2, comprising three new aircraft, the E175-E2, E190-E2, and E195-E2. The E190-E2 and E195-E2 entered service in April of 2018 and September of 2019, respectively.

The launch of the E2 advances our vision of offering leading-edge commercial aircraft with a capacity for 70 to 150 seats, seamless mainline comfort, and performance for flexible and efficient utilization by regional, low-cost and network carriers. Our strategy is to offer all the benefits of a new design, but with the reliability of an updated platform and commonality with current generation E-Jets. We have continually invested in the E-Jets program, so that our customers can stay competitive with aircraft that have the lowest operating costs and the highest passenger appeal.

In a typical single-class layout, the E175-E2 was extended by one seat row, compared to the current generation E175, and will seat up to 90 passengers, while the E190-E2 is the same size as the E190, with up to 114 seats. The E195-E2, compared to the current E195, has grown by three seat rows and will accommodate up to 132 seats in a typical single class configuration or up to 144 seats in a high-density configuration.

In June 2015, two years after the launch of the program, we began to assemble the first of the E-Jets E2 family, an E190-E2, at our factory in São José dos Campos.

In November 2015, the Pratt & Whitney PW1900G PurePower® Geared Turbofan™ (GTF) engine for the Embraer E190-E2 and E195-E2 aircraft successfully completed its first flight initiating the engine’s flight test program.

In February 2016, in a ceremony held at our plant in São José dos Campos, we presented the E190-E2, which made its first flight in May 2016. In March 2017, in a ceremony held at our plant in São José dos Campos, we presented the second model of the E2 generation. In March 2017, we announced that Azul, the largest operator of the current generation E195s in the world, would be the launch operator of the E195-E2.

On February 28, 2018, we received a Type Certificate from the National Civil Aviation Agency, the FAA and EASA for the E190-E2, the first member of the E-Jets E2 family of commercial aircraft. It was the first time that an aircraft program with the level of complexity of the E2 received a type certificate from three major worldwide certification authorities simultaneously.

On April 4, 2018, in a ceremony held in São José dos Campos, we celebrated the delivery of the first aircraft E190-E2 aircraft to Widerøe, the largest regional airline of Scandinavia. The aircraft entered into service in the same month and performed a sold-out flight between Bergen and Tromsø in Norway.

In April 2019, the E195-E2 received simultaneous approval and was certified by the Brazilian Aviation Authority, the FAA and EASA.

On September 12, 2019, in a ceremony held at our plant in São José dos Campos, we delivered the first E195-E2, the largest of the three members of the E-Jets E2 family of commercial aircraft. The recipients were AerCap, the world’s largest aircraft leasing company, and Azul Linhas Aéreas Brasileiras S.A., or Azul, which is the global launch operator for the E195-E2. On December 12, 2019, the Embraer E175-E2 made its inaugural flight from our facility in São José dos Campos. We believe in the E175-E2 market potential, being the most efficient and comfortable commercial aircraft in the market for the 76-seat category, whether to substitute the E175-E1 or to enhance the regional air mobility through new markets. Nevertheless, we intend to keep offering the E175-E1 with all the improvements made to the platform throughout the years of operation and feedback of our customers. If further developments are made into the scope clause, the E175-E2 will be the right and quickly ready product for the future, due to its optimized fuel consumption, maintenance cost, level of emissions and noise metrics.



On February 18, 2022, we announced a three-year pause on the development of the E175-E2 jet which is expected to entry into service between 2027 and 2028. Although US mainlines’ scope clauses are not expected to change in the next three years, we will keep monitoring discussions with the pilot unions regarding the maximum take-off weight (MTOW) limitation for aircraft with up to 76 seats, together with current global market conditions for commercial aviation and the continuing interest in the current E175 jet in the US market. Until then, the current generation E175 jet will continue to be the best solution available to this market segment.

On March 7, 2022, we announced the launch of the E190F and E195F Passenger to Freight Conversions (P2F), designed to meet the changing demands of e-commerce and modern trade that require fast deliveries and decentralized operations. The full freighter conversion is available for all pre-owned E190 and E195 aircraft, with entry into service expected in early 2024.

On November 10, 2022, the Embraer E190-E2 was granted the Type Certificate by the Civil Aviation Administration of China (CAAC). On December 15, 2022, the Embraer E195-E2 and E190-E2 were granted the Type Certification from Transport Canada Civil Aviation (TCCA), following certification from ANAC, the FAA (United States), and EASA (Europe) in 2019 and 2018 respectively.

In December, 2022, the first five of 50 Embraer E195-E2 ordered by Canadian company Porter Airlines were delivered. Porter was the North America entry customer for Embraer’s E195-E2 and opened up operations in the region.

As of December 31, 2022, the E-Jets E2 had 201 orders in backlog and 69 aircraft have already been delivered to customers worldwide. Operators include airlines in various regions, such as Azul Linhas Aéreas (Latin America), Widerøe (Europe), Helvetic (Europe), KLM (Europe), Binter (Europe), Air Kiribati (Asia Pacific), Bevalia (CIS), Air Peace (Africa) and Congo Airways (Africa) and the most recent Porter Airlines (North America).

***Customers***

We have a diverse, global customer base, and our major operators for commercial aircraft include some of the largest regional, low-cost and mainline airlines in the world. As of December 31, 2022, our largest E-Jet customers by number of aircraft in service were SkyWest, Republic, Envoy Air, Azul, Mesa, KLM, JetBlue, Aeromexico, LOT Polish, Tianjin and Horizon Air. In addition, as of December 31, 2022, 88.9% of our firm orders in backlog for the current EMBRAER 170/190 jet family are from the airlines Republic Airlines and Horizon Air / Alaska . Moreover, our E-Jets E2 family backlog mainly comprises orders from the companies Azul, AerCap, AirCastle, AirPeace, Porter, and Azorra which represent 83.1% of our E-Jets E2 family orders

We generally sell our commercial aircraft pursuant to contracts with our customers on a fixed-price basis, adjusted by an escalation formula. Our contracts generally include an option for our customers to purchase additional aircraft at a fixed-price option, subject to the same escalation formula. In addition, our contracts include a product support package to cover the entry into service of our aircraft, as well as a general warranty for such aircraft. Other provisions for specific aircraft performance and design requirements are negotiated with our customers. In addition, some of our contracts contain cancellation provisions and trade-in options and financial and residual value guarantees. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Embraer—Some of our aircraft sales may be subject to financial and residual value guarantees and trade-in options that may require us to make significant cash disbursements” for a more detailed discussion of these provisions.

***Sales and Marketing***

Our current marketing strategy is based upon our assessments of the worldwide commercial airline market and of the needs of our customers. We actively market our aircraft to international airlines and regional affiliates of major global airlines through our regional offices in the United States, Europe and Asia.

Our success depends, to a significant extent, on our ability to discern our customers’ needs, including needs for customer service and product support, and to fill those needs in a timely and efficient manner while maintaining the high quality of our products. Our market and airline analysts focus on the long-term trends of the market, competitive analysis, product-enhancement planning, and airline analysis. In terms of direct marketing to our customers, we rely on relationship development, social media, and professional network. As a way to keep our customers informed and enhance awareness and brand recognition, we participate at air shows and events, webinars and other forums. Besides São José dos Campos in Brazil, we have regional sales offices in Amsterdam, Holland; Fort Lauderdale, Florida, United States; Beijing, China; and Singapore.

***Production, New Orders and Options***

Prior to starting production or development of a new project, we secure letters of intent for future orders of a significant number of aircraft. We typically begin taking orders and building a backlog two years before we begin producing a new aircraft model, aiming to receive a significant number of orders before we deliver the initial aircraft. Once an order is taken, we reserve a place for that order on the production line, ensuring that we will maintain production sufficient to meet demand. Once a place is reserved on the production line, we are able to give customers delivery dates for their orders.

We include an order in backlog once we have received a firm commitment, represented by a signed contract. Our backlog does not include options and letters of intent for which definitive contracts have not been entered into.

Our options generally provide our customers the right to purchase an aircraft at a fixed price and on a specified delivery date, subject to escalation provisions, under a purchase agreement. Once a customer decides to exercise an option, we account for it as a firm order. Occasionally, we have extended the exercise date for our options and renegotiated the delivery schedule of firm orders, as well as allowed customers to convert their firm orders or options for one aircraft into firm orders or options for another aircraft within the same commercial aircraft family.

***Competition***

We generally face competition from major manufacturers in the international aircraft market. Each category of our products faces competition of a different nature and generally from different companies. Some of our competitors have greater financial, marketing, and other resources than we do.

We currently face the strongest competition from the following aircraft:

- A220, former CSeries, 110 to 150-seat jets acquired by Airbus from Bombardier, which entered into service in 2016;
- ARJ21, a 90-seat regional jet produced by the Commercial Aircraft Corporation of China, or COMAC;
- SSJ100, a 103-seat regional jet produced by JSC Sukhoi Company;
- SpaceJet (former MRJ), a 76 to 88-seat jet which was under development by Mitsubishi Aircraft Corporation, but had its development suspended in 2020 and officially cancelled in 2023;
- CRJ-700, CRJ-900 and CRJ-1000, 70-seat, 86-seat and 98-seat regional jets, respectively, formerly produced by Bombardier, acquired by Mitsubishi Heavy Industries (MHI);
- Dash 8-400 (former Q-400) a 72-seat turboprop program from Bombardier acquired by Havilland Canada which belongs to Viking Air;
- ATR-72, a 68-seat turboprop produced by ATR Aircraft.

We are the leading manufacturer in the market for jets up to 150 seats in the world, with 29% market share in terms of accumulated deliveries, since 2004, according to Cirium.

The key competitive factors in the markets in which we participate include design and technological strength, aircraft operational costs, aircraft price, including financing costs, customer service and manufacturing efficiency. We believe that we will be able to compete favorably based on our aircraft performance, efficiency, low operating costs, product development experience, global customer base, market acceptance, cabin design and aircraft price. In addition, while the competitive landscape has become increasingly aggressive, deals such as the Airbus acquisition of a majority stake in Bombardier’s C-Series Program, rebranded as A220, are evidence of the opportunities in the 100-150 seats market. With the Airbus sales team marketing the A220 Program, we believe customers who would not have previously considered aircraft of this size may seek our E190/E195-E2 as a comparable alternative.

**Executive Aviation Segment**

We design, develop and manufacture a variety of executive jets within our Executive Aviation segment. Our current portfolio of executive jets comprises the entry-level Phenom 100 EV, the light Phenom 300E the midsize Praetor 500 and the super-midsize Praetor 600.

We market our executive jets to companies, including fractional ownership companies, charter and air-taxi companies, high-net-worth individuals and flight academies, including independent, commercial airline and military flight academies. Our Executive Aviation segment accounted for 27.4%, 26.9% and 28.4% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively. On December 31, 2022, our firm orders in backlog for our executive jets totaled US\$3.9 billion as compared to US\$2.9 billion on December 31, 2021.

In May 2005, we launched the Phenom 100 and Phenom 300, which are executive jets in the entry-level and light jet categories, respectively. The Phenom 100 jet, which carries six to eight people, received the Brazilian Aviation Authority and FAA certification in December 2008, the same month of its entry into service. The Phenom 300 carries up to ten people and has a larger fuselage and wingspan and longer range than the Phenom 100. It received the Brazilian Aviation Authority and FAA certification and entered service one year after the Phenom 100. By the end of 2022, the Phenom 100 series fleet comprised nearly 400 aircraft distributed in 30 countries and the Phenom 300 fleet comprised over 700 jets distributed in 60 countries. Focused on constant improvement, we launched the Phenom 100EV and the Phenom 300E in 2016 and 2017, respectively. In 2020, we introduced the new Phenom 300E, featuring enhancements in performance, comfort and on-board technology. The new Phenom 300E is currently the only in-production single-pilot jet to reach Mach 0.80, offering a quieter cabin and upgrades to its avionics suite. These features include predictive windshear and a runway overrun awareness and alerting system, which are our exclusive intellectual property and the first technology of its kind to be developed and certified in business aviation. The model was already granted its certification by the Brazilian Aviation Authority, EASA and the FAA.

In August 2020, we announced the Phenom 300MED, a unique medical evacuation (MEDEVAC) transportation solution suitable to Phenom 300 model series, which is also available for retrofit, through a partnership with the companies umlaut and Aerolite AG (Aerolite). Embraer and umlaut have jointly developed and certified a new supplemental type certificate (STC) utilizing Aerolite equipment in 2021 and 2022. Aircraft STC is available for national aviation agencies such as EASA (Europe), FAA (United States) and ANAC (Brazil). Designed as an ideal solution for both civil and government applications, the MEDEVAC solution will be installed exclusively by Embraer’s award-winning Services & Support organization, ensuring the highest quality, reliability, and service experience, direct from the manufacturer.

In November 2020, Embraer and Porsche announced that they have collaborated to create a limited-edition, limited-quantity Embraer Phenom 300E aircraft and Porsche 911 Turbo S-car pairing called Duet. Embraer and Porsche ceased Duet offering in 2022.

In May 2006, we launched the Lineage 1000, an ultra-large executive jet based on the EMBRAER 190 commercial jet platform. The Lineage 1000 is configured to accommodate up to 19 passengers in a total cabin area of 750 square feet (70 square meters). The Lineage 1000 was certified by the Brazilian Aviation Authority in December 2008 and by the FAA in January 2009 and entered service in the first half of 2009. Continued investments in the Lineage 1000 resulted in the introduction of the Lineage 1000E, in 2013, enhancing the customer experience by extending its range capability and offering new interior amenities. In 2019, we successfully implemented the sunset strategy of the Lineage 1000E. As of December 31, 2022, the Lineage 1000 fleet comprised 26 units distributed in 11 countries.

In April 2008, we formally launched two new programs in the medium cabin category, the medium-cabin jet Legacy 450 , with a 2,575 nautical mile range and a capacity for up to nine passengers, and the supermidsize jet Legacy 500 , with a 3,125 nautical mile range and a capacity for up to 12 passengers. The Legacy 500 was certified by the Brazilian Aviation Authority and the FAA in 2014, the same year that it entered service. The Legacy 450 was certified by the Brazilian Aviation Authority and the FAA in August 2015 and by the EASA in September 2015. In November of the same year, we announced an increase of the Legacy 450's range in 2,900 nautical miles, and it entered service in December. In November 2017, we introduced the best-in-class 5,800-foot cabin altitude for the Legacy 450/500 jets, which further enhanced customer experience. These two aircraft programs have helped strengthen our position in the market and establish our portfolio as one of the broadest in the executive aviation industry. Both the Legacy 450 and 500 had their final deliveries to customers in 2020.

In October 2009, we introduced the Legacy 650 jet, a large jet based on the Legacy 600 platform, with a longer range for up to 14 passengers. The Legacy 650 received the Brazilian Aviation Authority and FAA certification in October 2010 and February 2011, respectively, and entered service in November 2010. The latest evolution of the aircraft that started our Executive Aviation segment is the Legacy 650E, which introduces auto-throttle and interior enhancements, in addition to a ten-year warranty, which set a new industry standard for performance and reliability. In 2019, we successfully implemented the Legacy 650 series sunset strategy. As of December 31, 2022, the Legacy 650 fleet comprised 109 units distributed in 31 countries.

In October 2018, we launched the new Praetor 500 and Praetor 600, the most disruptive and technologically advanced midsize and super-midsize jets, respectively, introducing unprecedented range into their categories. The Praetor 600 is the farthest-flying super-midsize business jet, which allows nonstop flights between London and New York. The Praetor 500 is the fastest midsize aircraft, capable of reaching Europe from the west coast of the US with a single stop. The Praetor 600 was certified and entered service in June of 2019 and in December of 2019, respectively. The Praetor 500 is the successor of the Legacy 450 in the midsize class as the Praetor 600 is for the Legacy 500 in the super midsize class. In 2020, we announced a series of breakthrough cabin enhancements for the Praetor 500 and Praetor 600. In addition to the lowest cabin internal atmospheric pressure in the class (equivalent to an altitude of 5,800 feet) and 100% fresh air capability, Embraer is now offering the HEPA filter as a standard feature on all Praetor aircraft and announced the certification of a new electric lavatory pocket door. In 2020, we announced the completion of the first European conversion of a Legacy 450 to a Praetor 500. The conversion was performed at the Embraer Executive Aviation Service Center at Le Bourget International Airport, in Paris, France. As of December 31, 2022, the Praetor 500 fleet comprised 42 units distributed in five countries and Praetor 600 fleet accumulated 69 units in 13 countries.

As of December 31, 2022, we have delivered more than 1,650 executive jets and our fleet had served over 1,000 customers in more than 65 countries.

**Competition**

Phenom 100EV and Phenom 300E competitors in the entry-level and light jet categories include Textron, Honda and Pilatus. In the medium cabin category, the Praetor 600 compete with Textron, Dassault and Gulfstream aircraft, while the Praetor 500 compete largely with aircraft produced by Textron.

***Continuing Internationalization***

In October 2014, we announced the opening of our Legacy 500 and Legacy 450 assembly complex in Melbourne, Florida, more than doubling the size of our campus at Melbourne International Airport. Since then, we have continued to expand our footprint into the complex, with delivery centers, assembly hangars, and paint and flight preparation facilities. As of December 31, 2022, our Melbourne campus had a constructed area of approximately 484,000 square feet.

**Defense & Security Segment**

We conceive, design, develop, manufacture and support a wide range of integrated solutions for the defense and security market. Our products include training, advanced training aircraft, aerial surveillance platforms, military transport aircraft, government transport aircraft and command, control, communications, computer, intelligence, surveillance and reconnaissance systems, border surveillance and security, and cybersecurity. We offer a complete portfolio of customer services, ranging from maintenance and material solutions to complete Contractor Logistical Support programs. Using our commercial platforms and executive jets, we also offer a comprehensive range of aircraft dedicated to transportation of authorities, medical evacuation and general transportation missions for the defense and security market.

As of December 31, 2022, we had sold more than 1,400 defense aircraft, including government transport aircraft, to more than 60 armed forces and operators worldwide. We are also the leading supplier of defense aircraft to the Brazilian Air Force based on the total number of aircraft in its fleet. Our Defense & Security accounted for 9.9%, 14.2% and 17.3% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively. As of December 31, 2022, our firm orders backlog for our Defense & Security segment was US\$2.4 billion, reflecting the effect of our negotiation processes with the Brazilian Air Force, in 2022, in order to reduce from 28 to 19 the total number of KC390 Millennium aircraft to be delivered until 2034 under the terms of the agreements entered into with the Brazilian Air Force, with no possibility of further reduction.

***Products***

*Military Transport – C-390 Millennium*

After its rebranding in 2019, our multi-mission aircraft C-390 Millennium maintained its features, per the certifications by ANAC and the Military Aviation Certification Authorities (the Department of Aeronautical Science and Technology, or DCTA, and the Industrial Development and Coordination Institute, or IFI).

The C-390 Millennium is a multi-role military transport aircraft developed to set higher standards in its class. The C-390 Millennium is efficient for cargo and troop transport, aerial resupply and humanitarian missions, among other uses, as well as for uses in adverse situations, evacuations, firefighting and aerial refueling (KC-390 Millennium version). Designed with modern engineering solutions, this new aircraft is an innovation in military transport aviation. The C-390 Millennium features flexibility, strength, mobility, easy maintenance and advanced technology.

In 2019, Embraer delivered the first two KC-390 Millennium multi-mission transport aircraft (the “K” denotes that these C-390 aircraft will also have aerial refueling capabilities) to the Brazilian Air Force. In addition, the Portuguese government signed the first export contract of KC-390 Millennium aircraft, including the acquisition of five aircraft and one flight simulator, together with a 12-year contract of services to support the fleet. The first delivery is planned for 2023, and the aircraft will be used for military transport.

In 2020, Embraer delivered the third and fourth KC-390 Millennium multi-mission transport aircraft to the Brazilian Air Force. Since the beginning of the COVID-19 pandemic, the Brazilian Air Force has operated the KC-390 in logistics transport operations, carrying essential supplies to combat the pandemic in Brazil. Furthermore, in November 2020, we entered into an export agreement with the Hungarian government for the acquisition of two aircraft in its KC-390 Millennium version, with the capacity to carry out in-flight refueling missions.

During 2021, the Brazilian Air Force had four KC-390 Millennium multi-mission transport aircraft operating in logistics transport operations. The development of the version of the KC-390 Millennium, tailored for Portugal, advanced as expected, and the version of the KC-390 Millennium intended for Hungary also showed significant progress in its development. In 2022, the Brazilian Air Force took delivery of its fifth KC-390 Millennium. As of December 31, 2022, the fleet has accomplished approximately 8,000 flight hours and around 6,000 flight cycles.

In June 2022, the Ministry of Defense of The Netherlands announced the decision to acquire five C-390 Millennium aircraft to substitute its fleet of C-130H Hercules. As of the date of this annual report, the procurement process is under the proposal analysis phase.

In February 2022, we and the Brazilian Air Force engaged in negotiations, which resulted, among other matters, in the reduction of the total number of KC-390 Millennium aircraft to be delivered under the terms of the agreement from 28 to 22. In October 2022, we and the Brazilian government engaged in further negotiations which resulted, among other matters, in the reduction of the total number of KC-390 Millennium aircraft to be delivered under the terms of the Contracts from 22 to 19, with no possibility of unilateral reductions. Deliveries related to these aircraft are scheduled to occur by 2034. For further information, see Note 1.1.1 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

*Close Air Support and Advanced Training – A-29 Super Tucano*

The A-29 Super Tucano is an aircraft equipped for close air support and counter-insurgency scenarios, containing integrated sensors, datalink, cockpit protection and multiple payload configurations. We believe that the Super Tucano is the market benchmark in its class, as it combines a rugged and reliable turboprop platform with a delivery system of high-precision class payloads. It is the only combat-proven close air support aircraft currently in production. The A-29 Super Tucano is also a full-fledged tactical trainer due to its handling features, low operational cost, and state of the art avionics systems. Since its entry into service in 2004, a total of more than 260 units have been sold to 16 different countries by the end of 2022.

We have been acting as a subcontractor for the United States Government (“USG”), and have delivered to Sierra Nevada Corporation (“SNC”), a USG prime contractor, 47 A-29 Super Tucano aircraft to different countries. In 2021, we delivered nine aircraft to SNC, three of them for the AFSOC (Air Force Special Operations Command) Program of the United States Air Force, and six through the Foreign Military Sales program to the Nigeria Air Force Program. In addition, through our Gavião Peixoto unit, we delivered five more aircraft to an undisclosed customer, together with advanced training systems, mission planning and debriefing stations, optional equipment and logistics package.

In 2022, we entered into a new sales contract of A-29 Super Tucano aircraft to an undisclosed customer.

*Fighter –F-39 Gripen Program*

In July 2014, we entered into an agreement with Saab AB (Saab) to collaborate in a joint management program for the F-X2 Project, currently called F-39 Gripen Program, pursuant to the selection of the Gripen NG as Brazil’s next generation fighter jet. Under this agreement, we have performed a material role in the overall program, and we have also taken an extensive share of work in systems development, integration, flight testing, final assembly and aircraft deliveries of both the single and the two-seat version of the state-of-the-art Gripen NG aircraft for the Brazilian Air Force.

In 2022, multiple milestones in the F-39 Gripen development Program have been accomplished, such as (i) Embraer’s support to the delivery of the first two aircraft assembled in Sweden to the Brazilian Air Force; and (ii) the set-up procedures of the F-39 Gripen final assembly line in Brazil, planned to start in 2023.

*Special Transport Aircraft*

In 2021, we have entered an agreement with Aerodata AG for the sale of a Praetor 600 jet to be converted into an aircraft to fulfill a variety of different in-flight inspection missions. In 2022, this aircraft was completed and delivered to Aerodata for integration of mission equipment and systems.

**Modernization Programs**

We offer military aircraft modernization services and currently have three ongoing programs under contract, two of them with the Brazilian Air Force and one with the Brazilian Navy.

The A-1M modernization program focuses on modernizing the AM-X aircraft, which is an aircraft developed by us and sold to the Brazilian Air Force approximately 20 years ago, and the platform naturally became technologically outdated overtime. From 2013 through 2021, we delivered 11 modernized aircraft and the program was completed with the Verification Plan by the Brazilian Air Force in 2021. In 2022, Embraer completed some remaining milestones in the program, after the final aircraft delivery the year before, and started demobilizing the production line and testing equipment, expected to be completed by 2023.

The other program with the Brazilian Air Force relates to the modernization of five E-99M Airborne Early Warning and Control (AEW&C) aircraft. The agreement also accounts for six mission planning and analysis stations, which will be employed for training and crew development. In 2020, the first two units were delivered and, in 2022, we delivered the fourth modernized aircraft to Brazilian Air Force. The last aircraft is planned to be delivered in 2023.

The modernization program with the Brazilian Navy is the upgrade of A-4 Skyhawk fighter jets (AF-1 per the Brazilian Navy’s Designation), with the purpose of incorporating new technology, including new avionics, radar, power generation and independent oxygen generating systems. By 2021, six out of seven modernized AF-1 (AF-1B) fighter jets were delivered to the Brazilian Navy. In 2022, we delivered our last modernized AF-1, as well as the fixed-base simulator AATD (Advanced Aircraft Training Device) to the Brazilian Navy.

**Radars and Land Systems Programs**

Our portfolio of capabilities with respect to radars and land systems includes the development, integration, project management, sourcing, manufacturing, implementation, deployment and life cycle support of radars and land systems for multiple applications, including: low-altitude air defense, surface surveillance, air traffic control, identification friend or foe (IFF), medium-range air defense, surveillance and early warning, monitoring and protection of borders, protection of critical infrastructures, among others. Our products include both fixed, modular, and transportable solutions. Our line comprises a comprehensive range of products, namely the SENTIR M20 ground surveillance radar, the SABER M60 short-range air defense radar, the S200R air traffic control and air defense radar, the SABER M200 VIGILANTE medium-range air defense radar, among other integrated solutions.

In 2020, we entered into an agreement with the Brazilian Army for the supply of two SABER M60 v2 radars to support its anti-aircraft artillery units. These radars have been timely delivered in 2022 and complemented more than 30 other SABER M60 radars delivered to the Brazilian Army in prior years. Also in 2022, we entered into an agreement with the Brazilian Army for the supply of four additional SABER M60 v2 radars.

In 2022, we signed a contract with the Brazilian Army for the development of a counter battery radar, which will count on the same knowledge and technology applied to the SABER M200 radars.

In 2022, the Brazilian Army completed the first phase of its Integrated Border Monitoring System (SISFRON) program, which largely strengthened the presence and the action of the Brazilian Armed Forces along the western borders of Mato Grosso and Mato Grosso do Sul states. Further to the development of the program, we entered into a new agreement with the same customer for the development and implementation of the second phase of the SISFRON program, which will add operational capabilities and expand the coverage of Brazilian western borders monitoring and protection system.

*Principal Defense & Security Subsidiaries and Joint Ventures*

*Atech*

Since 2013, Atech has worked in many strategic projects for the Brazilian Government, including our nuclear-electric generation laboratory (LABGENE program, which has the purpose of developing a protection and control system for the nuclear reactors) and the Brazilian air defense systems. It is also responsible for the development, implementation and modernization of the Brazilian air traffic control centers. The LABGENE program continued to advance, and completed the factory acceptance tests (FAT) in 2022, as well as the integration of the data control system (DCS). In 2022, Atech entered into new agreements with the Brazilian Air Force, and a new agreement with the Brazilian Navy to implement the Advanced System for Managing Air Traffic Information and Operational Interest Reports (*Sistema Avançado de Gerenciamento de Informações de Tráfego Aéreo e Relatório de Interesse Operacional*, or SAGITARIO), which is located at the Naval Air Base in São Pedro d’Aldeia. Atech also delivered the new version of the Electronic Flight Bag app (FPL BR – EFB), and completed the conceptual phase of the Urban Air Traffic Mobility system (UATM) for EVE Air Mobility.

In 2022, Atech has satisfactorily completed several relevant deployments with respect to its various products and services, including the completion of important milestones related to the F-X2 Gripen program and the Tamandaré Class Frigates Program. Also, in 2022, Atech received the Pro-Ethics Seal promoted by CGU and the Ethos Institute and was considered, for the fourth consecutive year, as a great company to work for the GPTW institute.

In 2022, Atech had also a distinct presence at Locked Shields, the world’s largest cybersecurity defense exercise, according to the NATO, and took part in the *Guardião Cibernético 4.0* exercise. In the C3I systems area, Atech successfully finalized the integration tests of the command, control, communications and intelligence center in Mauritania.

*Visiona Tecnologia Espacial S.A.*

Embraer and Telecomunicações Brasileiras S.A., or Telebras, formed Visiona Tecnologia Espacial S.A., or Visiona, of which Embraer holds a 51% stake and Telebras 49%. Through this joint venture, Visiona became the prime contractor for the Brazilian Strategic and Defense Communications Geostationary Satellite (SGDC), with responsibility for the system integration.

In 2022, the VCUB-1 Nano Satellite program advanced to the environmental and integration tests, the last phase before the actual launch, which is expected to take place in 2023. With respect to the remote sensing services, Visiona entered into an agreement with a non-disclosed customer that is a market leader in agricultural insurance. Visiona also won a public bid carried out by FINEP (a Brazilian Government research and innovation fund) to develop the technology of a small-size and high-resolution satellite, and will lead a group of five companies and five science & technology institutes from the main space technology hubs in Brazil.

*Tempest Security Intelligence*

Founded in 2000, Tempest Security Intelligence, or Tempest, is the largest cybersecurity company in Brazil, providing complete solutions for business protection in the digital world. The portfolio of products and services provided by Tempest is aligned with the framework of the National Institute of Standards and Technology (NIST), a non-regulatory government agency linked to the Technology Administration of the United States Department of Commerce. With more than 450 professionals and offices in Recife, São Paulo and London, Tempest has ensured the protection of more than 500 companies of all sizes and industries providing a portfolio with more than 70 solutions which include consulting, digital identity, managed security and integration services.



In 2020, we became the majority shareholder of Tempest, which in 2021 broke its revenue records, registering a 40% growth compared to 2020. In 2022, Tempest launched the Prospero Suite, a new integrated management platform dedicated to cybersecurity services and solutions. The platform, which was being used by 61 customers as of December 31, 2022, provides support and analysis for its users’ at all levels, including operational processes such as data management and consumption, and also strategic decisions.

In 2022, Tempest also developed the Allow-Me Bio, which is an identity monitoring tool that represents an evolution of facial biometrics that includes behavior analysis expertise. Created on the *security by design* concept, it guarantees security without impacting the user experience.

*Águas Azuis*

Founded in 2018, and awarded its first contract in 2019, Águas Azuis is a consortium between Embraer, Atech and Thyssenkrupp Marine Systems that was selected as the preferred supplier to build four new Tamandaré Class Frigates for the Brazilian Navy. In 2022, Águas Azuis started the construction of the first frigate. The program in advancing and its first delivery is scheduled for 2025.

**Competition**

Our military aircraft faces competition from various manufacturers in different countries in each market segment. The A-29 Super Tucano competes in the advanced training market with the Textron AT-6 (United States), L3 Harris’ SkyWard (United States), Textron Scorpion (United States), Leonardo M-345 (Italy), Aero Vodochody L-159 (Czech Republic), among others. In the flight training market, it competes with the Pilatus PC-21 (Switzerland), Textron T-6A/B (United States), Aero Vodochody L-39NG (Czech Republic), among others.

In the military transportation segment, the C-390 Millennium operates in the medium airlift segment in the 20-ton category. Its main competitor is the Lockheed Martin C-130J (United States). Due to the multi-mission design of the C-390 Millennium, including medical evacuation, search & rescue, firefighting, air-to-air refueling, transport of troops and aerial resupply, we expect specific competition in each segment: Airbus A400M and Kawasaki C-2, in the air-to-air refueling segment;, Airbus C-295 search and rescue segment, Leonardo C-27J in the passenger aircraft convertible into troop transportation aircraft segment, Ilyushin IL-76 in the firefighting aircraft segment, as well as C-130J, which is our biggest competitor in all of these categories.

In the VIP transportation segment, which comprises the aircraft that will be used by government officials and authorities, our business jets face competition from the main manufacturers of business jets, such as Textron and Gulfstream in the United States, Bombardier in Canada, and Dassault in France.

**Services & Support Segment**

On December 20, 2016, we announced the creation of Embraer Services & Support, a focused on services and customer support, which brings together capabilities that were previously allocated to each business segment and is responsible for developing solutions in support of current and new products and services, as well as for managing the associated processes and resources.

Embraer Services & Support is a segment focused on providing parts, flight hour solutions, maintenance, training, and engineering products and services for Embraer operators in the Commercial, Executive, Defense & Security segments. Accompanied with OGMA, Embraer’s subsidiary in Portugal, which provides agnostic services, and Embraer CAE Training Services (ECTS). With a network of over 76 owned and authorized service centers spread around the world, contact centers dedicated to each market, and a team with more than 4,300 employees overseeing support of over 4,580 Embraer Commercial, Executive and Defense aircraft as well as other original equipment manufacturers, or OEMs, aircraft, engines and radars.

In January 2022, Embraer and AVIAN Inventory Management, LLC (“AVIAN”), together with York Aerospace Solutions III (“YAS”), as AVIAN’s sole capital partner, entered into an agreement for purchasing, marketing and distribution of spare parts of Embraer commercial and business jet aircraft. Designed to promote accessibility and speed to market, AVIAN’s distribution center will deliver unparalleled product availability to all aircraft operators and maintenance and repair stations around the world providing a one-stop, go-to access point.

In March 2022, we also announced our entrance in the air freight market with the launch of the E190F and E195F Passenger to Freight Conversions (P2F). The E-Jets freighters are designed to meet the changing demands of e-commerce and modern trade that require fast deliveries and decentralized operations. Embraer is offering the unbeatable cargo economics and flexibility that rightsized jets provide. The full freighter conversion is available for all pre-owned E190 and E195 aircraft.

We launched, in 2022, new hangars at our service center located in Sorocaba, state of São Paulo, doubling its useful area from 20,000 m² to 40,000 m². As of December 31, 2022, the Sorocaba service center had four hangars, three of which are dedicated to maintenance, repair, and component overhaul (MRO) services and one to support fixed-base operator (FBO) operations.

Our Services & Support segment accounted for 27.9%, 27.0% and 24.4% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively. As of December 31, 2022, our firm orders in backlog for our Services & Support segment were US\$ 2.6 billion.

***Services & Support related to the Commercial Aviation Industry***

We are working on further developing our portfolio of services for our Commercial Aviation customers, which comprises the following areas:

- field support, which provides convenient, accessible, on-site or remote assistance for all operational and technical issues in order to maximize customer performance;
- technical support, which serves technical needs through analytics, engineering expertise, and real-time fleet monitoring;
- flight operations, which supports the efficiency and safety of airline operations through tailored solutions, consulting, supervision and training resources;
- aircraft modification, which provides execution and coordination of system upgrades for improved fleet performance and cabin modifications for enhanced onboard amenities;
- materials, which ensures parts availability and materials management for both scheduled and unscheduled maintenance;
- maintenance, which provides optimized maintenance solutions based on best practices for efficiency and safety;
- training, which prepares flight crew, maintenance technicians and operations personnel for the highest levels of competence; and
- digital solutions, which deploys the internet as the core communication channel for 24 hours a day, seven days a week collaboration and information exchange.

We have a worldwide presence, with five regional units strategically positioned around the globe in order to provide us with greater agility in understanding the needs and desires of our customers and respecting the cultural diversity of the different regions where our customers are based. Our regional units are located as follows:

- Fort Lauderdale, Florida, United States, which supports our customers in North America;
- Amsterdam, Netherlands, and Paris, France, which supports our customers in Europe, Africa, the Middle East and Central Asia;
- Singapore, which supports our customers in the Asia Pacific region;
- Beijing, China, which supports our customers in China; and
- São José dos Campos, Brazil, which supports our customers in Latin America.

All regions mentioned above have the following infrastructure:

- a spare parts distribution center;
- technical and material field support teams with field engineers and customer account managers;
- warranty and repair administration offices; and
- services sales managers.

In São José dos Campos, we also offer the following services:

- Customer Care Center, providing an integrated solution of technical and spare parts support available 24 hours a day, seven days a week;
- spare parts planning and material engineering;
- technical support;
- flight operations support;
- maintenance support engineering;
- maintenance Repair and Overhaul, or MRO, network management strategy and policy;
- business development support;
- technical publications development; and
- technical services, such as: maintenance training, Digital Solutions, engineering services, pilot services and aircraft modifications.

Beyond parts fulfillment and simple rental plans, we also provide innovative programs for material planning, logistics, and acquisitions, such as our:

- Flight-Hour Pool Program;
- Parts Consignment Program;
- Embraer Collaborative Inventory Plan;
- Embraer Parts Exchange Program; and
- Customer Stock Optimization.

We have a full flight simulator located at the Embraer Training Center in Johannesburg, South Africa, supporting our fleet growth in the African market.

Our MRO network includes facilities in Nashville, La Vergne, and Macon, United States, where we have Embraer Aircraft Maintenance Services, a dedicated service center for commercial aviation. We also count on Embraer Service Center in Gavião Peixoto, state of São Paulo, Brazil and OGMA (Indústria Aeronáutica de Portugal S.A), an Embraer subsidiary in Alverca, Portugal, which are dedicated to provide maintenance services to both commercial and defense customers.

Our MRO network supporting our commercial aviation aircraft fleet is also expanding with our third-party maintenance service centers. As of December 31, 2022, these centers are:

- STAECO, in Jinan, China;
- HNA Technik, in Tianjin, China;
- SIA Engineering Company, in Angeles City, Philippines;
- LOT AMS, Warszawa, Poland;
- Aspire in Lanseria, South Africa; and
- Kenya Airways, in Embakasi, Kenya.

We seek to maintain our leading position in the services and support market by continuing to provide the best support anytime and anywhere in the world, relying on our strong MRO network, to exceed customers’ expectations of quality, lead time, affordability, capability and global coverage.

We constantly monitor customer satisfaction levels and keep open communication channels with them to understand customer needs and define the most appropriate actions for the continuous improvement of our support. To do so, we use the following tools and forums:

- annual customer support satisfaction survey to identify our competitive position;
- specific action plans and commitments with each customer, known as Customer Integrated Action Plans;
- teamwork and systematic identification and integrated action plans to solve problems affecting us, our suppliers and customers;
- periodic dedicated meetings at the customer’s headquarters;
- Embraer Operators’ Conferences, which are held once a year and in different regions of the world, with the presence of all operators of E-Jets and E2s, as well as suppliers and partners;
- Maintenance Cost Workshop, a yearly event held to share best maintenance practices and discuss cost reduction initiatives among operators and the Embraer team;
- eTalks, which is a series of monthly lives created to keep customers informed and updated about different subjects related to Embraer Services & Support;
- interactive forums for discussions in the web portal FlyEmbraer, fostering the exchange of experiences among operators and Embraer;

- participation in international fairs related to maintenance, technology, customer relationship management and others; and
- an internal program, Embraer Excellence in Customer Experience, which aims to address changes in the Services & Support area of the commercial aviation division, in order to elevate the performance of our Commercial Aviation segment, covering current and future market needs, with the purpose of obtaining the highest levels of customer satisfaction based on their experience in the commercial aviation industry.

### ***Services & Support related to the Executive Aviation Industry***

Our executive jets customer fleet has expanded globally and has a strong presence in major markets. Between 2008 and 2010, we added seven owned service centers to support our executive and defense aircraft in Fort Lauderdale, Florida, United States; Melbourne, Florida, United States; Mesa, Arizona, United States; Bradley, Connecticut, United States; Le Bourget, France; Gavião Peixoto and Sorocaba, São Paulo, Brazil. In 2021, our facility in Bradley, Connecticut ceased its operations, so in the end of the year we had six service centers to support our executive and defense jets fleet; including OGMA in Lisbon, Portugal, and 69 authorized service centers around the world. In addition, in order to ensure customer satisfaction, we implemented a new spare parts system and planning policy to generate synergies among business segments. Our new planning policy will further enhance stock optimization and service levels, offering customers a high availability for our spare parts items.

Services and support provided to Executive Aviation aircraft continue to be strong, mostly driven by the high volume of aftermarket aircraft transactions and the addition of new customers to our Executive Care program, which is a comprehensive airframe maintenance program carefully designed and managed by Embraer to provide a simple and predictable way for budget aircraft's maintenance costs. We have also improved our services and support structure to enhance our customers' experience. To measure our customers' satisfaction, we implemented the Customer Experience Program, supported by a marketing tool that measures customer satisfaction based on the customer's experience. The score and feedbacks received allow us to be more responsive on developing initiatives and well as predict their needs. Our Customer Care Center has a team of specialists dedicated to support all Embraer Executive Aviation and offers complete and timely assistance for their operational, technical and maintenance needs. It operates 24 hours a day, seven days a week, and is based at Embraer's headquarters in São José dos Campos. Its priority is to minimize downtime from the customer's first contact to final completion, by quickly and efficiently applying appropriate resources to critical needs, assuring that customers have expert assistance anywhere in the world.

Since 2014, our product support has been top ranked in industry surveys. In 2016, for the first time we were number one in both the AIN and Pro Pilot Product Support Surveys. In 2017, AIN ranked us first for product support. In 2018, we were ranked number one in the Pro Pilot Product Support Survey and number two in AIN's Product Support Survey. In 2020, we were top ranked in Pro Pilot's Product Support Survey 2020, in all categories of the survey. In 2021, we were ranked third place in the AIN's Product Support Survey with Phenom, Legacy, Praetor, and Lineage jets. In Pro Pilots Product Support Survey, we were ranked first for the second consecutive year. We were ranked first in our cost of parts, tech manuals, tech reps, and service satisfaction categories. In 2022, we moved up to hold the first place in the AIN's Product Support Survey, and second place on Pro Pilots Product Support Survey.

In 2021, our four service centers in the United States received for the eleventh time the FAA Diamond award, a certificate of excellence related to maintenance technician training. In 2022, all of our services centers in the United States received the FAA Diamond Award for the twelfth time

In 2022, we and FlightSafety International announced that FlightSafety would offer a new full-flight simulator (FFS) for the Praetor 500 and Praetor 600 jets to meet the growing demand for these models' training. The simulator, which is the third for the Praetor 500 and Praetor 600 established by FlightSafety International, will be located in Orlando, Florida to serve the growing fleet of over 200 aircraft in the Praetor platform. These operations will begin in the second quarter of 2023.

*Services & Support related to the Defense & Security Industry*

The Services & Support segment provides solutions to several air forces and government entities through our comprehensive portfolio. These solutions are tailored to our customer needs and may include provision of material, training, maintenance, engineering and other aspects that will enhance fleet availability and mission readiness.

Our support services may range from simple transactional sales to integrated support programs. We assess our customer capabilities and requirements in order to define the integrated solution that will keep the fleet operating in the most effective way.

The multi-mission C-390 Millennium has a dedicated team to design and implement the most effective entry into service solution. The customer participates directly in the process, alongside the Embraer team, encompassing overall strategy as well as specific details, assuring a reliable and smooth operation from the beginning of the process.

As part of the integrated support program, we also provide services to new and existing customers of our Super Tucano, which is an aircraft used by several air forces around the world.

Additionally, we also provide support aircraft services to passenger carriers from several government organizations. For instance, we have support services designed to fulfill requirements, including sale of spare parts, maintenance, training and technical support, among others, relating to (i) recent aircraft Phenom 100, Phenom 300, Legacy 450; (ii) older aircraft, including Legacy 600 and ERJ-145, and (iii) legacy aircraft, including Bandeirantes (EMB-110) and Brasília (EMB-120). Through the support services we provide to our customers, we can complement commercial or business aircraft with equipment and sensors, thereby making our customers’ fleet available for different types of missions.

We provide a full range of services in different countries, often operating together with our customers’ teams in their own bases. In order to provide specific activities and comprehensive maintenance solutions, we own and operate maintenance, repair and overhaul, or MRO, service centers as follows:

- Alverca, Portugal, which we refer to as OGMA, which became operational in March 2005 and provides services to our commercial aviation, executive aviation and defense and security customers; and
- Gavião Peixoto, in the State of São Paulo, Brazil, where we have a dedicated service center for defense and security customers.

These MRO service centers are adapting their capabilities for purposes of providing C-390 Millennium maintenance services.

In 2022, Embraer Services & Support for the Defense Market also achieved important milestones, as the second phase of the SISFRON program, which started in the first quarter of 2022.

During the same year, new temporary support contracts were signed with the Brazilian Federal Police for two E175s and with SATENA, which represented new revenue to Embraer Services & Support. New agreements also include sustainment engineering (aircraft support and maintenance); pilot training; M60 radars on demand and technical representative contract for the Legacy 500 fleet.

Also in 2022, the Services & Support team supported the preparation for entry into service of the C-390 fleet of the Portuguese Air Force and the Hungarian Defense Force and the operation of 100% of the Super Tucano fleet in the Philippines. In training, the team assisted in the first and successful operation of the KC-390 to airdrop cargo supplies at the Brazilian Research Base in Antarctica, in addition to completing pilot training in the Turkmen Air.

## OGMA

OGMA, an Embraer subsidiary located in Alverca, Portugal, combines the accumulated know-how as an aircraft manufacturer and maintenance service provider. It offers worldwide MRO services, for defense, commercial and executive aviation as well for aircraft engines and components. Furthermore, OGMA plays an important role as a major aerostructures supplier of integrated solutions to OEMs and first tier suppliers. OGMA delivers assemblies and sub-assemblies of both metallic and composite materials. Embraer owns 65% of the voting capital of OGMA and the Portuguese State owns the remaining 35%.

In 2018, OGMA celebrated 100 years of activity in the aeronautical market. Since its formation, OGMA has been investing in the areas of MRO and manufacturing of aerostructures. In 2018, it also entered into an agreement for the maintenance and management of the Brazilian Air Force's C-130 aircraft fleet, strengthening OGMA's position in this market. OGMA further extended the MRO spectrum, obtaining certification for maintenance of the Rolls-Royce AE1107 engine. In addition, it also entered into a pylon manufacturing agreement with one of the largest manufacturers of executive aircraft.

Additionally, as of the date of this annual report, OGMA is developing the Supplementary Type Certificate (STCs) to integrate additional functionalities and certify the C-390 Millennium according to NATO requirements in the scope of the agreement entered into with the Portuguese Air Force (FAP) for five KC-390s. Pursuant to the terms of subcontracting agreement we have with OGMA, OGMA is also responsible to perform the maintenance activities related to the delivery of the KC-390 Millennium aircraft to the FAP from March 2023 until March 2027.

In 2020, OGMA entered into 12 new contracts to provide MRO services to defense and security and commercial aviation segments, and repair of maintenance components, such as those related to hydraulic, pneumatic, fuel, electrical and avionics systems. Still in 2020, OGMA became a new authorized maintenance center for Pratt & Whitney engines, as a result of a project developed by OGMA, with the support of Embraer, over the prior 12 months, allowing the expansion of its scope of services in the area of engine maintenance, and marking the entry of Pratt & Whitney maintenance, repair and overhaul in Portugal.

In 2021, OGMA had major achievements such as: Pratt & Whitney signed agreement for PW GTF Engines, the Rolls-Royce AE 2100 Program: Delivery of the 1st Nacelle within the contracted TAT, and an agreement for OGMA Aeronautical Academy. Also, featured in Aerospace & Defense Review, OGMA has been ranked as one of the "Top 10 MRO Service Companies in Europe 2021."

In 2022, OGMA delivered the last F-16 to the Royal Netherlands Air Force (RNLAF); the second ERJ-175 for the Brazilian Federal Police; and also delivered C-130 for the Portuguese Air Force.

OGMA has also achieved two important market recognitions, being ranked as one of the "Top 10 MRO Service Companies in Europe in 2022" by Aerospace & Defense Review. OGMA was also named as one of the best places to work, ranking first in the aviation industry, according to the employer branding study developed by Randstad Portugal.

We also have highlights such as the celebration of the delivery of the 100th Rolls-Royce AE 1107C engine, the implementation of the Safety Management System (SMS) in the organization and the Military Design Organization Approval (MDOA) certification granted to the company that gives it authority to design changes / repairs to military aircraft under AAN supervision.

OGMA reached a historic milestone by becoming the first Authorized Maintenance Center certified by the Portuguese Aeronautical Authority to carry out heavy maintenance of commercial aircraft of the Embraer E-Jets E2 family in Europe, Middle East and Africa (EMEA).

Other Segments

We provide fuel systems, structural parts, and mechanical and hydraulic systems to Sikorsky Aircraft Corporation, a Lockheed Martin Company, for its production of helicopters. We also manufacture general aviation propeller aircraft, also known as light aircraft, such as crop dusters.

We provide Sikorsky Corporation with the development and manufacture of landing gear, fuel systems and fuel tanks for the S-92 and H-92 Helibus helicopters. We also have Ipanema in our Other segments pipeline, which is a crop duster aircraft developed pursuant to the specifications of the Brazilian Ministry of Agriculture. These aircraft are produced only on demand. As of December 31, 2022, we have delivered a total of 1,541 of these aircraft, including 55 in 2022.

Our Other segments also include services related to the development and certification of eVTOLs, including the creation of a maintenance and services network for eVTOLs and the creation of an air traffic management system for eVTOLs (urban air mobility, or UAM business). The operating income (expenses) presented in our Other segments refers substantially to expenses incurred in the business combination with Zanite. For more information, see Note 12.3 to our 2022 audited consolidated financial statements.

Our Other segments accounted for 0.8%, 0.6% and 0.3% of our revenue for the years ended December 31, 2022, 2021 and 2020, respectively.

Aircraft Operating Lease Activities

In order to provide better financial support to our commercial activities, as well as to manage and reduce financial risks related to the marketing of aircraft, we created ECC Leasing in September 2002. ECC Leasing has been able to remarket aircraft in its portfolio with conditions and at values similar to market conditions and without any guarantee from Embraer. All sale and leasing transactions were entered into based on market rates, helping to sustain the present and future value of our products.

In January 2017, ECC Leasing merged with Embraer Netherlands, with its assets and activities incorporated under Embraer Netherlands. The mission of Embraer Netherlands, as our company responsible for aircraft operating lease activities, is to manage and remarket Embraer’s aircraft portfolio, which as a result of contractual obligations, may be acquired by us via trade-in transactions. We also provide remarketing services to third parties looking to sell their Embraer manufactured aircraft.

In 2022, Embraer Netherlands successfully sold and delivered one aircraft, for a total amount of US\$ 24.5 million, as compared to three aircraft delivered in 2021 for a total amount of US\$ 8.6 million and two aircraft delivered in 2020, for a total amount of US\$6.5 million. Since ECC was established in 2002 through December 31, 2022, this business segment handled 267 aircraft, of which none is available or under sale negotiations.

We believe the results of Embraer Netherlands will be largely dependent on market conditions, aircraft availability levels and the demand for jets mainly in the 70 to 150-seat category.

Markets

The following table sets forth our revenues by segment and geographic region of end users for the periods indicated:

	Year ended December 31,		
	2022	2021	2020
	(in US\$ millions)		
Commercial Aviation			
North America	1,234.7	687.6	858.4
Latin America (except Brazil)	—	—	0.4
Asia Pacific	—	3.3	4.8



	Year ended December 31,		
	2022	2021	2020
	<i>(in US\$ millions)</i>		
Brazil	2.4	1.8	3.0
Europe	234.9	494.5	215.4
Others	71.9	129.2	32.4
<b>Total</b>	<b><u>1,543.9</u></b>	<b><u>1,316.4</u></b>	<b><u>1,114.4</u></b>
<b>Executive Aviation</b>			
North America	914.1	807.2	1,054.4
Latin America (except Brazil)	20.0	4.1	—
Asia Pacific	—	27.6	—
Brazil	87.8	62.1	—
Europe	212.6	229.1	17.1
Others	9.9	—	—
<b>Total</b>	<b><u>1,244.4</u></b>	<b><u>1,130.1</u></b>	<b><u>1,071.5</u></b>
<b>Defense &amp; Security</b>			
North America	2.9	58.1	108.8
Latin America (except Brazil)	1.4	3.0	49.2
Asia Pacific	3.6	80.8	81.6
Brazil	245.1	285.8	297.6
Europe	194.1	158.7	108.4
Others	0.5	8.0	8.3
<b>Total</b>	<b><u>447.6</u></b>	<b><u>594.4</u></b>	<b><u>653.9</u></b>
<b>Services &amp; Support</b>			
North America	706.0	614.0	509.7
Latin America (except Brazil)	31.6	30.7	26.4
Asia Pacific	97.3	97.9	75.2
Brazil	132.2	106.1	72.3
Europe	242.8	234.4	203.1
Others	56.9	49.1	33.3
<b>Total</b>	<b><u>1,266.8</u></b>	<b><u>1,132.2</u></b>	<b><u>920.0</u></b>
<b>Other Segments</b>			
North America	—	1.3	1.2
Brazil	37.7	22.8	10.1
<b>Total</b>	<b><u>37.7</u></b>	<b><u>24.1</u></b>	<b><u>11.3</u></b>

#### Suppliers and Components; Risk-Sharing Arrangements

We do not manufacture all of the parts and components used in the production of our aircraft. As of December 31, 2022, 74.9% of our consolidated production costs in our Commercial Aviation, Executive Aviation and Defense & Security segments consisted of materials and equipment purchased from our risk-sharing partners and other major suppliers. Risk-sharing arrangements with suppliers of key components enable us to focus on our core business: design, development, manufacture and sale of aircraft and systems for the Commercial Aviation, Executive Aviation, and Defense & Security segments. Risk-sharing arrangements are those in which suppliers are responsible for the design, development and manufacture of major components or systems of our aircraft.

In our Commercial Aviation, Executive Aviation and Defense & Security segments, we rely on risk-sharing partners to supply vital components of our aircraft. We select suppliers on the basis of, among other factors, technical performance and quality of their products, production capacity, prior relationship and financial competitiveness. We have had continuing relationships with most of our major suppliers since production of the Bandeirante aircraft began in 1975.

In addition, we have entered into purchase agreements with our major suppliers, which cover our production. These contracts contain pricing formulas that take into consideration the various factors that affect the business of our suppliers and help us mitigate the effects of price volatility (which in some cases can be significant) of the materials, parts and components that are required for our operating activities. We are not obligated to purchase a minimum amount of materials annually under any of these supply contracts. Our ongoing supplier relationships depend on cooperation, performance and the maintenance of competitive pricing.

As a result of the conflict between Russia and Ukraine, inflation levels have raised and energy prices have also increased, mainly in Europe due to impact in the supply and gas prices. The conflict also had the effect of increasing costs of labor and caused a global shortage of components, affecting our supply chain cycle in 2022.

As soon as the conflict began, we suspended parts, maintenance, and technical support services for certain customers to comply with the sanctions imposed on Russia, Belarus, and certain regions of Ukraine by laws of jurisdictions to which we are subject. Russia is one of the largest titanium suppliers in the world, and titanium is a key element for the aircraft manufacturing process. Although there is no concern over the availability of titanium in our supply chain, considering our current inventory position and the existing alternative sources in other countries, we will continue to monitor our supply chain in order to identify any potential constraints.

For additional information on our relationship with our suppliers, see “Item 3. Key Information—D. Risk Factors—Risks Relating to Embraer—We work with a limited number of key suppliers.”

**Commercial Aviation**

*EMBRAER 170/190 Jet Family and E-Jets E2 Jet Family*

We are continuously improving the EMBRAER 170/190 jet family, together with risk-sharing partners that supply key systems for the aircraft. Our supplier arrangements for the EMBRAER 170/190 jet family differ from the supplier arrangements of the ERJ 145 regional jet family, in which we use fewer suppliers. In the EMBRAER 170/190 jet family, each risk-sharing partner is responsible for the development and production of aircraft systems, including the landing gear, the hydraulic system and the flight control system, rather than individual components, and fewer components are supplied by companies that are not risk-sharing partners. The assumption of responsibility for systems by our risk-sharing partners lowers our capital expenditures, which decreases our development risks and increases our operating efficiency by reducing the number of suppliers per product and cutting production costs. It also shortens development and production time.

When the E-Jets were launched, they were one of the most advanced aircraft in operation. The fly-by-wire system, the integrated avionics and the double-bubble cross-section brought a new level of technology and passenger comfort for the segment. The family’s success led to 29% market share of the deliveries in the up to 150 seats jet segment from 2004 to 2022, according to Cirium. Notwithstanding, during the last ten years we have been continually improving the family. New performance packages, maintenance improvements, external noise reduction and fuel burn reduction are examples of improvements developed.

The E-Jets E2 project is an important example of our commitment to keep our market leadership in the segment. The state-of-the-art technology applied to the engines, wings, and avionics make the E2 family a highly efficient tool for airlines. The E2 represents a new level of aerodynamic efficiency, as applied to the wing with one of the highest aspect ratios of the industry and advanced wing shape. The E2 also has improved systems and avionics, including fourth generation full fly-by-wire flight controls, and Pratt & Whitney’s PurePower™ Geared Turbofan high by-pass ratio engines (PW1700G on the E175-E2, PW1900G on the E190-E2 and E195-E2). These improvements result in double-digit reductions of fuel burn, emissions, noise and maintenance costs. Cockpit commonality with the current generation of E-Jets is a key driver in the design of the E-Jets E2, in order to enable a smooth transition for the E-Jets pilots. Honeywell’s Primus Epic™ 2 advanced integrated avionics system with large landscape displays and advanced graphics capabilities, and Honeywell’s Next Generation Flight Management System (NGFMS), already in development with current-generation E-Jets, provide exceptional pilot situational awareness and flexibility for continuous innovation on the flight deck. E-Jets E2 has the additional objective of increasing revenue opportunities, as the family is designed to provide better aircraft availability and to increase ancillary revenue for operators.

Known for its comfortable and roomy cabins, with no middle seats, the E-Jets passenger experience is further enhanced in the E2 generation. The U.K. design firm Priestmangoode was contracted to develop the aircraft cabin jointly with Embraer. The interiors establish a new benchmark in cabin design, improve the passenger experience, and deliver a more comfortable and improved environment tailored to passengers’ needs, while maximizing airlines’ operational efficiency.

Other suppliers and partners for the E-Jets E2 include: Liebherr (control systems for flaps and slats), Moog (fly-by-wire), Collins Aerospace (formerly Rockwell Collins) (horizontal stabilizer control system), Collins Aerospace (formerly UTC Aerospace Systems)(wheels, brakes, APU, electrical system), Safran AeroSystem (formerly Inter Technique), (engine and APU fuel feed, pressure refueling, fuel transfer, fuel tank inerting and ventilation, and fuel gauging and control), Crane Aerospace & Electronics (electronic control module for landing gear, brake control systems and proximity sensors), ASTK (formerly Triumph) (fuselage segments, rudder and elevators) and Aernnova Aerospace (vertical and horizontal stabilizers).

Parker-Meggitt (formerly Meggitt) designs and produces a redone high-performance assembly for in-flight connectivity, while KID-Systeme provides the SKYfi Club, a wireless streaming onboard platform.

***Executive Aviation***

The risk-sharing partners for the Phenom 100EV and Phenom 300I jets are Pratt & Whitney Canada, the engines supplier, Garmin, the avionics systems supplier, and for the Phenom 100EV Eaton Corporation, the hydraulic systems supplier. The main risk-sharing partners for the Praetor 500 and Praetor 600 jets are Honeywell, which is the engines supplier, and Rockwell Collins, the avionics systems supplier.

***Defense & Security***

With respect to our Defense & Security segment, we established business arrangements with various entities for the supply of parts. One example is our partnership with ELTA Systems, a subsidiary of the Israel Aerospace Industries (IAI), announced in 2019 for the launch of the P600 AEW&C. With respect to the C-390 Millennium, we have a partnership with Raytheon Technologies, responsible for various aircraft parts, including the engines and the avionics system, with Rheinmetall, our preferred supplier for simulators and training devices; and with BAE Systems to explore C-390 opportunities in the Middle-East. For the A-29 Super Tucano, we have a partnership with Elbit Systems, which is a strategic and relevant supplier of core electronic components, and a partnership with Sierra Nevada Corporation (SNC) for sales of the A-29 Super Tucano through the United States FMS (Foreign Military Sales) program.

**Aircraft Financing Arrangements**

Commercial aircraft customers may request financing support for aircraft acquisition. This support usually includes providing assistance to customers in obtaining financing arrangements from different sources, including ECAs, leasing companies, commercial banks and capital markets.

Additionally, customers may sometimes require short-term bridge financing prior to arranging long-term debt financing, as long-term funding may not be available for them at the time of delivery. On a case-by-case basis, we have provided interim financing, above market rates, to customers who already have their financing arrangement structured or who are in the process of negotiating such arrangements.

**Government Regulation and Aircraft Certification**

We are subject to regulation by regulatory aviation agencies, both in Brazil and abroad. These agencies principally regulate aircraft design, manufacturing and operation. Besides certification in Brazil, we must obtain certification in each jurisdiction in which our aircraft is registered and operated. The certifying authority in Brazil is the National Civil Aviation Agency (*Agência Nacional de Aviação Civil*), or the Brazilian Aviation Authority, a special organization with the status of a regulatory agency related to the Ministry of Infrastructure of the Presidency of the Federative Republic of Brazil, which supervises and certifies aircraft, aircraft parts, manufacturers and operations. We are also subject to the regulation of aviation authorities in other countries, including the FAA in the United States and the EASA for the European Union. Once an aircraft is certified by the Brazilian National Civil Aviation Agency and validated by the FAA and/or the EASA, some authorities, including those in Australia and Mexico, may opt to ratify the product certification instead of running a full domestic validation process. Other countries, such as Canada, require compliance with their own specific national requirements before certification. Some countries simply validate and complement original certification of the Brazilian National Civil Aviation Agency or of the FAA or the EASA, in accordance with their own rules. The Brazilian National Civil Aviation Agency has a bilateral certification agreement with several aviation authorities, including the FAA and EASA. This cooperation among regulatory authorities leads to faster certification by the foreign authorities.

Aircraft certification is a continuous process. The Brazilian Aviation Authority must approve any change in the design of any of our aircraft. Significant changes to aircraft design may require a separate validation/certification by other authorities as specified in their regulations and bilateral agreements. Changes in aircraft certification requirements do not require a new certification or a new validation of a previously certified aircraft, but significant safety improvements may otherwise be required by the authorities acting through operational rules or airworthiness directives.

Our defense products must comply with the certification guidelines defined in each contract with the customer. Unlike our civil aircraft, our defense products are not subject to regulatory obligations. Some contracts, including those for civil aircraft modified for military purposes, require civil certification (e.g., India, SIVAM, etc.). Other contracts, including those for LAS and C-390 Millennium, require approval from the Military Certification Authority.

**Environmental, Social and Governance (ESG) Practices**

ESG has been part of our strategy, including in the development of increasingly more eco-efficient aircraft and in the adoption of more sustainable production processes and management of natural resources. This includes two decades of positive social impact produced by Instituto Embraer, which manages our social projects. Nonetheless, we are aware of the responsibility of the private sector of going beyond and we will establish new environmental, social and governance, or ESG, commitments and targets for the next years.

We are embedding our business strategy with social responsibility and environmental impacts in everything we do, from our processes and facilities to product development and our supply chain. We work across all our key stakeholder audiences to develop sound strategies, define indicators, and establish targets that are integrated into our corporate sustainability plan.

ESG principles bring to our day-to-day routine the understanding of the need to generate profit, bearing in mind social and environmental responsibility and best governance practices. Sustainability is key for the continuity of any business and we are committed to align our economic targets to social and environmental performance. In light of the new global ESG requirements, we have been preparing our next steps to face the challenges of fighting climate change and increasing our diversity, inclusion and equity. These priorities add to our commitment to business ethics and absolute focus on the safety of our products, which are key pillars in our sector. Our new portfolio of products and services is significantly competitive and aligned with a new structure that is more agile, efficient and focused on sustainable growth.

In 2021, we announced new long-term goals in ESG. Efforts have been intensified to direct the business towards low-carbon aviation and a fairer, more inclusive and diverse society, especially in the communities where the company operates. Some of our long-term ESG commitments are: (i) achieve carbon neutrality in operations by 2040, through the acquisition of electricity 100% from renewable sources, the increasing use of sustainable aviation fuel (SAF) and the compensation of residual emissions that are not reduced through efficiency projects, alternative energy available or new technologies, (ii) develop sustainable

disruptive products, services and technologies, including electrification, hybrids, biofuels, including SAF and other innovative alternative energies; (iii) launch “eVTOL” aircraft with zero emission by 2026; and (iv) leverage diversity in the hiring of gateway programs, in leadership positions and in the aeronautical specialization program maintained by us. Achievement of these targets involves several risks. For more information, see “Item 3—D. Risk Factors—We may not be able to achieve our carbon emission targets or make progress in other environmental, social and governance initiatives.” For further information on our ESG practices, please see our sustainability annual report, available at our investor relations website, which is not incorporated by reference in this annual report.

In 2022, we worked to further develop our ESG agenda in all aspects, as described below.

***Environmental***

Environmental management is an essential part of our strategy and ranges from the development of new products and services, industrial operations to the dismantling and final disposal of the aircraft at its end-of-life.

Our Environment, Health and Safety at Work Policy defines the main corporate guidelines for the management of eco-efficiency, supply chain, product development and climate change, as well as compliance with laws and regulations. In addition, the conduction of projects to reduce resource consumption and greenhouse gas (GHG) emissions make concrete the commitment to respect the environment, reducing environmental impacts and risks. We also focused on initiatives aimed at improving the energy efficiency of its equipment and processes, thus building a global pipeline of projects. The maintenance of ISO 14001 certification, since 2002, shows the compliance and continuous improvement of our processes.

In 2022, we carried out important actions to meet our decarbonization goals. In May 2022, we entered into an electricity purchase agreement with the purpose of having 100% of the electricity purchased by our units in Brazil coming from renewable sources beginning in 2024. In addition, we invested in initiatives to reduce the consumption of fossil fuels, such as the installation of solar panels at the Gavião Peixoto unit and the installation of photovoltaic panels at our subsidiary ELEB Equipamentos Ltda.

In 2022, we also continued to pursue our SAF acquisition strategy, which is concentrated in our unit in Melbourne, United States. We are also directly involved in several initiatives and partnerships for research and development of the SAF chain in Brazil and worldwide. These include the Sustainable Aviation Fuel Users Group (SAFUG), the Initiative for Alternative Fuels for Commercial Aviation (CAAFI), participation in the Brazilian consortium BioValue (in partnership with the European consortium BECOOL, within the scope of the Horizon 2020 program of the European Commission) which is developing biomass and new technologies for sustainable advanced fuels, including for aviation. In addition to these actions, in strategic partnerships with other players in the chain, we funded Brazilian institutions to carry out technical research studies to identify the direct and indirect impact of the production of sustainable aviation fuels in Brazil.

We have also been proactively working on our products and services, with the goal of fulfilling the long-term objectives assumed by the aerospace sector. In the E-Jets E2 family of jets, we have evolved in the aerodynamic and system optimization that made it possible to reduce the aircraft’s fuel consumption by 5%. We used unprecedented solutions in the single aisle market, such as the use of the fly-by-wire system to reduce critical flight loads, allowing to reduce the weight of the aircraft in addition to other aerodynamic cleaning. Due to this extensive work, the E190-E2, which is the first aircraft of the new generation to come into service, had a 17% reduction in fuel consumption and emissions when compared to the first generation. In June 2022, we had the first flight on an E195-E2 aircraft using 100% renewable SAF, in partnership with the engine manufacturer Pratt & Whitney. The test proved that the Pratt & Whitney’s GTF™ engines and the E-Jets E2 family can fly with both engines at up to 100% SAF, without compromising safety or performance.

In addition to our new generation of commercial aircraft, we are developing a new concept of turboprop aircraft. Focused on the short-distance segment, up to 150 seats, the new turboprop will have its development directed to be the most economical solution for short distance operators. We intend to create it in order to be 100% compatible with sustainable aviation fuels and will facilitate its integration with future hydrogen propulsion technologies. Sustainability-oriented, the new turboprop, compared to the current turboprop in operation, will show a 15% reduction in CO<sub>2</sub> emissions.

We also announced a family of concept aircraft, the “Energia Family,” composed of four aircraft of varying sizes that incorporate different layout, energy sources and propulsion technologies – electricity, hydrogen fuel cell, dual-fuel gas turbine and hybrid-electric. This family explores a range of sustainable concepts to carry up to 50 passengers and seeks to reduce carbon emissions by 50% from 2030 – a key step towards the goal of being carbon neutral by 2050.

The electric demonstrator is another initiative on our journey towards a future of zero carbon emissions and, in 2021, the project reached a new phase with the beginning of the flight-testing campaign. Developed specifically to evaluate new technologies and solutions that enable 100% electric and more sustainable aeronautical propulsion, the demonstrator performs tests at the Embraer unit in Gavião Peixoto, in the interior of São Paulo. This technological cooperation project used a Weg electric powertrain system and a set of EDP funded batteries that were integrated into an EMB-203 Ipanema, an aircraft that is part of Embraer’s history and became in 2004 the first airplane in the world certified and mass- produced to fly with a renewable fuel source (ethanol). The results of the Electrical Demonstrator allow Embraer to use the knowledge acquired for the application of innovative electrification technologies in the development of new products aligned with the continuous search for a sustainable future.

Environmental performance is also considered in EmbraerX, an Embraer organization dedicated to the development of disruptive businesses, which is exploring new opportunities focused on urban transport. The concept of an electric vertical takeoff and landing aircraft (eVTOL) was unveiled in 2018 and presented itself as a solution focused not only on safety, passenger experience and affordability, but also on making the least impact in terms of emissions and noise.

**Social**

We continuously invest in personnel, diversity, inclusion and education, constantly seeking competitiveness and innovation. We make sure that our employees have adequate work conditions, professional development plans, quality of life and wellbeing. Accordingly, we offer an attractive compensation compared to market standards, and social and labor benefits. We also maintain social and environmental programs and projects that value education, culture, leisure and health. For us, promoting social inclusion is key to building a fairer and more sustainable society.

*Workforce and Diversity*

We constantly seek to build diverse teams that are representative and value the history and uniqueness of all people. In 2020, we created affinity groups, called EMBRACE, to discuss the agenda of diversity, inclusion and equity, representing the following minority groups: Women, Ethnicity, LGBTQIA+ and People with Disabilities.

Our goal is to have diverse teams that are representative of all people. In 2022, we developed several actions related to diversity, equity and inclusion, such as: (i) diversity hiring in the selection processes on the entry level programs; (ii) diversity training for our employees in leadership positions and all our staff; (iii) educational initiatives (conversation circles and discussions) on topics related to diversity, equity and inclusion; (iv) application of diversity mapping at EMEA and OGMA, taking into account the particularities of the laws of each jurisdiction; (v) actions to support LGBTQIA+ minorities, such as the development of a project to implement neutral restrooms and social identification for transgender employees, and (vi) career mentoring programs focused on minority groups. Also in 2022, we sponsored the Women in Aviation International Conference 2022, the 1<sup>st</sup> International Congress of Women in STEAM, and the 34<sup>th</sup> Annual Conference of the International Aviation Women’s Association (IAWA).

Parallel to the mapping, we also promoted the awareness of leaders on the theme of Diversity, Equity and Inclusion. Regarding the awareness of employees, we promoted periods of celebration and reflection on the struggle of some minority groups, stimulating the involvement of employees in discussions and testimonials on the topics. The dates celebrated were the history of the global LGBTQIA+ movement, Brazilian National Day of the Struggle of People with Disabilities and Black Consciousness in Brazil.

Currently, we have developed educational programs and special projects that range from young talents to support in the post-career process, always attentive to people's different career moments and plurality. We have structured the following programs for recruitment and qualification of workforce:

*Embraer Internship Program.* The program was structured focused on developing a better experience for candidates and managers, and on the retention of new talents. The program has consistently used artificial intelligence in the recruitment and selection process since 2018, in order to assist in the hiring process with the transformative behavioral profile. We gained agility and were also able to offer the response to candidates in a shorter amount of time. In 2022, 388 new interns joined our internship program.

*Young Apprentice Program.* One of our practical initiatives for the constant improvement and responsible insertion of teenagers in the marketplace is the Young Apprentice Program. Through this program, we help young people through learning to develop their ability for entry and maintenance in the labor market. The actions aim at developing their autonomy, favoring the search for improved quality of life, decision-making, the construction of healthy affective relationships, and the recognition of themselves as active and participant individuals within their social group. In 2022, approximately 200 apprentices participated in the program in the cities of São José dos Campos, Taubaté and Gavião Peixoto.

*Engineering Specialization Program (PEE).* In the context of fostering training and development, in 2021 we invested approximately R\$5.0 million in this large training initiative. Through the PEE, carried out in partnership with the Instituto Tecnológico de Aeronáutica (ITA), we offer the title of professional master in aeronautical engineering to selected participants who are interested in working in the aviation segment. The classes are taught by professionals of Embraer and teachers of ITA and the students have the possibility to be admitted by Embraer after the completion of the course. In 2022, 61 engineers joined the program.

*Software Specialization Program (PES).* Founded in 2022, our Software Specialization Program, or PES, is a post-graduate specialization in Embedded Software and Data Science, carried out in partnership with the Federal University of Pernambuco (UFPE). Courses are taught by UFPE professors and with the participation of Embraer professionals. Upon completion of the degree, students have the possibility of being employed by Embraer. In December 2022, the class was completed with the approval of 35 professionals, 33 of whom were hired by Embraer.

*Engineering Acceleration Program (ACE).* The ACE program aims to train employees with up to 12 months in the company and new hired in 34 courses divided into the pillars of Aeronautical Culture & Business, Manual of Excellence Engineering and DIP, Technical Concepts, Procedures and Tools Engineering and Soft Skills, with 100% of the training provided by Embraer specialist multipliers, within a period of 12 days. The program had its first class of 35 employees graduated in 2022.

*Manufacturing Engineering Training Program (PCEM).* The PCEM program was created with the purpose of diagnosing and developing skills required by the industry. Launched in August 2022, the program had more than 70 professionals involved in the structuring of the program, which took approximately 500 hours, and in the elaboration of its contents, which took approximately 2,000 hours. In 2022, we had 50 defined courses, 34 classes, and 887 engineers, analysts and technicians as participants. The program aims to develop soft and hard skills of the participants and is carried out in two phases, the first of which being a general conceptual phase and the second focusing on the future of manufacturing and practical skills for process evolution, practices and mindset of digital transformation.

*Embraer on the Diversity Route Program.* Carried out in partnership with educational institutions in the cities of São José dos Campos and Araraquara, the program focuses on the training of people with disabilities, offering theoretical training and practical training within Embraer and the allocation is carried out according to the profile of the vacancies. The program has contributed to increasing the employability of people with disabilities. Since its launch in 2019, approximately 100 people have been trained and many have pursued careers in various areas within Embraer such as Production, Quality, Engineering, Logistics and Administrative departments.

Social Tech Program. In 2021, in order to increase the opportunities to qualify workforce for technology and digital transformation, we launched this program in partnership with EdTechs, aimed at supporting technology careers for minority groups in Brazil. The purpose of the program is to promote professional qualification for 1,500 people from minority groups by 2025. Each representative group in the program follows the bootcamp methodology for immersive and accelerated training, in which participants attend technology courses and deal with challenges and project execution. Since its launch, Social Tech already had more than 1,400 students.

*Professional Development*

Since 2020, we have been reinforcing the people cycle concept, which covers the creation and monitoring of goals, going through the performance evaluation process, quarterly performance monitoring, and development and talent review.

Our performance evaluation process focuses on a culture of high performance and development, opening space for structured and evolutionary feedback and recognizing the deliveries and behaviors of employees in the previous year. The process has three steps: 1) Performance Matrix: with the purpose of evaluating the results and behaviors of employees and position them in the performance matrix; 2) Calibration: with the purpose of meeting with other leaders and calibrate the evaluation of the teams; 3) Performance Conversation: with the purpose of providing feedback to the evaluated employee and inform their final position in the performance matrix.

One of the great outputs of the performance evaluation process is preparing an individual development plan for our employees. We invest heavily in the education, training and development of people, always focusing on the qualification and preparation of our employees to take on the challenges inherent to our business and strategy.

Since 2019, we have been further reinforcing our learning culture, through the EMpower learning ecosystem. Our ecosystem brings together the best forms of learning, either through an internal catalog, with about two thousand educational solutions, or by the possibility of carrying out other development actions through a platform that uses artificial intelligence and creates content. The EMpower ecosystem aims to foster protagonism and self-development for our employees.

We also continue to invest in the development of online courses, to feed our internal catalog, providing knowledge quickly and effectively to all our units in the world. In 2022, we developed 34 online courses to meet new business competencies, in several languages and with the possibility of taking them through mobile devices. Currently, 70% of our employees that participate in our courses prefer to do it online.

In 2022, we recorded about 660,000 hours of training and invested approximately R\$6.9 million in development actions. We work with external and internal partners in our programs, and 85% of our training is carried out internally, with about 1,200 knowledge partners. This group is formed by our collaborators, who carry out the elaboration, development, review and instruction of the content, encouraging learning and stimulating the dissemination of knowledge.

Strengthening our EMpower learning ecosystem, we continue with the strategy of building the academies, aligned with our strategic objectives, and supported by an active and permanent learning process. As of December 31, 2022, we had the following academies:

Leadership Academy: covers the entire leadership lifecycle, from onboarding to training and development actions in the long term in order to enable the implementation of the corporate strategy. In 2022, we maintained the focus of leadership development in five pillars (Business, People Cycle, Diversity, Future of Work and Culture) and offered programs focused on hybrid management, cultural evolution, lean leadership, performance and potential, labor relations, among other topics. In total, within the Leadership Academy, we had more than 13,000 participations, totaling approximately 30,000 hours of training dedicated to leadership development.



Corporate Academy: reinforcing our commitment to be a company recognized for ethics and compliance, in 2021, we continued to provide online training for our Code of Ethics. The contents were made available globally and are part of the mandatory training route for all employees.

Within the Corporate Academy, a soft skills program was also developed, with the purpose of training our employees based on the behavioral skills necessary to meet our business and strategy needs. In 2022, our employees participated in courses on Occupational Safety, Business Planning, Performance Assessment, Data Protection, Coronavirus Prevention and Corporate Intellectual Property Policy, totaling approximately 6,000 hours of training.

Engineering Academy: in order to strengthen the aeronautical culture, the training of engineers, technicians and engineering professionals and establish a systemic view of the product, we offer development solutions aligned with the business strategy. In 2022, the Engineering Academy restructured its training program, counting on several specialists as contributors, with the purpose of educating its participants in soft skills, business management and product development.

Operations Academy: this academy has the Qualification Program, aimed at employees who work in the manufacture of aircraft. In 2022, there were 47,000 participations in our qualification courses, totaling 182,000 hours of training.

The courses are structured in curricula according to requirements for performance in the production process. The definition of these requirements is carried out in conjunction with representatives of quality, engineering, safety and human resources. The internal procedures and normative requirements for each process are considered. Face-to-face, remote, online and practical educational solutions are offered to enhance the employee's experience during the learning process.

In 2022, maintenance audits of NBR ISO 14001 and transition to ISO 45001 were carried out in the units of Gavião Peixoto, Botucatu, EDE, Taubaté, Eugênio de Melo and São José dos Campos. All these sites were approved with zero non-compliance.

Business Academy: considering our strategic planning, and the purpose of boosting our sales through our business segments, in 2022, we focused on building the VSS Materials Solution Academy, in order to assess the main competencies and skills necessary in the process to direct training and development priorities. While the Business Academy is still under construction, some training identified in this assessment has already been carried out, such as: Storytelling, Presenter Communication (oratory), Visual Communication / Slides, Negotiation, Decision Making, Onboarding, as well as specific technical training.

Supply Chain Academy. The Supply Chain Academy was created with the purpose of training supply chain management concepts and best practices, in addition to promote the necessary transformation of processes in pursuit of excellence. The Supply Chain Academy was launched in October 2021 and started to offer courses in 2022, in addition to soft and hard skills development programs. In 2022 we had approximately 60 classes, with more than 1,200 participations and about 190 hours of learning.

Procurement Academy. The purpose of the Procurement Academy is to guarantee the training of procurement professionals based on the skills required for each function to meet our business and strategy needs. The Procurement Academy covers 27 development themes, has had approximately 3,600 participations and over 11,500 hours of training.

Lean Academy. The Lean Academy is one of the pioneering and cross academies for all areas of the company. It was first known as the P3E (Business Excellence Program) training program, and was founded with the purpose of promoting organizational learning and dissemination of the Lean philosophy, which is

part of the cultural basis of our strategic plan. The trails of this academy involve all professional categories and aim to make Lean knowledge always available and accessible “Lean for All”. In 2022, we offered training in Lean practical learning rooms, called the “Dojos.” In 2022, we created two important programs using Dojo rooms, the Lean Leadership program and the Lean Attitudes for Trainers program. We currently have nine Dojo rooms serving units in Brazil and abroad. In 2022, the Lean Academy offered more than 60 courses and approximately 800 hours of training, involving more than 450 participant groups, and approximately 30,000 individual participations. In 2022, Lean was the second most researched skill at Empower.

Culture and Diversity Academy. Through what we call our Culture and Diversity Academy, we developed the concept of the journey “Culture Flight” and launched our first training on culture and diversity, for all employees in Brazil, USA, EMEA and Asia. In addition, we carried out sessions of psychological safety training for operations leaders, as well as conversation circles with leaders and our operations teams in Botucatu to discuss concepts and experienced situations of diversity, equity and inclusion.

Knowledge Partners Program: We encourage employees to share their skills in order to perpetuate knowledge. Due to the constant search of our employees for knowledge, innovation and technology, we reformulated the Knowledge Partners Program so that the training of instructors is now conducted by Embraer professionals, reducing the need of suppliers, which increased quality and decreased costs associated with the program.

To support the quality of the didactics of internal instructors and meet the new education trends, we developed the Virtual Facilitator Training, with the purpose of accelerating the online development of new and essential distance facilitation skills that make a difference in the development of people and in our results.

Language Program: We have adopted a professional development policy in focused on business language skills, seeking more robust, concentrated and effective ways to ensure the availability of qualified resources to meet the strategic business objectives of each area. In 2022, we started a new partnership with Lingopass, providing a more digital study method and supporting student engagement. We adapted the classroom classes for online and live classes, maintaining the quality of content and teaching. In 2022, we had the participation of more than 350 students.

Education Incentive Program. Launched in 2022, the Education Incentive Program aims to promote the recognition and development of employees, through grants for postgraduate courses, MBA degrees, master’s, doctorate and post-doctorate degrees, taking into account our strategy and business needs.

Future of Work Project: in March 2020, we were affected by the pandemic and had to adapt to the new reality with the purpose of preserving the health and well-being of our employees. We quickly adapted to the remote work format because we already had tools to support this work model. In September, we officially started the global Future of Work project in order to identify, analyze and structure actions and processes for this new remote work format. We formed a multidisciplinary team with approximately 50 employees, representing the main areas of Embraer.

In 2022, based on studies and analysis on the subject, we implemented new work models, namely: (i) on-site model (comprised of five days of physical attendance), (ii) hybrid model (comprised of up to two days of on-site work and remote work), and (iii) 100% remote work.

*Occupational Safety*

We seek excellence in our occupational health and safety performance, a topic considered a priority for Embraer. To this end, we promote educational and preventive actions in a continuous manner and directed by the Environment, Health and Safety at work (MASS) policy of global scope, which is a guideline for setting goals linked to our business excellence criteria.

The management model adopted in the Embraer Business Excellence Program - P3E uses the concept of Safety, Quality, Delivery and Cost (SQDC), aiming at the standardization and optimization of our operational and cost indicators. In addition to the criteria of business excellence, we have maintained international certifications in its largest manufacturing units for 20 years.

In 2022, the Brazil units successfully achieved the certification of ISO 45001, ensuring the implementation of all the tools provided for in this requirement. We have been working on the creation of important corporate programs that aim at preventive behavior in its operations, in order to record potential situations on a daily basis, directing the dealings quickly and assigning responsibilities among all involved. A consistent policy coupled with the assurance of a robust management system and programs with a focus on preventive has brought results compared to the most recognized global parameters.

*Social Projects*

For us, promoting social inclusion is key to building a fairer and more sustainable society. Over the years, we have developed several social programs to help develop the communities where we operate.

Embraer Institute of Education and Research

The Embraer Institute of Education and Research - IEEP consolidates the private social investment made by us in Brazil. The IEEP initiatives seek to engage communities, schools and Embraer employees in actions aimed at education. In 2022, our social investment was approximately R\$20 million, destined to programs developed in the regions in which we have activities in Brazil.

Among the IEEP projects, the Embraer Colleges serve low-income students and graduates from the public school system, according to established socioeconomic criteria. The model offers the three grades of high school full-time and, in 20 years of existence, became a reference in education, with high rates of approval in entrance exams of public and private universities. In total, more than 4,700 students have already been trained in the two units of São José dos Campos and Botucatu, in São Paulo. From 2019, in order to ensure the long-term sustainability of the project, the Colleges also opened the doors for paying students, allocating 20% of the vacancies to them.

In order to contribute to the continuity of the studies of low-income youth, the IEEP created in 2005 the Scholarship Fund program, aimed at former students at the Colleges with excellent school performance, financial limitations and who have been approved in public or private universities with total exemption from tuition. In 2022, the Scholarship Fund benefited 21 university students.

The IEEP also works directly with local communities, funding educational projects proposed by civil society organizations. The initiatives are guided by the agenda of the United Nations Sustainable Development Goals (SDGs). In 2022, we launched the first edition of the Diverse Science Program, with the purpose of bringing the teaching of Science, Technology, Engineering and Mathematics (STEM) to minority groups. In this first edition, two projects focused on teaching STEM to girls up to 18 years old were selected. Since 2004, more than 190 educational projects have been supported. In turn, through the Embraer Historical Center, created in 2006, the IEEP rescues, preserves and disseminates the memory of the aeronautical industry in Brazil – a topic that is the object of study inside and outside the country.

The Embraer Institute also coordinates programs to promote the culture of volunteering through the Wings of Good platform, an online portal that allows the relationship between Civil Society Organizations and Embraer Employees who wish to become volunteers. In 2022, there were more than 800 volunteer posts occupied in Brazil and more than 3000 people impacted by the actions carried out.

Embraer Foundation

In order to consolidate our corporate social responsibility strategy in the United States, we created in 2016 the Embraer Foundation, a sister organization of the Embraer Institute, whose operations are guided by three fronts: volunteering, social and environmental partnerships and entrepreneurship. The pillars are aligned with our global social responsibility strategy and respect the particularities of social investment in the United States. In 2022, more than 400 volunteers engaged in the social activities promoted by the Embraer Foundation, totaling about 3,300 hours. In the partnership pillar, 40 organizations received support from the Embraer Foundation to carry out projects, in the same way as the Social Partnership Program of the Embraer Institute in Brazil.

**Corporate Governance**

In order to ensure a corporate management focused on sustainable growth and business perpetuity, our corporate governance model is based on integrity and meets the highest market standards in Brazil and in the United States. Our target with respect to corporate governance is to maintain the highest international standards of governance and a robust ethics and compliance program, fully aligned with global standards.

*Governance Structure*

Our governance structure comprises our board of directors, fiscal council, board of executive officers, internal audit and external audit. For more information on our governance bodies, see “Item 6. Directors, Senior Management and Employees” and “Item 16. Reserved—G. Corporate Governance.”

*Ethics and Compliance*

We seek to ensure integrity and ethics in our activities. Accordingly, we established an ethics and compliance program to promote and support all actions aiming at compliance with the laws and regulations applicable to our business, as well as with our internal policies.

Our ethics and compliance program is based on key elements, including the maintenance of a responsible organization and structure through our leadership, the constant management of risks, the establishment of the appropriate internal control policies and standards, training and communication with our audiences, in addition to a monitoring process, audit and whistleblowing channels for the assessment and investigation of potential misconduct, promoting an ethics and integrity culture in all our units.

On May 22, 2020, we successfully completed the external and independent anticorruption monitoring, which started in January 2017 under the deferred prosecution agreement, or DPA, executed with the U.S. Department of Justice, or DoJ, with the consent of the SEC. We implemented the recommendations of the monitor to strengthen our compliance program and improve our processes, systems and internal controls. The monitor certified that our program reached the standards set forth in the DPA for compliance with the U.S. Foreign Corrupt Practices Act, or FCPA, and other applicable anticorruption laws. We continue to improve and expand our global compliance program in all our operations and countries where we are present.

Moreover, we permanently invest in the training of employees and business partners on business ethics and integrity through workshops, case studies, lectures and seminars, in the in-person and online formats.

*Risk Management*

Our risk management method focuses on the following categories of risks: strategic risks, operating risks, financial risks, regulatory/legal risks and cyber risks. Our structure is strengthened by the operation of our risks and internal controls department, comprising the following macroprocesses: management of internal controls, management of corporate risks, monitoring of credit risks in financial transactions, management of crises, and monitoring of risks and potential violations of segregation of functions and business continuity.

The purpose of our risk and internal controls department is to ensure that the identification, prioritization, assessment and management of the main risks are conducted in accordance with the best practices established by us and the market, ensuring transparency and integrity in our processes. We also use these tools to prevent uncertainties that may negatively affect our results. We seek the continuous improvement of our risks and internal controls system.

*Management Model and Strategic Planning*

Our management model comprises long-term planning, as set forth in our strategic plan, and short- and medium-term projects, as set forth in our action plan. Our strategic plan establishes strategic projects, and our action plan establishes the objectives to be met in the first year and the operating efficiency and economic and financial targets for the period, focused on sustainability.

Our strategic plan and our action plan aim at our business perpetuity and the creation of value for shareholders, focusing on increasing our competitiveness, improving our corporate excellence model and continuously searching for better results. For more information on our strategic plan, see “—Business Strategies.”

**Seasonality**

We have historically experienced seasonality in our results of operations and cash flow generation. This is mainly due to a traditionally higher number of deliveries in the fourth quarter, particularly in our Executive Aviation segment, which is in line with overall executive jet industry seasonality. Deliveries of executive jets in the fourth quarter generally constitute at least 35% to 45% of annual deliveries in our Executive Aviation segment, and we expect this trend to continue.

**C. Organizational Structure**

Our operations are conducted by Embraer S.A. as the controlling and principal operating company. We have a number of direct and indirect subsidiaries, none of which is considered significant. A complete list of our subsidiaries is filed as Exhibit 8.1 to this annual report, and a description of our joint ventures and project subsidiaries and strategic alliances is included in the annual report in Item 3 above.

**D. Property, Plants and Equipment**

For information on our property, plant and equipment, see Note 14 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

For a discussion of our capital expenditures relating to property, plant and equipment, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Capital Expenditures.”

**Production**

The manufacture of an aircraft consists of three principal stages: production of primary parts, assembly of major components and final assembly. Primary parts include metal sheets and plates (produced from die-cast molds, stretch forming or various chemical treatments), parts produced using computerized and non-computerized machines, and prefabricated parts. The primary parts are then assembled, or mated, with one another to produce the aircraft’s major components, which are in turn joined to create the aircraft’s basic structure. In the final assembly stage, the aircraft’s various operating systems (including wiring and electronics) are installed into the structure and tested.

In 2022, we entered into an agreement with Toyota do Brasil to embrace Toyota Production System (TPS) principles and concepts in its industrial operations. The program aims to eliminate waste, obtain operational efficiency, and increase value generation for stakeholders. During the first phase of this project, carried out throughout the second half of 2022, a team of TPS specialists from Toyota do Brasil has immersed into our daily work to evaluate and suggest improvements for our manufacturing area at the Ozires Silva Unit, located in São José dos Campos, Brazil.

We have the flexibility to increase or decrease production as a response to changing demand.

### ***Commercial Aviation***

In July 2009, in line with our initiatives to improve production efficiency pursuant to the Business Efficiency Strategy (Frente Eficiência Empresarial), we converted the final assembly for the E-Jets E1 family to a line concept in São José dos Campos, which resulted in a significant reduction in the cycle of production time. In 2015, we started the prototype production for the new E-Jets E2 family of jets, with the first delivery and production certification in 2018. We have production facilities for commercial aviation aircraft in São José dos Campos, State of São Paulo, Brazil.

### ***Executive Aviation***

Executive Aviation aircraft are currently produced in Melbourne, Florida in the United States and Gavião Peixoto, State of São Paulo, Brazil. The Melbourne facility is a final assembly plant with a Customer Center and an Engineering Office. In 2014, we announced an expansion plan to assemble the Legacy 450/500 in this facility, to improve our production capacity. We have been increasing the number of executive jets produced in Melbourne since 2016. Executive Jets has been manufactured in Gavião Peixoto facility since 2020.

### ***Defense & Security***

The Gavião Peixoto facility includes flight-testing capabilities for all Embraer aircraft and a final assembly line for our defense aircraft. This facility has been operational since November 2002. In May 2014, we inaugurated the final assembly line of the new military transport and aerial refueling jet, the C-390 Millennium, and in February 2015, it successfully performed its first flight. Embraer is currently conducting flight tests for the C-390 Millennium. In the fourth quarter of 2018, we received the Type Certificate from the Brazilian Aviation Authority for the multi-mission airlift C-390 Millennium and delivered the first aircraft in 2019.

We have a final assembly facility in Jacksonville, Florida for Defense & Security where we initiated the final assembly line for the A-29 Super Tucano for the United States Air Force's LAS Program in 2013.

In 2016, we launched the GDDN in Gavião Peixoto. It is the hub for the Gripen NG technology development in Brazil for Saab and Embraer together with the Brazilian partner industries and institutions. The GDDN includes the development environment and simulators required to undertake the fighter development work. In addition, the GDDN is connected to Saab in Sweden and the industrial partners in Brazil, securing both technology transfer and efficient development.

### ***Other Segments***

We manufacture aerospace systems and components at our subsidiary ELEB Equipamentos Ltda., or ELEB, which is one of our productive subsidiary located in São José dos Campos, and its main products are structural parts, landing gear systems, hydraulics and electro-mechanical sub-assemblies, such as actuators, valves, accumulators and pylons.

In Botucatu, state of São Paulo, Brazil, we produce the Ipanema, a crop duster aircraft developed pursuant to specifications of the Brazilian Ministry of Agriculture.

### ***Production in our Subsidiaries***

EZ Air Interior Limited, our subsidiary for the production of interior parts for our Commercial Aviation segment in Mexican factories, began production and shipping of parts to Brazil in 2013. It achieved full production capacity in January 2015.

In 2015, we completed the acquisition of a new subsidiary, Embraer Aero Seating Technologies. We progressively acquired its ownership stake in the company, headquartered in Irwindale, California, which provides luxury seating solutions for the aviation industry and for Embraer product lines. In 2016, we opened a new state of the art manufacturing facility located in Titusville, Florida.

On November 11, 2021, our board of directors approved the sale of the equity interest of two subsidiaries of Embraer, namely, Embraer Portugal Estruturas Metálicas S.A., or EEM, and Embraer Portugal Estruturas em Compósitos S.A., or EEC, to Aernnova Aerospace, SAU, or Aernnova. EEM and EEC are responsible for operating our two facilities in Évora, Portugal, which are used for the manufacture and assembly of metallic components and composite material components. The binding agreement for the sale, which was valued at US\$175.0 million, was entered into on January 11, 2022 and closed on May 2, 2022.

**Environmental Matters**

We have all material permits required to operate our business in all Embraer sites around the world. The terms of these operating permits are reviewed every year and, as of December 31, 2022, we were in compliance with all of them. In addition, our Environmental and Occupational Health and Safety Management System was established in 2001, allowing us to maintain ISO 14001 certification since 2002. Certified environmental, health and safety management systems have been progressively implemented across our manufacturing sites, with around 81% of our employees operating under an ISO 14001 and ISO 45001.

Since 2009, we have carried out our greenhouse gas (“GHG”) emissions inventory in accordance with ISO 14064 Part I. As of 2020, we have increased the coverage of GHG emissions data, and in 2022 our GHG emissions inventory included 15 facilities, representing approximately 93% of coverage.

Work procedures and instructions are set up in order to ensure that the activities that cause environmental impacts are carried out in order to minimize or mitigate any environmental damage, and we perform studies of environmental aspects and impacts and we implement actions to eliminate, reduce or control them, including infrastructure works.

We established a corporate procedure for performing environmental diagnoses and detailed investigations for finding the presence of contaminants in soil and water due to past activities. This procedure is applied to the relevant areas where Embraer has production and/or maintenance facilities, as well as to new relevant areas being acquired. The diagnosis results are periodically reported and monitored by the internal Risk Department, also reported to the CCRA (Committee for Environmental Risk and Control), our board and shareholders.

We take into account environmental and safety requirements to enter into agreements with third parties. Embraer is committed to hire suppliers, service providers and contractors who respect the environment, health and safety through their practices and processes, and we have a systematic procedure for their continual evaluation and monitoring.

We encourage not only the environmental certification but also the development of a full life cycle orientation for products and services, as this remains the most cost-efficient and practical way to effectively reduce environmental impacts. The environmental management system attempts to create economic value by reducing environmental costs and exposure at each stage of the product life, from design to operations and to end of life. Integrated development of environmentally sustainable products, through the design for environment methodology, aims to incorporate environmental requirements into product development throughout the various stages of production.

The implementation of further innovative and eco-efficient technologies and processes is a key factor in ensuring our sustainability, increasing the attractiveness of our products and our overall competitiveness. We continuously pursue eco-efficiency, seeking responsible business opportunities by developing breakthrough technologies, products and services, as well as by reducing the environmental impact of our activities and products throughout their life cycle, and, more generally, by integrating environmental concerns into our daily business. We recognize that environmental requirements, such as reduction of greenhouse gas emissions, are becoming one of the main drivers of airline fleet decisions and are already influencing aircraft developments.

We are committed to Brazilian and international legislations as well as our customers’ requirements. Our suppliers must also ensure that the environmental requirements will be followed through its upstream supply chain. Accordingly, our suppliers and their supply chain must comply with applicable environmental legislations, such as European REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) regulation (EC) No 1907/2006, TSCA (Toxic Substances Control Act), SCIP (Substances of Concern In articles as such or in complex objects (Products), established under the Waste Framework Directive (WFD)) and any other relevant rules that may affect our products.

The REACH regulation aims to improve the protection of human health and the environment through more strict regulation of chemicals. The regulation establishes progressive withdrawal of some of the substances considered of very high concern for human health and the environment. As of December 31, 2022, we have not suffered any penalties in connection with REACH.

To ensure compliance with REACH requirements and the SCIP database, we have developed a system that allows our engineering team to register substances present in raw materials and articles. We have filled up this system with the substances that are present in mixtures or articles that release substances and are working with our suppliers to collect information on substances, especially SVHC (Substances of Very High Concern) that are present in parts acquired by us.

Our commitments to environmental sustainability and compliance with regulations is further reflected in its adherence to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). This internationally recognized system establishes harmonized criteria for the classification and labeling of substances and compounds with respect to physical, health, and environmental hazards. By complying with the GHS, we ensure that our products are manufactured, handled, and transported in a safe and environmentally responsible manner.

Our dedication to developing advanced, innovative environmental solutions for our products is reflected in our membership in the International Aerospace Environmental Group (IAEG), as one of the twelve founding members, formed to address the complexity of the regulations on health and environment, impacting the Aerospace Industry and our supply chain and customers, and also as an associate company at the Aircraft Fleet Recycling Association (AFRA), the leading global organization for developing and promoting the safe and sustainable management of circularity of components and aircraft end-of-life.

Our commitment to responsible manufacturing practices and our goal to minimize the environmental impact of our products is evident in our historic disruption in the use of hazardous materials. We are actively promoting waste reduction during aircraft maintenance and operations by using LED lamps, which are free of mercury and have a longer lifespan than fluorescent bulbs, and by reducing the usage of hazardous materials like Hexavalent Chromium and Cadmium, which we believe not only serves as an important step towards reducing the environmental impact of our products, but also sets a high bar for other companies to follow.

**Insurance**

We maintain insurance at levels deemed to meet all risks associated with our operations and legislation. The insurance covers potential damages to our property, inventories, working process, cargo and aircraft hulls for our own fleet. In addition, we maintain a comprehensive aviation products liability policy, for claims arising out of our legal liability as manufacturers, repairers, suppliers or servicers. We also possess natural disaster and business interruption insurance.

**4A. Unresolved Staff Comments**

We have no unresolved staff comments.



**Item 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

This discussion should be read in conjunction with our audited consolidated financial statements and notes thereto and other financial information included elsewhere in this annual report. The purpose of this discussion is to provide management’s explanation of factors that have materially affected our financial condition and results of operations for the historical periods covered by the financial statements, and management’s assessment of factors and trends which are anticipated to have a material effect on our financial condition and results of operations for future periods.

This annual report contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed in the forward-looking statements as a result of various factors, including, without limitation, those set forth in “Item 3. Key Information—D. Risk Factors” and the matters set forth in this annual report generally.

Except as otherwise indicated, all consolidated financial information in this annual report has been prepared in accordance with IFRS as issued by IASB and presented in U.S. dollars, while, for local purposes, our consolidated financial statements are also prepared in IFRS but are presented in *reais*. For certain purposes, including providing reports to our shareholders located in Brazil, filing financial statements with the CVM and determining dividend payments and other distributions and tax liabilities in Brazil, we have prepared and will continue to be required to prepare parent company financial statements in accordance with IFRS, presented in *reais*.

**A. Operating Results**  
**Current Conditions and Trends in our Company and Industry**

*The following discussion is based largely upon our current expectations about future events and trends affecting our business. Actual results for our industry and performance could differ substantially. For additional information related to our forward-looking statements, see “Introduction—Special Note Regarding Forward-Looking Statements” and for a description of certain factors that could affect our industry in the future and our own future performance, see “Item 3. Key Information—D. Risk Factors.”*

**Restatement of Eve Holding’s and our Financial Statements**

As disclosed on our current report on form 6-K, filed on November 11, 2022, Eve Holding reviewed its accounting for certain warrants that were issued and became exercisable at the closing of the Business Combination Agreement on May 9, 2022, as well as for certain related transaction costs and listing expenses.

As a result, and as disclosed by Eve Holding in its current report on form 8-K/A filed on December 7, 2022, Eve Holding restated (i) the audited combined financial statements of the Urban Air Mobility Business of Embraer S.A as of December 31, 2021 and 2020 and for each of three years in the period ended December 31, 2021, (ii) the unaudited condensed consolidated financial statements of EVE UAM, LLC as of March 31, 2022, and for the three months ended March 31, 2022 and 2021, (iii) the unaudited pro forma condensed consolidated financial information and (iv) management’s discussion and analysis of financial condition and results of operations filed therewith.

After assessing, together with our independent registered accounting firm, the impacts of Eve Holding’s adjustments on Embraer’s unaudited interim condensed consolidated financial statements for the quarter ended June 30, 2022, which were prepared in accordance with accounting practices adopted in Brazil and IFRS (“Embraer’s Second Quarter Results”), we restated Embraer’s Second Quarter Results to recognize the following non-cash expenses: (i) with respect to warrants, we recognized a non-cash impact of US\$76 million in net results, resulting from a recording of US\$142 million in other operating expenses and US\$66 million of fair value in financial income; (ii) US\$136 million in other operating expenses related to listing expenses, and (iii) US\$15 million in equity to other operating expenses, related to the reclassification of transaction costs (of the Business Combination).

As a result, our audited consolidated financial statements as of and for the year ended December 31, 2022 reflect the restatement of Embraer’s Second Quarter Results.

***Closing of the Business Combination with Zanite***

As disclosed to the market on our current report on form 6-K, filed on May 9, 2022, the previously announced Business Combination between Eve and Zanite was completed on that date.

In connection with the closing of the Business Combination, our subsidiary Embraer Aircraft Holding, Inc., or EAH, contributed all of the Eve limited liability company interests held by it to Zanite in exchange for 220 million shares of Zanite common stock and Zanite changed its corporate name to Eve Holding, Inc. (“Eve Holding”). EAH also completed a cash investment of US\$185 million into Eve Holding substantially concurrently with the closing in exchange for an additional 18.5 million shares of Eve common stock. Eve Holding’s common stock and public warrants were then listed on the New York Stock Exchange under the tickers “EVEX” and “EVEXW”, respectively.

As of the date of this annual report, EAH holds 238.5 million shares of Eve Holding’s common stock, representing approximately 90% of the outstanding shares of Eve Holding common stock. The remaining shares of common stock are currently owned by public stockholders, including the sponsor and certain third-party investors who entered into subscription agreements to purchase shares of common stock at the closing of the Business Combination. Further, the previously announced agreements entered into by Embraer in connection with the Business Combination to provide products, inputs, and services to Eve continue to remain in full force and effect.

***Sale of two Embraer subsidiaries in Portugal***

On May 2, 2022, the sale of two of our subsidiaries, namely, Embraer Portugal Estruturas Metálicas S.A., or EEM, and Embraer Portugal Estruturas em Compósitos S.A., or EEC, to Aernnova Aerospace, SAU, or Aernnova, was concluded.

The transaction is an integral part of our assets optimization strategy, which aims at maximizing facilities use and increase profitability. We and Aernnova entered into a purchase and supply agreement, which became effective as of the closing of the transaction, for the continuous supply of metallic and composite components at fixed prices.

The transaction was valued at the final adjusted price of US\$ 175.0 million and resulted in a cash inflow of US\$158.2 million recorded as investing activities in our statements of cash flow for the year ended December 31, 2022.

***COVID-19***

The COVID-19 pandemic and governmental responses thereto have had, and may continue to have, an impact on global and Brazilian macro-economic and financial conditions, including the disruption of supply chains and the closures or interruptions of many businesses, leading to losses of revenues, increased unemployment and economic stagnation and contraction. The COVID-19 pandemic has also resulted in materially increased volatility in both Brazilian and international financial markets and economic indicators, including exchange rates, interest rates and credit spreads. Furthermore, the COVID-19 pandemic has negatively affected the supply of pilots in the United States, many of which decided to change careers or retire as a result of the pandemic.

In connection with the pandemic, we have adopted several initiatives focused on health and safety of our employees, including health and safety measures, carry-out of essential activities only, including customer support, aircraft maintenance and manufacturing, social distancing, remote work for some employees,

reduction of working hours and wages, collective vacations, and paid leaves. We have also adopted certain measures to preserve our cash flow, including (i) reductions in working hours and pay cuts; (ii) reductions and pay cuts in executive management and board of directors' fees (iii) extension of payment terms relating to our suppliers; (iv) extension of tax payment deadlines; (v) negotiation of new credit lines; and (vi) adjustment of our production chain.

Although vaccination campaigns have presented relevant advances around the globe and while many of the governmental imposed restrictions, such as social distancing measures, have since been lifted, there is no way to predict that these policies will not be tightened or that new and different restrictions will not be imposed, which may affect airports, passengers and airlines, and the industry total recovery itself. As a result, any future air traffic disruption and decreased demand globally may materially and adversely affect our aircraft deliveries.

For information on the risks related to COVID-19, see “Item 3. Key Information—D. Risk Factors—Risks Relating to Embraer—The outbreak of communicable diseases around the world, including COVID-19, may lead to higher volatility in the global capital markets and recessionary pressure on the global economy,” and “Item 3. Key Information—3D. Risk Factors—Risks Relating to Embraer—A downturn in our key markets may reduce our sales and revenue, and, consequently, our profitability.” For additional information on the impacts of the COVID-19 pandemic, see Note 1.1.1 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

*Impacts on our Commercial Aviation Segment*

In the Commercial Aviation segment, the extensive traffic disruption affected our customer's operations throughout the world. While global commercial airline traffic volume in 2022 recovered to 77% of 2019 levels by December 2022, as showed in the Air Passenger Market Analysis report published by the International Air Transport Association (IATA), we are still below our pre-COVID commercial aircraft delivery rate, with as of our customers have rescheduled aircraft deliveries for 2023 and beyond.

Additionally, the shortage of pilots in United States is expected to continue affecting the delivery pipeline for our E175 Program at least for the next two years. Most industry stakeholders, including us and some of our airline customers, expect a normalization around 2025.

*Impacts on our Executive Aviation Segment*

In 2022, the Executive Aviation segment continued to recover from the impacts of the pandemic. Despite the fact that COVID-19 and its variants have not caused significant negative impacts on our operations, the main risks related to the post-pandemic recovery is possibility of discontinuities in the supply of some parts and supplies to fleet maintenance and the manufacture of new aircraft. On the date of this annual report, the production lines of our Executive Aviation aircraft are able to attend the planned supply levels without further shortages. We continue to monitor these risks and control the supply chain, in order to accommodate demand and avoid obstacles that may yet arise from future global shortages and crisis arisen from or in connection with the pandemic. In 2022, we had no postponements of order cancellations, having delivered a total of 102 executive jets in 2022, representing a 9.7% increase as compared to 2021.

*Impacts on our Defense & Security Segment*

In our Defense & Security segment, the COVID-19 global pandemic has impacted mainly supply chain and logistics. Although our suppliers' production level has shown recovery, it is still below the pre-pandemic levels, which impact their ability to deliver parts and goods to us in a timely manner. Logistics for imports and exports has also been impacted, with higher cycles and costs.

In November 2021, the Brazilian Air Force decided to unilaterally reduce the total value of their KC-390 Millennium aircraft agreement with us, which caused a reduction in our backlog and a decrease in revenue. In February 2022, we and the Brazilian Air Force engaged in negotiations, which resulted, among

other matters, in the reduction of the total number of KC-390 Millennium aircraft to be delivered under the terms of the agreement from 28 to 22. In October 2022, we and the Brazilian government engaged in further negotiations which resulted, among other matters, in the reduction of the total number of KC-390 Millennium aircraft to be delivered under the terms of the agreements from 22 to 19, with no possibility of unilateral reductions.

*Impacts on our Services & Support Segment*

Our Services & Support segment has maintained positive results through its ability to support customer needs, convert commercial opportunities into new businesses.

The year-over-year revenue improvement comes despite ongoing challenges in the aerospace industry, as a result of the pandemic. The most critical of these are worldwide materials shortages and supply chain constraints which are affecting availability of spare parts inventories, delaying repair turnaround time, and increasing the quantity of back-ordered items. Nevertheless, the global trend is the increase in international and domestic commercial flights. In the Services & Support related to our Executive Aviation, the profits are already higher than pre-pandemic numbers.

*Cybersecurity Incident*

On November 24, 2020, we suffered a cybersecurity incident in our IT systems, which was later identified as a ransomware attack. The attack resulted in the encryption of an environment of virtual servers hosted in Brazil, prevented access to certain files and resulted in the inadvertent disclosure of data, some of which were made available on the dark web. We have reported the incident to law enforcement authorities.

Immediately after the incident, we employed significant IT resources, took measures to protect and strengthen the security of our systems, isolated the affected environment and repaired our network. As part of our reaction, we hired Tempest Security Intelligence, a leading cybersecurity firm, to investigate the incident and supplement our remediation efforts. Embraer adopted additional measures to strengthen the security of its systems, as well as reporting the incident to competent authorities, in Brazil and abroad.

The incident had no significant impact over our revenues, cash flows or any material incremental expenses for the 2020 fiscal year and we have not had any similar incident in 2021 and in 2022. There is also no indication that the accuracy and completeness of any financial information had been affected as a result of the incident.

**Operational Data**

The following tables present a summary of our operational data as of the dates and for the periods indicated.

Other Data: Aircraft delivered:	Year ended December 31,		
	2022	2021	2020
<b>To the Commercial Aviation Market</b>	<b>57</b>	<b>48</b>	<b>44</b>
EMBRAER 175	35	27	32
EMBRAER 190	3	—	1
EMBRAER 195	—	—	—
EMBRAER 190-E2	1	2	4
EMBRAER 195-E2	18	19	7
<b>To the Defense &amp; Security Market<sup>(1)</sup></b>	<b>4</b>	<b>17</b>	<b>24</b>
C-390	1	—	2
Super Tucano	—	14	16
Modernization Programs	2	3	6
Combat	0	—	—
Special Mission	1	—	—
<b>To the Executive Aviation Market</b>	<b>102</b>	<b>93</b>	<b>86</b>
Legacy 600/650	—	—	1
Legacy 450/500	—	—	1
Praetor 500	15	14	10

Other Data: Aircraft delivered:	Year ended December 31,		
	2022	2021	2020
Praetor 600	21	17	18
Phenom 100	7	6	6
Phenom 300	59	56	50
<b>To the General Aviation Market</b>	<b>55</b>	<b>42</b>	<b>22</b>
Light Propeller Aircraft	55	42	22
<b>Total delivered (in aircraft)</b>	<b>218</b>	<b>200</b>	<b>176</b>

Other Data: Aircraft in backlog	As of December 31,		
	2022	2021	2020
<b>In the Commercial Aviation Market</b>	<b>291</b>	<b>325</b>	<b>281</b>
EMBRAER 175	90	147	132
EMBRAER 190	—	3	3
EMBRAER 190 – E2	7	5	7
EMBRAER 195 – E2	194	170	139
<b>In the Defense &amp; Security Market<sup>(1)</sup></b>	<b>39</b>	<b>43</b>	<b>65</b>
C-390	21	25	31
Super Tucano	3	—	14
Modernization	—	2	5
Combat	15	15	15
Special Mission <sup>(2)</sup>	—	1	—
<b>In the Executive Aviation Market</b>	<b>281</b>	<b>221</b>	<b>84</b>
Phenom 100/300, Legacy 650, Legacy 450/500, Praetor 500/600	281	221	84
<b>Total backlog (in aircraft)</b>	<b>611</b>	<b>589</b>	<b>430</b>
<b>Total backlog (in US\$ millions)</b>	<b>17,488.4</b>	<b>17,039.1</b>	<b>14,363.6</b>

- (1) The amounts in backlog for C-390 aircraft reflects the modifications in accordance with the agreement reached with the Brazilian Air Force (FAB) for the order of the aircraft KC-390, as discussed under “Item 4. Information on the Company—A. Business Overview—Defense & Security Segment—Products—Military Transport – C-390 Millennium.”
- (2) Special Mission category comprises aircraft of our Executive Aviation segment portfolio, which we have sold to customers of our Defense & Security segment.

**Brazilian Economic Environment**

The Brazilian government has frequently intervened in the Brazilian economy and occasionally made drastic changes in policy and regulations. The Brazilian government’s actions to control inflation and affect other policies and regulations have often involved, among other measures, increases in interest rates, changes in tax policies and incentives, price controls, currency devaluations, capital controls and limits on imports. Changes in Brazil’s monetary, credit, tariff and other policies could adversely affect our business, as could inflation, currency and interest-rate fluctuations, social instability and other political, economic or diplomatic developments in Brazil, as well as the Brazilian government’s response to these developments.

Rapid changes in Brazilian political and economic conditions that have occurred and may occur require continued assessment of the risks associated with our activities and the adjustment of our business and operating strategy accordingly. Developments in Brazilian government policies, including changes in the current policy and incentives adopted for financing exports of Brazilian goods, or in the Brazilian economy, over which we have no control, may have a material adverse effect on our business.

The following table shows data for real GDP growth, inflation, interest rates and the U.S. dollar exchange rate for and as of the periods indicated.

	December 31,				
	2022	2021	2020	2019	2018
Real growth in gross domestic product	2.9%	4.6%	(4.1)%	1.1%	1.3%
Inflation (IGP-M) <sup>(1)</sup>	5.5%	17.8%	23.1%	7.3%	7.6%
Inflation (IPCA) <sup>(2)</sup>	5.8%	10.1%	4.5%	4.3%	3.8%
CDI rate <sup>(3)</sup>	12.4%	4.4%	2.8%	5.9%	6.4%
LIBOR rate <sup>(4)</sup>	4.8%	0.2%	0.2%	1.9%	2.8%
Depreciation of the <i>real</i> vs. U.S. dollar	(6.5)%	7.4%	28.9%	4.0%	17.1%
Period-end exchange rate—US\$1.00	R\$ 5.2177	R\$ 5.5805	R\$ 5.1967	R\$ 4.031	R\$ 3.875
Average exchange rate—US\$1.00 <sup>(5)</sup>	R\$ 5.1386	R\$ 5.4071	R\$ 5.2426	R\$ 3.944	R\$ 3.680

Sources: *Fundação Getúlio Vargas*, or FGV, and the Central Bank and Bloomberg.

- (1) Inflation (IGP-M) is the general market price index measured by FGV.
- (2) Inflation (IPCA) is a broad consumer price index measured by the *Instituto Brasileiro de Geografia e Estatística*.
- (3) The CDI rate is average of inter-bank overnight rates in Brazil (as of the last date of the respective period).
- (4) Three-month U.S. dollar LIBOR rate as of the last date of the period. The LIBOR rate is the London inter-bank offer rate.
- (5) Represents the average of the exchange rates on the last day of each month during the period.

Inflation and exchange rate variations have had, and may continue to have, substantial effects on our financial condition and results of operations. Inflation and exchange rate variations affect our monetary assets and liabilities denominated in *reais*. The value of these assets and liabilities as expressed in U.S. dollars declines when the *real* devalues against the U.S. dollar and increases when the *real* appreciates. In periods of devaluation of the *real*, we report (i) a remeasurement loss on *real*-denominated monetary assets and (ii) a remeasurement gain on *real*-denominated monetary liabilities. For additional information on the effects of exchange rate variations on our financial condition and results of operations, see “Item 11. Quantitative and Qualitative Disclosures about Market Risk—Foreign Exchange Rate Risk.”

For additional information on the impact of macro-economic factors on our financial position, see Note 25 of our 2022 audited consolidated financial statements.

Tax Incentives

Similar to other Brazilian companies across multiple industries, we benefit from certain tax and other government-granted incentives, including those related to our export and research and development activities. For the effective tax reconciliation, see Note 23.3 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

Tax Incentives for Companies in Research and Development

Brazilian Law 11,196/05, also known as *Lei do Bem*, grants tax benefits to entities involved in research and development activities for technological innovation.

To take advantage of the tax benefits, a beneficiary must (i) assess its income tax according to the real profit (*lucro real*) measurement, (ii) record taxable profits, (iii) be current with all of its fiscal obligations, , and (iv) have qualifying investments in research and development.

Technological innovation is deemed to be the development of a new product or manufacturing procedure, as well as the addition of new features or characteristics to an existing product or manufacturing procedure, which entails incremental improvements and gains in quality or productivity, therefore resulting in greater market competitiveness.

We and other Brazilian companies across multiple industries benefit from these tax incentives with respect to the income tax (*Imposto de Renda Pessoa Juridica*), or IRPJ, and the social contribution on net income tax (*Contribuição Social sobre o Lucro Líquido*), or CSLL. These benefits allow us to deduct from our taxable net income an additional amount between 60% to 80% of our expenditures related to research and development activities for technological innovation during a fiscal year.

***Tax Incentives and Payroll Exemptions for Exporting Companies***

Normative Instruction 2126/2022 from the Brazilian Federal Revenue (IN RFB 2126/2022) established Special Customs Regime of Industrial Warehouse under automated control of Customs Board (RECOF) which allows the beneficiary company to import or to acquire in the local market raw materials, parts and components destined to industrial application on which federal taxes are suspended. Part of these goods must be processed, and it can be subsequently shipped both to domestic and foreign markets. When exporting the finished good, the company exempts the payment of federal taxes.

Decree No. 45,490, from the State of São Paulo, established the Simple Special Customs Regime (RESE), which is the State version of RECOF and suspends or exempts the payment of state taxes.

Brazilian Law 12.546/11 established the tax incentives for exporting companies and created the Special Regime for the Reintegration of Taxes of Exporting Companies (*Regime Especial de Reintegração de Valores Tributários para as Empresas Exportadoras*), or REINTEGRA, to stimulate and facilitate exports. The goal of REINTEGRA is to recover, in whole or in part, the residual tax costs from the production chain of exported goods, thereby reducing the tax burden. The exporting entity may receive tax credits according to a percentage, which may vary from 0.1% to 3%, established by decree of the Brazilian Finance Ministry and applied to the revenue earned from the export of the goods abroad.

To take advantage of those tax benefits, (i) an exporting entity must manufacture the exported product in Brazil, (ii) the product must be codified in the TIPI, which is a material code list issued by Brazilian fiscal authorities under the Tax on Manufactured Products (*Imposto Sobre Produtos Industrializados*), or IPI, and (iii) the cost of imported materials used in the exported product may not exceed certain limits prescribed by law, expressed as a percentage of the export price.

**Principal Operating Data and Components of Our Statement of Income**

***Operating Data***

***Revenue***

We generate revenues from the sale of aircraft and spare parts as well as from providing maintenance and repair, training and other product support services. In 2022, we presented revenues from Commercial Aviation, Executive Aviation, Defense & Security, Services & Support, and Other segments.

Of our revenues, 61.4% and 58.3% were generated through commercial and executive aircraft deliveries in 2022 and 2021, respectively. Revenue arising from the sale of commercial and executive aircraft is denominated in U.S. dollars. In 2022 and 2021, total defense and security revenue included 58.7% and 75% of revenue denominated in foreign currency, predominantly in U.S. dollars, and 41.3% and 25% denominated in Brazilian *reais*, respectively. Our Services & Support segment accounted for 27.9% of our revenue for the year ended December 31, 2022.

In addition, we generate revenue from our Other segments which include single-source supply of structural parts and mechanical and hydraulic systems to other aircraft manufacturers, and general aviation propeller aircraft, including crop dusters, which are also referred to as light aircraft.

Our Other segments also include services related to the development and certification of eVTOLs, including the creation of a maintenance and services network for eVTOLs and the creation of an air traffic management system for eVTOLs (urban air mobility, or UAM business).

For the sales of our aircraft, we receive an initial deposit upon the execution of the purchase agreement, progress payments prior to the delivery of each aircraft and a final payment upon delivery. The final payment typically represents the majority of the sale price. The deposits and the progress payments are for the most part nonrefundable in the event orders are canceled, except in the case of the Defense & Security segment. Payments in advance of delivery are recorded under contract liabilities as a liability on our statement of financial position and, when we deliver the aircraft, these payments are recognized as revenue. We generally receive monetary deposits for each option to purchase an executive or commercial jet. For additional information on our operating revenues, see Note 3 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

Our sales contracts in U.S. dollars with our Executive Aviation and Services & Support segment segments customers generally include adjustments for inflation as measured by the U.S. Consumer Price Index for Urban Wage Earners and Clerical Workers, when deliveries are not in the same calendar year of the sale except when fixed prices are pre-determined considering the estimated inflation and strategic price positioning planning of a given aircraft model, in line with Embraer’s strategic planning. Our sales contracts with our Commercial Aviation and generally Defense & Security segment customers include adjustments to the purchase price of the aircraft based on an escalation formula, which is based on a mix of indexes related to raw material, transportation equipment and labor costs. Specific to Defense & Security sales contracts with Brazilian customers, national indexes are used to adjust the prices of the relevant contract. The initial deposits and progress payments are nonrefundable (except in some instances contemplated in the agreement). Once a customer exercises an option to purchase an aircraft, we account for it as a firm order, and we begin to receive the respective progress payments and recognize revenue upon delivery of the aircraft or the contractual milestone.

A significant part of our defense contracts, including the contracted research and development for specific programs, meet the criteria for revenue recognition by percentage of completion. For the contracts that do not meet the criteria for percentage of completion, we recognize revenue at a point of time, on the moment the product is delivered, or the service is rendered. Certain contracts contain provisions for the redetermination of price based upon future economic conditions. Our defense customers continue to provide customer advances, which are converted into revenue as we fulfill pre-determined stages of completion of the project, including conception, development and design, and engineering, systems integration and customization. These installments are nonrefundable for the most part.

*Cost of Sales and Services*

Cost of sales and services consists of the cost of the aircraft, spare parts and services rendered, comprising:

- *Raw materials.* Substantially all materials costs are covered by contracts with suppliers. Prices under these contracts are generally adjusted based on an escalation formula which reflects, in part, inflation in the United States.
- *Labor.* These costs comprise salaries and related charges primarily in Brazilian *reais*.
- *Depreciation.* Property, plant and equipment in general are depreciated over their useful lives, ranging from two to 60 years, on a straight-line basis. Depreciation of aircraft under operating leases is recorded in cost of sales and services from the beginning of the lease term using the straight-line method over the estimated useful life and considering a residual value at the end of the lease term.
- *Amortization.* Internally generated intangible assets are amortized in accordance with the estimated sales of the series of aircraft. Intangible assets acquired from third parties are amortized on straight-line bases over the estimated useful lives of the assets.

We accrue a liability for the obligations associated with product warranties at the aircraft delivery date, which is estimated based on historical experience and recorded in cost of sales and services.

We enter into transactions that represent multiple-element arrangements, including training, technical assistance, spare parts and other concessions. These costs are recognized when the product or service is provided to the customer.



Results of Operations

The following table presents statement of income data by segment for the periods indicated:

	2022	2021	2020
	(in US\$ millions)		
Revenue			
Commercial Aviation	1,543.9	1,316.4	1,114.4
Executive Aviation	1,244.4	1,130.1	1,071.5
Defense & Security	447.6	594.4	653.9
Services & Support	1,266.8	1,132.2	920.0
Others	37.7	24.1	11.3
Total	4,540.4	4,197.2	3,771.1
Cost of sales and services			
Commercial Aviation	(1,382.3)	(1,263.9)	(1,086.8)
Executive Aviation	(953.2)	(923.4)	(886.1)
Defense & Security	(350.8)	(488.4)	(549.1)
Services & Support	(912.3)	(827.6)	(751.4)
Others	(29.6)	(34.3)	(20.1)
Total	(3,628.2)	(3,537.6)	(3,293.5)
Gross profit			
Commercial Aviation	161.6	52.5	27.6
Executive Aviation	291.2	206.7	185.4
Defense & Security	96.8	106.0	104.8
Services & Support	354.5	304.6	168.6
Others	8.1	(10.2)	(8.8)
Total	912.2	659.6	477.6
Operating income (expenses)			
Commercial Aviation	(145.5)	(57.1)	(300.8)
Executive Aviation	(141.5)	(76.9)	(95.5)
Defense & Security	(86.8)	(89.0)	(72.2)
Services & Support	(193.2)	(143.2)	(240.7)
Other	(386.1)	(23.1)	(22.6)
Unallocated operating expenses <sup>(1)</sup>	(69.6)	(69.0)	(69.2)
Total	(1,022.7)	(458.3)	(801.0)
Operating (loss)/income before financial result	(110.5)	201.3	(323.4)

(1) Expenses not allocated in the total refers to (i) expenses incurred in 2022 and 2021 as part of the corporate restructuring of the Company and expenses with certain corporate demands not directly related to any operating segment, and (ii) expenses incurred by the Company as part of the voluntary dismissal plans for specific group of employees in Brazil and reduction in workforce in 2020.

The following table sets forth statement of income information, and this information as a percentage of our revenue, for the periods indicated:

Consolidated Statements of Income	2022		2021		2020	
	(in US\$ millions, except percentages presented in absolute values)					
Revenue	4,540.4	100%	4,197.2	100%	3,771.1	100%
Cost of sales and services	(3,628.2)	79.9%	3,537.6	84.3%	(3,293.5)	87.3%
Gross profit	912.2	20.1%	659.6	15.7%	477.6	12.7%
Operating income (expense)	(1,022.7)	22.5%	(458.3)	10.9%	(801.0)	21.2%
Administrative	(184.9)	4.1%	(153.2)	3.7%	(143.4)	3.8%
Selling	(274.4)	6.0%	(226.4)	5.4%	(194.0)	5.1%
Expected credit losses (reversal) over financial assets and contract assets	(17.4)	0.4%	13.0	0.3%	(61.8)	1.6%
Research	(110.0)	2.4%	(43.0)	1.0%	(29.8)	0.8%
Other operating expense, net	(444.5)	9.8%	(49.8)	1.2%	(374.7)	9.9%
Equity in income of associates	8.5	0.2%	1.1	0.0%	2.7	0.1%
Operating income/(loss) before financial result	(110.5)	2.4%	201.3	4.8%	(323.4)	8.6%
Financial income, net	121.9	2.7%	74.8	1.8%	29.1	0.8%
Financial expense	(245.4)	5.4%	(274.2)	6.5%	(261.8)	6.9%
Foreign exchange gain (loss), net	28.2	0.6%	25.5	0.6%	(79.1)	2.1%
(Loss)/Profit before income tax	(205.8)	4.5%	27.4	0.7%	(635.2)	16.8%
Income taxes expense	2.3	0.1%	(70.9)	1.7%	(93.1)	2.5%
Loss for the period	(203.5)	4.5%	(43.5)	1.0%	(728.3)	19.3%
Attributable to:						
Owners of Embraer	(185.4)	4.1%	(44.7)	1.1%	(731.9)	19.4%
Non-Controlling Interest	(18.1)	0.4%	1.2	0.0%	3.6	0.1%

**2022 Compared with 2021**

*Revenue*

Consolidated revenue increased 8.2% in the period, to US\$ 4,540.4 million in 2022, from US\$4,197.2 million in 2021.

Revenues from our Commercial Aviation segment increased 17.3%, to US\$1,543.9 million in 2022 from US\$1,316.4 million in 2021, mainly due to an increase of 18.8% in commercial aircraft deliveries, to 57 in 2022, from 48 in 2021. The increase in revenues was lower than the increase in the number of deliveries, as 38.6% of commercial jet deliveries in 2022 were larger jets (E190-E1, E190-E2 and E195-E2) which tend to carry higher average selling prices, as compared to 2021, in which 43.8% of total commercial jet deliveries were larger jets.

Revenue from our Executive Aviation segment increased 10.1%, to US\$1,244.4 million in 2022 from US\$1,130.1 million in 2021, mainly due to a 9.7% increase in executive jet deliveries, from 93 jets in 2021 to 102 jets in 2022. The increase in revenues was higher than the increase in the number of deliveries, as 35.3% of executive jet deliveries in 2022 were mid-size jets (Praetors) which tend to carry higher average selling prices, as compared to 2021, in which 33.3% of total executive jet deliveries were larger jets.

A significant part of our revenue from the Defense & Security segment is accounted for under the percentage of completion method, and we continued to execute under existing contracts with the Brazilian government, including the KC-390 Millennium program, SISFRON, deliveries of special mission aircraft, and others. Additionally, we have delivered Super Tucano aircraft to several countries around the world. Our Defense & Security segment revenues decreased 24.7%, to US\$447.6 million in 2022, from US\$594.4 million in 2021, due to the lower number of Super Tucano deliveries in 2022.

Revenue from our Services & Support segment increased by 11.9%, to US\$1,266.8 million in 2022, from US\$1,132.2 million in 2021, mainly due to the higher demand for parts and components, as a result of the growth of airlines flight activities in in the Commercial Aviation, training services in Executive Aviation and C-390 Millennium services in Defense & Security.

Revenue from our Other segments increased 56.4%, to US\$37.7 million in 2022 from US\$24.1 million in 2021, mainly due to the higher number of Ipanema Aircraft delivered in 2022, which increased to 55 in 2022 from 42 in 2021.

*Cost of Sales and Services*

Cost of sales and services increased 2.6%, to US\$3,628.2 million in 2022 from US\$3,537.6 million in 2021. This increase in cost of sales and services was lower than the 8.2% increase in consolidated revenues in 2022, as compared to 2021, which resulted in a decrease in cost of sales and services as a percentage of revenue to 79.9% in 2022, from 84.3% in 2021. This decrease in cost of sales and services as a percentage of revenue was mainly due to our ongoing efficiency programs which directly reduce costs.

Cost of sales and services in our Commercial Aviation segment increased 9.4%, to US\$1,382.3 million in 2022 from US\$1,263.9 million in 2021. This is due to the increase in deliveries and revenues in 2022, as compared to 2021. Cost of sales and services increased less than the 17.3% increase in revenues in 2022, mainly due to our ongoing efficiency programs which directly affects costs and the positive contribution from price of the products. Gross margin in our Commercial Aviation segment (calculated as gross profit from our Commercial Aviation segment *divided by* revenue from the Commercial Aviation segment) increased from 4.0% in 2021 to 10.5% in 2022.

Cost of sales and services in our Executive Aviation segment increased 3.2%, to US\$953.2 million in 2022 from US\$ 923.4 million in 2021, which was lower than the 10.1% increase in revenues for the segment. This was mainly due to our ongoing efficiency programs which directly affects costs and the more favorable mix of jet deliveries, in 2022 we delivered 59 Phenom 300 compared to 56 in 2021 and Phenom 300 tends to carry higher operational profitability. Gross margin in our Executive Aviation segment (calculated as gross profit from our Executive Aviation segment *divided by* revenue from the Executive Aviation segment) increased from 18.3% in 2021 to 23.4% in 2022.

Cost of sales and services in our Defense & Security segment decreased 28.2%, to US\$350.8 million in 2022 from US\$488.4 million in 2021. This decrease in cost of sales and services was higher than the 24.7% decrease in revenue in the same period, mainly due to the aforementioned ongoing efficiency programs. Gross margin in our Defense & Security segment (calculated as gross profit from our Defense & Security segment *divided by* revenue from the Defense & Security segment) increased from 17.8% in 2021 to 21.6% in 2022.

Cost of sales and services in our Services & Support segment increased 10.2%, to US\$ 912.3 million in 2022 from US\$ 827.6 million in 2021. This increase in cost of sales and services was lower than the 11.9% increase in revenue in the same period, mainly due to ongoing efficiency programs. Gross margin in our Services & Support segment (calculated as gross profit from our Services & Support segment *divided by* revenue from the Services & Support segment ) decreased from 26.9% in 2021 to 28.0% in 2022.

Cost of sales and services in the Other segments decreased 13.7% to US\$ 29.6 million in 2022 from US\$34.3 million in 2021, mainly due to lower costs of hydraulics and electro-mechanical sub-assemblies in 2022 as compared to 2021, despite the increase of costs due to the higher number of Ipanema delivered in 2022.

*Gross Profit*

As a result of the aforementioned factors, our gross profit increased 38.3% to US\$912.2 million in 2022 from US\$659.6 million in 2021. Our total gross margin (calculated as gross profit *divided by* revenue) increased from 15.7% in 2021 to 20.1% in 2022.

*Operating Income (Expenses)*

As further discussed below, total operating expenses increased to US\$1,022.7 million in 2022 from US\$458.3 million in 2021. Total operating expenses as a percentage of revenues increased to 22.5% in 2022 as compared to 10.9% in 2021, as further explained in the paragraphs below.

*Administrative.* Administrative expenses increased 20.7%, to US\$184.9 million in 2022 from US\$ 153.2 million in 2021. The majority of our administrative expenses are fixed and do not increase or decrease at the same rate as changes in our revenues. That said, the main drivers of the increase in administrative expenses in 2022 versus 2021 were: US\$ 3.7 million due to the effect of the dollar depreciation against the Brazilian *real* (with respect to our expenses denominated in *reais*), US\$ 9.0 million in higher provisions for short-term and long-term incentive compensation programs on better expected results for Embraer in 2022 as compared to 2021, an increase of US\$ 3.1.million in managing expenses related to services and support in the United States and US\$8.2 million in higher expenses related to the increase of administrative personnel at EVE in 2022.

*Selling.* Selling expenses increased by 21.2%, to US\$274.4 million in 2022 from US\$226.4 million in 2021, due to the increase of sales operation, such as marketing events, demonstration flight, sales campaign and travel expenses, in 2022, compared to lower expenses in 2021 due to the restrictions during the pandemic.

*Expected credit losses (reversal) over financial assets and contract assets.* Expected credit losses (reversal) over financial assets and contract assets increased to a loss of US\$17.4 million in 2022 from a reversal of US\$13.0 million in 2021, due to provisions for expected credit losses related to the downgrade of credit risk of one of our customers in the Services & Support segment.

*Research.* Research expenses increased to US\$110.0 million in 2022 from US\$43.0 million in 2021, due to Eve and projects at the Commercial Aviation segment, which were in lower pace during the pandemic.

*Other operating expense, net.* Other operating expense increased to an expense of US\$ 444.5 million in 2022 from an expense of US\$49.8 million in 2021, mainly due to expenses of US\$ 305.4 million related to EVE’s business combination and related developments (listing expenses, warrants and transaction costs and, as compared with the gain of US\$39.1 million in fair value remeasurement related to our interest in Republic Airways Holdings and impairments of assets in 2021.

*Operating Income/(Loss) Before Financial Result*

As a result of the aforementioned factors, our consolidated operating loss before financial result decreased to an operating loss of US\$110.5 million in 2022 from an operating income of US\$201.3 million in 2021. Our operating margin (which is calculated as operating income (loss) before financial result *divided by* revenue) decreased to a negative margin of 2.4% in 2022 from a positive margin of 4.8% in 2021.

*Financial Result*

Financial expenses decreased to US\$123.5 million in 2022 from US\$199.4 million in 2021, primarily due to the fair value measurement of Eve’s warrants which were classified as derivative financial instruments in liabilities initially measured at fair value against other operating expenses on the date the Business Combination was completed. The subsequent measurement of fair value has been recognized in our financial expense/income account.

*Foreign Exchange Gain (Loss), Net*

Foreign exchange gain (loss), net increased to a gain of US\$28.2 million in 2022 from a gain of US\$25.5 million in 2021, driven by the appreciation of the Euro against the U.S. dollar related to the assets and liabilities of subsidiaries which are recorded in Euro.

*Loss Before Income Tax*

As a result of the aforementioned factors, loss before taxes on income decreased to a loss of US\$205.8 million in 2022 from a profit US\$27.4 million in 2021.

*Income Tax Expense*

Income tax expense decreased to a benefit of US\$ 2.3 million in 2022, from an income tax expense of US\$70.9 million in 2021, primarily due to the impact of the exchange rate over non-monetary assets (primarily inventories, intangibles, and property, plant and equipment) and the reversal of certain deferred tax liability items. For additional information on the reconciliation of income tax expense, see Note 23.3 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

*Loss for the Period*

As a consequence of the aforementioned factors, our loss for the year increased to a loss of US\$203.5 million in 2022, from a loss of US\$43.5 million in 2021. As a percentage of revenue, net margin (which is calculated as loss for the year divided by revenue) decreased to a negative margin of 4.5% in 2022 from a negative margin of 1.0% in 2021.

*2021 Compared with 2020*

For this discussion, see “Item 5. Operating and Financial Review and Prospects—A. Operating Results—Results of Operations—2021 Compared with 2020” of our annual report on Form 20-F for the year ended December 31, 2021, filed with the SEC on March 31, 2022.

**B. Liquidity and Capital Resources**

**Overview**

Our liquidity needs arise mainly from working capital requirements, research and development, principal and interest payments on our debt, capital expenditures and distributions to shareholders. To meet these needs, we generally rely on funds provided by operations, borrowings under our credit arrangements, cash contributions from risk-sharing partners, advance payments from customers and, to a lesser extent, issuance of debt and equity securities in the capital markets. For additional information on our working capital requirements and our capital sources, see “Item 4. Information on the Company—B. Business Overview—Suppliers and Components; Risk-Sharing Arrangements” and “Item 4. Information on the Company—B. Business Overview—Commercial Aviation Segment—Production, New Orders and Options” and “—Credit Facilities and Lines of Credit.”

As of the date of this annual report, we believe that our traditional sources of funds are sufficient to meet our foreseeable working capital requirements, including planned capital expenditures. However, there can be no assurance that our traditional sources of funds, or that the cost or availability of our credit facilities or future borrowing sources, will not be materially impacted by market disruptions.

As of the date of this annual report, we have experienced certain post-pandemic challenges, such as delays in our supply chain, production operations, the shortage of pilots in the regional airline sector in United States which affect the demand for our products, mainly in Commercial Aviation. We expect that our customers may reschedule deliveries, fail to exercise options or cancel firm orders as a result of potential economic downturns, including as a result of the COVID-19 pandemic, or financial volatility in our markets.

**Cash Flow Analysis**

*Net Cash Generated (Used) by Operating Activities*

*2022 Compared with 2021*

In 2022, net cash generated by operating activities was US\$751.3 million, compared to net cash generated by operating activities of US\$ 515.3 million in 2021. The improvement in the operating cash flow was mainly due to the increase in Contract Liabilities (customer advances) as a result of the increase in sales from our Executive Aviation segment and increase in Trade Accounts Payable which was partially offset by the increase of inventories, which occurred mostly to support the postponement of delivery of three commercial aircraft from 2022 to 2023. Cash used by working capital accounts (accounts receivable, inventories and trade account payables) was US\$37.8 million in 2022 compared to cash generated of US\$493.0 million in 2021.

*2021 Compared with 2020*

For this discussion, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Overview—Net Cash Generated (Used) by Operating Activities and Adjusted Working Capital—2021 Compared with 2020” of our annual report on Form 20-F for the year ended December 31, 2021, filed with the SEC on March 31, 2022.

***Net Cash Used in Investing Activities***

*2022 Compared with 2021*

Net cash used in investing activities decreased to net cash used of US\$109.5 million in 2022 from net cash used of US\$131.6 million in 2021, mainly as a result of higher investments in property, plant and equipment in 2022, partially offset by the cash inflow from the sale of our two subsidiaries in Portugal.

*2021 Compared with 2020*

For this discussion, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Overview—Net Cash Used in Investing Activities—2021 Compared with 2020” of our annual report on Form 20-F for the year ended December 31, 2021, filed with the SEC on March 31, 2022.

***Net Cash Generated (Used) by Financing Activities***

*2022 Compared with 2021*

Net cash used in financing activities increased to US\$669.2 million in 2022 from US\$430.6 million in 2021. This difference was mainly due to the repayment of borrowings in 2022, partially offset by the receipt in the offering of shares of our subsidiary EVE. As of December 31, 2022, we had total debt (which we calculate as current and non-current loans and financing) of US\$3,203.2 million, 90.4% of which was non-current debt and 9.6% of which was current debt.

*2021 Compared with 2020*

For this discussion, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Overview—Net Cash Generated (Used) by Financing Activities and Total Debt—2021 Compared with 2020” of our annual report on Form 20-F for the year ended December 31, 2021, filed with the SEC on March 31, 2022.

**Capital Expenditures**

We capitalize our expenditures related to product development projects as non-current intangible assets on our statement of financial position when it is probable that the relevant projects will generate future benefits, taking into account their commercial and technological feasibility and availability of technological and financial resources and only if their cost can be reliably measured. We amortize the assets in the form of charges to cost of sales and services on our statements of income, based on the total estimated number of aircraft to be delivered for each new product development project. We also capitalize expenditures related to property, plant and equipment as non-current assets on our statement of financial position and depreciate the assets in the form of charges to cost of sales and services on our statements of income. For additional information on how we amortize our intangible assets and depreciate our property, plant and equipment, see “Item 5. Operating and Financial Review and Prospects—A. Operating Results—Principal Operating Data and Components of Our Statement of Income—Cost of Sales and Services.”

In our Commercial Aviation, Executive Aviation and Services & Support segment, we include our investments in development and property, plant and equipment as part of our capital expenditures. Development costs in these business are capitalized from the date of board approval for the relevant project until the final certification.

Most of our development expenditures are associated with the development of new products for the Commercial Aviation and Executive Aviation segments. For additional information on our development expenditures, see “Item 5. Operating and Financial Review and Prospects—C. Research and Development, Patents and Licenses, etc.—Research.”

Our disbursements in capital expenditures were related to property, plant and equipment, thereby composing our additions in the period except for the exchange pool program assets and aircraft under lease or available for lease. These investments are related mainly to (i) construction of new facilities and (ii) improvements and modifications to our plants and production facilities for the production of new aircraft models.

We incur expenditures for our Defense & Security segment under both development and production contracts; however, the customers involved in these programs, which in our case mainly consists of the Brazilian government, fund these programs. A significant part of these contracts is defined as construction contracts and the revenue associated with these contracts is realized on a percentage of completion basis, as contract milestones are achieved.

Our capital expenditures are generally financed by funds provided by operations, borrowings under our credit arrangements, cash contributions from risk-sharing partners, advance payments from customers and, to a lesser extent, capital increases to meet these needs. See “C. Research and Development, Patents and Licenses, etc.—Capital Expenditures—Research.”

As of December 31, 2022, the total capital expenditures in our Commercial Aviation, Executive Aviation and Services & Support segments accounted for US\$66.1 million, net of US\$0.5 million related to contracted capital expenditures from Defense & Security. The anticipated source of funds to satisfy such investments is related to our cash generated in operating activities. Credit Facilities and Lines of Credit

**Long-term Facilities**

*Revolving Credit Facility*

On October 13, 2022, our subsidiaries EAH and Embraer Netherlands Finance B.V. (“Embraer Netherlands”), entered into a revolving credit facility in the amount of US\$650.0 million (the “Revolving Credit Facility”), maturing on October 13, 2025 with 14 international financial institutions. The facility is guaranteed by Embraer and certain of our subsidiaries, and borrowings under the facility will accrue interest at a rate comprised of Term SOFR plus a margin of 1.50% or 1.85% per annum, depending on our corporate rating at the time of the disbursement. As of the date of this Annual Report, neither EAH nor Embraer Netherlands have incurred any borrowing under the Revolving Credit Facility.

*Facilities with Multilateral Development Banks and Agencies*

The Brazilian government has been an important source of export financing for our customers through the BNDES-Exim program, managed by Brazilian National Bank for Economic and Social Development (*Banco Nacional de Desenvolvimento Economico e Social*), or BNDES. On December 15, 2022, we entered into an export financing agreement with BNDES in the total amount of R\$2.2 billion (US\$400 million) under the BNDES-Exim program. The consummation of the financing is subject to customary conditions precedent.

In January 2023, we entered into a credit facility with Citibank in the aggregate principal amount of US\$ 200 million to finance purchases of supplies made by us in the United States. Disbursements under this credit facility will be made according to proof of purchases of inputs from suppliers. This credit facility is guaranteed by Export-Import Bank, the official US export credit agency.

In August 2020, we entered into a working capital guarantee agreement with the Export-Import Bank in an aggregate principal amount of US\$97.2 million, with a term of one year, which amount was disbursed in August 2020. This working capital and export financing has strengthened our cash position and guaranteed funding for our entire operational process, from production to product shipment for the export market. As of December 31, 2022, US\$8.4 million was outstanding in the short-term, including principal and accrued interest. Interest is paid monthly.

## Senior Notes

In September 2013, we completed an exchange offer in which (i) US\$146.4 million in principal amount of our guaranteed notes with maturity in 2017 and (ii) US\$337.2 million in principal amount of our guaranteed notes with maturity in 2020 were exchanged for US\$540.5 million in principal amount of notes issued by Embraer Overseas at a rate of 5.696%, maturing in 2023. The notes due in 2023 were issued pursuant to exemptions from SEC registration pursuant to Regulation S and Rule 144A under the Securities Act. The notes due in 2023 are subject to a registration rights agreement, pursuant to which we have agreed to (i) exchange the notes within 270 days of their issuance for notes with the same terms and conditions which are registered with the SEC or (ii) file a resale shelf registration statement with the SEC on Form F-3. In June 2014, we filed a resale shelf registration statement accordingly. As of December 31, 2022, a total of US\$211.8 million under our notes due 2023 was outstanding, of which US\$211.8 million was due in the short-term, including principal and accrued interest.

In June 2015, Embraer Netherlands Finance issued 5.05% US\$1.0 billion guaranteed notes due 2025, and, as of December 31, 2022, US\$957.0 million was outstanding (US\$2.0 million in the short-term), including principal and accrued interest. Interest is paid semiannually.

In February 2017, Embraer Netherlands Finance issued 5.40% US\$750.0 million guaranteed notes due 2027 and as of December 31, 2022, US\$744.9 million was outstanding (US\$16.3 million in the short-term), including principal and accrued interest. Interest is paid semiannually.

In September 2020, Embraer Netherlands Finance issued 6.950% US\$750.0 million guaranteed notes due 2028, or the 2028 notes, and as of December 31, 2022, US\$729.5 million was outstanding (US\$22.5 million in the short-term), including principal and accrued interest. Interest is paid semiannually.

Concurrently with the offering of the 2028 notes, in September 2020, Embraer Netherlands Finance completed two concurrent and distinct cash tender offers in which (i) \$167.7 million in principal amount of our guaranteed notes due 2022 was tendered and accepted for purchase, and (ii) US\$168.8 million in principal amount of our guaranteed notes due 2023 was tendered, of which \$82.3 million was accepted for purchase.

On January 1, 2022, as a result of the partial spin-off of our wholly-owned subsidiary Yaborã Indústria Aeronáutica S.A., or Yaborã, whereby Yaborã transferred substantially all of its assets to Embraer, we amended the indentures governing the senior unsecured notes due 2022, 2023, 2025, 2027 and 2028 in order to (i) have Embraer substitute Yaborã as the issuer of the notes due 2022 and (ii) have Embraer substitute Yaborã as guarantor of the notes due 2023, 2025, 2027 and 2028. As a result, Yaborã was released from its obligations as issuer or guarantor, as applicable, of the notes. As this transaction was considered a common control transaction, there was no impacts on Embraer's consolidated assets, liabilities and shareholders' equity.

On March 1, 2022, pursuant to a tender offer, we repurchased and cancelled US\$59.2 million and US\$228.6 million in aggregate principal amount of outstanding 5.150% senior unsecured notes due 2022 issued by Embraer S.A. and 5.696% senior unsecured notes due 2023 issued by Embraer Overseas Limited and guaranteed by Embraer S.A., respectively.

We may from time to time seek to retire or purchase our outstanding debt, including our guaranteed notes due 2023, 2025, 2027 and 2028, through cash purchases, tender offers and/or exchanges for other securities, in open market purchases, privately negotiated transactions or otherwise. The repurchases or exchanges, if any, will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors. The amounts involved may be material, and notes repurchased may be canceled or resold, but will only be resold in compliance with applicable requirements or exemptions under the relevant securities laws.



*Other Facilities*

We have various other long-term loans and credit agreements with aggregate outstanding borrowings of US\$204.0 million as of December 31, 2022. For additional information on these financing arrangements, see Note 20 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

Of our total indebtedness, US\$300 million (mainly related to our financing with BNDES), are secured by security interests in real estate, machinery and equipment and bank guarantees, in the aggregate amount of US\$301.3 million as of December 31, 2022.

We continue to evaluate additional financing opportunities in order to maintain a long-term indebtedness profile that supports and is aligned with business cycle. For additional information on our loans and financings, including currency and maturity breakdowns and breakdowns between fixed and floating rate debt, see Note 20 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

**Subsequent Events**

Other than the events described in this annual report, no subsequent events have occurred after December 31, 2022. For further information, see Note 37 to our 2022 audited consolidated financial statements.

**C. Research and Development, Patents and Licenses, etc.**  
**Research and Development**

Our research and development activities are driven by our corporate strategic planning in the short, medium, and long terms. We refer to research activities as technological development and to development activities as integrated product development.

Based on our work defining our product and services strategies, including innovation, growth, and business prospects, we carry out projects that include the production and commercialization of new aircraft, systems, and aerospace services.

With a focus on our internal business plans and continuous monitoring of the global technology environment, we define a technological development plan which aims to research and develop solutions to the main challenges we will face in the medium and long terms, in order to remain competitive in our business segments.

In an effort to reduce development risk and optimize financial results of our projects, our development strategy and teams have the essential skills to manage and execute multi-disciplinary projects, maintaining and coordinating a global network of development partners and integrating diverse groups such as universities, research and development institutes, companies, and startups. As a result, application of advanced technologies allows for the evolution of products, including lighter, quieter, more comfortable and energy efficient aircraft, in addition to improvements in design and production cycles and optimization of company resources.

Following the results of our internal technological development planning, the new product and services design phase begins. In this phase our efforts are coordinated in an integrated manner with advanced project engineering and our business segments, which work in collaboration with future customers and potential partners to conclude the design of new products and services. Once the design is approved, the product development program is created. In this capital-intensive phase, our development, product, process and services groups work together with strategic partners, suppliers and regulatory agencies, to begin the detailed development of the product, its production, systems and associated services, until the effective entry into service of the product.

We have the majority of our research and development activities concentrated in Brazil, but also maintain internal initiatives and partnerships in several locations around the world.

We incur research expenses related to the creation of new technologies that may be applied to our aircraft. These expenses are not associated with any particular aircraft and include the implementation of quality assurance initiatives, improvements to the productivity of production lines and studies to determine the latest developments in technology and quality standards. Under IFRS, research costs are expensed as incurred in the research line item of our statement of income.

**Intellectual Property**

Our intellectual property, which includes utility patents, design patents, trade secrets, know-how and trademarks, is important to our business. We hold trademarks over our name and symbol and the names of our products, some of which are registered and some of which are in the process of registration in a number of countries, including, but not limited to, Brazil, the United States, Canada, Singapore, Hong Kong, China, the European Union and Japan. As of December 31, 2022, we had approximately 561 trademarks registered or in the process of registration. Our trademarks are generally renewed at the end of their validity period, which usually runs for ten years from the date of application for registration. We do not believe that the loss of any of our trademarks would have a material impact on our business or results of operations.

We develop our intellectual property in our research, development and production process. Under the agreements we have with some of our suppliers and risk-sharing partners, we are granted access to information and technology necessary to better develop, manufacture and market our products. We aim to protect our intellectual property rights resulting from investments in technical research and development. We hold granted patents and patent applications relating to our technologies. Currently, we hold granted patents and patent applications from the appropriate registries in Brazil, the United States, the European Union, Russia, Japan, India and China in connection with the various technologies of our products. We require that our suppliers and risk-sharing partners respect the intellectual property rights of third parties, and we believe that we have the necessary intellectual property rights to conduct our business and operations.

Considering our utility and design patent portfolios, as of December 31, 2022, we had filed 796 patent applications and had been granted 640 patents.

**Innovation**

We seek to remain in the technological vanguard by constantly reinventing ourselves as we search for opportunities to transform our business, products, services, and markets aiming for a more sustainable future.

While it is necessary to compete, through consolidated technologies, in markets where efficiency and incremental improvements are valued as competitive differentials; it is also essential to be able to compete with distinction and relevance, through innovations and new technologies, and in new markets where flexibility, agility and experimentation are key to obtain competitive advantages. In this context, we set the balance between incremental, adjacent and transformational innovation.

Innovations that resulted in products and services launched in the last five years accounted for 46% of our revenues in 2022. We believe innovation is key to the competitiveness and continuous growth of our business. For this reason, we have created a vice-presidency dedicated to Corporate Strategy, Digital and Innovation, that reports directly to our chief executive officer.

We also structured the Innovation Verticals, focused on in research, technology and innovation to accelerate business results, and which main purpose is to organize and prioritize innovation efforts and investments, activating the best power of a common, co-created corporate vision about business models, niches, technologies, future products, services and processes. The Innovation Verticals integrate our innovation efforts across all business segments, affiliates and EmbraerX, a market accelerator committed to the development of innovative solutions. Our current Innovation Verticals are: Zero Emission, Autonomous Flight, Artificial Intelligence and Data Science, Industry 4.0, Airframe Competitiveness, Platform Based Business, Passenger Experience and Cybersecurity.

Embraer-X is located in Melbourne, Florida, United States, and has an office in Brazil. In 2022, we expanded our international presence and opened an office in the Aerospace Innovation Hub@TUD, at the Delft University of Technology (TU Delft) in the Netherlands, aiming to accelerate new partnerships to co-explore the application of emerging technologies for new businesses, as well as foster the development of joint education, research, and innovation projects that will create a vision for a more sustainable future when it comes to mobility.

A major milestone achieved in 2022 was the initial public offering of Eve Holding on the New York Stock Exchange, consolidating the plan to accelerate the Urban Air Mobility market through the first spin-off company that was created from Embraer-X.

Beacon, the second business accelerated by Embraer-X after EVE, has maintained growth after the launch customer in 2020 and has signed trial agreements with major operators, most notably Jetblue Airways in New York and Binter in the Canary Islands. Beacon’s goal is to continue accelerating the future of aviation digitalization both in the United States and Europe, while raising the level of efficiency of maintenance teams through improved collaboration. As a completely solution agnostic, Beacon has grown its network of providers for commercial and business aviation annually bringing a human-centric approach.

In addition to agreements and partnerships, Embraer-X also makes active use of venture capital. Connected to Embraer Ventures, our corporate venture capital vehicle, Embraer-X seeks to identify and create synergies with technology-based startups of high economic and social impact. Currently, Embraer Ventures implements its strategy through three private equity funds (FIP): the Brazil Aerospace Fund (FIP-AERO) and two funds based in Silicon Valley, Catapult Ventures I and II. Among the technology topics covered by the investments are cybersecurity, computer vision, robotics, artificial intelligence, data science, and the Internet of Things (IoT), among others. Besides being a shareholder in FIPs, Embraer Ventures also invests directly in minority stakes in companies. In 2022, Embraer Ventures also invested in Xmobots, the largest drone manufacturing company in Latin America.

On January 27, 2023, Embraer announced an initial investment of approximately US\$ 3.8 million in MSW MultiCorp 2, a fund managed by MSW Capital, a Venture Capital manager, with the objective of attracting and boosting innovative Brazilian startups that have synergy with the company’s innovation strategy. On February 13, 2023, we paid an amount of approximately US\$ 0.3 million. As a result of this event, we now hold 40% of the shares of MSW MultiCorp. The Research and Technology (R&T) department is constantly monitoring the global technological environment and is developing the readiness of new technologies that will enable us to maintain our competitiveness and to achieve our vision of the future.

To strengthen the capability of pre-competitive aeronautical research activities in Brazil and other countries, Embraer has been working with different R&T organizations worldwide, covering a very broad spectrum of technologies, including: Sustainable Aviation Fuels (including H2), Electrification, Autonomy, Flight Safety, Aircraft Condition-Based Maintenance, Aircraft Design, New Materials & Structures, Noise Reduction, Airborne Systems, Augmented Reality, Artificial Intelligence & Data Sciences and Flexible Manufacturing Solutions.

Some R&T projects are developed in cooperation with reference universities and research centers in Brazil and abroad, including Instituto Tecnológico da Aeronáutica (ITA), Universidade Federal de Santa Catarina (UFSC), Serviço Nacional da Aprendizagem Industrial (SENAI), Centro de Pesquisa em Energia e Materiais (CNPEM), Centro de Referência em Tecnologias Inovadoras (CERTI), Fundação CPQD, Universidade de São Paulo-Escola de Engenharia de São Carlos (USP-EESC), Instituto de Pesquisa Tecnológica (IPT), Instituto de Estudos Avançados (IEAv), Instituto Tecgraf de Desenvolvimento de Software Técnico-Científico da PUC-Rio (TECGRAF), Universidade Federal de São Paulo (UNIFESP), Universidade do Estado de São Paulo (UNESP), Bristol University (Great Britain), IST - Instituto Superior de Eng. do Porto (Portugal), Tu Delft (The Netherlands), DLR (Germany), IVS - Intelligent Vision Systems

(United States), Rosemount (United States), Goodrich/Collins Aerospace (United States), GMV (POR), FCT - Fundação p/Ciência e a Tecnologia (Portugal), University of Stuttgart (Germany), University of Linköping (Sweden), University of Hanyang (South Korea), RollsRoyce (United Kingdom), Deep Blue SRL (Italy), Wideroe (Norway), SAAB (Sweden), MDH (Sweden), FACC (Australia).

We also have the Innova Program, which aims to strengthen the innovation culture within Embraer. The Innova Program includes the Green Light, Innova Challenge and Innovation Day. The Green Light is our entrepreneurship program that evaluates innovative proposals presented voluntarily by employees and provides time availability, technical and business mentoring, and resources for them to carry out the idea until its technical and economic feasibility is proven. . In 2022, 60 innovative projects were under development. The Innova Challenge is an internal crowdsourcing mechanism that stimulates ideas to solve issues globally from different departments of the company, and any employee in the world may participate in this process. Moreover, cultural events like the Innovation Day in 2022 had the participation of more than 2,800 employees.

With respect to our digital transformation, our current strategy is to accelerate the development of solutions to our clients and strengthen efficiency in corporate and business areas of the company. In addition, we aim to increase operational efficiency in processes through digital solutions. Digital inventory management system and new data-based services to aircraft operators are some of our projects. In order to accelerate digital transformation by increasing human capital aligned to our strategy, we launched two new entry programs: (i) Software Specialization Program in partnership with the Federal University of Pernambuco. In December 2022, the program’s first group was concluded with the approval of 35 professionals, 33 of whom were hired by Embraer, and (ii) Social Tech Program. In its first edition, Social Tech had people with disabilities as participants and, in 2022, the program focused on black people, with more than 10,000 candidates for 1,000 vacancies. significantly enhancing the development of new ideas for improvements, new products, innovative services, and new businesses.

**D. Trend Information**  
**General Information**

Our total firm order backlog as of December 31, 2022 was US\$17.5 billion, of which US\$8.6 billion was from the Commercial Aviation segment , US\$3.9 billion was from the Executive Aviation segment, US\$2.4 billion was from the Defense & Security segment and US\$2.6 billion was from the Services & Support segment . Our total firm order backlog as of December 31, 2021 was US\$17.0 billion, of which US\$9.0 billion was from the Commercial Aviation segment , US\$2.9 billion was from the Executive Aviation segment, US\$2.7 billion was from the Defense & Security segment and US\$2.4 billion was from the Services & Support segment. Our total firm order backlog as of December 31, 2020 was US\$14.4 billion, of which US\$7.6 billion was from the Commercial Aviation segment , US\$1.2 billion was from the Executive Aviation segment, US\$3.6 billion was from the Defense & Security segment and US\$2.0 billion was from the Services & Support segment. Economic uncertainty, mainly related to the COVID-19 outbreak, will continue to play a role in investment attitude and philosophy of the private and public sectors. Business jet prospective buyers around the globe are reviewing their cash flows and capital expenditures in order to preserve capital, which is affecting market growth fundamentals and perspectives. Furthermore, the COVID-19 pandemic has negatively affected the supply of pilots in the United States, many of which decided to change careers or retire as a result of the pandemic.

In the Commercial Aviation segment , the extensive traffic disruption affected our customer’s operations throughout the world. While global commercial airline traffic volume in 2022 recovered to 77% of 2019 levels by December 2022, as showed in the Air Passenger Market Analysis report published by the International Air Transport Association (IATA), we are still below our pre-COVID commercial aircraft delivery rate, with as of our customers have rescheduled aircraft deliveries for 2023 and beyond.

Additionally, the aforementioned shortage of pilots in United States is expected to continue affecting the delivery pipeline for our E175 Program at least for the next two years. Most industry stakeholders, including us and some of our airline customers, expect a normalization around 2025.

On the Executive Aviation segment, we expect global demand to outpace 2019 levels in 2023. In 2022, the executive aviation global market continued to grow, mainly in light and medium size jet classes. Recovery was strengthened by private, corporate flight departments, and fractional ownership segments buying activity. Industry average backlog at the end of 2022 was estimated to be above two years.

While we do not expect any additional material adverse effects on our deliveries for 2023 resulting from traffic disruption and decreased demand, we cannot fully determine the impact of the COVID-19 pandemic and other communicable diseases, in the short-to-medium term on our business. Factors such as the organic growth of world wealth and the need for fleet renewal of large fractional ownership operators, should maintain market activity at stable levels in 2023.

With respect to our Defense & Security segment, we expect an increase in global defense spending in light of intensified international tensions and ongoing insurgencies threats in some countries. In this scenario, with our comprehensive product portfolio and customers in key countries, we are well positioned to provide key customized solutions, creating sales opportunities for our Defense & Security segment, especially in the areas of aircraft platforms, critical software, command, control, communications and intelligence (C4I) and sensors in all domains (air, sea, land, space and cybersecurity).

In relation to our Services & Support segment, we expect that all segments associated with this segment continue progressing to either recover business volumes, similar to Commercial Aviation, or to maintain business activities or growth associated to pre-pandemic volumes, as in Defense & Security or surpass the pre-pandemic volumes, as it the case with Executive Aviation. As we have been able to properly support customer needs, convert commercial opportunities into new businesses, and to renew contracts, we can notice positive trends for the future with respect to our Services & Support segment.

On March 10, 2023, we released our projections for 2023, including a deliveries range of 65 to 70 aircraft in the Commercial Aviation segment and a range of 120 to 130 aircraft in the Executive Aviation segment, compared to actual deliveries of 57 aircraft in the Commercial Aviation segment and 102 aircraft in Executive Aviation segment, in 2022.

**Commercial Aviation Segment**

The following table summarizes our order book for our Commercial Aviation segment as of December 31, 2022:

<u>Commercial Aviation</u>	<u>Firm Orders</u>	<u>Deliveries</u>	<u>Firm Order Backlog</u>
EMB 120 Brasília	352	352	—
ERJ 135	108	108	—
ERJ 140	74	74	—
ERJ 145	708	708	—
EMBRAER 170	191	191	—
EMBRAER 175	818	728	90
EMBRAER 190	568	568	—
EMBRAER 195	172	172	—
EMBRAER 190 – E2	25	18	7
EMBRAER 195 – E2	245	51	194

The following tables set forth our Commercial Aviation order book as of December 31, 2022 by aircraft type, customer and country.

EMBRAER 170:

<u>Customer</u>	<u>Firm Orders</u>	<u>Delivered</u>	<u>Firm Order Backlog</u>
Airnorth (Australia)	1	1	—
Alitalia (Italy)	6	6	—
BA CityFlyer (UK)	6	6	—
Cirrus (Germany)	1	1	—
ECC Leasing (Ireland)	6	6	—
EgyptAir (Egypt)	12	12	—
Finnair (Finland)	10	10	—
GECAS (United States)	9	9	—
JAL (Japan)	18	18	—
NAC / Jetscape (United States)	6	6	—
LOT Polish (Poland)	1	1	—
Petro Air (Libya)	2	2	—
Regional (France)	10	10	—
Republic Airlines (United States)	48	48	—
Satena (Colombia)	1	1	—
Saudi Arabian Airlines (Saudi Arabia)	15	15	—
Sirte Oil (Libya)	1	1	—
Suzuyo (Japan)	2	2	—
TAME (Equator)	2	2	—
US Airways (United States)	28	28	—
Virgin Australia (Australia)	6	6	—
<b>Total</b>	<b>191</b>	<b>191</b>	<b>—</b>

EMBRAER 175:

<u>Customer</u>	<u>Firm Orders</u>	<u>Delivered</u>	<u>Firm Order Backlog</u>
Air Canada (Canada)	15	15	—
Air Lease (United States)	8	8	—
Alitalia (Italy)	2	2	—
American Airlines (United States)	101	101	—
Belavia (Belarus)	1	1	—
CIT (United States)	4	4	—
ECC Leasing (Ireland) <sup>(1)</sup>	1	1	—
Flybe (UK)	11	11	—
Fuji Dream (Japan)	2	2	—
GECAS (United States)	5	5	—
Horizon Air / Alaska (United States)	50	33	17
KLM (The Netherlands)	17	17	—
LOT Polish (Poland)	12	12	—
Mauritania Airlines (Mauritania)	2	2	—
Mesa (United States)	7	7	—
NAC / Aldus (Ireland)	2	2	—
NAC / Jetscape (United States)	4	4	—
Northwest (United States)	36	36	—
Oman Air (Oman)	5	5	—
Overland Airways (Nigeria)	3	—	3
Republic Airlines (United States)	190	127	63
Royal Jordanian (Jordan)	2	2	—
Skywest (United States)	209	205	4
Suzuyo (Japan)	11	11	—
TRIP (Brazil)	5	5	—
Undisclosed	3	—	3
United Airlines (United States)	110	110	—
<b>Total</b>	<b>818</b>	<b>728</b>	<b>90</b>

(1) Aircraft delivered by ECC Leasing to Air Caraibes.

EMBRAER 190:

<u>Customer</u>	<u>Firm Orders</u>	<u>Delivered</u>	<u>Firm Order Backlog</u>
Aero Republica (Colombia)	5	5	—
Aeromexico (Mexico)	12	12	—
Air Astana (Kazakhstan)	2	2	—
Air Canada (Canada)	45	45	—
Air Caraibes (Guadalupe)	1	1	—
Air Lease (United States)	23	23	—
Air Moldova (Moldavia)	1	1	—
Augsburg (Germany)	2	2	—
Austral (Argentina)	22	22	—
AZAL (Azerbaijan)	4	4	—
Azul (Brazil)	5	5	—
BA CityFlyer (UK)	9	9	—
BOC Aviation (Singapore)	14	14	—
China Southern (China)	20	20	—
CIAF (Egypt)	3	3	—
CIT (United States)	7	7	—
Conviasa (Venezuela)	16	16	—
Copa (Panama)	15	15	—
Dniproavia (Ukraine)	5	5	—
ECC Leasing (Ireland)	1	1	—
Finnair (Finland)	12	12	—
GECAS (United States)	27	27	—
Guizhou / Colorful (China)	9	9	—
Hainan (China)	50	50	—
Hebei (China)	6	6	—
JAL (Japan)	14	14	—
JetBlue (United States)	64	64	—
Kenya Airways (Kenya)	10	10	—
KLM (The Netherlands)	26	26	—
KunPeng (China)	5	5	—
LAM (Mozambique)	2	2	—
Lufthansa (Germany)	9	9	—
M1 Travel (Lebanon)	8	8	—
NAC / Aldus (Ireland)	21	21	—
NAC / Jetscape (United States)	9	9	—
NAS Air (Saudi Arabia)	3	3	—
NIKI (Austria)	7	7	—
Regional (France)	10	10	—
Republic (United States)	2	2	—
Taca (El Salvador)	11	11	—
TAME (Ecuador)	3	3	—
TRIP (Brazil)	3	3	—
US Airways (United States)	25	25	—
Virgin Australia (Australia)	18	18	—
Virgin Nigeria (Nigeria)	2	2	—
<b>Total</b>	<b>568</b>	<b>568</b>	—

EMBRAER 195:

<u>Customer</u>	<u>Firm Orders</u>	<u>Delivered</u>	<u>Firm Order Backlog</u>
Arkia (Israel)	1	1	—
Aurigny (Guernsey)	1	1	—
Azul (Brazil)	59	59	—
Belavia (Belarus)	4	4	—
BOC Aviation (Singapore)	1	1	—
Flybe (UK)	14	14	—
GECAS (United States)	12	12	—
Globalia (Spanish)	12	12	—
Hainan (China)	20	20	—

<u>Customer</u>	<u>Firm Orders</u>	<u>Delivered</u>	<u>Firm Order Backlog</u>
LOT Polish (Poland)	4	4	—
Lufthansa (Germany)	34	34	—
Montenegro (Montenegro)	1	1	—
NAC / Aldus (Ireland)	4	4	—
NAC / Jetscape (United States)	2	2	—
Royal Jordanian (Jordan)	2	2	—
Trip (Brazil)	1	1	—
<b>Total</b>	<b>172</b>	<b>172</b>	<b>—</b>

#### EMBRAER 190 – E2:

<u>Customer</u>	<u>Firm Orders</u>	<u>Delivered</u>	<u>Firm Order Backlog</u>
Aercap (Ireland)	5	5	—
Air Kiribati (Kiribati)	2	1	1
Aircastle (United States)	2	—	2
Azorra (USA)	4	—	4
Helvetic (Switzerland)	8	8	—
Widerøe (Norway)	3	3	—
Undisclosed	1	1	—
<b>Total</b>	<b>25</b>	<b>18</b>	<b>7</b>

#### EMBRAER 195 – E2:

<u>Customer</u>	<u>Firm Orders</u>	<u>Delivered</u>	<u>Firm Order Backlog</u>
Aercap (Ireland)	45	16	29
Air Peace (Nigeria)	13	5	8
Aircastle (United States)	23	11	12
Azorra (USA)	16	—	16
Azul (Brazil)	51	—	51
Binter Canarias (Spain)	5	5	—
Helvetic (Switzerland)	10	5	5
ICBC (China)	6	—	6
Porter (Canada)	50	5	45
Undisclosed	22	—	22
<b>Total</b>	<b>245</b>	<b>51</b>	<b>194</b>

For additional information on trends in our business, see “Item 4. Information on the Company—B. Business Overview—Business Strategies” and “Item 5. Operating and Financial Review and Prospects—A. Operating Results—Current Conditions and Trends in our Industry.” For additional information on risks affecting our business, see “Item 3. Key Information—D. Risk Factors.”

#### E. Critical Accounting Estimates

For this information, see Note 3 to our 2022 audited consolidated financial statements included elsewhere in this annual report.



Item 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

We are managed by our board of directors (*conselho de administração*), composed of a minimum of nine and a maximum of 11 effective members. As approved in our shareholders’ meeting held on September 1, 2021, our board of directors for the 2021/2023 biennium (which expires in the annual shareholders’ meeting to be held in April 2023) exceptionally had 13 members. Our board of executive officers (*diretoria*) is composed of no less than four and no more than 13 members (each an executive officer). We have a permanent fiscal council (*conselho fiscal*), which is composed of at least three and no more than five members and an equal number of alternates.

There are no family relationships among the members of our board of directors and/or our board of executive officers.

Board of Directors

Our board of directors meets ordinarily eight times a year and extraordinarily when called by the chairman. It is responsible for, among other things, establishing our general business policies and electing our executive officers and supervising management.

Our board of directors is appointed by our shareholders for a two-year term, reelection is permitted, and there are three reserved seats as follows: (i) one effective and one alternate member to be appointed by the Brazilian government, as holder of the “golden share,” and (ii) two effective and two alternate members to be appointed by our employees (one board member and his alternate to be appointed by the Employee Investment Club of the Company - *CIEMB - Clube de Investimentos dos Empregados da Embraer* and one board member and his or her alternate to be appointed by the non-shareholder employees of the Company). The remaining eight effective directors are elected in accordance with the slate voting, or cumulative voting, rules according to our bylaws. For additional information on the rules and procedures regarding the nomination and election of our board members, see “Item 10. Additional Information—10. Memorandum and Articles of Association—Board of Directors—Election of Board of Directors.” There is no mandatory retirement age for our directors.

According to the *Novo Mercado* listing segment rules, the members of our board of directors agreed to comply not only with the *Novo Mercado* rules but also with the rules of the B3 Arbitration Chamber before taking office. In order to take office, the members of the board of directors must execute a term of investiture (*termo de posse*).

Set forth below are the names, ages, positions, the year first elected and brief biographical descriptions of the members of our board of directors, as of the date of this annual report:

Name	Age	Position	Year First Elected to Board
Alexandre Gonçalves Silva	78	Chairman	2011
Raul Calfat	70	Vice-President	2017 <sup>(1)</sup>
Alexandre Magalhães Filho	70	Member	2015
Claudia Sender Ramirez	48	Member	2021
Dan Ioschpe	58	Member	2020
Dejair Losnak Filho	59	Member	2017 <sup>(2)</sup>
João Cox Neto	59	Member	2011
Kevin G. McAllister	59	Member	2021
Marcelo Kanitz Damasceno	63	Member	2021
Maria Leticia de Freitas Costa	63	Member	2017
Pedro Wongtschowski	76	Member	2015
Sergio Guillinet Fajerman	50	Member	2020
Todd Messer Freeman	63	Member	2021

(1) Appointed as the vice-president of our board of directors on May 18, 2020.  
(2) Elected as member of the board of directors from 2017 to 2019 and re-elected in 2021.

*Alexandre Gonçalves Silva.* Mr. Silva holds a Bachelor of Science degree in mechanical engineering from *Pontifícia Universidade Católica do Rio de Janeiro* (PUC Rio de Janeiro). In his 40-year career, he has occupied positions in several areas, including 22 years as a CEO. Mr. Silva was the CEO of General Electric (GE) in Brazil from 2001 to 2007 and since then, he has occupied positions on boards of directors of various companies. Mr. Silva is the chairman and an independent member of our board of directors, an independent member of the board of directors of Nitroquímica and Iochpe-Maxion. Since 2003, Mr. Silva is also a pro bono board member of the American Chamber of Commerce.

*Raul Calfat.* Mr. Calfat holds a degree in business administration from *Fundação Getúlio Vargas* (FGV). Mr. Calfat (i) was the CEO of Votorantim S.A. until December 2013, and the Chairman of the board of directors of Votorantim S.A. from January 2014 until April 2019; (ii) has been the chairman of the board of directors of Aché Laboratórios Farmacêuticos since September 2018; (iii) has been an independent board member of Dexco S.A. since 2015; (iv) has been an independent member of the board of directors of China Three Gorges Brasil since January 2021; (v) has been an independent board member of Fleury S.A. since May 2021, He is also a senior advisor at RGE Pte Ltd (Singapore), Macquarie Serviços Agrícolas Participações Ltda and at Bracell SP Cellulose Ltda and (vi) has been a member of the board of Sirio-Libanês Hospital from August 2015 up to April 2020. Mr. Calfat is an independent member of our board of directors, and also acts as the coordinator of our Strategy and Innovation Committee and as a member of our audit, risks and ethics committee.

*Alexandre Magalhães Filho.* Mr. Magalhães Filho holds a degree in accounting sciences from *Faculdade de Ciências Econômicas e Administrativas Professor Ulisses Vieira*, class of 1975, with a specialization in budget analysis. He has been an employee of Embraer since 1986, holding the following positions: (i) budget supervisor, from 1986 to 2008; (ii) assistant controllership officer; (iii) pricing and economic planning manager, from 2008 to 2010; and (iv) costs manager. Mr. Magalhães Filho is a member of our board and also acts as a financial process manager in charge of cost, accounting and tax procedures, including products and services costing, accounting for 29 companies, controllership and IFRS accounting consolidation for 50 companies in the Embraer group, and tax operations. Mr. Magalhães Filho was a member of the fiscal council of (i) Banco do Brasil Previdência Privada (BBPREV) from 1997 to 2009; (ii) Embraer Prev – Sociedade de Previdência Complementar from 2010 to 2012 and reelected for two terms from 2015 to 2018 and from 2018 to 2021; and (iii) Cooperativa dos Empregados da Embraer (Cooperemb), from 2009 to 2011, and was also elected to their board of directors from 2015 to 2017. He is also a member of the fiscal council of Instituto Embraer de Educação e Pesquisas, since 2001. Mr. Magalhães Filho was an alternate director for the representative of the Embraer Employees Investment Club (CIEMB) on our board of directors from 2013 to 2015, was elected as an effective director for three consecutive terms, from 2015 to 2017, 2017 to 2019, 2019 to 2021, and 2021 to 2023 as appointed by Embraer’s employees.

*Claudia Sender Ramirez.* Mrs. Ramirez has a bachelor’s degree in chemical engineering from Escola Politécnica da Universidade de São Paulo, obtained in 1998 and an MBA degree from Harvard Business School, earned in 2002. She was recognized by the World Economic Forum as a Young Global Leader in 2014. Mrs. Ramirez is a member of the board of directors of companies listed in Brazil and Europe, such as Gerdau in Brazil, Telefonica in Spain and Holcim in Switzerland. In addition, she is a member of the board of directors of several NGOs, such as Amigos do Bem, Hospital Israelita Albert Einstein and Gastromotiva. Before serving as a board member, Mrs. Ramirez was President and CEO of LATAM Airlines Brasil and Chief Customer Officer of Latam globally. She started her career at TAM in December 2011. She worked for 7 years with consumer goods at Whirlpool in Brazil, mainly in the areas of marketing and product development. Prior to joining Whirlpool, she was a consultant at Bain&Company for 7 years, working in several industries and countries. Mrs. Ramirez was elected as an effective member of the board of directors of Embraer S.A. She is an independent member of our board of directors and a member of the People and ESG Committee and the Audit, Risk and Ethics Committee.

*Dan Ioschpe.* Mr. Ioschpe holds a bachelor’s degree in journalism from *Universidade Federal do Rio Grande do Sul* (UFRS), class of 1986, with a specialization in marketing from *Escola Superior de Propaganda em Marketing* (ESPM São Paulo), class of 1988, and an MBA degree from the Amos Tuck School at Dartmouth College, class of 1991. Since May 2020, Mr. Ioschpe is an independent member of our board of directors, and also a member of our Strategy and Innovation Committee. He is the chairman of the board of directors of Iochpe-Maxion S.A., an independent member of the board of directors of Cosan S.A., WEG S.A. and Marcopolo S.A., a chairman of the board of directors of IEDI, and a member of the board of Sindipecas, SESI/SP and ABDI and Vice President of FIESP.

*Dejair Losnak Filho.* Mr. Losnak Filho holds a bachelor’s degree in law from Universidade do Vale do Paraíba in São José dos Campos, 2011, and a postgraduate degree in social security and labor law from UNISAL, in São José dos Campos, obtained in 2013 and a postgraduate degree in social security law from Faculdade Legale, São Paulo, 2016, a training for members of the board of directors and fiscal council by IBGC completed in 2017/2019 and a certification of member of the fiscal council by FGV, obtained in 2019. Mr. Losnak Filho has been a member of the Fiscal Council of COOPEREMB since 2018, served as an effective member of the board of directors of Embraer from 2017 to 2019 and as a member of the Deliberative Council of Embraer’s Pioneers and Veterans Association (APVE - Associação dos Pioneiros e Veteranos da Embraer) from 2017 to 2020. In April 2021, Mr. Losnak Filho was elected as an effective member of the board of directors of Embraer, by the company’s non-shareholder employees. He has also been an employee of Embraer since 2003, working as a production programmer.

*João Cox Neto.* Mr. Cox holds a bachelor’s degree in economics from Universidade Federal da Bahia and attended to post graduation in economics at Université du Québec à Montreal and at the College of Petroleum Studies of Oxford University. Mr. Cox has extensive board experience in both public and private companies. Currently he serves as Chairman of the board of directors of Vivara S.A. (largest Latin America jewelry company) and as member of the board of directors of Embraer S.A. Some of his previous board positions include, but are not limited to: Independent board member of Petrobras S.A.; Vice-Chairman of Braskem S.A.’s board of directors; Chairman of the Board of TIM Participações S.A; Vice-Chairman of Claro S.A.’s board of directors; Vice-chairman of the board of directors of Cellcom; Independent board member of Linx S.A.; CRSFN— National Financial System Resources Council; ABRASCA (Brazilian Association of Publicly-Held Companies) and ;IBRI (Brazilian Institute of Investors’ Relations). Mr. Cox is an independent member of the board of directors of Embraer since 2011, also acting as a head of the Audit and Risks Committee and member of the People and ESG Committee.

*Kevin Gregory McAllister.* Mr. McAllister has a bachelor’s degree from University of Pittsburgh, Metallurgical and Materials Engineering, 1987. Mr. McAllister has been an independent member of the board of directors of Embraer S.A. since September 2021. Mr. McAllister brings more than 30 years of experience in the aerospace industry through his tenures with Howmet Corporation, GE Aviation, and the Boeing Company. He has 27 years of engine experience at GE, complemented by close to three years of experience at Boeing, serving as the President and CEO of Boeing Commercial Airplanes. He is a certified Six Sigma Master Black Belt, with deep understanding of operational efficiency and excellence. Mr. McAllister’s current experience as a senior operating partner at the private equity firm AE Industrial Partners, as well as his Board role at Belcan (owned by AE Industrial), has provided him with a much broader industry exposure, particularly as it relates to new markets and technologies, such as satellites, space and eVTOL. Mr. McAllister is the current Chairman of the Board of Directors of ORBIS International, a non-profit global organization dedicated to preserving and restoring sight worldwide. Also, he has served in various positions in other companies or third sector organizations, he was a member of the Board of Director of the Washington Roundtable and Challenge Seattle, organization that brings senior executives together for positive change in policies that support a vibrant Washington state economy and served as President of the Wings Club Board of Governors, the premier global society of aviation professionals and a leading forum for aviation issues since 1942. Mr. McAllister is a member of Embraer’s Strategy and Innovation Committee.

*Marcelo Kanitz Damasceno.* Mr. Damasceno completed several academic courses, including an Aviation Officer Training Course, an Officer Improvement Course at Escola de Aperfeiçoamento de Oficiais, a Command and General Staff Course at Universidade da Força Aérea – UNIFA, and an Aerospace Policy and Strategy and Business Administration course at Universidade de Santa Catarina. Mr. Damasceno received

several awards, including, Order of Defense Merit - Grand Officer Degree, Order of Aeronautical Merit - Grand Officer Degree, Order of Military Judicial Merit - High Distinction Degree, Order of Rio Branco - Officer Degree, National Order of Merit (French government) and Santos-Dumont Medal of Merit. In the military area, he served in various positions, including, Secretary of Economy, Finance and Administration of the Air Force, from January 2019 to October 2020 and Head of the Office of the Air Force Commander, from April 2016 to January 2019. He has been Chief of the Air Force General Staff since October 2020. In April 2021, Mr. Damasceno was elected as an effective member of the board of directors of Embraer, by the Brazilian Federal Government, as holder of a golden share.

*Maria Leticia de Freitas Costa.* Mrs. Costa holds a Bachelor of Science degree in industrial engineering from the Polytechnical School of the *Universidade de São Paulo*, class of 1982, and an MBA degree from the Samuel Curtis Johnson School of Business at Cornell University, class of 1986. Mrs. Costa is an independent member of our board of directors, also acting as the coordinator of our People and ESG Committee and as a member of our Strategy and Innovation Committee. Mrs. Costa is also a partner at Prada Assessoria Empresarial Ltda. from 2010 until 2022; member of the board of directors of Localiza S.A. since 2009; member of the Board of Directors of BrasilSeg and Mapfre Holding since 2015; a member of the board of directors of Totvs S.A. since 2017; a member of the board of directors of Mapfre S.A. since 2015. She was a member of the board of directors of Martins S.A. from 2014 to 2020. She was also the coordinator of the strategy committee at Votorantim Cimentos from 2018 to 2019.

*Pedro Wongtschowski.* Mr. Wongtschowski holds a bachelor’s degree in chemical engineering and master and PhD degrees in engineering from the Polytechnical School of the University of São Paulo (*Universidade de São Paulo*), classes of 1970, 1978 and 1998, respectively. He was CEO of Oxiteno S.A. from 1992 to 2006. From January 2007 to December 2012, he was the president and CEO of ULTRAPAR Participações S.A., a publicly held company doing business in the fields of fuel distribution (*Ipiranga*), LPG distribution (*Ultragaz*), bulk liquid logistics (*Ultracargo*), and specialty chemicals (Oxiteno). Mr. Wongtschowski is the chairman of the board of directors of Ultrapar Participações S.A., an independent director of Embraer S.A. and Centro de Tecnologia Canavieira S.A., as well as a member of our Strategy and Innovation Committee.

*Sergio Guillinet Fajerman.* Mr. Fajerman holds a Bachelor of Science degree in economics from *Universidade do Rio de Janeiro* (UFRJ) in 1998, an MBA degree in corporate finance from IBMEC in 2020 and an MBA degree from INSEAD in Fontainebleau, France in 2004. Since May 2020, Mr. Fajerman is a member of our board of directors, also acting as a member of our People and ESG Committee, and a partner and Executive Director of HR since 2017 and a Member of the Executive Committee responsible for the People, Marketing and Corporate Communications area at Itaú Unibanco since January, 2021.

*Todd Messer Freeman.* Mr. Freeman has a bachelor’s degree from Lehigh University in Accounting & Finance, 1982, an MBA in Finance & Strategic Planning, 1987, from the Wharton School of the University of Pennsylvania and an M.A. in International Studies, 1987, from the University of Pennsylvania. He is also an FAA-certified flight instructor. Mr. Freeman has been an independent member of the board of directors of Embraer S.A. since September 2021 and a member of Embraer’s Strategy and Innovation Committee. Mr. Freeman brings over 30 years of experience in the aviation industry, the majority of which has been spent in commercial aircraft leasing leadership roles at GECAS. He leveraged his early career experience with JP Morgan and Airbus to evolve into an effective commercial leader in the aircraft leasing world. He brings good technical knowledge across a range of airframe and engine types. Mr. Freeman spent 12 years leading GECAS’ regional aircraft business, which provided him with great exposure to Embraer and other major regional players. He has an intimate understanding of the regional aircraft market and the competitive landscape, including business challenges and opportunities. He was a Special Advisor to the Chairman of Nordic Aviation Capital, from 2019 to 2022, a role which deepened his experience in the regional aircraft market segment. From 1989 to 2018, he held various commercial positions in General Electric Company. Mr. Freeman holds or has held several positions in other organizations, charities or industry groups as follows: Chairman of Airlink; member of the Board of Mubadala Infrastructure Partners; Chairman of the Board of ISTAT Foundation; member of the Board of the Regional Airline Association (US); member of the Board of the European Regions Airline Association; member of the Board of GRA, Inc (airline/airport advisory). He is also an FAA-certified flight instructor.

Committees

Three committees were formed to assist the board of directors in its duties and responsibilities:

- *Strategy and Innovation Committee*. See “—C. Board Practices—Strategy and Innovation Committee” below.
- *Audit, Risk and Ethics Committee*. See “—C. Board Practices—Audit, Risks and Ethics Committee” below.
- *People and ESG Committee*. See “—C. Board Practices—People and ESG Committee” below.
- *Fiscal Council* . See “—C. Board Practices—Fiscal Council” below.

Executive Officers

Our executive officers are responsible for our day-to-day management. The board of executive officers has responsibilities established by our bylaws and by the board of directors.

The terms of office for our executive officers are two years and reelection is allowed. The vote of at least seven members of our board of directors is necessary to remove an executive officer. Our bylaws prohibit any executive officer from also serving simultaneously as a member of our board of directors.

According to the *Novo Mercado* rules, the members of our board of directors agreed to comply not only with the *Novo Mercado* rules but also with the rules of the B3 Arbitration Chamber before taking office. In order to take office, the members of the board of directors must execute a term of investiture (*termo de posse*).

Our chief executive officer’s tenure will end in April 2023, at our annual and special general shareholders’ meetings. We will formalize the announcement of our president and chief executive officer on or before this date.

Set forth below are the names, ages, positions, the year first elected and brief biographical descriptions of our current executive officers, as of the date of this annual report:

Name	Age	Position	Year First Elected
Francisco Gomes Neto	64	President and Chief Executive Officer	2019
Antonio Carlos Garcia	57	Executive Vice President – Chief Financial and Investor Relations Officer	2020
Fabiana Klajner Leschziner	51	Executive Vice President – General Counsel & Chief Compliance Officer	2016
Jackson Medeiros de F. Schneider	58	Executive Vice President – Defense & Security	2014

*Francisco Gomes Neto*. Mr. Gomes Neto holds a degree in electrical engineering from Universidade de Mogi das Cruzes (UMC), class of 1981, and an MBA degree in controlling and finance from Universidade de São Paulo (USP), class of 2001. He has also concluded specialization courses in business administration at Fundação Getúlio Vargas (FGV) in 2000, finance and risk management at St. John’s University in 2002, executive education programs at University of Michigan in 2002 and at Instituto Brasileiro de Governança (IBGC) in 2018. Mr. Gomes Neto is our president and chief executive officer since May 2019. He has extensive experience in management positions, including CEO positions for approximately 20 years, in the

transportation sector in Brazil and abroad. Mr. Gomes Neto was the CEO of Marcopolo Group, one of the leading bus body manufacturers in the world, when he led the company’s transformation process, generating strong sales growth and market value for the business. He was also the CEO Americas of the company Mann+Hummel and was the president of Knorr Bremse, a leading company in commercial vehicle control systems.

*Antonio Carlos Garcia.* Mr. Garcia. Mr. Garcia holds a degree in accounting from Faculdades Integradas Campos Salles, class of 1989 and an MBA degree in business administration from Pontificia Universidade Católica de São Paulo (PUC – São Paulo), class of 1999. Furthermore, Mr. Garcia holds an MBA at Duke University from Siemens Management Program in 2001. He also participated in ThyssenKrupp Executive Program at Harvard Business School in 2011. Mr. Garcia was elected Executive Vice President, Financial and Investor Relations on January 1, 2020. Since July 2020 he is also responsible for Procurement. Mr. Garcia worked at ThyssenKrupp where he served as global CFO of the forged technologies business segment in Germany. Previously, he worked for six years at the ZF Group in Brazil and over eighteen years at the Siemens Group, where he worked in several business segments.

*Fabiana Klajner Leschziner.* Mrs. Leschziner holds a law degree from the Universidade de São Paulo (USP) School of Law, class of 1993, and an LL.M. degree from Cornell Law School. She specializes in compliance, corporate law, corporate finance, capital markets, antitrust and international trade. Mrs. Leschziner is our executive vice president, general counsel and chief compliance officer since June 2016. She worked at DuPont in Brazil from September 2002 to December 2015 as the legal and government affairs director for Brazil and from January 2016 to June 2016 as legal director for Brazil and the Andean Region, responsible for the legal aspects of all business of DuPont in Brazil, Colombia, Venezuela, Peru, Ecuador and Bolivia. She was also an associate at Davis Polk & Wardwell in New York from July 1998 to December 2001.

*Jackson Schneider.* Mr. Schneider is the President and CEO of Embraer Defense & Security, which provides solutions for defense, space and security customers. He also holds the position of Executive Vice-President of Governmental Relations for Embraer worldwide. Jackson is currently the Chairman of Visiona (space technology Embraer/Telebras joint venture), the Chair of the Brazilian Chapter of BRICS Business Council (CEBRICS) and a member of the Board of Directors of OGMA (aeronautic industry Embraer/Portuguese Government joint venture), the Mercedes-Benz do Brasil Advisory Council, and he is the President of COSCEX (Superior Council for Foreign Trade). He is also an active member in various not-for-profit organizations, including the Biennial Foundation of Sao Paulo, the AACD (Association to Support Disabled Children) and MASP – Assis Chateaubriand São Paulo’s Art Museum. Mr. Schneider began his career at the Brazilian Ministry of Justice, actively participating in a number of government committees and special task forces. Prior to joining Embraer, Jackson held management positions in private sector companies such as Mercedes-Benz Brazil and Unilever, holding responsibilities in corporate affairs, legal and HR. Schneider was the former President of ANFAVEA (Brazilian Association of Vehicle Manufacturers), ABIPLA (Brazilian Association of Manufacturers of Cleaning Products) and a Board Member of CDES (Brazilian President’s Council on Economic and Social Development). Jackson holds a law degree from the University of Brasilia (UNB) and a Master of Business Administration degree from the Business School of Sao Paulo. He is a visiting Senior Research Fellow in Conflict and Security at the Department of War Studies at the King’s College London.

**B. Compensation**  
**Overview**

Our executive officers, board of directors and fiscal council members are entitled to fixed compensation. In addition, our executive officers are eligible to participate in our executive profit-sharing plan, which provides them with variable compensation that is based on their and our performance and is limited to a percentage of our net income for the year.

For the fiscal year ended December 31, 2022, the aggregate compensation that we paid to members of the board of directors, the audit, risks and ethics committee, and the executive officers for services in all capacities was US\$7.2 million, of which US\$3.0 million to members of the board of directors and US\$4.1 million to the executive officers. In the same period, we paid US\$0.1 million to members of the fiscal council.

For the fiscal year ended December 31, 2022, members of our committees of the board of directors, including our audit, risks and ethics committee, received an aggregate additional compensation of US\$0.8 million, which is included in the US\$3.0 million compensation mentioned above.

In addition, in 2022, we contributed US\$0.1 million for the payment of pension benefits to our executive officers. Members of our board of directors and fiscal council do not receive these benefits. The board of directors’ members, fiscal council members and executive officers did not receive any compensation (including benefits in kind) from any of our subsidiaries. As of December 31, 2022, none of the board of directors’ members, fiscal council members or executive officers had any financial or other interests in any transaction involving us which was not in the ordinary course of our business. In the year ended December 31, 2022, the maximum, medium and minimum yearly compensation paid to an individual member of our board of directors was US\$0.4 million, US\$0.2 million and US\$0.1 million, respectively.

In the year ended December 31, 2022, the maximum, medium and minimum yearly compensation paid to an individual member of our board of executive officers was US\$1.6 million, US\$0.4 million and US\$0.4 million, respectively.

In the year ended December 31, 2022, the maximum, medium and minimum yearly compensation paid to an individual member of our fiscal council was US\$0.34 thousand, US\$0.31 thousand and US\$0.30 thousand, respectively.

Phantom Shares Plan

In February 2014, we adopted a long-term incentive plan aligned with our remuneration policy. This plan is based on the granting of virtual shares to officers and management and has as its objective of attracting and retaining highly qualified staff to ensure continuity of management and align the interest of officers and key personnel of the Company with that of shareholders. Amounts distributed are defined with reference to the market, under the conditions described in the plan. In general, participants in the plan are entitled to receive two classes of virtual shares, 50% in the form of virtual restricted shares and 50% in the form of virtual performance shares linked to performance indicator target. We pay the amount of the long-term incentive converting the virtual shares into reais by the average price of the Company’s shares in the ten trading sessions preceding the relevant determination date, in general after the third year of the grant date.

The objectives of our long-term incentive plan are the recruitment and retention of highly qualified personnel and to allow those who can contribute to our performance the opportunity to participate in our profits. Incentives under the plan are intended to promote continuity among our management and alignment of the interests between our executives and shareholders.

The table below sets forth information about the grants under the Phantom Shares Plan with outstanding virtual shares as of December 31, 2022.

Grants under the Phantom Shares Plan	Year Granted	Total Benefit Granted <i>(in R\$ millions)</i>	Amount of Virtual Shares Granted	Fair Value of Shares on December 31, 2022 <sup>(1)</sup> <i>(in R\$ millions)</i>	Outstanding Virtual Shares as of December 31, 2022 <sup>(2)</sup>
7 <sup>th</sup> grant	April 12, 2018	35.2	1,622,986	2.3	167,347
8 <sup>th</sup> grant	March 12, 2019	26.0	1,349,153	4.4	323,415
9 <sup>th</sup> grant	March 24, 2020	27.7	1,633,741	15.8	1,157,029
10 <sup>th</sup> grant	November 13, 2020	43.6	6,530,000	59.2	4,326,111
11 <sup>th</sup> grant	March 18, 2021	24.6	2,181,442	17.7	1,293,066
12 <sup>th</sup> grant	March 11, 2022	40.4	2,292,434	8.6	631,352
13 <sup>th</sup> grant	September 05, 2022	187.1	13,662,385	28.4	2,074,484
14 <sup>th</sup> grant	November 18, 2022	78.7	6,254,302	7.4	542,908

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- (1) Refers to the estimated fair value of total virtual shares granted in each grant date.
- (2) Refers to outstanding virtual shares as of December 31, 2022 considering the respective vesting periods and less the virtual shares already paid to the beneficiaries.

For additional information on this plan, see Note 27 to our 2022 audited consolidated financial statements.

**Short-Term Variable Compensation Policy**

Our Short-Term Variable Compensation Policy is designed to promote the retention of executives and alignment of their interests with those of shareholders. Goals with greater impact and importance for our company are given greater weight.

**Employee Profit-Sharing Plan**

We first implemented a profit-sharing plan in 1998 that linked employee profit sharing to dividend payments. In 2020, we approved a new profit-sharing plan that linked employee profit sharing, as a percentage of the employee’s monthly wage, to the achievement of corporate targets, such as free cash flow and operating margin.

For the 2022, 2021 and 2020 fiscal years, we distributed US\$19.2 million, US\$10.7 million and US\$9.0 million to our employees under our profit-sharing plan.

**Defined Contribution Pension Plan**

We sponsor a defined contribution pension plan for employees and the participation in this plan is optional. The plan is managed by EMBRAER PREV – Sociedade de Previdência Complementar. Contributions made by us to this plan in the years ended December 31, 2022, 2021 and 2020 were US\$9.7 million, US\$12.0 million and US\$12.3 million, respectively. For additional information on our post-retirement benefits, see Note 24.5.2 to our 2022 audited consolidated financial statements.

Risk management studies are performed annually to identify the future exposure to be recorded as a provision. The provision recorded of medical benefits plan in Brazil was US\$34.2 million as of December 31, 2022, US\$36.5 million as of December 31, 2021 and US\$24.7 million as of December 31, 2020. The decrease observed in 2022 is related to remeasurement of the plan based on updated actuarial and financial assumptions.

The actuarial methods used comply with the generally accepted actuarial methods in force, in accordance with the projected unit credit method.

**D&O Insurance**

We maintain directors’ and officers’ liability insurance in an amount of US\$50.0 million. This insurance covers liabilities resulting from wrongful acts, including any act or omission committed or attempted by any officer or director acting in his or her capacity as officer or director or any matter claimed against an officer or director solely due to his or her serving in such capacity.



According to our by-laws, we may enter into agreements with, or approve indemnity policies covering the members of our board of directors, fiscal council, board of executive officers and our committees or of our controlled companies, as well as certain of our employees or of our controlled companies, for whom we agree to bear or reimburse certain expenses, costs and damages effectively incurred by the beneficiaries, during or after the period of their relationship with us, related to arbitration, judicial or administrative proceedings, involving acts practiced in carrying out the beneficiaries’ duties, from the date of their investiture or beginning of the employment relationship with us, as applicable.

**C. Board Practices**

Our board of directors is appointed for a two-year term. See “—A. Directors and Senior Management—Board of Directors.”

The current executive officers were elected by the board of directors, with a term of office lasting until the meeting of our board of directors to be held following the annual general meeting of our shareholders in 2024 to approve our financial statements for the fiscal year ended December 31, 2023. The members of our board of directors and our executive officers have a uniform two-year term and are eligible for reelection. A vote of at least seven members of our board of directors is necessary to remove an executive officer. See “6A. Directors and Senior Management—Executive Officers.”

None of our directors is party to an employment agreement providing for benefits upon termination of term. All of our executive officers are party to a service agreement setting forth the rights and obligations of the executive officers.

**Audit, Risks and Ethics Committee**

Our Audit, Risk and Ethics Committee has no executive power and must have at least three and up to five members, of which (i) the majority of its members must be independent members of the board of directors, (ii) at least one must be an external member, pursuant to our bylaws, (iii) at least one must have acknowledged experience in corporate accounting matters, and (iv) one member must be an independent member of the board of directors with acknowledged experience in corporate accounting matters, or an external member with acknowledged experience in corporate accounting matters. The primary purpose of the Audit Risks and Ethics Committee is to assist the board of directors. The Audit Risks and Ethics Committee’s responsibilities include validation and submission to the board of directors of guidelines for risk policy, verification of risk management policy compliance, supervision of activities performed by our independent registered accounting firm and monitoring the quality and integrity of internal controls and financial statements. Our Audit, Risk and Ethics Committee is currently composed of three independent members of our board of directors and two external members.

Foreign private issuers are subject to local legislation which may prohibit the board of directors from delegating certain responsibilities to the audit committee, pursuant to Rule 10A-3 of the Exchange Act. Audit committees of foreign private issuers may be granted responsibilities, including advisory powers, with respect to certain matters to the extent permitted by law. Due to certain restrictions imposed by the Brazilian Corporate Law, our Audit Risks and Ethics Committee, unlike a U.S. audit committee, only has an “advisory” role and may only make recommendations for adoption by the full board of directors, which is responsible for the ultimate vote and final decision. For example, our Audit, Risks and Ethics Committee makes recommendations regarding the appointment of auditing firms, which are subject to a vote by the board of directors. Our Audit, Risks and Ethics Committee complies with Brazilian legal requirements (including for “independent directors,” as defined by Brazilian law).

Set forth below are the names, ages, position and the year first elected and brief biographical descriptions of the members of our Audit, Risks and Ethics Committee:

Name	Age	Position	Year First Elected
João Cox Neto	59	Coordinator and Effective member	2015 <sup>(1)</sup>
Claudia Sender Ramirez	48	Effective member	2021
Raul Calfat	70	Effective member	2020
Sergio Eraldo de Salles Pinto	58	External member	2011 <sup>(2)</sup>
Vanessa Claro Lopes	47	External member	2019 <sup>(3)</sup>

- (1) Mr. João Cox Neto was also a member of this committee from April 2011 through April 2013.
- (2) Mr. Sergio Eraldo de Salles Pinto was elected in May 2020 as an external member of the Audit, Risks and Ethics Committee, after resigning as an effective member of our board of directors.
- (3) Ms. Vanessa Claro Lopes was elected on July 16, 2019 as an external member of the Audit, Risks and Ethics Committee.

*João Cox Neto.* See “—A. Board of Directors.”

*Claudia Sender Ramirez.* See “—A. Board of Directors.”

*Raul Calfat.* See “—A Board of Directors.”

*Sergio Eraldo de Salles Pinto.* Mr. Salles Pinto holds a bachelor’s degree in economics from Centro de Ensino Unificado de Brasília (CEUB) and in electrical engineering from Universidade de Brasília (UnB). He holds a master’s degree in economics from FGV – Rio de Janeiro (EPGE) and a master’s degree in business administration from Universidade Católica do Rio de Janeiro (PUC). Since 2011, he has been serving as chief executive officer of Grupo Bozano. In April 2009, he was elected for the first time as member of our board of directors and served as independent member until May 2020. Mr. Salles Pinto serves as member of the board of directors of Azul Linhas Aéreas.

*Vanessa Claro Lopes.* Ms. Lopes holds a bachelor’s degree in accounting sciences from Universidade Federal Fluminense, or UFF, a bachelor’s degree in system analysis from FATEC/BS, and a master’s degree in management systems from UFF, with specialization in corporate management from EAESP FGV and computer networks from Universidade São Judas. Ms. Lopes is an external and independent member of our Audit, Risks and Ethics Committee. She has 28 years of professional experience and currently serves as independent member in the boards of directors of Afya Limited and Lojas Americanas S.A.; coordinator of the audit committee of Tagma Logística S.A.; member of the audit committees of Afya Limited and Lojas Americanas S.A.; and member of the fiscal councils of Cosan S.A., Comgás S.A. and Cosan Logística S.A. Mrs. Lopes served as chairman of the fiscal council of Via Varejo S.A. and member of the fiscal councils of Gerdau S.A., Terra Santa Agro S.A., Renova Energia S.A. and Estácio Participações S.A. She has significant experience in publicly-held companies, listed in Brazil and in the United States.

People and ESG Committee

Our People and ESG Committee has no executive power and its members are appointed by our board of directors. The majority of its members shall be independent members of our board of directors, and the remaining members can be external members, pursuant to paragraph 1 of Section 34 and paragraph 3 of Section 37 of our bylaws. The purpose of this committee is to assist our board of directors with matters related to human resources issues, including appointment of executive officers and removal of executive officers from office and designation of their duties according to our bylaws, compensation and human relations policy and transfer of our resources to employee associations, charity and recreational entities, to the private security fund and foundation. Additionally, this committee also assists our board of directors with corporate governance matters.

Set forth below are the names, ages, position and the year first elected and brief biographical descriptions of the members of our People and ESG Committee:

Name	Age	Position	Year First Elected
Maria Leticia de Freitas Costa	63	Coordinator and effective member	2019
Claudia Sender Ramirez	48	Effective member	2021
João Cox Neto	59	Effective member	2011
Sergio Guillinet Fajerman	50	Effective member	2020
Beatriz Botelho de Oliveira	58	External member	2021

*Maria Leticia de Freitas Costa.* See “—A Board of Directors.”

*Claudia Sender Ramirez.* See “—A Board of Directors.”

*João Cox Neto.* See “—A Board of Directors.”

*Sergio Guillinet Fajerman.* See “—A Board of Directors.”

*Beatriz Botelho de Oliveira.* Mrs. Botelho holds a bachelor’s degree in Chemical Engineering from the Universidade Federal do Rio de Janeiro (UFRJ) with a specialization in Environmental and Sanitary Engineering from the Universidade do Rio de Janeiro (UERJ) and an MBA in Business Management from the São Paulo Business School. A professional with 35 years of experience in the environmental and sustainability area, Mrs. Botelho is an Environmental and Sustainability Consultant at B2 Consultoria Ambiental. She was the Head of Environment for South America at Ambev, from 1991 to 2020, including 49 industrial plants. She was responsible for the sustainability strategy supply and Leadership of the Sustainability Committee, responsible for environmental management and control, eco-efficiency indicators as well as environmental training and team building. She performed natural resource preservation work with a reduction of more than 50% in water consumption among other activities. She has experience in Europe and the USA in the development of global environmental policies and standards. She has received 3 global awards for the development of best sustainability practices and 7 consecutive global awards for South America as the Company’s Best Zone in Environmental Management (2014 to 2020), and the 2017 CEBEDS (Brazilian Business Council for Sustainable Development) award for Women’s Leadership in Brazil for Sustainability. Mrs. Botelho is an external and independent member of our People and ESG Committee.

Strategy and Innovation Committee

Our Strategy and Innovation Committee has no executive power and its members are appointed by our board of directors. The majority of its members shall be independent members of our board of directors, and the remaining members can be external members, pursuant to paragraph 1 of Section 34 and paragraph 3 of Section 37 of our bylaws. The primary purpose of our Strategy and Innovation Committee is to assist the board of directors. The Strategy and Innovation Committee’s responsibilities include assisting the board of directors in the performance of its duties, focused on the following areas: (i) strategic objectives and macro-projects relating to our strategic plan and action plan, and (ii) potential opportunities in the assessment of new business.

Set forth below are the names, ages, position and the year first elected and brief biographical descriptions of the members of our Strategy and Innovation Committee:

Name	Age	Position	Year First Elected
Raul Calfat	70	Coordinator	2017
Dan Ioschpe	58	Effective member	2020
Kevin G. McAllister	59	Effective member	2021
Maria Leticia de Freitas Costa	63	Effective member	2017
Pedro Wongtschowski	76	Effective member	2015
Todd Messer Freeman	64	Effective member	2021

*Raul Calfat.* See “—A Board of Directors.”

*Dan Ioschpe.* See “—A Board of Directors.”

*Kevin G. McAllister.* See “—A Board of Directors.”

*Maria Leticia de Freitas Costa.* See “—A Board of Directors.”

*Pedro Wongtschowski.* See “—A Board of Directors.”

*Todd Messer Freeman.* See “—A Board of Directors.”

Fiscal Council

Under the Brazilian Corporate Law, the fiscal council is a corporate body independent of management and a company’s external auditors. The fiscal council has not typically been equivalent to or comparable with a U.S. audit committee. The primary responsibility of the fiscal council has been to monitor management’s activities, review the financial statements, and report its findings to the shareholders. In our case, our statutory audit, risks and ethics committee, established in accordance with the *Novo Mercado* Listing Rules, will serve as the equivalent of a U.S. audit committee. For additional information on our committees, see “—A. Directors and Senior Management—Committees.”

Under the Brazilian Corporate Law, the fiscal council may not have members who are members of the board of directors or the executive committee, or who are our employees or employees of a controlled company or of a company of this group, or a spouse or relative of any member of our management. In addition, the Brazilian Corporate Law requires that fiscal council members receive a remuneration of at least 10% of the average amount paid to each executive officer. The Brazilian Corporate Law requires a fiscal council to be composed of a minimum of three and a maximum of five members and their respective alternates.

Our fiscal council is composed of three to five members who are elected at the annual shareholders’ meeting, with terms lasting until the next annual shareholders’ meeting after their election. Under the Brazilian Corporate Law, if a company acquires control of another company, minority shareholders that in the aggregate hold at least 10% of the voting shares also have the right to elect separately one member of the fiscal council. This provision will not be applicable to us as long as we are subject to widespread control. Set forth below are the names, ages, the year first elected and positions of the members of our fiscal council and respective alternates, elected at our annual shareholders’ meeting held on April 26, 2022.

The following table sets forth the name and year of election of each of the members of our fiscal council as of the date of this annual report.

Name	Age	Position	Year First Elected
Ivan Mendes do Carmo <sup>(1)</sup>	60	Effective member	2008
Tarcísio Luiz Silva Fontenele	60	Alternate	2001
José Mauro Laxe Vilela <sup>(2)</sup>	75	Effective member	2011
Wanderley Fernandes da Silva	49	Alternate	2011
Mario Ernesto Vampré Humberg	59	Effective member	2020
Carla Alessandra Trematore	47	Alternate	2022
Otavio Ladeira de Medeiros	55	Effective member	2022
Adriano Pereira de Paula	59	Alternate	2022

(1) President of the fiscal council.

(2) Vice-President of the fiscal council.

D. Employees

The table below sets forth the number of our employees by category at the dates indicated and includes the employees of our wholly owned subsidiaries. The total consolidated employees refer to employees at all of our subsidiaries and joint ventures, including, OGMA, ECTS, and Visiona:

	As of December 31,		
	2022	2021	2020
Production Process	8,671	7,882	7,874
Research and Development	3,717	3,562	3,590
Customer Support	3,010	2,847	2,599
Administrative—Production Support	250	253	262
Administrative—Corporate	1450	1,447	1,333
<b>Total (including only wholly owned subsidiaries of Embraer S.A)</b>	<b>1,7263</b>	<b>16,067</b>	<b>15,658</b>
<b>Total Consolidated Employees</b>	<b>1,9475</b>	<b>18,320</b>	<b>18,125</b>

Approximately 80% of our workforce is employed in Brazil. Most of our technical staff is trained at leading Brazilian engineering schools, including ITA, located in the city of São José dos Campos.

Embraer fully supports the choice of union association of its employees. In Brazil, 6.4% of our employees are unionized, and, according to Brazilian labor laws, salary readjustments and other clauses negotiated in collective bargaining agreements extend to the entire category, resulting in 100% employees covered by clauses negotiated in these agreements.

We actively support the training and professional development of our employees. We have established a program at our facility in the city of São José dos Campos to provide newly graduated engineers with specialized training in aerospace engineering.

E. Share Ownership

As of December 31, 2022, our board members owned 601 of our common shares and our executive officers did not own any of our common shares. As of the same date, members of our fiscal council owned one of our common shares and none of our directors individually owns more than 1.0% of the outstanding common shares.

For a description of our stock option plan terminated in March 2020 that was applicable to our executive officers and employees in 2020, including those of our subsidiaries, see “—B. Compensation—Stock Option Plan.”

Item 7. MAJOR SHAREHOLDERS AND RELATED-PARTY TRANSACTIONS

A. Major Shareholders

Shareholders

As of the date of this annual report, we have a total authorized capital of 1,000,000,000 shares, of which 740,465,044 common shares were issued, including one special “golden share” held by the Brazilian government. The golden share provides the Brazilian government with veto rights in certain specific circumstances. In addition, non-Brazilian shareholders may have their voting rights restricted in certain specific circumstances. For additional information on the voting rights of our common shares, see “Item 10. Additional Information—B. Memorandum and Articles of Association—Voting Rights of Shares.”

The table below sets forth information related to the number of shares held by our significant shareholders, as of December 31, 2022, in accordance with the most recent shareholder position information provided to us:

	Common Shares	
	Shares <sup>(1)</sup>	(%)
Brandes Investment Partners, L.P. <sup>(2)</sup>	112,071,399	15.14
BNDES Participações S.A.—BNDESPAR <sup>(3)</sup>	39,762,489	5.37
BlackRock, Inc <sup>(4)</sup> .	37,290,149	5.0
União Federal/Brazilian government <sup>(5)</sup>	1	0.0
Shares in company treasury	5,832,238	0.79
Others	545,508,768	73.67
<b>Total</b>	<b>740,465,044</b>	<b>100.0</b>

- (1) The number of shares includes our ADS.
- (2) Brandes Investment Partners, L.P. is a 100% employee-owned independent investment advisory firm founded and co-owned by Charles Howard Brandes. The firm manages the Brandes series of mutual funds in addition to other funds and caters to individuals and institutions.
- (3) BNDESPAR is a wholly owned subsidiary of *Banco Nacional de Desenvolvimento Econômico e Social* – BNDES, the government-owned national development bank of Brazil.
- (4) Blackrock INC. is an American global investment management corporation based in the city of New York, United States. Founded in 1988, initially as a risk management and fixed income institutional asset manager, BlackRock is the world’s largest asset manager.
- (5) The Brazilian government holds our “golden share.”

There have been no significant changes in percentage ownership by any major shareholder in the past three years. On December 31, 2022, we had approximately 101,736 holders of common shares, including common shares in the form of ADSs. On December 31, 2022, an aggregate of 95,454,084 ADSs were held by 152 record holders, including DTC in the United States.

B. Related Party Transactions

The Brazilian Government

The Brazilian government, through its direct and indirect stakes in us and its ownership of our “golden share,” is one of our major shareholders. The issuance of the “golden share” was a requirement of the regulations governing our privatization in 1994 and grants the Brazilian government veto rights over certain military-related programs and corporate actions (including transfers of control and changes in our name, logo and corporate purpose). For additional information on the voting rights of our golden share, see “Item 10. Additional Information—B. Memorandum and Articles of Association—Voting Rights of Shares—Golden Share.” As of December 31, 2022, in addition to the “golden share,” the Brazilian government owned an indirect 5.37% stake in us through BNDESPAR, a wholly owned subsidiary of BNDES, which, in turn, is controlled by the Brazilian government. As a result, for the purposes of this annual report’s disclosure requirements, we consider transactions between Embraer and the Brazilian government or its agencies as falling within the definition of “related-party transactions.”

The Brazilian government plays an important role in our business activities, including as:

- a major customer of our defense products, through the Brazilian Air Force;
- a source for research debt financing through technology development institutions, including FINEP and BNDES;
- an export credit agency, through BNDES; and
- a source of short-term and long-term financing and a provider of asset management and commercial banking services, through Banco do Brasil.

For additional information on the role of the Brazilian government in our business activities, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Credit Facilities and Lines of Credit,” “Item 4. Information on the Company—B. Business Overview—Aircraft Financing Arrangements,” “Item 3. Key Information—D. Risk Factors—Risks Relating to Embraer—Any decrease in Brazilian government-sponsored customer financing or increase in government-sponsored financing that benefits our competitors, may decrease the cost competitiveness of our aircraft” and “Item 3. Key Information—D. Risk Factors—Risks Relating to Embraer—Any decrease in Brazilian government-sponsored customer financing or increases in government sponsored financing that benefits our competitors, may decrease the competitiveness of our aircraft.” For additional information regarding our related-party transactions, see Note 13.1 to our 2022 audited consolidated financial statements.

*A Major Customer (Brazilian Government)*

The Brazilian government, mainly through the Brazilian Air Force, has been a significant customer of Embraer since its inception. For the year ended December 31, 2022, the Brazilian government, again mainly through the Brazilian Air Force, accounted for 42.5% or US\$ 190.2 million of the revenue of our Defense & Security segment. In addition, as of December 31, 2022, we had US\$ 370.5 million in contract assets and US\$69.6 million in contract liabilities in connection with the Brazilian Armed Forces. We expect to continue to be the primary source of new aircraft and spare parts and services for the Brazilian government. For a description of our transactions with the Brazilian government, see “Item 4. Information on the Company—B. Business Overview—Defense & Security Segment.”

*Financing Source*

*FINEP*

We maintain credit facilities with FINEP, which as of December 31, 2022, had a total outstanding balance of US\$6.4 million. These loans were extended to us primarily to fund research and development expenses of the Phenom 100 and 300 aircraft and the Legacy 500 aircraft. For additional information on the amounts, maturity dates and interest rates of the principal loans we have with FINEP, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Credit Facilities and Lines of Credit.”

*BNDES*

The Brazilian government has been an important source of export financing for our customers through the BNDES-Exim program, managed by BNDES. For additional information on our aircraft financing arrangements, see “Item 4. Information on the Company—B. Business Overview—Aircraft Financing Arrangements.”

We also entered into credit working capital and export financing agreements with BNDES, which as of December 31, 2022, had a total amount of US\$400.0 million. The consummation of the financing is subject to customary conditions precedent. For additional information on the amounts, maturity dates and interest rates of these agreements, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Credit Facilities and Lines of Credit.”

*A Service Provider (Banco do Brasil)*

As of December 31, 2022, we maintained cash and cash equivalents of US\$2.1 million with Banco do Brasil and several of its affiliates. Banco do Brasil has been a provider of regular commercial banking and asset management services to us for many decades and is one of the banks responsible for the payment of our payroll expense. These services include maintaining our checking account.

As of December 31, 2022, R\$38.5 million of our cash, cash equivalents and financial investments were indexed to the variation of the CDI rate.

## C. Interests of Experts and Counsel

Not applicable.

## Item 8. FINANCIAL INFORMATION

### A. Consolidated Statements and Other Financial Information

See to “Item 18. Financial Statements” for our consolidated financial statements and report of our independent registered public accounting firm included elsewhere in this annual report.

### Legal Proceedings

#### *Arbitration Proceedings*

On January 24, 2019, we entered into a Master Transaction Agreement (the “MTA” or “Master Transaction Agreement”) and certain other transaction documents with Boeing and certain subsidiaries of Embraer or Boeing, which were wrongfully terminated by Boeing, pursuant to which a subsidiary of Boeing would acquire a controlling stake in Embraer’s Commercial Aviation segment and Embraer, or a subsidiary of Embraer, and Boeing, or a subsidiary of Boeing, would form a joint venture for the promotion and development of new markets and applications for the C-390 Millennium multi-mission transport aircraft.

On January 1, 2020, we implemented the internal carve-out of our Commercial Aviation segment by means of the contribution by Embraer to Yaborã Indústria Aeronáutica S.A. (“Yaborã”) of the net assets comprising assets, liabilities, properties, rights and obligations (subject to certain exceptions) related to our Commercial Aviation segment, through a capital increase.

On April 25, 2020, we received a notice from Boeing communicating its decision to terminate the Master Transaction Agreement, based on Boeing’s assertion that certain closing conditions in the MTA had not been satisfied by Embraer by the April 24, 2020 termination date in the MTA. In addition, Boeing terminated the Contribution Agreement. Embraer strongly believes that Embraer was in full compliance with its obligations under the MTA and the Contribution Agreement and Boeing wrongfully terminated the MTA and the Contribution Agreement, that Boeing was under an obligation to continue to comply with the terms of the MTA and the Contribution Agreement and that our pending arbitration proceedings against Boeing and its affiliates are a valid enforcement of our rights under the MTA and the Contribution Agreement. Such dispute with respect to the termination of the MTA and/or the Contribution Agreement has been submitted by each of Boeing and Embraer to separate arbitration proceedings that are currently ongoing. These arbitration proceedings have been consolidated into a single arbitration proceeding.

For risks relating to the termination of the Boeing Transaction, see “Item 3. Key Information—D. Risk Factors—Risks Relating to Embraer—Legal proceedings pertaining to the now-terminated strategic partnership with Boeing, including arbitration proceedings related to Boeing’s termination of and failure to close the MTA and/or the Contribution Agreement, may adversely impact our business, financial condition and results of operations.”

#### *Labor Lawsuits*

We are defendants in individual labor lawsuits, for which we are awaiting the decision of the Brazilian labor courts. Due to the immaterial amount involved in these legal proceedings, we do not believe that any liabilities related to these individual labor lawsuits would have a material adverse effect on our financial condition or results of operations. For a further discussion of our labor lawsuits, see Note 24 to our 2022 audited consolidated financial statements.



***Tax Matters***

We have challenged the constitutionality of certain Brazilian taxes and payroll charges, as well as modifications to and increases in the rates and basis of calculation of those taxes and charges and have obtained *writs of mandamus* or injunctions to avoid their payment or recover past payments. For a further discussion of our tax lawsuits, see Notes 23 and 24 to our 2022 audited consolidated financial statements.

Interest on the total amount of unpaid taxes and payroll charges accrues monthly based on the SELIC rate, which is the key lending rate of the Brazilian Central Bank, and, accordingly, we make an accrual to the interest income (expenses), net line item on our statements of income.

***Other Proceedings***

In addition, we are involved in other legal proceedings, all of which are in the ordinary course of business.

Our management does not believe that any of our proceedings, if adversely determined, would materially or adversely affect our business, financial condition or results of operations.

As of December 31, 2022, there was a US\$58.6 million provision recorded as a liability (taxes, labor and civil related) on our statement of financial position in connection with litigation contingencies that we classify as representing probable losses to us. For a further discussion of these provisions and contingent liabilities, see Note 24 to our 2022 audited consolidated financial statements.

**Dividends and Dividend Policy**

***Amounts Available for Distribution***

At each annual shareholders’ meeting, the board of directors is required to recommend how net profits for the preceding fiscal year are to be allocated. For purposes of the Brazilian Corporate Law, net profits are defined as net income after income taxes and social contribution taxes for the fiscal year, net of any accumulated losses from prior fiscal years and any amounts allocated to employees’ and management’s participation in our profits, determined under IFRS. In accordance with the Brazilian Corporate Law and our bylaws, the amounts available for dividend distribution are the amounts determined under IFRS in our parent company financial statements. The amount for distribution is equal to our net income after taxes less (or plus):

- any amounts allocated from the net income after taxes to the legal reserve, and
- any amounts allocated from the net income after taxes to a contingency reserve for anticipated losses or the reversion of the reserve constituted on previous fiscal years.

We are required to maintain a legal reserve to which we must allocate 5% of net profits for each fiscal year until the amount of the legal reserve equals 20% of our capital stock. However, we are not required to make any allocations to our legal reserve in respect of any fiscal year in which the legal reserve, when added to our other established capital reserves, exceeds 30% of our capital stock. Net losses, if any, may be charged against the legal reserve. The balance of our legal reserve was US\$204.4 million, which was equal to 13% of our capital stock as of December 31, 2022.

The Brazilian Corporate Law also provides for two additional, discretionary allocations of net profits that are subject to approval by the shareholders at the annual meeting. First, a percentage of net profits may be allocated to a contingency reserve for anticipated losses that are deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year for which the anticipated loss was forecast if the loss does not in fact occur, or written off in the event that the anticipated loss occurs. Second, the amount for distribution may be limited to the fiscal year’s net profit already realized, and the difference between the amounts shall be allocated to an unrealized revenue reserve. Under the Brazilian Corporate Law, unrealized revenue is defined as the sum of:

- price-level restatement of statement of financial position accounts;

- the share of equity earnings of affiliated companies; and
- profits from installment sales to be received after the end of the next succeeding fiscal year.

According to our bylaws and subject to shareholder approval, our board of directors may allocate to an investment and working capital reserve up to 75% of our parent company adjusted net income after taxes. The reserve may not exceed 80% of our capital stock. The purpose of the investment and working capital reserve is to make investments in fixed assets or increase our working capital. The balance of the investment and working capital reserve may be used:

- in the deduction of accumulated losses, whenever necessary;
- in the distribution of dividends, at any time;
- in the redemption, withdrawal, purchase or open market repurchase of shares, as authorized by law; and
- to increase our capital, including by means of an issuance of new shares.

We may also grant a participation in our net income to our management and employees. However, the allocation to the investment and working capital reserve or the participation of our management and employees cannot reduce the mandatory distributable amount, as discussed below.

Otherwise, the reserved amounts, except for the contingency reserve and the unrealized revenue reserve that exceeds our capital stock, must be used to increase our capital or be distributed as a cash dividend.

The amounts available for distribution may be further increased by a reversion of the contingency reserve for anticipated losses constituted in prior years but not realized, or further increased or reduced as a result of the allocations of revenues to or from the unrealized revenue reserve. The amounts available for distribution are determined on the basis of financial statements prepared in accordance with the Brazilian Corporate Law method. We have not established a contingency reserve.

As of December 31, 2022, our accumulated retained earnings accounted for US\$862.7 million. As of December 31, 2022, the amounts are net of minimum dividends and interest on shareholders' equity paid or payable, as determined by the Brazilian Corporate Law.

### ***Mandatory Distribution***

The Brazilian Corporate Law generally requires that the bylaws of each Brazilian corporation specify a minimum percentage of the amounts available for distribution by the corporation for each fiscal year that dividends must be distributed to shareholders, also known as the mandatory distributable amount. Under our bylaws, the mandatory distribution is based on a percentage of adjusted net income, not lower than 25%, and not on a fixed monetary amount per share. The Brazilian Corporate Law, however, permits a publicly held company to suspend the mandatory distribution of dividends if the board of directors and fiscal council report presented at the shareholders' meeting indicate that the distribution would be inadvisable in view of Embraer's financial condition. This suspension is subject to approval of holders of common shares. In this case, the board of directors shall file a justification for the suspension with the CVM. Profits not distributed by virtue of the suspension will be attributed to a special reserve and, if not absorbed by subsequent losses, will be paid as dividends as soon as the financial condition of the corporation permits the payments.

***Payment of Dividends***

We are required by the Brazilian Corporate Law and by our bylaws to hold an annual shareholders’ meeting by the end of the fourth month after the end of each fiscal year at which, among other things, the shareholders have to decide on the payment of an annual dividend. The payment of annual dividends is based on our parent company financial statements prepared under IFRS for the relevant fiscal year. Brazilian companies, including us, are permitted to make a special distribution to shareholders referred to as interest on shareholders’ equity, which may be distributed cumulatively or *in lieu* of dividends as part of the mandatory distributable amount. Subject to certain limitations set forth by legislation, distribution of interest on shareholders’ equity can be treated as a tax-deductible expense for IRPJ and CSLL purposes. Under the Brazilian Corporate Law, dividends generally are required to be paid within 60 days following the date the dividend was declared, unless a shareholders’ resolution sets forth another date of payment, which, in either case, must occur prior to the end of the fiscal year in which the dividend was declared. A shareholder has a three-year period from the dividend payment date to claim dividends (or payments of interest on shareholders’ equity) in respect of its shares, after which the amount of the unclaimed dividends reverts to the Company.

The Brazilian Corporate Law allows a company to pay interim dividends out of preexisting and accumulated profits determined under IFRS for the preceding fiscal year or semester, based on financial statements approved by its shareholders. According to our bylaws, the shareholders may declare, at any time, interim dividends based on the preexisting and accumulated profits, provided that the mandatory dividend has already been distributed to the shareholders. Our bylaws also permit us to prepare financial statements semiannually and for shorter periods. Our board of directors may approve the distribution of dividends calculated with reference to those financial statements, even before they have been approved by the shareholders. However, the dividends cannot exceed the amount of capital reserves.

In general, shareholders who are not residents of Brazil must register with the Central Bank to have dividends, sales proceeds or other amounts with respect to their shares eligible to be remitted outside of Brazil. The common shares underlying our ADSs will be held in Brazil by Banco Itaú S.A., also known as the custodian, as agent for the depositary, which will be the registered owner on the records of the registrar for our shares. Our current registrar is Itaú Corretora de Valores S.A. The depositary electronically registers the common shares underlying our ADSs with the Central Bank and, therefore, is able to have dividends, sales proceeds or other amounts with respect to these shares eligible to be remitted outside Brazil.

Payments of cash dividends and distributions, if any, will be made in Brazilian currency to the custodian on behalf of the depositary, which will then convert the proceeds into U.S. dollars and will cause the U.S. dollars to be delivered to the depositary for distribution to holders of ADSs. Under current Brazilian law, dividends paid to shareholders who are not Brazilian residents, including the holders of ADSs, will not be subject to Brazilian withholding income tax, except for dividends declared based on profits generated prior to December 31, 1995. For additional information on Brazilian taxes, see “Item 10. Additional Information—E. Taxation—Material Brazilian Tax Consequences.”

***History of Dividend and Interest on Shareholders’ Equity Payments and Dividend Policy***

Law No. 9,249, dated December 26, 1995, as amended, provides for distribution of interest on shareholders’ equity as an alternative form of payment to shareholders and treats those payments as a deductible expense for purposes of calculating Brazilian corporate income tax and social contribution on net profits. These distributions may be paid in cash. The interest is limited to the daily pro rata variation of the TJLP (long term interest rate) and cannot exceed the greater of:

- 50% of net income (after the deduction of social contribution on net profits, but before taking into account the provision for corporate income tax and the amounts attributable to shareholders as net interest on shareholders’ equity) for the period in respect of which the payment is made; or
- 50% of the sum of retained profits and profit reserves as of the beginning of the period in respect of which the payment is made.

Any payment of interest on shareholders' equity to holders of ADSs or common shares, whether or not they are Brazilian residents, is subject to Brazilian withholding income tax at the rate of 15% or 25% if the beneficiary is resident in a tax haven jurisdiction, that is, a country or location that does not impose any income tax or which imposes the tax at a maximum rate of less than 20%, or in which the domestic legislation imposes restrictions on the disclosure of the shareholding composition or the ownership of the investment. For additional information on Brazilian taxes, see "Item 10. Additional Information—E. Taxation—Material Brazilian Tax Consequences." The amount paid to shareholders as interest on shareholders' equity, net of any withholding tax, may be included as part of any mandatory distributable amount.

Under Brazilian law, we are obligated to distribute to shareholders an amount sufficient to ensure that the net amount received by them, after payment by us of applicable Brazilian withholding taxes in respect of the distribution of interest on shareholders' equity, plus the amount of declared dividends, is at least equal to the mandatory distributable amount. When we distribute interest on shareholders' equity, and that distribution is not accounted for as part of the mandatory distribution, Brazilian withholding tax will apply. All payments to date were accounted for as part of the mandatory distribution.

We have not made any payments in 2022, 2021 and 2020.

No dividends nor interest on shareholders' equity were approved for 2022, 2021 and 2020. In 2022, 2021 and 2020, we did not distribute interest on shareholders' equity and interim dividends. In 2018, we distributed US\$11.9 million in interest on shareholders' equity and interim dividends approved by Statutory Board of Directors in connection with shareholders' equity reserves. In 2017, we distributed US\$47.3 million in interest on shareholders' equity in connection with profits generated in the year ended December 31, 2017. For additional information on mandatory distribution of dividends, see "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Dividends and Dividend Policy—Mandatory Distribution."

Our functional currency is the U.S. dollar. Since we are established and domiciled in Brazil, the components of our shareholders' equity are required under Brazilian Corporate Law to be measured accounted and maintained in Brazilian *reais*, including amounts to be distributed to shareholders (dividends and interest on own capital). Such a requirement is different from our original accounting records in its functional currency, which is prepared and maintained in historical U.S. dollars. Net earnings or losses incurred by us at the end of each fiscal year in U.S. dollars are translated to Brazilian *reais* for Corporate Law accounting purposes at average exchange rate observed for that period, and then distributed, retained or absorbed by the statutory reserves. We file audited consolidated financial statements in Brazil (translated to Brazilian *reais* based on requirements of IAS 21), which discloses the components of shareholders' equity accounted as required by the Brazilian Corporate Law.

In 2022, the losses incurred of US\$185.4 million reduced again the retained earnings in historical U.S. dollars to US\$1,116.1 million, out of which US\$862.7 million would be available for distribution in case no restriction exist, but such losses in the amount of R\$953.7 million as translated to *reais* further increased the retained losses translated to *reais* to R\$2,376.6 million.

As of January 1, 2020, we had retained earnings recorded in the statutory reserves in the historical amount of US\$2,110.0 million, out of which US\$1,856.7 million would be available for distribution under our by-laws. These components in historical *reais* as of January 1, 2020 were R\$2,595.4 million and R\$2,058.2 million, respectively. Mainly as a result of losses incurred in 2020 of US\$731.9 million, the statutory reserves reduced to US\$1,377.8 million, however in *reais* the reserves were fully absorbed due to the translation of losses incurred at average exchange rate observed in 2020, which cause the losses translated to *reais* of R\$3,616.0 million to be higher than the previously accumulated statutory reserves. Therefore, we presented retained losses of R\$ 1,021.0 million as of December 31, 2020 under the Brazilian Corporate Law requirements, which restricts us to distribute earnings to shareholders while the accumulated retained losses are not consumed by future net earnings. In 2021, the losses incurred of US\$44.7 million reduced the statutory reserve (retained earnings) in historical U.S. dollars to US\$ 1,301.5 million, out of which US\$1,048.1 million would be available for distribution in case no restriction exist, but such losses in the amount of R\$274.8 million as translated to *reais* further increased the retained losses translated to *reais* to R\$1,423.0 million.

We intend to declare and pay dividends and/or interest on shareholders’ equity, as required by the Brazilian Corporate Law and our bylaws. Our board of directors may approve the distribution of dividends and/or interest on shareholders’ equity, calculated based on our semiannual or quarterly financial statements. The declaration of annual dividends, including dividends in excess of the mandatory distribution, requires approval by the vote of the majority of the holders of our common shares. The amount of any distributions will depend on many factors, including our results of operations, financial condition, cash requirements, prospects and other factors deemed relevant by our board of directors and shareholders. Within the context of our tax planning, we may in the future continue to determine that it is in our benefit to distribute interest on shareholders’ equity.

**B. Significant Changes**

Except as otherwise disclosed in our audited consolidated financial statements and in this annual report, there have been no significant changes in our business, financial condition or results of operations since December 31, 2022. For further information, see Note 37 to our 2022 audited consolidated financial statements.

**Item 9. THE OFFER AND LISTING**

**A. Offer and Listing Details**

Our ADSs are listed on the New York Stock Exchange, or NYSE, under the symbol “ERJ.” In addition, our common shares are traded on the B3 under the symbol “EMBR3.” Each ADS represents four common shares.

Our ADSs began trading on the NYSE on June 5, 2006, with each ADS representing four common shares issued by us. The ADSs are issued under a deposit agreement and JPMorgan Chase Bank N.A., or JP Morgan, serves as depository under that agreement.

**B. Plan of Distribution**

Not applicable.

**C. Markets**

**Trading on the B3**

In 2000, the São Paulo Stock Exchange, currently called the B3, was reorganized through the execution of memoranda of understanding by the Brazilian stock exchanges. Under the memoranda, all securities are now traded only on the B3, with the exception of electronically traded public debt securities and privatization auctions, which are traded on the Rio de Janeiro Stock Exchange.

Our common shares are listed and traded on the *Novo Mercado* segment of the B3. Trades in our common shares on the B3 settle in one business day after the trade date. Delivery of and payment for shares is made through the facilities of the *CBLC – Companhia Brasileira de Liquidação e Custódia* (clearinghouse for the B3), which maintains accounts for member brokerage firms.

In order to better control volatility, the B3 adopted a “circuit breaker” system pursuant to which trading sessions may be suspended for a period of 30 minutes or one hour whenever the indices of this stock exchange fall below the limit of 10% and 15%, respectively, in relation to the closing value of the index registered in the previous trading session.

The B3 is less liquid than the NYSE and other major exchanges in the world. As of December 31, 2022, the B3 had an aggregate market capitalization of approximately R\$4.2 trillion, equivalent to US\$0.8 trillion. In comparison, the NYSE had a market capitalization of approximately US\$24.1 trillion on the same date. Although any of the outstanding shares of a listed company may trade on the B3, in most cases less than one-half of the listed shares are actually available for trading by the public, the remainder being held by small groups of controlling persons, by governmental entities or by one principal shareholder. As of December 31, 2022, we accounted for approximately 0.3% of the market capitalization of all listed companies on the B3. There is also significantly greater concentration in the Brazilian securities markets than in the NYSE or other major exchanges

Trading on the B3 by non-residents of Brazil is subject to limitations under Brazilian foreign investment legislation.

***Novo Mercado Corporate Governance Practices***

In 2000, the B3 introduced three special listing segments, known as Levels 1 and 2 of Differentiated Corporate Governance Practices and the *Novo Mercado*, aiming at fostering a secondary market for securities issued by Brazilian companies with securities listed on the B3, by prompting these companies to follow good practices of corporate governance. The listing segments were designed for the trading of shares issued by companies voluntarily undertaking to abide by corporate governance practices and disclosure requirements in addition to those already imposed by Brazilian law. These rules generally increase shareholders’ rights and enhance the quality of information provided to shareholders.

To become a Level 1 (*Nível 1*) company, in addition to the obligations imposed by current Brazilian law, an issuer must agree to (i) ensure that shares of the issuer representing 25% of its total capital are effectively available for trading, (ii) adopt offering procedures that favor widespread ownership of shares whenever making a public offering, (iii) comply with minimum quarterly disclosure standards, (iv) follow stricter disclosure policies with regards to contracts with related parties, material contracts and transactions made by controlling shareholders, directors and officers involving securities issued by the issuer, (v) submit any existing shareholders’ agreements and stock option plans to the B3 and (vi) make a schedule of corporate events available to shareholders.

To become a Level 2 (*Nível 2*) company, in addition to the obligations imposed by current Brazilian law, an issuer must agree to (i) comply with all of the listing requirements for Level 1 companies, (ii) grant tag-along rights for all shareholders in connection with a transfer of control of the company, offering the same price paid per share for controlling block, (iii) grant voting rights to holders of common shares in connection with certain corporate restructurings and related-party transactions, including (1) any transformation of the company into another corporate form, (2) any merger, consolidation or spin-off of the company, (3) approval of any transactions between the company and its controlling shareholder, including parties related to the controlling shareholder, (4) approval of any valuation of assets to be delivered to the company in payment for shares issued in a capital increase, (5) appointment of an expert firm to ascertain the fair value of the company in connection with any deregistration and delisting tender offer, and (6) any changes to these voting rights, (iv) have a board of directors composed of at least five members, of which 20% must be independent directors, with a term limited to two years, (v) prepare annual financial statements in English, including cash flow statements, in accordance with international accounting standards, such as U.S. GAAP or IFRS, (vi) if it elects to delist from the Level 2 segment, hold a tender offer by the company’s controlling shareholder (the minimum price of the shares to be offered will be determined by an appraisal process), and (vii) adhere exclusively to the rules of the B3 Arbitration Chamber for resolution of disputes between the company and its investors.

To be listed on the *Novo Mercado*, an issuer must meet all of the requirements described above, in addition to (i) issuing only voting shares, (ii) have at least two, or the equivalent of 20% of the board members, whichever is bigger, independent members on the board of directors, with a term limited to two years, (iii) follow stricter disclosure policies with regards to the company’s policies, the internal rules of procedures, the code of business conduct and periodic reports of the audit committee, and (iv) adopt stricter compliance procedures, including an audit committee, an internal audit and other risk management controls.

Regarding the obligation to ensure that shares of the issuer representing 25% of its total capital are effectively available for trading, for the companies listed on the *Novo Mercado*, the threshold might be reduced to 15% of its capital stock, provided its average daily trading volume remains equal to or greater than R\$25.0 million, taking into account the trades performed during the previous 12 months. Our shares are listed on the *Novo Mercado* segment.

**Regulation of Brazilian Securities Markets**

The Brazilian securities markets are regulated by the CVM (the Brazilian Securities and Exchange Commission), which has regulatory authority over stock exchanges and the securities markets generally, and by the Brazilian Central Bank, which has, among other powers, licensing authority over brokerage firms and regulates foreign investment and foreign exchange transactions.

Under the Brazilian Corporate Law, a corporation is either publicly held (*companhia aberta*), like us, or closely held (*companhia fechada*). All publicly held companies, including us, are registered with the CVM and are subject to reporting requirements. Our shares are listed and traded on the *Novo Mercado* segment of the B3 and may be traded privately subject to limitations.

We have the option of asking for the trading of our securities on the B3 to be suspended in anticipation of a material announcement. Trading may also be suspended on the initiative of the B3 or the CVM, among other reasons, based on or due to a belief that the company has provided inadequate information regarding a material event or has provided inadequate responses to the inquiries by the CVM or the B3.

Trading on the B3 by non-residents of Brazil is subject to limitations under Brazilian foreign investment and tax legislation. The Brazilian custodian for our common shares and the depositary for our ADSs has obtained an electronic certificate of registration from the Brazilian Central Bank to remit U.S. dollars abroad for payments of dividends, any other cash distributions, or upon the disposition of the shares and sales proceeds thereto. Pursuant to CMN Resolution No. 4,373, in order for an investor to surrender ADSs for the purpose of withdrawing the shares represented thereby, the investor is required to appoint a Brazilian financial institution duly authorized by the Brazilian Central Bank and the CVM to act as its legal representative, who shall be responsible, among other things, for keeping and updating the investors’ certificates of registrations with the Brazilian Central Bank, which entitles registered foreign investors to trade the underlying shares directly on the B3.

**Disclosure Requirements**

Pursuant to CVM Resolution No 44, of August 23, 2021, the CVM revised and consolidated the requirements regarding the disclosure and use of information related to material facts and acts of publicly held companies, including the disclosure of information on the trading and acquisition of securities issued by publicly held companies.

These requirements include provisions that:

- establish the concept of a material fact that gives rise to reporting requirements. Material facts include decisions made by the controlling shareholders, resolutions of the general meeting of shareholders and of management of the company, or any other facts related to the company’s business (whether occurring within the company or otherwise somehow related thereto) that may influence the price of its publicly traded securities, or the decision of investors to trade those securities or to exercise any of those securities’ underlying rights;
- specify examples of facts that are considered to be material, which include, among others, the execution amendment or termination of a shareholders’ agreements providing for the transfer of control, the entry or withdrawal of shareholders that maintain any managing, financial, technological or administrative function with or contribution to the company, and any corporate restructuring undertaken among related companies;

- oblige the investor relations officer, controlling shareholders, other officers, directors, members of the audit committee and other advisory boards to disclose material facts;
- require simultaneous disclosure of material facts to all markets in which the corporation’s securities are admitted for trading;
- require the acquirer of a controlling stake in a corporation to publish material facts, including its intentions as to whether or not to de-list the corporation’s shares, within one year;
- establish rules regarding disclosure requirements in the acquisition and disposal of a material stockholding stake;
- restrict the use of insider information; and
- prohibits the company controlling shareholders, directors, members of the board of directors and the supervisory board to carry out any trading with the securities issued by the company, or related to them, during the period that comes before the date of disclosure of the information quarterly accounting and annual financial statements of the company.

**D. Selling Shareholders**

Not applicable.

**E. Dilution**

Not applicable.

**F. Expenses of the Issue**

Not applicable.

**Item 10. ADDITIONAL INFORMATION**

**A. Share Capital**

Not applicable.

**B. Memorandum and Articles of Association**

Set forth below is certain information concerning our capital stock, and a brief summary of certain significant provisions of our bylaws, the Brazilian Corporate Law, the relevant rules and regulations of the CVM, and the relevant *Novo Mercado* rules applicable to our capital stock. This description does not purport to be complete and is qualified by reference to our bylaws and to Brazilian law.

**Corporate Purpose**

We are a corporation duly incorporated with a principal place of business and jurisdiction in the city of São José dos Campos, São Paulo, Brazil, governed mainly by our bylaws and the Brazilian Corporate Law. According to article I of our bylaws, our corporate purpose is to (i) design, build and market aircraft and aerospace materials and related accessories, components and equipment, according to the highest standards of technology and quality, (ii) perform and carry out technical activities related to the manufacturing and servicing of aerospace materials, (iii) contribute to the training of technical personnel as necessary for the aerospace industry, (iv) engage in other technological, manufacturing and business activities in connection with the aerospace industry, and to provide services therefore, (v) design, build and trade equipment, materials, systems, software, accessories and components for the defense, security and power industries, as well as to perform and carry out technical activities related to the manufacturing and maintenance activities, according to the highest standards of technology and quality, and (vi) conduct other technological, manufacturing and trade activities and services related to the defense, security and power industries.



**Description of Capital Stock**

***General***

As of December 31, 2022, our capital stock consisted of a total of 740,465,044 issued common shares, without par value, including 5,832,238 common shares held in treasury and one special class of common shares known as the “golden share,” held by the Brazilian government. Our bylaws authorize the board of directors to increase the capital stock up to 1,000,000,000 common shares, irrespective of any amendment to our bylaws and of shareholder approval. As of March 30, 2023, we had 734,632,806 outstanding common shares, which were fully paid. Our shareholders must approve at a shareholders’ meeting any capital increase that exceeds the above-referenced authorized capital stock. Our shareholders are not liable for further capital calls. Their liability is limited to the amount of any portion of our capital stock which they have subscribed but have not fully paid in.

***Share Buyback***

On November 12, 2020, our board of directors approved a share buyback program for our common shares, in compliance with *Instrução* CVM No. 77, for the purpose of adding value to our shareholders through the management of our capital structure. We were authorized to buy back up to an aggregate of 7,000,000 common shares. Our common shares outstanding totaled 736,143,105 as of November 12, 2020 and our total of treasury shares as of this date was 4,291,938 which was based on the shareholder base of November 12, 2020. The acquisition of 7,000,000 common shares had a maximum duration, within the buyback program, of 12 months and expired on November 12, 2021. In 2021, we bought back 1,540,300 shares which is the total of the shares repurchased in the aforementioned program.

***Common Shares***

Each common share is generally empowered with one vote at our shareholders’ meetings. Pursuant to our bylaws and the B3 listing agreement in connection with the listing of our shares on the *Novo Mercado*, we cannot issue shares without voting rights or with restricted voting rights.

Changes to rights granted to common shares under our bylaws would generally require an amendment to our bylaws. Under the Brazilian Corporate Law, an amendment to our bylaws requires shareholder approval in a shareholders’ meeting. Changes to our bylaws would generally require approval by a simple majority vote of holders of common shares, except for matters that require the approval of shareholders representing at least one-half of the issued and outstanding voting shares or for matters subject to the approval of our golden share. For additional information on qualified quorum matters and on voting rights relating to the golden share, see “—Voting Rights of Shares—Qualified Quorum Matters” and “—Voting Rights of Shares—Golden Share,” respectively.

The Brazilian Corporate Law and our bylaws require that all our shareholders’ meetings be called by publication of a notice in a newspaper of general circulation in the city where our headquarters are located, in a summarized form and with simultaneous disclosure of the full text of the documents on the page of the same newspaper online, which must provide digital certification of the authenticity of the documents kept on the page issued by a certifying authority accredited by the Brazilian Public Key Infrastructure (ICP-Brazil), currently the *O Vale* in São José dos Campos, at least 30 days prior to the meeting. In addition, publications are made in another newspaper of general circulation in São Paulo, where the São Paulo Stock Exchange is located, currently the *Valor Econômico*. The quorum to hold a shareholders’ meetings at first call is the presence of shareholders representing at least 25% of the common shares (except for meetings convened to amend our bylaws or to waive the public tender offer required for delisting from *Novo Mercado*, which require a quorum of at least two-thirds of the common shares at first call); and at second call the meeting can be held with the presence of any number of shareholders.

According to our bylaws, in order to attend a shareholders’ meeting, a shareholder must show the evidence of ownership of the shares it intends to vote by showing an identification document and a proof of share ownership. Our shareholders may be represented at shareholders’ meetings by a proxy, issued within a one-year period prior to the meeting to (1) one of our directors or officers, (2) a lawyer or (3) a financial institution. Notwithstanding the above, the CVM decided on November 4, 2014 that shareholders that are legal entities may be represented at shareholders’ meetings by their legal representatives or by a duly appointed attorney-in-fact, pursuant to the bylaws and related corporate instruments of the legal entities and pursuant to the Brazilian Civil Code. Investment funds must be represented by their administrator.

Alternatively, the shareholders might participate in a shareholders’ meetings through a remote voting mechanism, which is regulated by CVM Resolution No. 80, as amended, and aims to facilitate the participation of shareholders in general meetings either through the vote or through the submission of proposals and candidates for the election of members of the board of directors or fiscal council. For this purpose, this regulation provided the following:

- the remote voting bulletin through which shareholders may exercise their right to vote prior to the date the shareholders’ meeting is held;
- the possibility of inclusion of candidates and proposals of deliberation of minority shareholders in that bulletin, with due observance of certain percentages of equity interest, in order to facilitate shareholders’ participation in shareholders’ meetings; and
- the deadlines, procedures and ways of sending this bulletin, which may be forwarded by the shareholder: (a) to the custodian (if the shares held by the shareholder are kept at a centralized deposit) or; (b) to the book-entry agent of the shares issued by the company (if such shares are not kept at a centralized deposit); or (c) directly to the company.

According to the Brazilian Corporate Law, the common shares are entitled to dividends in proportion to their share of the amount available for distribution. For additional information on payment of dividends on our shares, see “Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Dividends and Dividend Policy.” In addition, upon any liquidation of the company, the common shares are entitled to return of capital in proportion to their share of our shareholders’ equity.

According to the Brazilian Corporate Law, neither our bylaws nor actions taken at a shareholders’ meeting may deprive a shareholder of the following rights:

- the right to participate in the distribution of profits;
- the right to participate equally and proportionally in any remaining residual assets in the event of liquidation of the company;
- preemptive rights in the event of issuance of shares, convertible debentures or warrants, except in some specific circumstances under Brazilian law described in “—Preemptive Rights”;
- the right to supervise our management in accordance with Article 109 of the Brazilian Corporate Law; and
- the right to appraisal rights in the cases specified in the Brazilian Corporate Law, which are described in “—Redemption and Right of Withdrawal.”

**Golden Share**

The golden share is held by the Federative Republic of Brazil. For a discussion of the rights to which the golden share is entitled, see “—Voting Rights of Shares—Golden Share.”

**Voting Rights of Shares**

Each common share is generally empowered with one vote at the general shareholders’ meeting. Pursuant to our bylaws and the B3 listing agreement in connection with the listing of our shares on the *Novo Mercado* listing segment of B3, we cannot issue shares without voting rights or with restricted voting rights.

***Qualified Quorum Matters***

Under the Brazilian Corporate Law, the approval of shareholders representing at least one-half of the issued and outstanding voting shares is required for the matters described below:

- reducing the mandatory distribution of dividends;
- changing our corporate purpose;
- merging into or consolidating with another company, subject to the conditions set forth in the Brazilian Corporate Law;
- transferring all of our shares to another company or receiving shares of another company in order to make the company whose shares were transferred a wholly owned subsidiary of the other company, known as a merger of shares (*incorporação de ações*);
- participating in a centralized group of companies as defined under the Brazilian Corporate Law and subject to the conditions set forth therein;
- conducting a spin-off;
- dissolving or liquidating us;
- canceling any ongoing liquidation of us; or
- creating preferred shares with greater privileges than the existing shares or changing a priority, preference, privilege or condition of redemption or amortization of preferred shares.

In the event of the last item described above, the approval of shareholders representing the majority of issued and outstanding shares of the affected class would also be required. Our bylaws currently provide that our capital stock shall be divided exclusively into common shares and the only special class is our golden share. For additional information on the golden share, see “—Golden Share.”

***Limitations on the Voting Rights of Certain Holders of Common Shares***

Our bylaws provide that, at any shareholders’ meeting, no shareholder or group of shareholders, including brokers acting on behalf of one or more holders of ADSs, may exercise votes representing more than 5% of the quantity of shares into which our capital stock is divided. Votes that exceed this 5% threshold will not be considered.

For purposes of our bylaws, two or more of our shareholders are considered to be a “group of shareholders” if:

- they are parties to a voting agreement;
- one of them is, directly or indirectly, a controlling shareholder or controlling parent company of the other, or the others;
- they are companies directly or indirectly controlled by the same person/entity, or group of persons/entities, which may or may not be shareholders; or

- they are companies, associations, foundations, cooperatives and trusts, investment funds or portfolios, universalities of rights or any other forms of organization or undertaking (i) with the same administrators or managers, or further (ii) whose administrators or managers are companies that are directly or indirectly controlled by the same person/entity, or group of persons/entities, which may or may not be shareholders.

In the case of investment funds having a common administrator, only funds with policies of investment and of exercise of voting rights at shareholders’ meetings that fall under the responsibility of the administrator on a discretionary basis will be considered to be a group of shareholders.

In addition, shareholders represented by the same proxy, administrator or representative on any account at any shareholders’ meeting will be considered to be a group of shareholders, except for holders of our ADSs when represented by the relevant depository. All signatories to a shareholders’ agreement that addresses the exercise of voting rights will also be considered to be a group of shareholders for purposes of the foregoing limitation.

This limitation on the voting rights of certain holders of common shares is illustrated in the following table:

<u>Equity Interest of Shareholder or Group of Shareholders</u>	<u>Voting Rights as a Percentage of our Capital Stock</u>
1%	1%
2%	2%
3%	3%
4%	4%
5%	5%
> 5%	5%

***Limitations on the Voting Rights of Non-Brazilian Shareholders***

In accordance with the *edital* (invitation to bid) issued by the Brazilian government in connection with the privatization of Embraer in 1994, voting participation of non-Brazilian holders of Embraer common shares was limited to 40% of Embraer common shares votes at shareholders’ meeting.

Our bylaws provide that, at any shareholders’ meeting, non-Brazilian shareholders and groups of non-Brazilian shareholders may not exercise voting rights representing more than two-thirds of the total votes of all of the Brazilian shareholders present at the meeting. The total number of votes that may be exercised by Brazilian shareholders and by non-Brazilian shareholders will be assessed after giving effect to the 5% voting limitation described above in “—Limitations on the Voting Rights of Certain Holders of Common Shares.” Votes of non-Brazilian shareholders that exceed this two-thirds threshold will not be considered. If the total vote of non-Brazilian shareholders at any shareholders’ meeting exceeds two-thirds of the votes that may be exercised by the Brazilian shareholders present at such meeting, the number of votes of each non-Brazilian shareholder will be proportionately reduced so that the total vote of non-Brazilian shareholders does not exceed two-thirds of the total votes that can be exercised by Brazilian shareholders present at the shareholders’ meeting.

The fraction of two-thirds effectively limits the voting rights of non-Brazilian shareholders and groups of non-Brazilian shareholders to 40% of share capital represented at the shareholders’ meeting. The objective of this limitation is to ensure that Brazilian shareholders constitute a majority of the total votes cast at any shareholders’ meeting. This limitation will effectively prevent our takeover by non-Brazilian shareholders and limit the ability of non-Brazilian shareholders to control us.

For purposes of our bylaws, the following are considered to be “Brazilian shareholders”:

- Brazilian individuals, whether native or naturalized, resident in Brazil or abroad;

- legal private entities organized under the laws of Brazil that have their administrative head offices in Brazil and (i) do not have a foreign controlling parent company, unless the parent company meets the requirements of clause (ii) of this item, and (ii) are controlled, directly or indirectly, by one or more Brazilian individuals, whether native or naturalized, resident in Brazil or abroad; and
- investment funds or clubs organized under the laws of Brazil that have their administrative head office in Brazil and whose managers and/or investors holding the majority of their equity interests are persons/entities referred to above.

A Brazilian shareholder will be required to provide evidence to us and the depositary agent for the book-entry registry that such shareholder satisfies the foregoing requirements and only after this evidence is given will the shareholder be included in the records of Brazilian shareholders.

For purposes of our bylaws, “non-Brazilian shareholders” are any individuals, legal entities, investment funds or clubs and any other organizations that are not considered Brazilian shareholders and that cannot evidence that they satisfy the requirements to for registration as Brazilian shareholders, according to our bylaws.

A “group of shareholders,” as defined above, will be considered to be non-Brazilian whenever one or more of its members is a non-Brazilian shareholder.

The effect of this limitation on the voting rights of non-Brazilian shareholders (*i.e.*, their participation) is illustrated in the following table, where the column “Non-Brazilian Shareholder Participation” indicates the maximum percentage of votes a non-Brazilian shareholder may cast:

<u>Brazilian Shareholder Participation</u> <i>(% of capital stock)</i>	<u>Non-Brazilian Shareholder Participation</u> <i>(% of capital stock)</i>	<u>Non-Brazilian Shareholder Participation<sup>(1)</sup></u> <i>(%)</i>
90	10	10.00
80	20	20.00
70	30	30.00
60	40	40.00
59	41	39.33
50	50	33.33
40	60	26.67
30	70	20.00
20	80	13.33
10	90	6.67

(1) Number of votes calculated based on two-thirds of the Brazilian shareholders’ votes.

The tables below illustrate, in different situations, the voting system that will apply at our shareholders’ meetings.

Example 1

All Brazilian shareholders hold less than 5% and non-Brazilian shareholders hold a total of 40%, but without any individual holdings higher than 5%. This example shows a situation where the general restriction for non-Brazilian shareholders does not affect the voting ratio.

<u>Shareholder</u>	<u>% Shares Attending</u>	<u>Effective % of Votes After 5% Vote Restriction</u>	<u>Effective % of Votes After Non-Brazilian Restriction</u>	<u>% of Valid Votes</u>	<u>Vote Ratio (Votes/ Share)</u>
Brazilian A	5	5	5	5	1.00
Brazilian B	5	5	5	5	1.00
Brazilian C	5	5	5	5	1.00
Brazilian D	5	5	5	5	1.00

Shareholder	% Shares Attending	Effective % of Votes After 5% Vote Restriction	Effective % of Votes After Non- Brazilian Restriction	% of Valid Votes	Vote Ratio (Votes/ Share)
Brazilian E	5	5	5	5	1.00
Brazilian F	5	5	5	5	1.00
Brazilian G	5	5	5	5	1.00
Brazilian H	5	5	5	5	1.00
Brazilian I	5	5	5	5	1.00
Brazilian J	5	5	5	5	1.00
Brazilian K	5	5	5	5	1.00
Brazilian L	5	5	5	5	1.00
Total Brazilians	60	60	60	60	1.00
Non-Brazilians <sup>(1)</sup>	40	40	40	40 <sup>(2)</sup>	1.00
Total	100	100	100	100	1.00

- (1) Assumes that no individual non-Brazilian shareholder holds more than 5% of our capital. If a non-Brazilian shareholder holds more than 5% of our capital, this shareholder will also be subject to the 5% voting restriction on such holding.
- (2) Two-thirds of 60 (total votes of the Brazilian shareholders after application of the 5% voting restriction) equals 40 votes.

Example 2

One Brazilian shareholder holds more than 5% of our capital, the other Brazilian shareholders hold 5% and non-Brazilian shareholders hold a total of 50%, but without any individual holdings higher than 5%.

Shareholder	% Shares Attending	Effective % of Votes After 5% Vote Restriction	Effective % of Votes After Non- Brazilian Restriction	% of Valid Votes	Vote Ratio (Votes/ Share)
Brazilian A	20	5	5.0	8.57	0.25
Brazilian B	5	5	5.0	8.57	1.00
Brazilian C	5	5	5.0	8.57	1.00
Brazilian D	5	5	5.0	8.57	1.00
Brazilian E	5	5	5.0	8.57	1.00
Brazilian F	5	5	5.0	8.57	1.00
Brazilian G	5	5	5.0	8.57	1.00
Total Brazilians	50	35	35.0	59.99	1.00
Non-Brazilians <sup>(1)</sup>	50	50	23.3 <sup>(2)</sup>	40.00	0.47
Total	100	85	58.3 <sup>(2)</sup>	100.00	0.58

- (1) Assumes that no individual non-Brazilian shareholder holds more than 5% of our capital. If a non-Brazilian shareholder holds more than 5% of our capital, this shareholder will also be subject to the 5% voting restriction on the holding.
- (2) Two-thirds of 35 (total votes of the Brazilian shareholders after application of the 5% voting restriction) equals 23 votes.

Example 3

No Brazilian shareholders hold more than 5% of our capital, a non-Brazilian shareholder holds 30% and other non-Brazilian shareholders hold a total of 40%, but without any individual holdings higher than 5%.

Shareholder	% Shares Attending	Effective % of Votes After 5% Vote Restriction	Effective % of Votes After Non- Brazilian Restriction	% of Valid Votes	Vote Ratio (Votes/ Share)
Brazilian A	5	5	5.0	10.0	1.00
Brazilian B	5	5	5.0	10.0	1.00
Brazilian C	5	5	5.0	10.0	1.00
Brazilian D	5	5	5.0	10.0	1.00
Brazilian E	5	5	5.0	10.0	1.00

Shareholder	% Shares Attending	Effective % of Votes After 5% Vote Restriction	Effective % of Votes After Non- Brazilian Restriction	% of Valid Votes	Vote Ratio (Votes/ Share)
Brazilian F	5	5	5.0	10.0	1.00
Total Brazilians	30	30	30.0	60.0	1.00
Non-Brazilians A	30	5	2.2 <sup>(2)</sup>	4.4	0.07
Non-Brazilians <sup>(1)</sup>	40	40	17.8 <sup>(2)</sup>	35.6	0.44
Total	100	75	50.0	100.0	0.50

- (1) Assumes that no individual non-Brazilian shareholder (except Non-Brazilian A) holds more than 5% of our capital. If a non-Brazilian shareholder holds more than 5% of our capital, this shareholder will also be subject to the 5% voting restriction on the holding.
- (2) Two-thirds of 30 (total votes of the Brazilian shareholders after application of the 5% voting restriction) equals 20 votes, proportionally divided between Non-Brazilian A and the other non-Brazilians.

Example 4

Two Brazilian shareholders holding more than 5% of our capital, three Brazilian shareholders holding 5% and non-Brazilian shareholders holding a total of 30%, but without individual holdings higher than 5%.

Shareholder	% hares Attending	Effective % of Votes After 5% Vote Restriction	Effective % of Votes After Non- Brazilian Restriction	% of Valid Votes	Vote Ratio (Votes/ Share)
Brazilian A	30	5	5.0	12	0.17
Brazilian B	25	5	5.0	12	0.20
Brazilian C	5	5	5.0	12	1.00
Brazilian D	5	5	5.0	12	1.00
Brazilian E	5	5	5.0	12	1.00
Total Brazilians	70	25	25.0	60	1.00
Non-Brazilians <sup>(1)</sup>	30	30	16.7 <sup>(2)</sup>	40	0.56
Total	100	55	41.7	100	0.42

- (1) Assumes that no individual non-Brazilian shareholder (except Non-Brazilian A) holds more than 5% of our capital. If a non-Brazilian shareholder holds more than 5% of our capital, this shareholder will also be subject to the 5% voting restriction on the holding.
- (2) Two-thirds of 25 (total votes of the Brazilian shareholders after application of the 5% voting restriction) equals 16.7 votes.

Shareholders’ Agreement

Our bylaws limit any shareholder or group of shareholders from exercising voting control over us.

Golden Share

The golden share is held by the Federative Republic of Brazil. The golden share is entitled to the same voting rights as the holders of common shares. In addition, the golden share entitles the holder thereof to veto rights over the following corporate actions:

- change of our name and corporate purpose;
- modification and/or application of our logo;
- creation and/or alteration of military programs (whether or not involving Brazil);
- development of third-party skills in technology for military programs;

- discontinuance of the supply of spare parts and replacement parts for military aircraft;
- transfer of our control;
- any amendments to the list of corporate actions over which the golden share carries veto rights, including the right of the Brazilian government to appoint one acting member to our board of directors and the right of our employees to appoint two acting members to our board of directors and to the rights conferred to the golden share; and
- changes to certain provisions of our bylaws pertaining to voting restrictions, rights of the golden share and the mandatory tender offer requirements applicable to holders of 35% or more of our outstanding shares.

The matters listed above are subject to prior approval by our board of directors, followed by prior notices to the Brazilian government and to the Brazilian Ministry of Finance. Within 30 days from the notice, the Brazilian government, as holder of the golden share, may exercise its veto rights. After such period or the pronouncement from the Brazilian government, the board of directors shall meet. In case of rejection of the Brazilian government, the board of directors shall reconsider the previous resolution. In case of approval or in the absence of a response from the Brazilian government within the 30-day period, the previous resolution will be ratified and will be deemed to have been approved by our board of directors. In certain cases, pursuant to our bylaws or applicable law, the matter must be subject to approval at a shareholders’ meeting, and the Brazilian government shall also be entitled to exercise its veto rights related to that matter.

**Disclosure of Significant Interest**

***Brazilian Requirements***

Brazilian law provides that all shareholders or groups of shareholders will be required to disclose, through notice to us and to the stock exchanges on which our securities are traded, the negotiation of securities that results in the shareholder surpassing or falling below the thresholds of 5%, 10%, 15%, and so on, of participation in a certain class or type of share representative of a company’s capital stock. In addition, our bylaws provide that all shareholders or groups of shareholders will be required to disclose, through notice to us and to the stock exchanges on which our securities are traded, the acquisition of shares that, together with those already held by them, exceed 5% of our capital stock. A violation of these disclosure obligations could result in the suspension of rights, including voting rights, by a resolution of shareholders at a shareholders’ meeting.

***Certain U.S. Legal Requirements***

In addition, the U.S. Exchange Act imposes reporting requirements on shareholders or groups of shareholders who acquire beneficial ownership (as this term is defined under Rule 13d-3 of the U.S. Exchange Act) of more than 5% of our common shares. In general, shareholders must file, within ten days after the acquisition, a report of beneficial ownership with the SEC containing the information prescribed by the regulations under the U.S. Exchange Act. This information is also required to be sent to us and to each U.S. securities exchange on which our common shares are traded. Shareholders should consult with their own legal advisor regarding their reporting obligations under the U.S. Exchange Act.

**Form and Transfer**

As our shares are in registered book-entry form, the transfer of shares is governed by the rules of Article 35 of the Brazilian Corporate Law. This Article provides that a transfer of shares is effected by an entry made by Banco Itaú S.A., also known as the registrar, in its books, by debiting the share account of the transferor and crediting the share account of the transferee. Banco Itaú S.A. also performs all the services of safe-keeping and transfer of shares and related services for us.



Transfers of shares by a non-Brazilian shareholder are made in the same way and entered into by that shareholder’s local agent on the shareholder’s behalf except that if the original investment was registered with the Brazilian Central Bank pursuant to Resolution No. 4,373, the foreign investor must also seek amendment, if necessary, through its local agent, of the electronic registration to reflect the new ownership.

The B3 operates as a central clearing system. A holder of our shares may choose, in its discretion, to participate in this system and all shares elected to be put into this system will be deposited in the custody of the B3 (through a Brazilian institution duly authorized to operate by the Brazilian Central Bank and having a clearing account with the B3). The fact that those shares are held in the custody of the B3 will be reflected in our register of shareholders. Each participating shareholder will, in turn, be registered in our register of beneficial shareholders maintained by the B3 and will be treated in the same way as registered shareholders.

**Board of Directors**

According to the Brazilian Corporate Law, our officers and directors are prohibited from voting on, or acting in, matters in which their interests conflict with ours.

Our bylaws provide that the shareholders are responsible for determining the global remuneration of the members of our management bodies. Our board of directors is responsible for dividing the remuneration among the members of management. There are no specific provisions regarding the directors’ power to vote on their compensation in the absence of an independent quorum.

With respect to the borrowing powers of the board of directors, the board of directors has the power to authorize the borrowing of funds, either in the form of bonds, notes, commercial paper or other instruments of regular use in the market. Other financing arrangements, including bank loans, may be entered into by us upon the joint signatures of (i) two executive officers, (ii) one officer and one attorney-in-fact or (iii) two attorneys-in-fact.

There is no requirement under the Brazilian Corporate Law or our bylaws that directors retire upon reaching a certain age. In addition, our bylaws do not provide for the re-election of directors at staggered intervals.

For additional information on our board of directors, see “Item 6. Directors, Senior Management and Employees—A. Directors and Senior Management—Board of Directors” and “Item 6. Directors, Senior Management and Employees—C. Board Practices.”

***Election of Board of Directors***

The election of members of our board of directors, absent a request to adopt a cumulative voting system, will be conducted under a system of slate voting whereby voting will be based on a slate of directors and no voting will be allowed on individual candidates. Our board of directors is appointed by our shareholders for a two-year term and three reserved seats as follows: (i) one acting member (and his or her alternate) to be appointed by the Brazilian government, as holder of the “golden share” and (ii) two acting members (and his or her alternate) to be appointed by our employees (one board member and his or her alternate will be appointed by the Employee Investment Club of the Company (*CIEMB - Clube de Investimentos dos Empregados da Embraer*), and one Board member and his or her alternate will be appointed by the non-shareholder employees of the Company). The remaining eight acting directors are elected in accordance with the slate voting or cumulative voting rules contained in our bylaws. A candidate may participate in two or more different slates. Each shareholder may only vote on one slate and the slate that receives the highest number of votes shall be declared elected.

Any shareholder or group of shareholders has a right to propose and submit a slate of members for election to the board of directors different than the slate provided according to our bylaws (*i.e.*, proposed by the board of directors). The same shareholder or group of shareholders may not submit more than one slate. Our bylaws also contain a provision whereby a shareholder that intends to appoint an alternative slate must

send written notice at least ten days prior to the general meeting at which the members of the board of directors will be elected, providing us with the name and other particulars and professional resume of the candidates. In case we receive this notice, we must publish a press release to our shareholders, which also must be available on our website within at least eight days before the date of the general meeting, informing shareholders how to obtain a copy of the proposed slate.

Alternatively, the election of members of the board of directors may be conducted under a system of cumulative voting. According to the regulations of the CVM and to our bylaws, adoption of a resolution for cumulative voting depends on a written request by shareholders representing at least 5% of our capital stock, submitted at least 48 hours in advance of the time for which the general shareholders’ meeting has been called, including through a remote voting mechanism. Under the cumulative voting system, each share is entitled to the same number of votes as the number of board members to be elected (subject to the restriction on shareholders holding greater than 5% of the common shares and restrictions on non-Brazilian shareholders as per our by-laws), and each shareholder is entitled to concentrate votes in just one candidate or to distribute the votes among more than one or all of the candidates. Any vacant offices not filled due to a tie in the voting will be subject to a new vote, under the same process.

**Preemptive Rights**

Each of our shareholders has a general preemptive right to subscribe for shares in the event of any capital increase, or securities convertible into shares, in proportion to its shareholding, except in the event of the grant and exercise of any option to acquire shares of our capital stock. A period of at least 30 days following the publication of notice of the issuance of shares or securities convertible into shares is allowed for exercise of the right, and the right is negotiable. According to the Brazilian Corporate Law and our bylaws, the board of directors may, in its discretion, eliminate the preemptive rights of the shareholders in the event that we issue shares, debentures convertible into shares, or subscription warrants that will be offered either through a stock exchange or in a public offering, or through an exchange of shares in a public offering, the purpose of which is to acquire control of another company, as established by law.

In the event of a capital increase by means of the issuance of new shares, holders of ADSs, or of common shares, would, except under the circumstances described above, have preemptive rights to subscribe to any class of our newly issued shares. However, a holder may not be able to exercise the preemptive rights relating to the common shares underlying the ADSs unless a registration statement under the Securities Act is effective with respect to those shares to which the rights relate or an exemption from the registration requirements of the Securities Act is available. For additional information on the risks related to our preemptive rights, see “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Common Shares and ADSs—Holders of our ADSs might be unable to exercise preemptive rights with respect to the common shares.

**Redemption and Right of Withdrawal**

The Brazilian Corporate Law provides that, under limited circumstances, a shareholder has the right to withdraw from the company and to receive payment for his shares. This right of withdrawal may be exercised by dissenting shareholders if at least half of voting shares outstanding authorize us to:

- reduce the mandatory distribution of dividends;
- change our corporate purpose;
- merge into or consolidate with another company, subject to the conditions set forth in the Brazilian Corporate Law;
- transfer all of our shares to another company or receive shares of another company in order to make the company whose shares were transferred a wholly owned subsidiary of the other company, known as a merger of shares (*incorporação de ações*);

- acquire control of another company at a price which exceeds the limits set forth in the Brazilian Corporate Law;
- participate in a centralized group of companies as defined under the Brazilian Corporate Law and subject to the conditions set forth therein; or
- conduct a spin-off that results in (i) a change of our corporate purposes, except if the assets and liabilities of the spun-off company are contributed to a company that is engaged in substantially the same activities, (ii) a reduction in the mandatory dividend or (iii) any participation in a centralized group of companies, as defined under the Brazilian Corporate Law.

In addition, if the entity resulting from a merger, merger of shares (*incorporação de ações*), as described above, or a consolidation or a spin-off of a listed company fails to become a listed company within 120 days of the shareholders' meeting at which this decision was taken, the dissenting shareholders may also exercise their right of withdrawal.

The dissenting shareholders may exercise the right of withdrawal only in relation to the shares held on the date that is the earliest between the date of the publication of the first call notice for the shareholders' meeting that approved the resolution giving rise to the right of withdrawal, or on the date of publication of the material fact in relation to such resolution.

The Brazilian Corporate Law contains provisions that restrict withdrawal rights and allow companies to redeem their shares at their economic value, subject to certain requirements. As our bylaws currently do not provide that our shares would be redeemable at their economic value, our shares would be redeemable at their book value, determined on the basis of the last statement of financial position approved by the shareholders. If the shareholders' meeting giving rise to withdrawal rights occurs more than 60 days after the date of the last approved statement of financial position, a shareholder may demand that its shares be valued on the basis of a new statement of financial position that is as of a date within 60 days of such shareholders' meeting.

According to the Brazilian Corporate Law, in events of consolidation, merger, merger of shares (*incorporação de ações*), participation in a group of companies, and acquisition of control of another company, the right to withdraw does not apply if the shares in question meet certain tests relating to market liquidity and float. Shareholders would not be entitled to withdraw their shares if the shares are a component of a general stock index and shares held by persons unaffiliated with the controlling shareholder represent more than half of the outstanding shares of the relevant type or class. According to CVM Resolution No.78, the applicable general stock index is the Bovespa index, or Ibovespa, of which we are a component.

#### **Mechanism to Promote Dispersed Ownership of Our Shares**

Our bylaws contain provisions that have the effect of avoiding concentration of our shares in the hands of an investor or a small group of investors in order to promote more dispersed ownership of our shares. To this end, these provisions place certain obligations on a shareholder or group of shareholders that becomes a holder of 35% or more of our total capital stock, or an Acquiring Shareholder. Not later than 15 days after a shareholder becomes an Acquiring Shareholder, this shareholder must submit a request to the Brazilian government, through the Ministry of Finance, to make a public tender offer to acquire all of our capital stock. The Brazilian government will have full discretion to accept or deny this request. The Acquiring Shareholder may not purchase any additional shares until the Brazilian government provides its opinion on the public offer. If the request is accepted by the Brazilian government, the Acquiring Shareholder must make a public offer for all shares within 60 days of acceptance. The offer must be made in accordance with the CVM and the B3 regulations and the provisions of our bylaws. If the request is denied by the Brazilian government, the Acquiring Shareholder must sell all shares the Acquiring Shareholder owns in excess of 35% of our total capital stock within 30 days. Failure to comply with these provisions will subject the Acquiring Shareholder to the potential suspension of all voting rights inherent to the shares the Acquiring Shareholder holds, if a resolution to this effect is approved at a general meeting of our shareholders called by our management. These provisions are not applicable to shareholders who become holders of 35% or more of our total capital stock in certain transactions specified in our bylaws as, for example, cancellation of our common shares held in treasury.

The public tender offer must be (i) directed to all of our shareholders, (ii) made through an auction to take place on the B3, (iii) launched at a set price calculated in accordance with the procedure set forth below, (iv) paid upfront, in *reais*, (v) made so as to assure equal treatment to all shareholders, (vi) irrevocable and not subject to any changes after publication of the bidding offer and (vii) based on a valuation report to be prepared in accordance with the rules set forth in our bylaws and in applicable CVM rules and regulations.

The price to be offered for the shares in the public tender offer will be calculated as follows:

- Tender Offer Price = Value of the Share + Premium,  
where:
  - “Tender Offer Price” corresponds to the acquisition price for each share issued by us in the public offering of shares provided hereunder.
  - “Value of the Share” corresponds to the greater of:
    - (i) the highest unit quotation obtained for the shares issued by us during the 12-month period prior to the tender offer among values recorded on any stock exchange on which the shares were traded;
    - (ii) the highest price paid by the Acquiring Shareholder, during the 36-month period prior to the tender offer, for a share or tranche of shares issued by us;
    - (iii) the amount equivalent to 14.5 times our Consolidated Average EBITDA, as defined below, reduced by our net consolidated indebtedness, divided by the total number of shares issued by us; or
    - (iv) the amount equivalent to 0.6 times the amount of our firm backlog orders, according to the last information disclosed by the latter, reduced by our net consolidated indebtedness, divided by the total number of shares issued by us.
- “Premium” corresponds to 50% of the Value of the Share.
- “Consolidated EBITDA” is our consolidated operating profit before net financial expenses, income tax and social contribution, depreciation, depletion and amortization, as assessed based on the audited statements for our most recent complete fiscal year.
- “Average Consolidated EBITDA” is the arithmetic average of our consolidated EBITDA for the two most recent complete fiscal years.

The launch of a public tender offer does not preclude us or any of our shareholders from launching a competing public tender offer, in accordance with applicable regulations.

**Arbitration**

Any disputes or controversies relating to the *Novo Mercado* rules, our bylaws, the Brazilian Corporate Law, the rules published by the CMN, the Brazilian Central Bank, the CVM, and other rules applicable to the Brazilian capital markets in general, must be submitted to arbitration conducted in accordance with the rules of the B3 Arbitration Chamber (“Rules”).

According to item 1.4 of the Rules, unless otherwise agreed by the Parties, the parties should be bound by the Rules in force on the date of the request for arbitration. Any shareholder that becomes a holder of shares representing our control agrees to comply with the rules of the B3 Arbitration Chamber. These provisions will not apply, however, in the event of a dispute or controversy related to our golden share which shall be subject to the jurisdiction of the central courts of Brasília, Federal District of Brazil.

**Going Private Process**

If our shareholders determine to take us private and at that time we are controlled by a shareholder, or a group of shareholders, the controlling shareholder or group of shareholders is responsible for conducting a public tender offer for the acquisition of our shares. If our shareholders determine to take us private and at that time we are subject to widespread control, we must conduct the public tender offer, within the limits imposed by applicable law. In this case, we may only purchase shares from shareholders that have voted in favor of our Company becoming a private company after purchasing all shares from the other shareholders that did not vote in favor of the “going private” decision and that have accepted the public tender offer.

Thus, we may become a private company only if we or our controlling shareholders, as the case may be, conduct a public tender offer to acquire all of our outstanding shares (taking into account, for this purpose, the shares held by the shareholders that expressly agree with the ‘going private’ decision or sign up for the public tender offer), subject to prior approval of the public tender offer by the Brazilian government, as holder of the golden share, and in accordance with Brazilian Corporate Law, the CVM regulations and the *Novo Mercado* rules, as applicable.

The public tender offer must be made at a fair price based on a valuation report of the Company, which means that the offer for the purchase of the totality of shares must be equivalent to at least the value of the Company as appraised. According to our bylaws, the price per share shall be equivalent to, at least, the economic value of those shares as determined in a valuation report prepared by a specialized and independent company of recognized experience, which will be chosen at a shareholders’ meeting from a list of three institutions presented by our board of directors, by an absolute majority of the votes of the shareholders of our outstanding shares present at the meeting (excluding, for this purpose, the shares held by any controlling shareholder or group of shareholders at the time, if any, his/her partners and dependents as described in his/her income tax statement, if the controlling shareholder is an individual; treasury shares; shares held by our affiliates and by other companies that are a part of our economic group, as well as blank votes). All the expenses and costs incurred in connection with the preparation of the valuation report must be borne by the offeror.

Shareholders holding at least 10% of our outstanding shares (taking into account, for this purpose, all the Company’s shares, except for the shares held by the controlling shareholder; shares held by our affiliates and by other companies that are a part of our economic group; shares held by our officers and directors; and treasury shares) may require our management to call a special shareholders’ meeting to determine whether to perform another valuation using the same or a different valuation method. This request must be made within 15 days following the disclosure of the price to be paid for the shares in the public tender offer. The shareholders who make the request, as well as those who vote in its favor, must reimburse us for any costs involved in preparing the new valuation, if the new valuation price is not higher than the original valuation price. If the new valuation price is higher than the original valuation price, the public tender offer must be made at the higher price.

**Delisting from the *Novo Mercado***

Our delisting from the *Novo Mercado*, either by voluntary or compulsory action or by virtue of corporate restructuring, shall observe the *Novo Mercado* rules. At any time, we may delist our shares from the *Novo Mercado*, provided that a public tender offer for the acquisition of our outstanding shares is carried out.

If we are controlled by a shareholder, or a group of shareholders, at the time of our delisting from the *Novo Mercado*, either for our shares to be traded outside the *Novo Mercado* or as a result of a corporate reorganization, the controlling shareholder or group of shareholders is responsible for conducting the public tender offer for the acquisition of our shares. If we are subject to widespread control at the time of our delisting from the *Novo Mercado*, either for our shares to be traded outside the *Novo Mercado* or as a result of a corporate reorganization, the shareholders present at the meeting may determine the persons responsible for carrying out the tender offer or decide to waive the tender offer.

If the public tender offer is carried out, our delisting is conditioned to shareholders representing more than 1/3 (one third) of our outstanding shares having (i) expressly agreed with the delisting decision or (ii) accepted the public tender offer (taking into account, for this purpose, the shares held by the shareholders that expressly agree with the delisting decision or sign up for the public tender offer). The decision of the shareholders must specify if the delisting will occur because the securities will no longer be traded on the *Novo Mercado*, or because we are going private. Our delisting from the *Novo Mercado* will not result in the loss of our registration as a publicly held company on the Brasil, Bolsa, Balcão, or B3.

According to our bylaws, the price per share for the public tender offer shall be equivalent to, at least, the economic value of those shares as determined in a valuation report prepared by a specialized and independent company of recognized experience, which will be chosen at a shareholders' meeting from a list of three institutions presented by our board of directors, by an absolute majority of the votes of the shareholders of our outstanding shares present at the meeting (excluding, for this purpose, the shares held by any controlling shareholder or group of shareholders at the time, if any, his/her partners and dependents as described in his/her income tax statement, if the controlling shareholder is an individual; treasury shares; shares held by our affiliates and by other companies that are a part of our economic group, as well as blank votes). In addition, the *Novo Mercado* rules establish that the offer for the purchase of the totality of shares must be equivalent to at least the fair value of the Company as appraised. All the expenses and costs incurred in connection with the preparation of the valuation report must be paid by the offeror.

A voluntary delisting from the *Novo Mercado* may occur regardless of the completion of the tender offer mentioned above in the event of a waiver approved at a general shareholders' meeting, which must observe the rules and conditions of the *Novo Mercado Rules*.

Pursuant to our bylaws, we may also be delisted if the São Paulo Stock Exchange decides to suspend trading of our shares on the *Novo Mercado* due to our non-compliance with the *Novo Mercado* rules. In this case, the chairman of the board of directors must call a shareholders' meeting, within two days of the determination by the São Paulo Stock Exchange, in order to replace all members of our board of directors. If the chairman of the board of directors does not call the shareholders' meeting, any shareholder may do so. The new board of directors will be responsible for the compliance with the requirements that resulted in the delisting.

Additionally, if we are delisted from the *Novo Mercado* (1) because a decision taken at a general shareholders' meeting resulted in non-compliance with the *Novo Mercado* rules, the public tender offer must be conducted by the shareholders that voted in favor of the decision, or (2) as a result of our non-compliance with the *Novo Mercado* rules resulting from acts of our management, we must conduct the public tender offer in order to become a private company, within the limits imposed by law, if the Company is not controlled by a controlling shareholder or group of shareholders. Otherwise, the controlling shareholder or group of shareholders is responsible for conducting a public tender offer for the acquisition of the shares.

According to the *Novo Mercado* rules, in the event of a transfer of our shareholding control within 12 months following our delisting from the *Novo Mercado*, the selling controlling shareholders and the acquirer must offer to acquire the remaining shares for the same price and terms offered to the selling controlling shareholders, adjusted for inflation, or the surplus, if there is any, between the price per share offered at the public tender offer, adjusted for inflation, and the price per share received by the selling controlling shareholders due to the transfer of control.

**Sarbanes Oxley Act of 2002**

We maintain controls and procedures designed to ensure that we are able to collect the information required to disclose in the report we file with the SEC, and to process, summarize and disclose the information within the periods specified in the rules of the SEC. We have filed the relevant officer certifications under Section 404 of the U.S. Sarbanes Oxley Act of 2002 regarding internal controls over financial reporting as Exhibits 12.1 and 12.2 to this annual report.

### **C. Material Contracts**

Not applicable.

### **D. Exchange Controls**

There are no restrictions on ownership of our common shares by individuals or legal entities domiciled or headquartered outside Brazil. However, the registration of this investment with the Brazilian Central Bank is required and the right to convert dividend payments and proceeds from the sale of common shares into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation.

Pursuant to Brazilian law, investors may invest in common shares under Resolution No. 4,373, of September 29, 2014, issued by the CMN, governmental authority responsible for formulating the Brazilian monetary and credit policies. The rules of Resolution No. 4,373 allow foreign investors to invest in almost all financial assets and to engage in almost all transactions available in the Brazilian financial and capital markets, provided that certain requirements are fulfilled. In accordance with Resolution No. 4,373, the definition of foreign investor includes individuals, legal entities, mutual funds and other collective investment entities domiciled or headquartered abroad.

Pursuant to the Resolution No. 4,373, foreign investors must: (i) appoint at least one representative in Brazil with powers to perform actions related to the foreign investment; (ii) provide all required information that shall be sent by the representative to the CVM through the CVM's website; (iii) be registered as a foreign investor with the CVM and the Brazilian tax authorities; and (iv) register the foreign investment with the Brazilian Central Bank.

Securities and other financial assets held by foreign investors pursuant to Resolution No. 4,373 must be registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Brazilian Central Bank or the CVM. In addition, securities trading for these investors is restricted to transactions carried out in the stock exchanges or organized over-the-counter markets licensed by the CVM.

Under Resolution No. 4,373, foreign investors registered with the CVM may buy and sell securities on Brazilian stock exchanges or organized over-the-counter markets without obtaining a separate certificate of registration for each transaction. Investors under these regulations are also generally entitled to favorable tax treatment.

Annex II to Resolution No. 4,373 provides for the issuance of depositary receipts in foreign markets in respect of Brazilian issuers' securities.

In connection with equity offerings of our common shares, an electronic registration was issued in the name of the depositary with respect to the ADSs and is maintained by the custodian on behalf of the depositary. This electronic registration was carried out through the Brazilian Central Bank Information System. Pursuant to the registration, the custodian and the depositary are able to convert dividends and other distributions with respect to the common shares represented by ADSs into foreign currency and remit the proceeds outside Brazil, to the holder of ADSs. In the event that a holder of ADSs exchanges the ADSs for common shares, the custodian must update the registry of the investment with the Brazilian Central Bank within five business days after the exchange. In order to receive the common shares, the investor must have a registration with the Brazilian Central Bank and the CVM pursuant to Resolution 4,373. Until this registration has been obtained, the holder will not be able to receive the common shares.

In addition, if the foreign investor resides in a “tax haven” jurisdiction or is not an investor registered under Resolution No. 4,373, the investor will be subject to less favorable Brazilian tax treatment than a holder of ADSs.

For additional information on Brazilian taxes, see “Item 3. Key Information—D. Risk Factors—Risks Relating to our Common Shares and ADSs—If holders of our ADSs exchange the ADSs for common shares, they risk losing the ability to remit foreign currency abroad and Brazilian tax advantages” and “Item 10. Additional Information—E. Taxation—Material Brazilian Tax Consequences.”

**E. Taxation**

The following discussion, subject to the limitations set forth below, summarizes certain Brazilian and United States tax considerations relating to the ownership of our common shares or ADSs. This discussion does not purport to be a complete analysis of all tax considerations in those countries and does not address tax treatment of shareholders under the laws of other countries. Shareholders that are resident in countries other than Brazil and the United States, along with shareholders that are resident in those two countries, are urged to consult with their own tax advisors as to which countries’ tax laws could be relevant to them. This summary is based upon the tax laws of Brazil and the United States as in effect on the date of this annual report, which are subject to change, possibly with retroactive effect, and to differing interpretations. Any change in the law may change the consequences described below.

Although there presently is no income tax treaty between Brazil and the United States, the tax authorities of the two countries have had discussions that may result in this treaty. No assurance can be given, however, as to if or when a treaty will enter into force or how it will affect the U.S. holders of common shares or ADSs.

**Material Brazilian Tax Consequences**

*General.* The following discussion summarizes the principal Brazilian tax consequences of the acquisition, ownership and disposition of common shares or ADSs, as the case may be, by a holder that is not considered domiciled in Brazil, or a Non-Brazilian Holder, for purposes of Brazilian taxation.

This discussion is not a comprehensive discussion of all the tax considerations that may be relevant to a decision to purchase our common shares or ADSs and is not applicable to all categories of investors, some of which may be subject to special rules, and does not specifically address all of the Brazilian federal income tax considerations applicable to any particular holder. It is based on the tax laws of Brazil in effect on the date of this report, which are subject to change, possibly with retroactive effect, and to differing interpretations. Each prospective purchaser is urged to consult his own tax advisor about the particular Brazilian tax consequences of an investment in our common shares or ADSs.

*Taxation of Dividends.* Dividends, including stock dividends and other dividends paid in kind, paid by us to the depositary in respect of the ADSs, or to a Non-Brazilian Holder in respect of the common shares, are currently not subject to withholding tax, provided that they are paid out of profits generated as of January 1, 1996. There are some proposed bills under discussion in the Brazilian Congress which, if enacted, would revoke this exemption. Furthermore, the taxation of dividends has also been mentioned multiples times by the government and law makers as one of the items in the Brazilian tax reform agenda (and was included in the Federal Government’s proposition of the Income Tax Reform). Should any of these bills be passed by Congress and sanctioned by the president of Brazil, all dividends paid from Brazil would be subject to withholding tax in Brazil upon payment to Non-Brazilian Holders.

*Taxation of Gains.* According to Law No. 10,833, enacted on December 29, 2003, capital gains realized on the sale or disposition of assets located in Brazil by a Non-Brazilian Holder, regardless of whether the sale or the disposition is made to another non-Brazilian resident or to a Brazilian resident, is subject to taxation in Brazil. Accordingly, on the disposition of the common shares, which are considered assets located in Brazil, the Non-Brazilian Holder will be subject to income tax on the gains assessed, following the rules



described below, regardless of whether the transactions are conducted in Brazil or abroad and with a Brazilian resident or not. Regarding the ADSs, although the matter is not free from doubt, arguably the gains realized by a Non-Brazilian Holder on the disposition of ADSs should not be taxed in Brazil, based on the argument that ADSs would not constitute assets located in Brazil for purposes of Law No. 10,833, 2003. However, we cannot assure you about how Brazilian tax authorities and courts would interpret the definition of assets located in Brazil in connection with the taxation of gains realized by a Non-Brazilian Holder on the disposition of ADSs. Thus, the gain on a disposition of ADSs by a Non-Brazilian Holder may be subject to income tax in Brazil according to the rules described below for ADSs or those applicable to the disposition of common shares, when applicable. It is important to clarify that, for purposes of Brazilian taxation, the income tax rules on gains related to disposition of common shares or ADSs can vary depending on the domicile of the Non-Brazilian Holder, the form by which the Non-Brazilian holder has registered its investment with the Central Bank and/or how the disposition is carried out, as described below.

The deposit of common shares in exchange for ADSs may be subject to Brazilian income tax on capital gains at rates ranging from 15% to 22.5%, (or 25% in case of a Non-Brazilian Holder located in a Low or Nil Tax Jurisdiction as defined below), if the acquisition cost of the common shares is lower than (i) the average price per common share on a Brazilian stock exchange on which the greatest number of these shares were sold on the day of deposit or (ii) if no common shares were sold on that day, the average price on the Brazilian stock exchange on which the greatest number of common shares were sold in the 15 trading sessions immediately preceding such deposit. In this case, the positive difference between the average price of the common shares, calculated as above, and the corresponding acquisition cost, may be considered a capital gain. In some circumstances, there may be arguments to support that such tax treatment is not applicable in case of Non-Brazilian Holders registered under Resolution No. 4,373/14 from the Brazilian Central Bank, or the 4,373 Holder, that are not resident in a Low or Nil Tax Jurisdiction (as defined below). Prospective holders of common shares should consult their own tax advisors as to the tax consequences of the deposit in exchange for ADSs. The withdrawal of ADSs in exchange for common shares should not be considered as giving rise to a capital gain subject to Brazilian income tax, as far as the regulatory rules in respect to the registration of the investment before the Central Bank are duly observed.

Gains assessed on the disposition of common shares carried out on the Brazilian stock exchange (which includes the transactions carried out on the organized over-the-counter market) are:

- exempt from income tax when assessed by a Non-Brazilian Holder that (i) is a 4,373 Holder and (ii) is not resident in a Low or Nil Tax Jurisdiction (as defined below); or
- subject to income tax at a rate of up to 25% in any other case, including the gains assessed by a Non-Brazilian Holder that (i) is not a 4,373 Holder and/or or (ii) is a 4,373 Holder resident in a Low or Nil Tax Jurisdiction (as defined below). In these cases, a withholding income tax of 0.005% of the sale value shall be applicable and can be later offset with the eventual income tax due on the capital gain. Day trade transactions are subject to the rate of 1%.

Any other gains assessed on a disposition of the common shares that is not carried out on Brazilian stock exchanges are subject to income tax at rates of up to 22.5%, except for a resident of a Low or Nil Tax Jurisdiction (as defined below) which, in this case, is subject to income tax at a rate of 25%. In case the gains are related to transactions conducted on the Brazilian non-organized over-the-counter market with intermediation, the withholding income tax of 0.005% on the sale value shall also be applicable and can be offset with the eventual income tax due on the capital gain. In the case of a redemption of common shares or ADSs or a capital reduction by a Brazilian corporation, the positive difference between the amount effectively received by the Non-Brazilian Holder and the proportional acquisition cost of the common shares or ADSs redeemed is treated as capital gain derived from sale or exchange of common shares not carried out in a Brazilian stock exchange market and is therefore subject to income tax at rates of up to 25%, as the case may be. As a general rule, the gains realized as a result of a disposition transaction of common shares or ADSs are determined by the difference between the amount realized on the sale or exchange of the shares or ADSs and their acquisition cost.

There can be no assurance that the current preferential tax treatment for Non-Brazilian Holders of ADSs and 4,373 Holder of common shares will continue.

Any exercise of preemptive rights relating to the common shares or ADSs will not be subject to Brazilian income tax. Any gain on the sale or assignment of preemptive rights relating to our common shares or the ADSs by a Non-Brazilian Holder of common shares will be subject to Brazilian income taxation according to the same rules applicable to the sale or disposition of these shares.

*Taxation on Interest on Shareholders' Equity.* For additional information on taxation on interest on shareholders' equity, see "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Dividends and Dividend Policy—History of Dividend and Interest on Shareholders' Equity Payments and Dividend Policy."

In accordance with Law No. 9,249, dated December 26, 1995, as amended, Brazilian corporations may make payments to shareholders characterized as distributions of interest on the company's shareholders' equity on top of or as an alternative to making dividend distributions. This interest is calculated by multiplying the TJLP as determined by the Central Bank from time to time by the sum of determined Brazilian company's net equity accounts. Interest on Shareholders' Equity are deductible for purposes of calculating the Brazilian corporate income tax and social contribution on net profits, as long as the following limits are observed:

- 50% of net profits (after the social contribution on net profits but before taking such distribution and the provision for corporate income tax into account) related to the period for which the payment is made; and
- 50% of the sum of retained profits and profit reserves as of the date of the beginning of the period for which the payment is made.

The Brazilian Corporate Law establishes that interest attributed to shareholders' equity in respect of the common shares paid to shareholders who are Non-Brazilian holders, including Non-Brazilian holders of ADSs, are subject to Brazilian withholding income tax at the rate of 15%, (or 25% in case of a resident of a Low or Nil Tax Jurisdiction, as defined below). The distribution of interest on shareholders' equity may be determined by our board of directors. We cannot assure you that our board of directors will not determine that future distributions of profits may be made by means of interest on shareholders' equity instead of by means of dividends.

The amounts paid as distribution of interest on shareholders' equity to a Non-Resident Holder located in a country that has a tax treaty with Brazil may be classified as (i) interest, (ii) dividends or (iii) other revenues. The classification will depend on the actual wording of the treaty. There are some proposed bills under discussion in the Brazilian Congress which, if enacted, would revoke the possibility of the company paying interest on shareholders' equity. Furthermore, revoking the deductibility of the interest on shareholder's equity has also been mentioned multiples times by the government and law makers as one of the items in the Brazilian tax reform agenda (and was included in the Federal Government's proposition of the Income Tax Reform).

*Low or Nil Taxation Jurisdictions.* On June 4, 2010, Brazilian tax authorities enacted Normative Ruling No. 1,037 listing (i) the countries and jurisdictions considered as Low or Nil Taxation Jurisdiction or where the local legislation does not allow access to information related to the shareholding composition of legal entities, to their ownership or to the identity of the effective beneficiary of the income attributed to non-residents (Tax Favorable Jurisdictions) and (ii) the privileged tax regimes, or PTR, which definition is provided by Law No. 9,430, of 27 December, 1996. Brazilian tax authorities periodically update the list of countries/jurisdictions and regimes that shall be treated as Tax Favorable Jurisdiction and PTR.

The concept of PTR, encompasses structures that: (i) are not liable to tax on income or tax it at a maximum rate lower than 20%; (ii) grant tax benefits to non-residents (1) with no requirement to carry out substantial economic activity within the territory or (2) on the condition that they do not carry out substantial economic activity within the territory; (iii) do not tax income from outside its territory, or taxes it at less than 20%; or (iv) do not disclose certain information on the ownership and beneficial ownership of assets or on transactions within its territory, or imposes restrictions on disclosure of that information

On November 28, 2014 the Brazilian Revenue Service issued Rule 488 reducing the concept of Tax Favorable Jurisdictions and of PTR to those that tax the income below the rate of 17% (the previous concept adopted a 20% maximum rate for that purpose).

We believe that the best interpretation of the current tax legislation leads to the conclusion that the above-mentioned PTR concept should apply solely for purposes of Brazilian transfer pricing and thin capitalization rules. Currently, the understanding of the Brazilian tax authorities is in the sense that payment of interest to beneficiaries resident in PTRs is not subject to the same treatment applicable to beneficiaries in Tax Favorable Jurisdictions (Answer to Advance Tax Ruling Request COSIT n. 575, of December 20, 2017). Nevertheless, we cannot assure you that subsequent legislation or interpretations by the Brazilian tax authorities regarding the definition of a PTR provided by Law No. 9,430, of December 27, 1996 altered by Law No. 11,727 will also apply to a Non-Brazilian Holder on payments of interest on shareholders' equity. Notwithstanding the above, we recommend that you consult your own tax advisors regarding the consequences of the implementation of Law No. 11,727, Normative Ruling No. 1,037 and Rule 488.

*Taxation on Foreign Exchange Transactions, or IOF/Exchange.* Pursuant to Decree No. 6,306/07, the conversion into foreign currency or the conversion into Brazilian currency of the proceeds received or remitted by a Brazilian entity from a foreign investment in the Brazilian securities market, including those in connection with the investment by a Non-Brazilian Holder in the common shares and ADSs may be subject to the IOF/Exchange. Currently applicable rate for most foreign currency exchange transactions is 0.38%.

However, currency exchange transactions carried out for the in-flow of resources into Brazil by a 4,373 Holder are subject to IOF/Exchange at (i) 0% rate in case of variable income transactions carried out on the Brazilian stock, futures and commodities exchanges, as well as in the acquisitions of shares of Brazilian publicly held companies in public offerings or subscription of shares related to capital contributions, provided that the issuer company has registered its shares for trading in the stock exchange, and (ii) 0% for the outflow of resources from Brazil related to these type of investments, including payments of dividends and interest on shareholders' equity and the repatriation of funds invested in the Brazilian market. Furthermore, the IOF/Exchange is currently levied at a 0% rate on the withdrawal of ADSs into shares.

In any case, the Brazilian government may increase the rate at any time, up to 25.0%. However, any increase in rates may only apply to future transactions.

*Tax on Transactions Involving Bonds and Securities, or IOF/Bonds.* Pursuant to Decree 6,306/07 the IOF/Bonds may be imposed on any transactions involving bonds and securities, even if the transactions are carried out on a Brazilian stock exchange. The rate of IOF/Bonds applicable to transactions involving common shares and ADS is currently zero. In particular, the IOF/Bond also levies at a zero percent rate on the transfer of shares traded on the Brazilian stock exchange with the purpose of the issuance of depositary receipts to be traded outside Brazil. The Brazilian government may increase the rate of the IOF/Bonds at any time by up to 1.5% per day of the transaction amount, but only in respect of future transactions.

*Other Brazilian Taxes.* There are no Brazilian federal inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of common shares or ADSs by a Non-Brazilian Holder. Gift and inheritance taxes, however, may be levied by some states of Brazil on gifts made or inheritances bestowed by Non-Brazilian Holders to individuals or entities resident or domiciled within those states in Brazil. There are no Brazilian stamp, issue, registration or similar taxes or duties payable by holders of common shares or ADSs.

*Brazilian Tax Reform.* In addition to the potential effects already mentioned above about the taxation of dividends and revocation of the interest on shareholder's equity, the Brazilian Government and Congress have been discussing several different bills and proposed amendments to the Federal Constitution in the context of the Brazilian tax reform. Some of these proposals may significantly change the Brazilian tax system and affect the way we calculate our direct and indirect taxes. At this point we cannot assure if, when and how any of these changes will be implemented and which effects it could have in our operations.

**Material U.S. Federal Income Tax Consequences**

The following discussion, subject to the limitations and conditions set forth herein, summarizes certain U.S. federal income tax consequences of the purchase, ownership and disposition of Embraer common shares and ADSs. This discussion only applies to beneficial owners of Embraer common shares or ADSs that are “U.S. Holders” (as defined below) that hold common shares or ADSs of Embraer as capital assets (generally for investment purposes). This discussion does not address all aspects of U.S. federal income taxation that may be applicable to a U.S. Holder, including, gift, estate, alternative minimum and Medicare contribution tax consequences, or the tax consequences to U.S. Holders subject to special treatment under U.S. federal income tax law, including:

- partnerships and other entities classified as partnerships for U.S. federal income tax purposes;
- tax-exempt entities;
- dealers and traders in securities or foreign currencies;
- insurance companies;
- certain financial institutions;
- persons who own Embraer common shares or ADSs as part of an integrated investment, including a straddle, hedging or conversion transaction, comprising the Embraer common shares or ADSs and one or more other positions for tax purposes;
- U.S. Holders whose functional currency is not the U.S. dollar for U.S. federal income tax purposes;
- persons who actually or constructively own 10% or more of Embraer’s total combined vote or value of its outstanding common shares or ADSs;
- persons subject to special tax accounting rules under Section 451(b) of the Code;
- persons who acquired Embraer common shares or ADSs pursuant to the exercise of any employee stock option or otherwise as compensation; and
- persons holding Embraer common shares or ADSs in connection with a trade or business conducted outside the United States.

In addition, there is no discussion herein of state, local, or non-U.S. tax considerations of the purchase, ownership and disposition of Embraer common shares or ADSs. The discussion is based upon the provisions of the Internal Revenue Code of 1986, as amended, or Code, its legislative history, existing final, temporary, and proposed U.S. Treasury regulations, rulings and other pronouncements of the U.S. Internal Revenue Service, or IRS, and judicial decisions as of the date of this annual report. Such authorities may be repealed, revoked or modified (with possible retroactive effect) so as to result in U.S. federal income tax consequences different from those discussed below.

This discussion is also based in part on the representations of the depositary and the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms.

Shareholders are urged to consult their own independent tax advisors concerning the U.S. federal income tax consequences of the ownership of Embraer common shares and ADSs in light of their particular situations, as well as any consequences arising under the laws of any other taxing jurisdiction.

As used herein, the term “U.S. Holder” means a beneficial owner of Embraer common shares or ADSs representing Embraer common shares for U.S. federal income tax purposes that is (i) an individual who is a citizen or resident of the United States, (ii) a corporation, created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source or (iv) a trust (1) that is subject to the supervision of a court within the United States and the control of one or more U.S. persons as described in Section 7701(a)(30) of the Code or (2) that has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person. Except where specifically described below, this discussion assumes that we are not a controlled foreign corporation or a passive foreign investment company, or PFIC, in either case, for U.S. federal income tax purposes.

If a partnership (or an entity treated as a partnership for U.S. federal income tax purposes) holds Embraer common shares or ADSs, the tax treatment of such partnership and each partner will generally depend upon the status of the partner in such partnership and upon the activities of the partnership. Partnerships that hold Embraer common shares or ADSs, and partners of a partnership holding such common shares or ADSs, are urged to consult their own tax advisors regarding the consequences of the purchase, ownership and disposition of Embraer common shares or ADSs.

In general, for U.S. federal income tax purposes, a U.S. Holder who is a beneficial owner of an ADS will be treated as the owner of the underlying Embraer common shares that are represented by such ADS.

***Distributions on Embraer Common Shares or ADSs***

For U.S. federal income tax purposes, the gross amount of any distributions (including distributions of notional interest charges attributed to shareholders’ equity) paid to U.S. Holders of Embraer common shares or ADSs (including Brazilian withholding taxes imposed on such distributions) will be treated as a dividend, to the extent paid out of current or accumulated earnings and profits of Embraer as determined under U.S. federal income tax principles. Such a dividend will be includable in the gross income of a U.S. Holder as ordinary income on the date received or accrued by the U.S. Holder. To the extent that the amount of any distribution exceeds Embraer’s current and accumulated earnings and profits for a taxable year (as determined under U.S. federal income tax principles), the distribution will first be treated as a tax-free return of capital to the extent of a U.S. Holder’s adjusted tax basis in the Embraer common shares or ADSs, and thereafter as capital gain. We do not expect to maintain calculations of earnings and profits in accordance with U.S. federal income tax principles, and unless and until such calculations are made, U.S. Holders should assume that a distribution is paid out of earnings and profits and will be treated as a dividend for U.S. federal income tax purposes.

Dividends paid by Embraer will not be eligible for the dividends-received deduction allowed to certain domestic corporations under the Code.

The amount of any cash distribution paid in *reais* will be included in a U.S. Holder’s gross income in an amount equal to the U.S. dollar value of the *reais* calculated by reference to the exchange rate in effect on the date the dividend is received or accrued by the U.S. Holder, in the case of Embraer common shares, and by the depositary, in the case of ADSs, regardless of whether the *reais* are converted into U.S. dollars. If the *reais* received as a dividend are not converted into U.S. dollars on the date of receipt, a U.S. Holder will have a tax basis in the *reais* equal to their U.S. dollar value on the date of receipt. Any gain or loss realized on a subsequent conversion or other disposition of the *reais* will be treated as U.S. source ordinary income or loss for U.S. federal income tax purposes.

Dividends received with respect to the Embraer common shares or ADSs will be treated as foreign source income for U.S. federal income tax purposes, and will be “passive category income” for purposes of calculating foreign tax credits in most cases, subject to various limitations. U.S. regulations have imposed additional requirements that must be met for a foreign tax to be creditable (including requirements that a “covered withholding tax” be imposed on nonresidents in lieu of a generally applicable tax that satisfies the regulatory definition of an “income tax”, which may be unclear or difficult to determine). U.S. Holders may instead claim a deduction in respect of such Brazilian income taxes, provided that, if such withholding tax is a

“covered withholding tax”, the U.S. Holder elects to deduct (rather than credit) all foreign taxes paid or accrued for the taxable year. The rules relating to computing foreign tax credits or deducting foreign income taxes are extremely complex, and U.S. Holders are urged to consult their own independent tax advisors regarding the availability of foreign tax credits with respect to any Brazilian withholding taxes in regards of dividends paid on Embraer’s common shares or ADSs.

Subject to certain exceptions for short-term and hedged positions, the amount of dividends received by certain non-corporate U.S. holders (including individuals) with respect to the Embraer common shares or ADSs may be eligible for a reduced rate of taxation if the dividends represent “qualified dividend income.” Dividends paid on the Embraer common shares or ADSs will be treated as qualified dividend income if (i) the Embraer common shares or ADSs are readily tradable on an established securities market in the United States, (ii) the U.S. Holder meets the holding period requirement for the common shares or ADSs (generally more than 60 days during the 121-day period that begins 60 days before the ex-dividend date) and (iii) Embraer was not in the year prior to the year in which the dividend was paid (with respect to a U.S. Holder that held Embraer common shares or ADSs), and is not in the year in which the dividend is paid, a PFIC. Under guidance issued by the IRS, the ADSs of Embraer should qualify as readily tradable on an established securities market in the United States so long as they are listed on the NYSE. In the case of Embraer common shares held directly by U.S. Holders and not through an ADS, it is not clear whether dividends paid with respect to such shares will represent “qualified dividend income.” U.S. Holders holding Embraer common shares directly and not through an ADS are urged to consult their own independent tax advisors.

Based on its audited financial statements as well as relevant market and shareholder data, Embraer believes that it was not a PFIC for U.S. federal income tax purposes with respect to its 2022 taxable year. However, Embraer cannot assure you that it was not a PFIC with respect to its 2022 taxable year or that it is not or will not become a PFIC in 2023 or future years. See “—Passive Foreign Investment Company Rules.”

***Sale, Exchange or Other Taxable Disposition of Embraer Common Shares or ADSs***

A U.S. Holder will recognize a taxable gain or loss on any sale, exchange or other taxable disposition of Embraer common shares or ADSs in an amount equal to the difference between the amount realized on the sale, exchange or other taxable disposition and the U.S. Holder’s adjusted tax basis (determined in U.S. dollars) in the Embraer common shares or ADSs. Such gain or loss will generally be capital gain or loss and will be long-term capital gain or loss if the Embraer common shares or ADSs have a holding period of more than one year. Certain non-corporate U.S. Holders (including individuals) may be eligible for preferential rates of U.S. federal income tax in respect of long-term capital gains. The deductibility of capital losses is subject to limitations under the Code.

Any gain or loss recognized by a U.S. Holder from the sale, exchange or taxable disposition of Embraer common shares or ADSs generally will be gain or loss from U.S. sources for U.S. foreign tax credit purposes. Consequently, if a Brazilian withholding tax or capital gains tax is imposed pursuant to a sale of Embraer common shares or ADSs, even if the Brazilian tax is otherwise a creditable tax, U.S. Holders who do not have sufficient foreign source income still might not be able to derive effective U.S. foreign tax credit benefit in respect of such Brazilian withholding tax or capital gains tax. The rules relating to foreign tax credits, including the amount of foreign income taxes that may be claimed as a credit in any given year, are extremely complex and subject to limitations. U.S. Holders are urged to consult their own independent tax advisor regarding the application of the foreign tax credit rules to their particular circumstances.

Deposits and withdrawals of Embraer common shares in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

***Passive Foreign Investment Company Rules***

If, during any taxable year of a non-U.S. corporation, 75% or more of the corporation’s gross income consists of certain types of “passive” income, or the average value during a taxable year of the “passive assets” of the corporation (generally, assets that generate or are held to generate passive income) is 50% or more of the average value of all the corporation’s assets, the corporation will be treated as a PFIC under

U.S. federal income tax law. For this purpose, passive income generally includes, among other things, dividends, interest, rents, royalties and gains from the disposition of investment assets, subject to various exceptions. If the non-U.S. corporation owns at least 25% (by value) of the stock of another corporation, it will be treated, for purposes of the PFIC tests, as owning its proportionate share of the other corporation’s gross assets and receiving its proportionate share of the other corporation’s gross income. However, if the non-U.S. corporation owns less than 25% (by value) of the stock of another corporation, that stock may be treated as a passive asset.

If a corporation is treated as a PFIC, a U.S. Holder may be subject to increased tax liability upon the sale of its stock, or upon the receipt of certain dividends, unless such U.S. Holder makes an election to be taxed currently on its *pro rata* portion of the corporation’s income, whether or not such income is distributed in the form of dividends, or otherwise makes a “mark-to-market” election with respect to the corporation’s stock as permitted by the Code. Currently, a U.S. Holder who owns common shares or ADSs in any year that Embraer is a PFIC in excess of certain *de minimis* amounts and fails to qualify for certain other exemptions would be required to file IRS Form 8621 to report such holdings. In addition, as discussed above, a U.S. Holder would not be entitled to (if otherwise eligible for) the preferential reduced rate of tax payable on certain dividend income.

As stated above, although no assurances can be given, based on Embraer’s operations, projections and business plans and the other items discussed above, Embraer does not believe that it was a PFIC for 2022 or in prior years. Although Embraer is not aware that it will be a PFIC in 2023 or future years, this will depend on the nature, amount and value of Embraer’s operations, activities, assets and income as of the relevant time of determination. Accordingly, there can be no assurance that Embraer is not a PFIC or will not become a PFIC for 2023 or a future year.

U.S. Holders are urged to consult their own independent tax advisors regarding the potential application of the PFIC rules and related reporting requirements to the common shares or ADSs and the availability and advisability of making an election to avoid the adverse tax consequences of the PFIC rules should Embraer be considered a PFIC for any taxable year.

***U.S. Tax Reform – Tax Cuts and Jobs Act of 2017 (TCJA) and U.S. Coronavirus Aid, Relief, and Economic Security (CARES) Act***

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in response to the economic fallout of the COVID-19 pandemic. The CARES Act includes several provisions that affect Embraer. The act provided for an employee retention credit to assist with employers keeping employees on payroll even if they cannot physically report to work under the COVID-19 restrictions. The Act also included a five-year net operating loss carryback provision which enables companies to benefit from certain losses and re-measure certain deferred tax assets and liabilities at the former federal tax rate of 35%. In addition, the CARES Act provided a delay in making required payroll tax deposits, as well as extension and first quarter estimated tax payments. The purpose of this delay was to assist companies with cash flow issues. The provisions of the CARES Act did not have a significant impact on Embraer for the years ended December 31, 2022 and 2021.

The TCJA amended the Code section 174, requiring expenses which are categorized as research and experimental (R&E) to be capitalized for tax purposes. The new measure became effective as of January 1, 2022. Capitalized assets are then amortized over five years (or 15 years for expenditure attributable to foreign research). The impact of this change in 2022 was capitalization of US\$99.7 million of expenses and amortization deduction of US\$3.8 million. This legislation is currently under consideration, and congress could provide temporary Section 174 relief as of the Build Block Better Bill.

***Information Reporting and Backup Withholding***

In general, payments of dividends on Embraer common shares or ADSs, and payments of the proceeds of the sale, exchange or other taxable disposition of Embraer common shares or ADSs, paid within the United States or through certain U.S.-related financial intermediaries to a U.S. Holder are subject to

information reporting and may be subject to backup withholding at a current maximum rate of 24% unless the U.S. Holder (i) is a corporation or other exempt recipient or (ii) in the case of backup withholding, provides an accurate taxpayer identification number and certifies that no loss of exemption from backup withholding has occurred. Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder’s U.S. federal income tax liability, provided the required information is timely provided to the IRS. A U.S. Holder generally may obtain a refund of any amounts withheld under the backup withholding rules that exceed its U.S. federal income tax liability by filing a timely refund claim with the IRS.

In addition, certain U.S. Holders are required to report to the IRS information relating to an interest in the common shares or ADSs, subject to exceptions (including an exception for common shares or ADSs held in accounts maintained by certain financial institutions), by attaching a complete IRS Form 8938, Statement of Specified Foreign Financial Assets, with their tax returns for each year in which they held an interest in the common shares or ADSs. U.S. Holders are urged to consult their own tax advisors regarding the effect, if any, of this information reporting requirement on their acquisition, ownership and disposition of the common shares or ADSs.

***Corporate Alternative Minimum Tax (CAMT)***

The Inflation Reduction Act of 2022 created the CAMT. This imposes a 15% minimum tax on the adjusted financial statement income of large corporations for taxable years beginning in 2023. Based on our latest financial information, we believe that we should not be affected by the CAMT with respect to our 2022 taxable year. Although we are not aware that we will be affected by the CAMT with respect to 2022 or future years, this will depend on the relevant financial information at the time of determination. Accordingly, there can be no assurance that we will not be affected by the CAMT for 2023 or a future year.

**F. Dividends and Paying Agents**

Not applicable.

**G. Statements by Experts**

Not applicable.

**H. Documents on Display**

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Accordingly, we are required to file reports and other information with the SEC. You may inspect and obtain copies, at prescribed rates, of reports and other information filed by us with the SEC at its Public Reference Room maintained at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC in the United States at 1-800-SEC-0330. You may also inspect and copy this material at the offices of the New York Stock Exchange, Inc., 20 Broad Street, New York, New York 10005.

We file our annual report on Form 20-F, including our financial statements, and other reports, including our reports on Form 6-K, electronically with the SEC. These filings are available at [www.sec.gov](http://www.sec.gov). We also file financial statements and other periodic reports electronically with the CVM at its website, [www.cvm.gov.br](http://www.cvm.gov.br). Copies of our annual reports on Form 20-F and documents referred to in this annual report and our bylaws will be available for inspection upon request at our principal executive office, located at Avenida das Nações Unidas, 8501, 30th floor, Eldorado Business Tower, 05425-070, Pinheiros, São Paulo, SP, Brazil.

**I. Subsidiary Information**

Not required.



J. Annual Report to Security Holders

Not applicable.

Item 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to various market risks, primarily related to potential loss arising from adverse changes in interest rates and foreign currency exchange rates. We have established policies and procedures to manage sensitivity to interest rate and foreign currency exchange rate risk. These procedures include the monitoring of our levels of exposure to each market risk, including an analysis based on forecast of future cash flows, the funding of variable rate assets with variable rate liabilities, and limiting the amount of fixed rate assets which may be funded with floating rate liabilities. We may also use derivative financial instruments to mitigate the effects of interest rate fluctuations and to reduce our exposure to exchange rate risk. The following sections address the significant market risks associated with our financial activities.

Interest Rate Risk

Our exposure to market risk for interest rate fluctuations principally relates to changes in the market interest rates of our U.S. dollar-denominated and *real*-denominated monetary assets and liabilities, principally our short- and long-term debt obligations. Increases and decreases in prevailing interest rates generally translate into increases and decreases in interest expense. Additionally, the fair values of interest rate-sensitive instruments are also affected by general market conditions.

Our short- and long-term debt obligations totaled US\$3.2 billion as of December 31, 2022 and were denominated in U.S. dollars, Brazilian *reais* and Euros. Of the total amount of debt denominated in U.S. dollars (i.e., US\$3.1 billion), US\$2.7 billion was subject to fixed rates. The remaining floating rate U.S. dollar-denominated debt, or US\$483.9 million, which corresponds to 15.1% of our debt denominated in U.S. dollars, was indexed to LIBOR or SIFMA. We will have to transition away from LIBOR as a benchmark to our debt in 2023, since the banks’ obligations to report information used to set LIBOR will cease by then. While we are taking actions together with the counterparty financial institutions to mitigate potential impacts due to the reform and discontinuation of LIBOR, we not expect material impacts nor expect an impact on existing hedge agreements.

Of our US\$10.3 million Brazilian *real*-denominated debt as of December 31, 2022, US\$3.9 million bears interest at a variable rate based on the TJLP, IPCA and CDI, and US\$6.4 million bears interest at a fixed rate. Of our US\$31.3 million euro-denominated debt as of December 31, 2022, US\$4.4 million bears interest at a variable rate based on EURIBOR, and US\$26.9 million bears interest at a fixed rate.

The table below provides information about our short-term debt obligations as of December 31, 2022, which are sensitive to changes in interest rates and foreign currency exchange rates.

	Weighted Average Interest Rate 2022 <sup>(1)</sup> (%)	Total Amount Outstanding (in US\$ millions)	Total Fair Value
Short-Term Debt			
U.S. dollars (Fixed indexed)	5.8%	252.7	256.2
U.S. dollars (Floating indexed)	5.2%	21.0	36.3
Euros (Fixed rate)	3.0%	26.9	24.9
Euros (Floating indexed)	1.3%	1.4	1.4
<i>Reais</i> (Fixed rate)	3.5%	6.4	6.3
<i>Reais</i> (Floating indexed)	16.6%	0.1	0.3
Total short-term debt		308.5	325.4

(1) The interest rate refers exclusively to the weighted average of our indebtedness (short-term and long-term). It does not represent the indexed rates as of December 31, 2022.

The table below provides information about our long-term debt obligations as of December 31, 2022, which are sensitive to changes in interest rates and foreign currency exchange rates:

	Weighted Average Interest Rate 2022 <sup>(1)</sup> (%)	Total Amount Outstanding	2024	2025	2026	2027	2028 and thereafter	Total Fair value
(in US\$ millions)								
<b>Long-Term Debt</b>								
U.S. dollars (Fixed rate)	5.7%	2,487.9	9.5	958.8	—	728.6	791.0	2,431.5
U.S. dollars (Floating indexed)	3.5%	400.0	300.0	—	—	100.0	—	355.1
Euros (Floating indexed)	1.3%	3.0	—	—	3.0	—	—	2.5
Reais (Floating indexed)	16.6%	3.8	—	—	3.8	—	—	3.0
<b>Total long-term debt</b>		<b>2,894.7</b>	<b>309.5</b>	<b>958.8</b>	<b>6.8</b>	<b>828.6</b>	<b>791.0</b>	<b>2,792.1</b>

(1) The interest rate refers exclusively to the weighted average of our indebtedness (short-term and long-term). It does not represent the indexed rates as of December 31, 2022.

The table below provides information about our short-term debt obligations as of December 31, 2022, after taking into account the effects of the aforementioned derivative transactions:

	Weighted Average Interest Rate 2022 <sup>(1)</sup> (%)	Total Amount Outstanding (in US\$ millions)	Total Fair Value
<b>Short-Term Debt</b>			
U.S. dollars (Fixed rate)	5.8%	252.7	256.2
U.S. dollars (Floating indexed)	5.2%	21	36.3
Euros (Fixed rate)	3.0%	26.9	24.9
Euros (Floating indexed)	1.3%	1.4	1.4
Reais (Fixed rate)	3.5%	6.4	6.3
Reais (Floating indexed)	16.6%	0.1	0.3
<b>Total short-term debt</b>		<b>308.5</b>	<b>325.4</b>

(1) The interest rate refers exclusively to the weighted average of our indebtedness (short-term and long-term). It does not represent the indexed rates as of December 31, 2022.

The table below provides information about our long-term debt obligations as of December 31, 2022, after taking into account the effects of the aforementioned derivative transactions:

	Weighted Average Interest Rate 2022 <sup>(1)</sup> (%)	Total Amount Outstanding	2024	2025	2026	2027	2028 and There- after	Total Fair value
(in US\$ millions)								
<b>Long-Term Debt</b>								
U.S. dollars (Fixed rate)	5.7%	2,487.9	9.5	958.8	—	728.6	791.0	2,431.5
U.S. dollars (Floating indexed)	3.5%	400.0	300.0	—	—	100.0	—	355.1
1.3%3.0-3.0-2.5Euros (Floating indexed)	1.3%	3.0	—	—	3.0	—	—	2.5
Reais (Floating indexed)	16.6%	3.8	—	—	3.8	—	—	3.0
<b>Total long-term debt</b>		<b>2,894.7</b>	<b>309.5</b>	<b>958.8</b>	<b>6.8</b>	<b>828.6</b>	<b>791.0</b>	<b>2,792.1</b>

(1) The interest rate refers exclusively to the weighted average of our indebtedness (short-term and long-term). It does not represent the indexed rates as of December 31, 2022.

For further information, see Note 25.3.4(a) to our 2022 audited consolidated financial statements included elsewhere in this annual report.

Foreign Exchange Rate Risk

In managing our foreign currency risk, we focus on balancing our non-U.S. dollar-denominated assets against our non—U.S. dollar-denominated liabilities plus shareholders’ equity in relation to our forecasts of future cash flows. Beyond the foreign currency exposure related to our debt obligations as summarized above, we also have other assets and liabilities denominated in currencies other than the U.S. dollar. These monetary assets and liabilities are primarily cash and cash equivalents, financial assets, accounts receivable and payable, deferred income taxes, dividends and certain other assets and liabilities and are primarily denominated in Brazilian *reais*. The effects on these assets and liabilities of the appreciation or devaluation of other foreign currencies against the U.S. dollar result in foreign exchange gains (losses) recognized as interest income (expense), net. The translation gains and losses arising from the remeasurement of our financial statements to U.S. dollars are recognized on our statement of income as foreign exchange gain (loss), net.

Our cash flow exposure comes as a result of the fact that 7.6% of our revenues and 11.1% of our total costs are denominated in *reais*. Having more *real* denominated costs than revenues generates the exposure. For additional information on our hedges and derivate instruments, see Note 8 to our 2022 audited consolidated financial statements.

The table below provides information about our assets and liabilities exposed to foreign currency risk as of December 31, 2022, as well as the derivative transactions outstanding at the same date:

	Financial instruments indexed to currencies other than the U.S. dollar						
	Outstanding Amount by Year of Maturity						
	Total Outstanding Amount	2023	2024	2025	2026	There- after	Total Fair Value
(in US\$ millions)							
ASSETS							
Cash and cash equivalents and financial investments							
In Reais	131.3	131.3	—	—	—	—	131,3
In Euro	62.0	62.0	—	—	—	—	62.0
In other currencies	4.1	4.1	—	—	—	—	4.1
Trade accounts receivable							
In Reais	96.9	96.9	—	—	—	—	96.9
In Euro	25.4	25.4	—	—	—	—	25.4
In other currencies	0.4	0.4	—	—	—	—	0.4
Other assets							
In Reais	278.1	179.6	98.5	—	—	—	278.1
In Euro	34.4	33.3	1.1	—	—	—	34.4
In other currencies	0.7	0.7	—	—	—	—	0.7
Total assets in Reais	506.3	407.8	98.5	—	—	—	506.3
Total assets in Euro	121.8	120.7	1.1	—	—	—	121.8
Total assets in other currencies	5.2	5.2	—	—	—	—	5.2
LIABILITIES							
Loans							
In Reais	10.2	6.4	—	—	3.8	—	10.2
In Euro	31.1	28.1	1.4	1.4	0.2	—	31.1
Accounts payable to suppliers							
In Reais	89.9	89.9	—	—	—	—	89.9
In Euro	44.9	44.9	—	—	—	—	44.9
In other currencies	2.4	2.4	—	—	—	—	2.4
Customer advances							
In Reais	760.5	620.9	139.6	—	—	—	760.5
In Euro	51.2	51.2	—	—	—	—	51.2
In other currencies	1.5	1.5	—	—	—	—	1.5
Other accounts payable & accrued liabilities							
In Reais	430.2	268.7	161.5	—	—	—	430.2
In Euro	39.9	37.9	2.0	—	—	—	39.9
In other currencies	3.4	3.1	0.3	—	—	—	3.4

	Financial instruments indexed to currencies other than the U.S. dollar						
	Outstanding Amount by Year of Maturity						
	Total Outstanding Amount	2023	2024	2025	2026	There- after	Total Fair Value
			(in US\$ millions)				
<b>Taxes and payroll charges payable</b>							
In Reais	55.2	38.1	17.1	—	—	—	55.2
In Euro	6.2	6.2	—	—	—	—	6.2
<b>Accrued taxes on income</b>							
In Reais	5.7	5.7	—	—	—	—	5.7
In Euro	0.9	0.9	—	—	—	—	0.9
In other currencies	4.0	4.0	—	—	—	—	4.0
<b>Contingencies</b>							
In Reais	52.0	14.1	5.9	5.9	5.9	20.2	52.0
In Euro	1.9	0.7	0.2	0.2	0.2	0.6	1.9
<b>Total liabilities in Reais</b>	<b>1,403.7</b>	<b>1,043.8</b>	<b>324.1</b>	<b>5.9</b>	<b>9.7</b>	<b>20.2</b>	<b>1,403.7</b>
<b>Total liabilities in Euro</b>	<b>176.1</b>	<b>169.9</b>	<b>3.6</b>	<b>1.6</b>	<b>0.4</b>	<b>0.6</b>	<b>176.1</b>
<b>Total liabilities in other currencies</b>	<b>11.3</b>	<b>11.0</b>	<b>0.3</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>11.3</b>
<b>Total exposure in Reais</b>	<b>(897.4)</b>	<b>(636.0)</b>	<b>(225.6)</b>	<b>(5.9)</b>	<b>(9.7)</b>	<b>(20.2)</b>	<b>(897.4)</b>
<b>Total exposure in Euro</b>	<b>(54.3)</b>	<b>(49.2)</b>	<b>(2.5)</b>	<b>(1.6)</b>	<b>(0.4)</b>	<b>(0.6)</b>	<b>(54.3)</b>
<b>Total exposure in other currencies</b>	<b>(6.1)</b>	<b>(5.8)</b>	<b>(0.3)</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>(6.1)</b>

For further information, see Note 25.3.4(b) to our 2022 audited consolidated financial statements included elsewhere in this annual report.

### Credit Risk

We may incur losses if counterparties to our various contracts do not pay amounts that are owed to us. In that regard, our primary credit risk derives from the sales of aircraft, spare parts and related services to customers, including the financial obligations related to those sales in the cases where we provide guarantees for the benefit of the providers of finance to the aircraft purchases of our customers. We are also exposed to the credit risk of the counterparties to our financial instruments.

Financial instruments which may potentially subject us to credit risk concentration include (i) financial investments and other financial instruments, (ii) trade accounts receivable, (iii) customer commercial financing and (iv) advances to suppliers. We seek to limit our credit risk associated with cash and cash equivalents by placing the investments we make with those instruments with investment-grade ratings following the guidelines of our financial management policy. With respect to trade accounts receivable and customer commercial financing, we seek to limit our credit risk by performing ongoing credit evaluations. All these customers are currently meeting their commitments with us, are operating within the established credit limits that we assign to them and are considered by management to represent an acceptable credit risk level to us. Advances to suppliers are made only to select, long-standing suppliers. We analyze the financial condition of those suppliers on an ongoing basis with a view to limiting credit risk.

We may also have credit risk related to the sale of aircraft during the period in which their purchasers are finalizing the financing arrangements for their aircraft purchases from us. In order to try to minimize these risks, we continuously monitor customer credit analyses and work closely with financial institutions to facilitate customer aircraft financing.

For further information, see Note 25.3.2 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

**Item 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

- A. Debt Securities**  
  
Not applicable.
- B. Warrants and Rights**  
  
Not applicable.
- C. Other Securities**  
  
Not applicable.
- D. American Depositary Shares**

**Depository Fees and Charges**

The depository may charge, and collect from, (i) each person to whom ADSs are issued, including, without limitation, issuances against deposits of shares, issuances in respect to share distributions, rights and other distributions, issuances pursuant to a stock dividend or stock split declared by us, or issuances pursuant to a merger, exchange of securities or any other transaction or event affecting the ADSs or the deposited securities, and (ii) each person surrendering ADSs for withdrawal of deposited securities or whose ADSs are canceled or reduced for any other reason, US\$5.00 for each 100 ADSs (or portion thereof) issued, delivered, reduced, canceled or surrendered (as the case may be). The depository may sell (by public or private sale) sufficient securities and property received in respect of share distributions, rights and other distributions prior to the deposit to pay the charge.

The following additional charges shall be incurred by ADS Holders, the beneficial owners of, or in, ADSs, by any party depositing or withdrawing shares or by any party surrendering ADSs, to whom ADSs are issued (including, without limitation, issuances pursuant to a stock dividend or stock split declared by us or an exchange of stock regarding the ADSs or the deposited securities or a distribution of ADSs pursuant to section 10 of the deposit agreement, whichever is applicable:

- a fee of US\$0.05 or less per ADS for any cash distribution made pursuant to the deposit agreement;
- a fee of US\$1.50 per ADS or ADSs or transfers made pursuant to section 3 of the deposit agreement;
- a fee for the distribution or sale of securities pursuant to section 10 of the deposit agreement, this fee being in an amount equal to the fee for the execution and delivery of ADSs, referred to above which would have been charged as a result of the deposit of the securities (for purposes of section 7 of the deposit agreement treating all such securities as if they were shares) but which securities or the net cash proceeds from the sale thereof are instead distributed by the depository to ADS holders entitled thereto;
- an aggregate fee of US\$0.05 per ADS per calendar year (or portion thereof) for the services performed by the depository in administering the ADSs (which fee may be charged on a periodic basis during each calendar year and shall be assessed against holders as of the record date or record dates set by the depository during each calendar year and shall be payable at the sole discretion of the depository by billing such holders or by deducting such charge from one or more cash dividends or other cash distributions); and
- a fee for the reimbursement of those fees, charges and expenses as are incurred by the depository and/or any of its agents (including, without limitation, the custodian and expenses incurred on behalf of holders in connection with compliance with foreign exchange control regulations or any law or regulation relating to foreign investment) in connection with the servicing of the shares or other

deposited securities, the sale of securities (including, without limitation, deposited securities), the delivery of deposited securities or otherwise in connection with the depositary’s or its custodian’s compliance with applicable laws, rules or regulations (which fees and charges shall be assessed on a proportionate basis against holders as of the record date or dates set by the depositary and shall be payable at the sole discretion of the depositary by billing such holders or by deducting such charge from one or more cash dividends or other cash distributions), including, without limitation, any amounts charged by any governmental authorities or other institutions such as the Brazilian Clearing and Depository Corporation (*Companhia Brasileira de Liquidação e Custódia*) or the B3 S.A. – Brasil, Bolsa, Balcão, the stock exchange on which the shares are registered for trading.

We will pay all other charges and expenses of the depositary and any agent of the depositary (except the custodian) pursuant to agreements from time to time between us and the depositary, except:

- stock transfer or other taxes and other governmental charges (which are payable by holders or persons depositing shares);
- SWIFT, cable, telex and facsimile transmission and delivery charges incurred at the request of persons depositing, or holders delivering shares, ADSs or deposited securities (which are payable by such persons or holders); and
- transfer or registration fees for the registration or transfer of deposited securities on any applicable register in connection with the deposit or withdrawal of deposited securities (which are payable by persons depositing shares or holders withdrawing deposited securities.;

These charges may at any time and from time to time be changed by agreement between us and the depositary.

**Depositary Payments for the Year December 31, 2022**

According to our contractual arrangements with JPMorgan, in 2022, JPMorgan paid us a gross amount of US\$1.2 million in connection with investor relations related expenses of Embraer incurred in 2022.

**Part II**

**Item 13.      DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

No matters to report.

**Item 14.      MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

**Material Modifications to the Rights of Security Holders**

Not applicable.

**Use of Proceeds**

Not applicable.

## **Item 15. CONTROLS AND PROCEDURES**

### **(a) Disclosure Controls and Procedures**

Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, or persons performing similar functions, as appropriate, to allow timely decisions regarding required financial disclosure.

Under the supervision and with the participation of our management, including our principal executive officers and principal financial officer, we evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of December 31, 2022. Based on this evaluation, our principal executive officers and principal financial officer have concluded, together with management, that our disclosure controls and procedures were not effective as of December 31, 2022, due to material weaknesses, as described below.

As discussed elsewhere in this Annual Report on Form 20-F, our subsidiary Eve Holding, Inc. (“Eve Holding”), formerly known as EVE UAM, LLC (“EVE”), completed a business combination on May 9, 2022 (“Business Combination”) with Zanite Acquisition Corporation (“Zanite”), a special purpose acquisition company (“SPAC”). The Business Combination was considered to be a significant unusual transaction. As disclosed in Eve Holding’s Form 10-Q/A filed on December 8, 2022, errors in the initial accounting for the Business Combination led to the restatement of Eve Holding’s interim financial statements of as of and for the three-month and six-month periods ended June 30, 2022.

At the Embraer level, while our management had performed an analysis of the accounting effects of the Business Combination, after engaging in consultation with external specialists, the aforementioned errors also led to related errors in our consolidated financial statements, which have been corrected by our management in our financial statements as of and for the year ended December 31, 2022.

Notwithstanding the material weaknesses in internal controls over financial reporting identified in our Management’s Annual Report on Internal Controls Over Financial Reporting (see “—Item 15. (b) Management’s Annual Report on Internal Controls Over Financial Reporting”), our management performed additional analysis as deemed necessary to ensure that our consolidated financial statements as of and for the year ended December 31, 2022 were prepared in accordance with IFRS. Accordingly, our management believes that the consolidated financial statements included in this annual report present fairly, in all material respects, our financial position, results of operations, and cash flows of the periods presented in accordance with IFRS.

### **(b) Management’s Annual Report on Internal Controls Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal controls over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal controls over financial reporting are designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external purposes in accordance with IFRS. Our internal controls over financial reporting include those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of the Company are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal controls over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

In this context, our management, with the participation of the chief executive officer and chief financial officer, under the oversight of our Audit Committee, assessed the effectiveness of our internal controls over financial reporting as of December 31, 2022 based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, our management concluded that, as of December 31, 2022, our internal controls over financial reporting were not effective due to the material weaknesses described below.

A material weakness is a deficiency, or combination of deficiencies, in internal controls over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

We did not have sufficient personnel with appropriate qualifications, experience and training related to certain complex accounting matters. As a result, there was ineffective risk assessment such that certain process-level controls were not designed, implemented or operated effectively related to the accounting for the Business Combination between Eve Holding and Zanite.

These deficiencies resulted in material misstatements in our consolidated financial statements during the year ended December 31, 2022, related to the Business Combination that have been corrected by our management. Because there is a reasonable possibility that a material misstatement in the consolidated financial statements may not be prevented or detected on a timely basis, management concluded these deficiencies represent material weaknesses in our internal controls over financial reporting.

### **(c) Report of the Independent Registered Public Accounting Firm on Internal Controls over Financial Reporting**

Our independent registered public accounting firm, KPMG Auditores Independentes Ltda (“KPMG”), who audited the consolidated financial statements included in this Annual Report on Form 20-F, issued an audit report expressing an adverse opinion on the effectiveness of the Company’s internal controls over financial reporting as of December 31, 2022. KPMG’s report appears on page F-6 of this Annual Report on Form 20-F.

### **(d) Management’s Remediation Plan**

In order to address the material weaknesses in internal controls over financial reporting described above, our management, under the oversight of our Audit Committee, is in the process of developing and implementing remediation plans to address the control deficiencies that led to these material weaknesses. We are committed to ensuring that our internal controls over financial reporting are effective. Our remediation plan includes:

- Improvements in our policies and procedures with respect to significant unusual transactions;
- Engagement of external consultants to assist in the design, implementation, documentation, and recommendations of internal controls with respect to complex accounting matters concerning business combinations, restructuring or acquisitions, and other significant unusual transactions.
- Regular technical training for our employees, mainly those involved with the financial reporting process at the Embraer level in main subsidiaries, regarding accounting practices and standards;

- Enhancement of a global training program and communication plan for all Embraer group.

**Changes in Internal Controls over Financial Reporting**

Except for the material weaknesses identified above, there was no change in our internal controls over financial reporting that occurred during the period covered by this annual report that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.



Item 16. Reserved

16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Mr. João Cox Neto, a member of our statutory audit, risks and ethics committee is an “audit committee financial expert” as defined by current SEC rules. For a discussion of the role of our audit, risks and ethics committee, see “Item 6. Directors, Senior Management and Employees—C. Board Practices—Audit, Risks and Ethics Committee.”

16B. CODE OF ETHICS

Our board of directors has adopted a Code of Ethics and Conduct applicable to our directors, officers and employees worldwide, including our principal executive officer, principal financial officer and controller. A copy of our Code of Ethics and Conduct has been filed as Exhibit 11.1 to this annual report.

16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth by category of service the aggregate fees billed for professional services rendered by our principal accountants for each of the last two fiscal years, namely: (i) KPMG Auditores Independentes Ltda. (PCAOB ID 1124 and located in São Jose dos Campos , Brazil) during the fiscal year ended December 31, 2022, and (ii) PricewaterhouseCoopers Auditores Independentes Ltda. for (PCAOB ID 1351 and located in São José dos Campos, Brazil) during the fiscal year ended December 31, 2022 and December 31, 2021:

Principal accountant fees and services	Year ended December 31,	
	2022	2021
	(in US\$ thousands)	
Audit Fees	2,993.3	3,611.6
Audit-Related Fees	449.2	1,528.1
Tax Fees	102.6	40.3
All Other Fees	1,280.1	40.4
Total	4,825.2	5,220.4

Audit Fees

Audit fees consisted of the aggregate fees in connection with (i) audit of annual financial statements prepared under Brazilian GAAP and IFRS as issued by the IASB, which are published in Brazil and United States, and performed in accordance with the International Standards on Auditing and the Public Company Accounting Oversight Board (PCAOB) auditing standards, (ii) review of quarterly financial information prepared under Brazilian GAAP and IFRS as issued by the IASB in Brazil, and (iii) audit of statutory financial statements of subsidiaries.

Audit-Related Fees

For the year ended December 31, 2022 and December 31, 2021, audit-related fees consisted mainly of the aggregate fees in connection with compliance services provided to us and some of our subsidiaries related to documents filed with regulatory and government agencies, and some other fees related to compliance services rendered for some of our subsidiaries, and services related to information technology diagnosis.

For the year ended December 31, 2021, audit-related fees also included audit services and issuance of related audit reports in connection with EVE’s transaction with the special purpose acquisition company Zanite Acquisition Corp, as well as agreed upon procedures.

**Tax Fees**

Tax fees consisted of the aggregate fees in connection with tax compliance services for some of our subsidiaries.

**All Other Fees**

All other fees refer to miscellaneous permitted compliance services rendered for some subsidiaries and services related to IT diagnosis.

For the year ended December 31, 2022, all other fees also included fees payable in connection with permitted advisory services provided to our subsidiary EVE.

**Pre-Approval Policies and Procedures**

Our board of directors approved all audit and audit-related services provided by PricewaterhouseCoopers Auditores Independentes Ltda. in 2021 and by KPMG Auditores Independentes Ltda. in 2022. Any services provided by KPMG Auditores Independentes Ltda. that are not specifically included within the scope of the audit must be pre-approved by our audit, risk and ethics committee in advance of any engagement. Pursuant to Rule 2-01 of Regulation S-X, audit committees are permitted to approve certain fees for audit-related services, tax services and other services pursuant to a *de minimis* exception prior to the completion of an audit engagement. In 2022 and 2021, none of the fees paid to PricewaterhouseCoopers Auditores Independentes Ltda. or KPMG Auditores Independentes Ltda. were approved pursuant to the *de minimis* exception.

**16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES**

None.

**16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

On December 7, 2007, our board of directors approved a share buyback program for our common shares, in compliance with CVM Resolution No. 567, for the purpose of adding value to our shareholders through the management of our capital structure. We were authorized to buy back up to an aggregate of 16,800,000 common shares, representing approximately 2.3% of our outstanding capital, which totaled 740,465,044 outstanding common shares. The acquisition of the shares was made on the B3 and the common shares bought back were kept in treasury form, and the treasury shares did not have any political or economic rights. The program was terminated on March 31, 2008. A total of 16,800,000 shares were purchased at an average price of R\$19.06 per share.

On March 10, 2016, our board of directors approved a new share buyback program for our common shares, in compliance with CVM Instruction No. 77. We were authorized to buy back up to an aggregate of 3,000,000 common shares, representing approximately 0.4% of our outstanding capital, which totaled 737,439,054 common shares outstanding on March 10, 2016. A total of 3,000,000 common shares were repurchased at an average price of R\$20.00 per share from March 17 through June 30, 2016.

On June 2, 2017, our board of directors approved a new share buyback program for our common shares, in compliance with CVM Instruction No. 77. We were authorized to buy back up to an aggregate of 3,000,000 common shares, representing approximately 0.4% of our outstanding capital, which totaled 735,752,704 common shares outstanding on June 2, 2017. A total of 3,000,000 common shares were repurchased at an average price of R\$16.13 per share from June 6 through August 29, 2017.

On November 12, 2020, our board of directors approved a new share buyback program for our common shares. We were authorized to buy back up to an aggregate of 7,000,000 common shares. Our common shares outstanding totaled 736,143,105 as of November 12, 2020 and our total of treasury shares as of this date was 4,291,938 which was based on the shareholder base of November 12, 2020. The acquisition of 7,000,000 common shares had a maximum duration, within the buyback program, of 12 months and expired on November 12, 2021.

**16F. CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANT**

Not applicable.

**16G. CORPORATE GOVERNANCE**

We are subject to NYSE corporate governance listing standards. As a foreign private issuer, the standards applicable to us are considerably different than the standards applied to U.S. listed companies. Under the NYSE rules, we are required only to: (i) have an audit committee or audit board, pursuant to an applicable exemption available to foreign private issuers, that meets certain requirements, as discussed below, (ii) provide prompt certification by our CEO of any material non-compliance with any corporate governance rules and (iii) provide a brief description of the significant differences between our corporate governance practices and the NYSE corporate governance practice required to be followed by U.S. listed companies. The discussion of the significant differences between our corporate governance practices and those required of U.S. listed companies follows below.

**Majority of Independent Directors**

The NYSE rules require that a majority of the board of directors must consist of independent directors. Independence is defined by various criteria, including the absence of a material relationship between the director and the listed company, which independence must be affirmatively determined by the board of directors. Likewise, the *Novo Mercado* Rules require that at least 20%, or at least two, whichever is greater, of the members of the board of directors of a company listed on the *Novo Mercado* segment of the B3 be independent. Independence of Board members in accordance with the *Novo Mercado* Rules is defined by criteria similar to those set forth in the NYSE rules.

The members of our board of directors declared they are independent for purposes of the *Novo Mercado* Rules, except for the representative of the Brazilian government, as a result of the government’s ownership of the “golden share,” and the two representatives of our employees. Our directors meet the qualification requirements of the Brazilian Corporate Law, the CVM requirements and the *Novo Mercado* Rules.

Brazilian Corporate Law and our bylaws require that our directors be elected by our shareholders at a general shareholders’ meeting. The election of members of our board of directors, absent a request to adopt a cumulative voting system, will be conducted under a system of slate voting whereby voting will be based on a slate of Directors and no voting will be allowed on individual candidates. According to our bylaws, the board of directors will nominate a slate for the subsequent term of office. Our board of directors is appointed by our shareholders for a two-year term, having three reserved seats as follows: (i) one acting member (and his/her alternate) to be appointed by the Brazilian government, as holder of the “golden share” and (ii) two acting members (and his/her alternate) to be appointed by our employees (one board member and his alternate will be appointed by the Employee Investment Club of the Company (*CIEMB—Clube de Investimentos dos Empregados da Embraer*), and one board member and his alternate will be appointed by the non-shareholder employees of the Company). The remaining eight acting directors are elected in accordance with the slate voting or cumulative voting rules contained in our bylaws. A person may participate in two or more different slates. Each shareholder may only vote on one slate and the slate that receives the highest number of votes shall be declared elected. For additional information on the election of our board of directors, see “Item 10. Additional Information—B. Memorandum and Articles of Association—Board of Directors—Election of Board of Directors.”

**Executive Sessions**

NYSE rules require that the non-management directors must meet at regularly scheduled executive sessions without management. Brazilian Corporate Law does not have a similar provision. According to Brazilian Corporate Law, up to one third of the members of the board of directors can be elected from management. The remaining non-management directors are not expressly required to check on management. Embraer’s board of directors’ rules of procedure provide that the external members of the board of directors (comprising members who do not hold any commercial, employment or management relationship with Embraer) shall meet on exclusive sessions to be held on the same day of and prior to the board of directors meetings to discuss the agenda of the meeting.

**Nominating/Corporate Governance Committee**

NYSE rules require that listed companies have a nominating/corporate governance committee composed entirely of independent directors and governed by a written charter addressing the committee’s required purpose and detailing its required responsibilities, which include, among other things, identifying and selecting qualified board member nominees and developing a set of corporate governance principles applicable to the company. Members of our board of directors are elected by our shareholders at a general shareholders’ meeting. Although we have not established a nominating/corporate governance committee, as we are not required to do so under applicable Brazilian law, our People and ESG Committee, among other things, performs the same duties imposed to the nominating/corporate governance committee by NYSE rules.

**Compensation Committee**

NYSE rules require that listed companies have a compensation committee composed entirely of independent directors and governed by a written charter addressing the committee’s required purpose and detailing its required responsibilities, which include, among other things, reviewing corporate goals relevant to CEO compensation, evaluating CEO performance and approving CEO compensation levels and recommending to the board non-CEO compensation, incentive-compensation and equity-based plans. Although we have not established a compensation committee, as we are not required to do so under applicable Brazilian law, our People and ESG Committee with no executive power and composed by members appointed by our board of directors, among other things, performs the same duties imposed to the compensation committee by NYSE rules. According to the Brazilian Corporate Law, the total amount available for compensation of our directors and executive officers and for profit-sharing payments to our executive officers is established by our shareholders at the annual general meeting. The board of directors is then responsible for determining the individual compensation and profit sharing of each executive officer, as well as the compensation of our board and committee members. In making these determinations, the board reviews the performance of the executive officers, including the performance of our CEO.

**Audit Committee**

NYSE rules require that listed companies have an audit committee that (i) is composed of a minimum of three independent directors who are all financially literate, (ii) complies with the SEC rules regarding audit committees for listed companies, (iii) has at least one member who has accounting or financial management expertise and (iv) is governed by a written charter addressing the committee’s required purpose and detailing its required responsibilities. We have an Audit, Risks and Ethics Committee which meets the requirements of Rule 10A-3 under the U.S. Securities Exchange Act of 1934. We do not claim an exemption from the listing standards for audit committees.

Embraer’s statutory “Audit, Risks and Ethics Committee” is composed, in its majority, of independent members of our board of directors, and by two external members. For additional information, see “Item 6. Directors, Senior Management and Employees—C. Board Practice—Audit, Risks and Ethics Committee.” Because foreign private issuers are subject to local legislation which may prohibit the full board of directors from delegating certain responsibilities to the audit committee, pursuant to Rule 10A-3, audit committees of foreign private issuers may be granted responsibilities, which may include advisory powers, with respect to such matters to the extent permitted by law. Due to certain restrictions imposed by the Brazilian Corporate Law, our Audit, Risks and Ethics Committee, unlike a U.S. audit committee, only has an “advisory” role and may only make recommendations for adoption by the full board of directors, which is responsible for the ultimate vote and final decision. For example, our Audit, Risks and Ethics Committee makes recommendations regarding the appointment of auditing firms, which are subject to a vote of the board of directors. Our Audit, Risks and Ethics Committee complies with Brazilian legal requirements (including “independent directors,” as defined by Brazilian law).

**Shareholder Approval of Equity Compensation Plans**

NYSE rules require that shareholders be given the opportunity to vote on all equity compensation plans and material revisions thereto, with limited exceptions. Under the Brazilian Corporate Law, shareholders must approve all stock option plans. In addition, any issuance of new shares that exceeds our authorized share capital is subject to shareholder approval.

**Corporate Governance Guidelines**

NYSE rules require that listed companies adopt and disclose corporate governance guidelines. In addition to being subject to the *Novo Mercado* rules that include rules on corporate governance, we have not adopted any formal corporate governance guidelines. We have adopted and observe, our Policy on Trading in Company Securities and Disclosure of Material Information and Preservation of Confidentiality that requires the public disclosure of all relevant information pursuant to guidelines set forth by the CVM, as well as insider trading rules, which, among other things, establishes black-out periods and requires insiders to inform management of all transactions involving our securities.

In November 2016, after the contribution and comments made by the CVM, the Brazilian Corporate Governance Code, which provides for corporate governance practices guidelines for publicly held companies in Brazil, was released by an institution formed by several market entities, such as the Brazilian Pension System, the Brazilian Association of Publicly-Held Companies, the Brazilian Financial and Capital Markets Association, the Brazilian Private Equity & Venture Capital Association, the Brazilian Association of Capital Markets Investors, the Association of Capital Markets Investment Analysts and Professionals, B3, BRAIN – Brazil Investments and Business, the Brazilian Institute of Corporate Governance, the Brazilian Investor Relations Institute and the Brazilian Capital Markets Institute.

In June 2017, the CVM approved a new rule, CVM Resolution No.80, which establishes that companies must inform whether they will implement the provisions set forth in the Brazilian Corporate Governance Code, or otherwise justify the reasons for non-compliance with those practices. Additionally, the B3 and the Brazilian Institute of Corporate Governance have issued guidelines for corporate governance best practices in Brazil.

**Code of Business Conduct and Ethics**

NYSE rules require that listed companies adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. Applicable Brazilian law does not have a similar requirement. However, we adopted a Code of Ethics and Conduct applicable to our officers, directors and employees worldwide, including at the subsidiary level. We believe this code substantially addresses the matters required to be addressed pursuant to the NYSE rules. A copy of our Code of Ethics and Conduct has been filed as Exhibit 11.1 to this annual report. For a further discussion of our Code of Ethics and Conduct, see “—B. Code of Ethics.” We usually review our Code of Ethics every two years. The latest version of the Code of Ethics is the 6<sup>th</sup> Edition and was approved on November 7, 2019.

**Internal Audit Function**

NYSE rules require that listed companies maintain an internal audit function to provide management and the audit committee with ongoing assessments of the company’s risk management processes and system of internal control. Our internal audit reports to the Audit, Risks and Ethics Committee, and risk management and internal controls report to the Chief Financial Officer, respectively, assuring the necessary independence and competence to assess the design of our internal controls over financial reporting, as well as to test their effectiveness as required by Section 404 of the Sarbanes-Oxley Act of 2002.

**16H. MINE SAFETY DISCLOSURE**

Not applicable.

**16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS**

Not applicable.

Part III

Item 17. FINANCIAL STATEMENTS

We have responded to Item 18 *in lieu* of responding to this item.

Item 18. FINANCIAL STATEMENTS

Our audited consolidated financial statements, together with the reports of the Independent Registered Public Accounting Firms thereon, are filed as part of this annual report and are located following the signature page hereof.

Item 19. EXHIBITS

Exhibit Number	Description
1.1	<a href="#">Bylaws of Embraer dated September 1, 2021 (English translation).*</a>
2.1	<a href="#">Form of Third Amended and Restated Deposit Agreement, among Embraer S.A., JP Morgan Chase Bank, N.A., as depositary, and the Holders from time to time of American Depositary Receipts issued thereunder, including the Form of American Depositary Receipt, dated as of 2019, incorporated herein by reference from Exhibit (a) from Embraer’s Form F-6 Registration Statement under the Securities Act of 1933 filed with the Securities and Exchange Commission (SEC File No. 333-133162) on November 18, 2019.</a>
2.2	The registrant hereby agrees to furnish to the SEC, upon request, copies of instruments defining the rights of holders of long-term debt of the registrant and its consolidated subsidiaries and for any of its unconsolidated subsidiaries for which financial statements are required to be filed.
2.3	<a href="#">Description of the registrant’s securities registered under Section 12 of the Exchange Act.*</a>
8.1	<a href="#">List of Embraer’s subsidiaries.*</a>
11.1	<a href="#">Code of Ethics and Conduct, dated November 7, 2019.*</a>
12.1	<a href="#">Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.*</a>
12.2	<a href="#">Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.*</a>
13.1	<a href="#">Section 1350 Certification of Chief Executive Officer.*</a>
13.2	<a href="#">Section 1350 Certification of Chief Financial Officer.*</a>
101.INS	XBRL Instance Document.*
101.SCH	XBRL Taxonomy Extension Schema.*

Exhibit Number	Description
101.CAL	XBRL Taxonomy Extension Scheme Calculation Linkbase.*
101.DEF	XBRL Taxonomy Extension Scheme Definition Linkbase.*
101.LAB	XBRL Taxonomy Extension Scheme Label Linkbase.*
101.PRE	XBRL Taxonomy Extension Scheme Presentation Linkbase.*

\* Filed herewith.

SIGNATURES

The Registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

EMBRAER S.A.

By: /s/ FRANCISCO GOMES NETO  
Name: Francisco Gomes Neto  
Title: President and Chief Executive Officer

By: /s/ ANTONIO CARLOS GARCIA  
Name: Antonio Carlos Garcia  
Title: Executive Vice President, Financial and Investor Relations

Date: March 30, 2023





INDEX TO THE FINANCIAL STATEMENTS

	<u>Page</u>
<a href="#"><u>Consolidated Statements of Financial Position as of December 31, 2022 and 2021</u></a>	F-7
<a href="#"><u>Consolidated Statements of Income for the Years Ended December 31, 2022, 2021 and 2020</u></a>	F-9
<a href="#"><u>Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020</u></a>	F-10
<a href="#"><u>Consolidated Statements of Changes in Shareholders' Equity for the Years Ended December 31, 2022, 2021 and 2020</u></a>	F-11
<a href="#"><u>Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020</u></a>	F-12
<a href="#"><u>Notes to the Consolidated Financial Statements</u></a>	F-13

**Report of Independent Registered Public Accounting Firm**

To the Shareholders and Board of Directors of Embraer S.A.

***Opinion on the Consolidated Financial Statements***

We have audited the accompanying consolidated statements of financial position of Embraer S.A. and subsidiaries (the “Company”) as of December 31, 2022, the related consolidated statements of income, comprehensive income, changes in shareholders’ equity, and cash flows for the year then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and the results of its operations and its cash flows for the year then ended, in conformity with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 30, 2023 expressed an adverse opinion on the effectiveness of the Company’s internal control over financial reporting.

***Basis for Opinion***

These *consolidated* financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

**Critical Audit Matters**

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

*Revenue recognition for long-term contracts in the Defense & Security segment*

As described in Notes 2.2.25.c, 3.1.1 and 29 of the consolidated financial statements, a portion of the Company’s revenue is derived from long-term contracts related to the Defense and Security segment, for which the performance obligation is satisfied over time, measured using the ratio of actual cumulative costs incurred divided by total estimated costs at completion for progress measurement. Revenue recognition related to development contracts in the Defense & Security segment is based on Management’s estimates of total costs at completion, as such costs become evident due to changes in circumstances and new events, such as contract modifications.

We identified the evaluation of the total estimated costs at completion as a component of revenue recognized from long-term contracts in the Defense & Security segment as a critical audit matter. Evaluating the Company’s determination of total estimated costs used in the initial budget and subsequent revisions and monitoring of such costs involved a high degree of subjective auditor judgment.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company’s revenue recognition process, including controls over the determination of total estimated costs to be incurred in the initial budget and subsequent revisions and monitoring of such costs. We evaluated total estimated costs at completion by:

- inspecting contracts signed between the Company and customers to evaluate the effects of the relevant contractual clauses
- analyzing underlying documentation for a sample of actual costs incurred to date
- performing a retrospective analysis comparing costs budgeted to be incurred up to December 31, 2022 with costs actually incurred through that date to assess the Company’s ability to accurately forecast.

*Impairment assessments of long-lived non-financial assets*

As described in Notes 2.2.14, 3.2 and 17 to the consolidated financial statements, the Company performs an impairment test for all cash-generating units (CGUs) with indefinite-lived intangible assets on annual basis. An analysis for CGUs with definite-lived assets is performed each quarter to evaluate whether there is any indication a CGU might be impaired to perform an impairment test. The Company applies the value in use concept, using discounted cash flow projections. When the impairment test is performed, the Company compares the carrying amounts of the Company’s CGUs with its recoverable amounts, which is determined at the higher between its value in use and fair value less cost to sell. An impairment charge is recognized when the carrying amount exceeds the recoverable amount.

We identified the evaluation of impairment assessments for long-lived non-financial assets for certain CGUs as a critical audit matter. A high degree of subjective auditor judgment and effort, including specialized skills and knowledge, were required to evaluate the significant assumptions included in the Company’s projected future cash flows used to estimate the recoverable value of the long-lived assets, specifically the revenue growth rates, gross margins, and discount rate.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company’s impairment assessment process for long-lived non-financial assets for certain CGUs, including controls over the determination of the revenue growth rates, gross margins, and discount rate used in the related projected cash flows. We evaluated the Company’s revenue growth rates, gross margins, and discount rate by considering external market and industry data. We compared the Company’s historical cash flow forecasts to actual results to assess the Company’s ability to accurately forecast. We involved valuation professionals with specialized skills and knowledge, who assisted in the evaluation of the significant assumptions, by comparing with industry data and other information available from external sources.

*Transaction with Zanite Acquisition Corporation*

As discussed in Notes 1.1.2, 2.2.6 a, 3.3 and 12.3 to the consolidated financial statements, on May 9, 2022, a business combination involving the Company, and two of its wholly owned subsidiaries Embraer Aircraft Holding, Inc. (EAH) and Eve UAM, LLC (Eve), and Zanite Acquisition Corporation (Zanite), a special purpose acquisition company, was completed through the full exchange of the shares of Eve for 220,000,000 common shares of Zanite (Zanite transaction).

We identified the evaluation of the application of accounting policy for the Zanite transaction as a critical audit matter. A high degree of complex auditor judgment was required in evaluating (1) the determination of whether the listing expenses within the Zanite transaction were within the scope of IFRS 2, (2) the determination of whether transaction costs were direct and incremental for the transaction, and (3) the initial and subsequent measurement of put options and warrants, specifically the assessment of the probability of occurrence of future contingent events that would allow investors to exercise the right to purchase the shares. Additionally, specialized skills and knowledge were required in evaluating the probability of future contingent events.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the application of accounting policy for the Zanite transaction, including listing expenses, by reading the contracts that related to the transaction. We inspected the underlying documentation for a selection of transaction costs to evaluate the Company’s determination of whether the costs were direct and incremental for the transaction. We involved valuation professionals with specialized skills and knowledge who assisted in evaluating the initial and subsequent measurement of put options and warrants issued in the transaction by evaluating the Company’s assessment of the probability of occurrence of future contingent events that would allow investors to exercise the warrants by analyzing underlying documentation.

KPMG Auditores Independentes Ltda.

We have served as the Company’s auditor since 2022

São José dos Campos, SP, Brazil  
March 30,2023

## **Report of Independent Registered Public Accounting Firm**

To the Shareholders and Board of Directors of Embraer S.A.

### ***Opinion on Internal Control Over Financial Reporting***

We have audited Embraer S.A. and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weaknesses, described below, on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial position of the Company as of December 31, 2022, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for the year then ended, and the related notes (collectively, the consolidated financial statements), and our report dated March 30, 2023 expressed an unqualified opinion on those consolidated financial statements.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in management's assessment:

The Company did not have sufficient personnel with appropriate qualifications, experience and training related to certain complex accounting matters. As a result, there was ineffective risk assessment such that certain process-level controls were not designed, implemented or operated effectively related to the accounting for the Business Combination between its subsidiary, Eve Holding (formerly EVE), and Zanite Acquisition Corporation.

These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2022 consolidated financial statements, and this report does not affect our report on those consolidated financial statements.

### ***Basis for Opinion***

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

### ***Definition and Limitations of Internal Control Over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

KPMG Auditores Independentes Ltda.

São José dos Campos, SP, Brazil  
March 30, 2023

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Embraer S.A.

***Opinion on the Financial Statements***

We have audited the consolidated statements of financial position of Embraer S.A. and its subsidiaries (the “Company”) as of December 31, 2021, and the related consolidated statements of income, comprehensive income, changes in shareholders’ equity and cash flows for each of the two years in the period ended December 31, 2021, including the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2021 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

***Basis for Opinion***

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/  
PricewaterhouseCoopers  
Auditores Independentes Ltda.  
São José dos Campos, Brazil  
March 31, 2022

We served as the Company’s auditor from 2017 to 2022.

Embraer S.A.

Consolidated Statements of Financial Position as of December 31, 2022 and 2021  
(In millions of U.S. dollar)

ASSETS	Note	12.31.2022	12.31.2021
CURRENT			
Cash and cash equivalents	5	1,816.9	1,818.3
Financial investments	6	494.4	750.8
Trade accounts receivable, net	7	202.9	189.0
Derivative financial instruments	8	5.4	0.1
Customer and commercial financing	9	50.8	9.6
Contract assets	29.b	505.4	582.3
Inventories	10	2,329.0	1,986.0
Income tax and social contribution		105.5	114.5
Other assets	11	246.3	194.3
		5,756.6	5,644.9
Assets held for sale	15	—	230.9
		5,756.6	5,875.8
NON-CURRENT			
Financial investments	6	170.0	65.6
Trade accounts receivable, net	7	2.3	—
Derivative financial instruments	8	5.7	—
Customer and commercial financing	9	50.4	22.4
Contract assets	29.b	0.7	—
Deferred income tax and social contribution	23.1	48.1	97.6
Other assets	11	135.2	128.0
Investments		12.3	4.4
Property, plant and equipment, net	14	1,649.2	1,687.6
Intangible assets, net	16	2,246.5	2,213.4
Right of use		65.1	60.2
		4,385.5	4,279.2
TOTAL ASSETS		10,142.1	10,155.0

The accompanying notes are an integral part of these consolidated financial statements.



Consolidated Statements of Financial Position as of December 31, 2022 and 2021  
(In millions of U.S. dollar)

LIABILITIES	Note	12.31.2022	12.31.2021
CURRENT			
Trade accounts payable	18	739.5	495.2
Trade accounts payable - Supplier finance	19	27.5	14.8
Lease liability	20	12.0	11.5
Loans and financing	20	308.5	574.2
Other payables	21	319.9	257.1
Contract liabilities	29.b	1,469.0	1,204.6
Derivative financial instruments	8	57.4	2.9
Taxes and payroll charges payable	22	47.2	40.4
Income tax and social contribution		107.2	71.6
Unearned income		2.6	2.5
Provision	24.1	126.5	108.9
		3,217.3	2,783.7
Liabilities held for sale	15	—	45.1
		3,217.3	2,828.8
NON-CURRENT			
Lease liability	20	59.0	52.3
Loans and financing	20	2,894.7	3,452.7
Other payables	21	51.1	60.5
Contract liabilities	29.b	495.0	308.7
Derivative financial instruments	8	40.1	3.0
Taxes and payroll charges payable	22	13.2	10.0
Income tax and social contribution	23.4	4.0	—
Deferred income tax and social contribution	23.1	370.6	505.8
Unearned income		22.6	37.7
Provision	24.1	150.2	120.5
		4,100.5	4,551.2
TOTAL LIABILITIES		7,317.8	7,380.0
SHAREHOLDERS' EQUITY			
Capital	26.1	1,551.6	1,551.6
Treasury shares	26.3	(28.2)	(28.2)
Revenue reserves		1,116.1	1,301.5
Share-based remuneration		40.3	37.4
Other comprehensive loss		(189.7)	(167.7)
Result in transactions with non controlling interest		77.4	(26.7)
		2,567.5	2,667.9
Non-controlling interests		256.8	107.1
TOTAL SHAREHOLDERS' EQUITY		2,824.3	2,775.0
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		10,142.1	10,155.0

The accompanying notes are an integral part of these consolidated financial statements.

Embraer S.A.

Consolidated Statements of Income Years Ended 2022, 2021 and 2020  
(In millions of U.S. dollar)

	Note	12.31.2022	12.31.2021	12.31.2020
REVENUE	29.a	4,540.4	4,197.2	3,771.1
Cost of sales and services		(3,628.2)	(3,537.6)	(3,293.5)
GROSS PROFIT		912.2	659.6	477.6
OPERATING INCOME (EXPENSE)				
Administrative	30	(184.9)	(153.2)	(143.4)
Selling	30	(274.4)	(226.4)	(194.0)
Expected credit (losses) reversals over financial assets and contract assets	30	(17.4)	13.0	(61.8)
Research	30	(110.0)	(43.0)	(29.8)
Other operating expense, net	31	(444.5)	(49.8)	(374.7)
Equity in associates	30	8.5	1.1	2.7
OPERATING INCOME (LOSS) BEFORE FINANCIAL RESULT		(110.5)	201.3	(323.4)
Financial income	32	121.9	74.8	29.1
Financial expenses	32	(245.4)	(274.2)	(261.8)
Foreign exchange gain (loss), net	33	28.2	25.5	(79.1)
INCOME (LOSS) BEFORE INCOME TAX		(205.8)	27.4	(635.2)
Income tax expense	23.3	2.3	(70.9)	(93.1)
LOSS FOR THE YEAR		(203.5)	(43.5)	(728.3)
Attributable to :				
Owners of Embraer		(185.4)	(44.7)	(731.9)
Non-controlling interests		(18.1)	1.2	3.6
Earnings (loss) per share - basic in US\$	28	(0.25)	(0.06)	(0.99)
Earnings (loss) per share - diluted in US\$	28	(0.25)	(0.06)	(0.99)

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Comprehensive Income Years Ended 2022, 2021 and 2020  
(In millions of U.S. dollar)

	12.31.2022	12.31.2021	12.31.2020
LOSS FOR THE YEAR	(203.5)	(43.5)	(728.3)
ITEMS THAT WILL NOT BE RECLASSIFIED THROUGH PROFIT OR LOSS			
Remeasurement of post-employment benefit	7.2	(9.5)	—
Listing expenses	135.7	—	—
ITEMS THAT MAY BE SUBSEQUENTLY RECLASSIFIED THROUGH PROFIT OR LOSS			
Financial instruments - Cash flow hedge	4.2	(8.9)	9.0
Other comprehensive income	—	—	3.5
Translation adjustments	(30.6)	(67.8)	62.1
OTHER COMPREHENSIVE INCOME (LOSS), NET OF TAX EFFECTS	116.5	(86.2)	74.6
TOTAL OF COMPREHENSIVE LOSS	(87.0)	(129.7)	(653.7)
Attributable to:			
Owners of Embraer	(207.4)	(124.2)	(669.4)
Non-controlling interests	120.4	(5.5)	15.7
	(87.0)	(129.7)	(653.7)

The accompanying notes are an integral part of these consolidated financial statements.

Embraer S.A.

Consolidated Statements of Changes in Shareholders' Equity Years Ended  
(In millions of U.S. dollar)

	Revenue reserves					Other comprehensive (loss)								
	Capital	Treasury shares	Share-based remuneration	Government grants	Legal reserve	For investment and working capital	Result in transactions with non-controlling interest	Retained earnings	Post-employment benefit	Cumulative translation adjustment	Financial instruments	Total	Non-controlling interest	Total shareholders' equity
At December 31, 2019	1,551.6	(26.5)	37.4	49.0	204.4	1,856.7	(4.2)	(31.6)	(39.2)	(110.0)	(1.5)	3,486.1	96.9	3,583.0
Loss for the year	—	—	—	—	—	—	—	(731.9)	—	—	—	(731.9)	3.6	(728.3)
Translation adjustments	—	—	—	—	—	—	—	—	—	53.5	—	53.5	8.6	62.1
Financial instruments - Cash flow hedge	—	—	—	—	—	—	—	—	—	—	9.0	9.0	—	9.0
Other comprehensive income	—	—	—	—	—	—	—	—	—	—	—	—	3.5	3.5
Total of comprehensive loss	—	—	—	—	—	—	—	(731.9)	—	53.5	9.0	(669.4)	15.7	(653.7)
Stock options grants exercised	—	0.8	—	—	—	—	—	(0.4)	—	—	—	0.4	—	0.4
PUT options of non-controlling interest	—	—	—	—	—	—	(22.2)	—	—	—	—	(22.2)	—	(22.2)
Allocation of profits:														
Absorption of reserves by loss for the year	—	—	—	—	—	(732.3)	—	732.3	—	—	—	—	—	—
At December 31, 2020	1,551.6	(25.7)	37.4	49.0	204.4	1,124.4	(26.4)	(31.6)	(39.2)	(56.5)	7.5	2,794.9	112.6	2,907.5
Loss for the year	—	—	—	—	—	—	—	(44.7)	—	—	—	(44.7)	1.2	(43.5)
Actuarial loss on post employment benefit obligation	—	—	—	—	—	—	—	—	(9.5)	—	—	(9.5)	—	(9.5)
Translation adjustments	—	—	—	—	—	—	—	—	—	(61.1)	—	(61.1)	(6.7)	(67.8)
Financial instruments - Cash flow hedge	—	—	—	—	—	—	—	—	—	—	(8.9)	(8.9)	—	(8.9)
Total of comprehensive loss	—	—	—	—	—	—	—	(44.7)	(9.5)	(61.1)	(8.9)	(124.2)	(5.5)	(129.7)
Repurchases of common shares	—	(2.5)	—	—	—	—	—	—	—	—	—	(2.5)	—	(2.5)
PUT options of non-controlling interest	—	—	—	—	—	—	(0.3)	—	—	—	—	(0.3)	—	(0.3)
Allocation of profits:														
Absorption of reserves by loss for the year	—	—	—	—	—	(76.3)	—	76.3	—	—	—	—	—	—



Consolidated Statements of Cash Flows Years Ended 2022, 2021 and 2020  
(In millions of U.S. dollar)

	Note	12.31.2022	12.31.2021	12.31.2020
<b>OPERATING ACTIVITIES</b>				
Loss for the year		(203.5)	(43.5)	(728.3)
<b>ADJUSTMENT TO NET INCOME FOR ITEMS NOT AFFECTING CASH</b>				
Depreciation of property plant and equipment		106.6	122.0	163.6
Realization of government grants		(0.5)	(3.0)	(4.6)
Amortization of intangible assets	16	103.7	86.6	128.5
Realization of contribution from suppliers	16	(21.1)	(10.1)	(8.3)
EVE transaction	12.3	239.2	—	—
Gain and loss on shareholding		(1.4)	—	—
Loss (reversal) for inventory obsolescence		(28.1)	(55.7)	16.6
Adjustment to fair value, inventory, property plant and equipment and intangible		11.6	(20.3)	4.2
Adjustment to fair value - Financial investments		(1.7)	(39.1)	4.1
Expect credit losses (reversal) and receivables written-off		17.4	(13.0)	37.4
Losses on fixed assets disposal		41.1	31.6	15.2
Deferred income tax and social contribution	23.3	(87.5)	38.4	104.7
Accrued interest		201.0	227.6	197.8
Interest on marketable securities, net		(9.8)	(2.4)	(0.4)
Share-based remuneration		2.9	—	—
Equity in associates gains and losses		(8.5)	(1.1)	(2.7)
Foreign exchange gain (loss), net	33	(24.8)	(21.4)	77.1
Mark to market of the residual value guarantees		—	(51.5)	(9.7)
Other provisions		38.7	32.3	23.6
Non-controlling interests		18.1	(1.5)	(3.2)
<b>CHANGES IN ASSETS</b>				
Financial investments		181.3	(41.7)	(513.0)
Derivative financial instruments		(5.6)	5.4	(2.1)
Accounts receivable		(1.1)	13.9	42.6
Contract assets		75.2	(119.3)	33.9
Customer and commercial financing		(87.5)	11.4	(38.4)
Inventories		(294.3)	474.4	(34.6)
Other assets		10.5	(40.4)	(73.2)
<b>CHANGES IN LIABILITIES</b>				
Trade accounts payable		244.9	(10.0)	(314.0)
Trade accounts payable - Supplier finance		12.7	14.7	—
Other payables		(3.5)	(39.1)	(52.5)
Income tax and social contribution paid		(50.2)	(22.5)	(86.9)
Interest paid		(183.7)	(207.4)	(173.2)
Contract liabilities		450.8	216.8	(134.5)
Taxes and payroll charges payable		39.1	24.4	48.7
Financial guarantees		(15.7)	(55.0)	(5.4)
Unearned income		(15.0)	13.8	(3.2)
<b>NET CASH GENERATED (USED) IN OPERATING ACTIVITIES</b>		<b>751.3</b>	<b>515.3</b>	<b>(1,290.2)</b>
<b>INVESTING ACTIVITIES</b>				
Acquisition of property, plant and equipment	14	(136.2)	(101.7)	(102.3)
Proceeds from sale of property, plant and equipment	14	5.4	3.6	10.7
Additions to intangible assets	16	(119.8)	(166.5)	(121.4)
Additions investments in subsidiaries and affiliates		(0.4)	(0.8)	(1.8)
Investment sale		158.2	—	—
Acquisition of subsidiary, net of cash acquired		—	—	(4.1)
Acquisition of non controlling interest		—	(3.8)	—
Financial investments		(17.6)	135.9	113.1
Dividends received		0.9	1.7	0.5
<b>NET CASH USED IN INVESTING ACTIVITIES</b>		<b>(109.5)</b>	<b>(131.6)</b>	<b>(105.3)</b>
<b>FINANCING ACTIVITIES</b>				
Proceeds from borrowings		145.4	60.4	2,079.1
Repayment of borrowings		(961.8)	(478.2)	(1,061.8)
Proceeds from stock options exercised		—	—	0.4
Receipt in the offering of subsidiary shares		207.0	—	—
Costs in the offering of subsidiary shares		(47.9)	—	—
Repurchases of common shares		—	(2.5)	—
Lease payments		(11.9)	(10.3)	(9.0)
<b>NET CASH GENERATED (USED) IN FINANCING ACTIVITIES</b>		<b>(669.2)</b>	<b>(430.6)</b>	<b>1,008.7</b>
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>		<b>(27.4)</b>	<b>(46.9)</b>	<b>(386.8)</b>
Effects of exchange rate changes on cash and cash equivalents		4.4	2.4	(37.8)
Cash and cash equivalents at the beginning of the period		1,838.6	1,883.1	2,307.7
<b>CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD</b>		<b>1,815.6</b>	<b>1,838.6</b>	<b>1,883.1</b>
Included in cash and cash equivalents per the statements of financial position		1,816.9	1,818.3	1,883.1
Included in assets held for sale - Evora Companies		—	20.3	—
Including cash overdraft classified as liability		(1.3)	—	—

The accompanying notes are an integral part of these consolidated financial statements.

1. Operations

Embraer S.A. (“Embraer” or “the Company”) is a publicly held company incorporated under the laws of the Federative Republic of Brazil (“Brazil”) with headquarters in São José dos Campos, State of São Paulo. The corporate purpose of the Company is:

- (i) To design, build and market aircraft and aerospace materials and related accessories, components and equipment.
- (ii) To perform and carry out technical activities related to the manufacturing and servicing of aerospace materials.
- (iii) To contribute to the training of technical personnel as necessary for the aerospace industry.
- (iv) To engage in and provide services for other technological, industrial, commercial and service activities related to the aerospace industry.
- (v) To design, build and trade in equipment, materials, systems, software, accessories and components for the defense, security and energy industries, as well as promote and carry out technical activities related to the manufacturing and servicing thereof.
- (vi) To conduct other technological, manufacturing, trading and services activities related to the defense, security and energy industries.

The Company’s shares (B3: EMBR3, NYSE: ERJ) are listed in the enhanced corporate governance segment of the Stock Exchange in Brazil (“B3”), known as the New Market (“Novo Mercado”). Embraer S.A. has also issued American Depositary Shares (evidenced by American Depositary Receipts - ADRs) which are registered with the Securities and Exchange Commission (“SEC”) and listed on the New York Stock Exchange (“NYSE”).

These financial statements were authorized by Management on March 30, 2023.

1.1 Significant events in the fiscal year and its impacts in the consolidated financial statements

1.1.1 Impacts of the COVID-19 pandemic

The updated status and related impacts on the Company’s segments are detailed below.

*Defense & Security*

In the last quarter of 2022, the Defense & Security segment continues to be impacted by the COVID-19 global pandemic, in terms of operations and supply chain. The vendors’ level of production has shown recovery, but are still below the pre-pandemic levels, jeopardizing their ability to deliver parts and goods on time. Import and export logistics are still suffering with longer cycles and higher costs. The Company has taken actions to overcome the challenges imposed by the COVID-19 pandemic, and to minimize its impacts on Defense deliveries, and is following the sanitary measures to fight the COVID-19.

On October 21, 2022, the Company reached a new contractual agreement with the Brazilian Air Force, reducing the total number of KC-390 Millennium aircraft to be acquired from 22 to 19, with deliveries scheduled through 2034. The negotiation was successfully concluded between the parties, preserving the Company’s cash flow, ensuring the economic and financial viability of the project. The negotiation was successfully concluded between the parties and does not allow further reductions by the Brazilian Air Force.

*Executive Aviation*

During 2022, the Executive Aviation segment continued its recovery trajectory in the face of the post-pandemic scenario. The effect of COVID-19 and its variants upon demand did not have significant negative impacts during the year and the main risks to market growth lie in the possibility of discontinuities in the supply of some parts and supplies to fleet maintenance and the manufacture of new aircraft.

On the date of this report, the production lines of our Executive Aviation products are able to maintain planned supply levels without further shortages. The Company continue to oversee risks and control the supply chain, accommodating demand to avoid obstacles that may yet arise from this global crisis.

In 2022 no postponements or cancellations of orders were observed. The Company delivered a total of 102 executive jets in 2022, thus achieving a 9.6% increase over the volume delivered in the previous year.

*Commercial Aviation*

In the Commercial Aviation segment, the extensive traffic disruption caused by COVID-19 affected our supplier’s and customer’s operations throughout the world, similar to the effects observed in the market worldwide. As a result of COVID-19, industrial sector is suffering impacts related to the supply chain, which has affected Embraer in the same way. In 2022, the most significant impacts were attributable by supplier delays.

*Services & Support*

Embraer Services & Support is a segment focused on providing parts, flight hour solutions, maintenance, training, and engineering products and services for Embraer operators in the Commercial, Executive, Defense & Security segments.

Embraer has maintained positive results through its ability to support customer needs, convert commercial opportunities into new businesses, and contract renewals as the market had gradually and cautiously been recovering its activities.

The slight year-over-year revenue improvement comes despite ongoing challenges in the aerospace industry as a reflection of the pandemic. The most critical of these are worldwide materials shortages and supply chain constraints which are affecting availability of spare parts inventories, delaying repair turnaround time, and increasing the quantity of back-ordered items.

The trend is the increase in international and domestic commercial flights. In the executive jet aviation, the numbers are already higher than pre-pandemic period.

**1.1.2 Completion of transaction with Zanite Acquisition Corporation and listing of Eve on the NYSE**

On May 9, 2022, in accordance with terms of the Business Combination Agreement entered into on December 21, 2021, between Embraer, two of its wholly owned subsidiaries Embraer Aircraft Holding, Inc. (“EAH”) and Eve UAM, LLC (“Eve”), and Zanite Acquisition Corp. (“Zanite”), a Special Purpose Acquisition Company – SPAC incorporated in 2020, the closing of the Business Combination occurred, pursuant to which Zanite issued 220,000,000 shares to EAH in exchange for the transfer by EAH to Zanite of all of the issued and outstanding equity interests of Eve. As a result, Eve is now a wholly owned subsidiary of Zanite, which has changed its name to Eve Holding, Inc. Eve Holding, Inc. (EVEX) is an emerging growth company and non-accelerated filer with securities listed on the NYSE. Embraer holds 90.2% of EVEX ownership interests upon the completion of Business Combination. Further details in relation to the accounting impacts of Business Combination process to Embraer consolidated financial statements are presented on Note 12.3. In the 4th quarter of 2022, due to the new warrants for PIPE investors, as well as the exercise of some warrants, EAH’s final interest on December 31, 2022, decreased to 89.7%.



**1.1.3 Completion of the divestment plan related to the Évora (Portugal) industrial facilities**

The Company concluded on May 2, 2022, the sale of all the shares of the subsidiaries Embraer Portugal Estruturas Metálicas S.A. and Embraer Portugal Estruturas em Compósitos S.A. to Aernnova Aerospace, SAU, based on the terms of the binding agreement signed on January 11, 2022. The final adjusted price for the transaction was US\$ 175.0, resulting in a cash inflow of US\$ 158.2 presented as investing activities in the statements of the cash flows. Further details are presented in Note 15.

**1.1.4 Russia - Ukraine conflict**

The Company has suspended the supply of parts, maintenance and technical support services for certain customers to comply with the sanctions imposed on Russia, Belarus and certain regions of Ukraine by laws of jurisdictions to which Embraer is subject.

The Company continues to monitor its supply chain in view of the uncertainties related to the conflict between Russia and Ukraine and the challenges of the current macroeconomic scenario, as well as the impacts of inflation, gas and energy prices. Embraer will continue to monitor the evolution and developments of the conflict and its impacts on the Company’s operations, customers and suppliers. The Company has no material assets or liabilities exposed to Russia, Belarus, or Ukraine as of December 31, 2022, therefore no relevant accounting impact was identified at the date of authorization for issuance of these consolidated financial statements.

**1.1.5 Pause in the E175-E2 jet development program**

The Company’s Board of Directors approved on February 18, 2022, a three-year pause in its E175-E2 jet development program. As in previous years, the re-programing of activities is associated with the ongoing US mainline scope clause discussions with the pilot unions regarding the maximum take-off weight (MTOW) limitation for aircraft with up to 76 seats, together with current global market conditions for commercial aviation and the continuing interest in the current E175 jet in the US market.

The Company expects to resume the program development activities following the aforementioned period, which will result in a re-programming of the aircraft entry into service between 2027 and 2028.

The impacts on the future cash flows of the E2 Platform cash-generating unit (CGU) related to the pause in the E175-E2 jet development program were considered by Management in the impairment test of this CGU on December 31, 2022, and no impairment losses were identified. In addition, there were no impairment indicators in this CGU for the year ended on December 31, 2022 (Note17).

**1.1.6 Tender Offer**

On March 1, 2022, under a Tender Offer, Embraer S.A. repurchased and canceled US\$ 287.8 in principal amount of notes issued, in which US\$ 59.2 are notes issued by Embraer S.A. maturing in 2022 with an interest of 5.15% p.a. and US\$ 228.6 are notes issued by Embraer Overseas Limited and guaranteed by Embraer S.A., with an interest of 5.696% p.a., and maturing in 2023.

In 2022, the Senior unsecured notes repurchased were derecognized. The Company recognizes as a financial expense the difference between the carrying amount of the repurchased portion (amortized cost) and the amount paid, totaling US\$ 12.1 (Note 32).

**1.1.7 Investment agreement for non-controlling interest in XMobots**

On September 16, 2022, the Company signed an investment agreement for non-controlling interest in XMobots, a company specializes in the development and manufacture of high-performance VTOL drones and related technologies.

By the application of resources in XMobots, the Company holds, in the amount of US\$ 3.8 million (R\$ 20 million), 158,508 class A3 preferred shares, convertible into common shares and with voting rights, representing 10.24% of the voting and total share capital of XMobots.

The closing term of the transaction between the parties was signed on November 8, 2022.

2. Presentation of the Financial Statements and Accounting Practices

2.1 Presentation and preparation of the financial statements

The consolidated financial statements have been prepared in conformity with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”) which include (i) IFRS, (ii) the International Accounting Standard (“IAS”), and (iii) the International Financial Reporting Interpretations Committee (“IFRIC”).

2.1.1 Basis of preparation

These consolidated financial statements have been prepared under the historical cost convention, except when the account requires different criteria and adjusted for assets and liabilities measured as at fair value in subsequent measurement, when applicable.

The preparation of financial statements requires the use of certain estimates. It also requires the management of the Company to exercise judgment in the process of applying the Company’s accounting policies. These consolidated financial statements include accounting estimates for certain assets, liabilities and other transactions.

The areas which involve higher degree of judgments or complexities, or assumptions and significant estimates to the consolidated financial statements, are disclosed in Note 3.

2.1.2 Consolidation

These consolidated financial statements include the balances as of December 31, 2022 of the Company and all subsidiaries in which the Company has control, directly or indirectly.

All accounts and balances arising from transactions between controlled entities are eliminated during the consolidation process. Unrealized profits generated by intercompany transactions are eliminated in the consolidation process, both for sales operations from subsidiaries to the Parent Company (upstream transactions) or from the Parent Company to subsidiaries (downstream transactions).

Subsidiaries are entities over which the Company has control, which means exposure and rights to variable returns, the ability to use its power over these entities to affect those returns and ability to manage its relevant activities. The control assessment considers, in addition to who holds the majority of voting rights, the shareholders agreement in place between the Company and other non-controlling shareholders with voting rights, any rights arising from other contractual agreements and potential voting power. Subsidiaries are fully consolidated from the date on which control is acquired until the date in which the Company losses control.

Balances associated to the non-controlling shareholders with remaining interest over subsidiaries are presented as non-controlling interest in the Company’s statements of income and shareholders’ equity. The accounting policies of the subsidiaries are consistent with the policies adopted by the Company.

<b>2.1.3 Corporate structure</b>			
Below is presented information regarding the consolidated subsidiaries:			
As of December 31, 2022:			
<b>Entity</b>	<b>Interest Embraer</b>	<b>Country</b>	<b>Core activities</b>
<b>Airholding S.A.</b>	<b>100%</b>	<b>Portugal</b>	<b>Coordinates investments in subsidiaries in Portugal</b>
OGMA - Indústria Aeronáutica de Portugal S.A.	65%	Portugal	Aviation maintenance and production
<b>ELEB Equipamentos Ltda.</b>	<b>100%</b>	<b>Brazil</b>	<b>Sale of hydraulic and mechanical equipment for the aviation industry</b>
<b>Embraer Aircraft Holding, Inc.</b>	<b>100%</b>	<b>USA</b>	<b>Concentrates corporate activities in the USA</b>
Embraer Aircraft Customer Services, LLC	100%	USA	Sale of spare parts and support services in North America and the Caribbean
Embraer Aircraft Maintenance Services, LLC	100%	USA	Maintenance of aircraft and components
Embraer Business Innovation Center, Inc.	100%	USA	R&D of technological innovations in the aerospace sector and related areas
Embraer Executive Jet Services, LLC	100%	USA	After sale support and aircraft maintenance
Embraer Executive Aircraft, Inc.	100%	USA	Final assembly and delivery of executive jets
Embraer Engineering & Technology Center USA, Inc.	100%	USA	Engineering services related to aircraft research and development
Embraer Defense and Security, Inc.	100%	USA	Supply of Super Tucano aircraft to the American Air Force (LAS)
Embraer CAE Training Services, LLC	51%	USA	Pilot, mechanic and crew training
EVE Holding, Inc	89.7%	USA	Publicly held company, with shares traded on the NYSE, which owns the full interest of EVE UAM, LLC.
EVE UAM, LLC.			Development, design, manufacture, marketing, certification and support of aircraft and urban air traffic management solutions related to urban air mobility.
EVE Soluções De Mobilidade Aérea Urbana Ltda.	100%	Brazil	Eve subsidiary with operations in Brazil.
<b>Embraer Aviation Europe – EAE</b>	<b>100%</b>	<b>France</b>	<b>Concentrates corporate activities abroad, specifically Europe</b>
Embraer Aviation International – EAI	100%	France	Sale of parts and after sale services in Europe, Africa and the Middle East
Embraer Europe SARL	100%	France	Commercial representation of the Company in Europe, Africa and the Middle East
<b>Embraer Defesa e Segurança Participações S.A.</b>	<b>100%</b>	<b>Brazil</b>	<b>Coordinates investments in the Defense &amp; Security segments</b>
Atech - Negócios em Tecnologias S.A.	100%	Brazil	Development and control, communications, computer and intelligence services
Visiona Tecnologia Espacial S.A.	51%	Brazil	Supply and development of satellite solutions
Visiona Internacional B.V.	100%	Netherlands	International subsidiary of Visiona
Tempest Serviços de Informática S.A.	61%	Brazil	Research, development and services in the areas of Information Technology, Information Security and Intelligence
Tempest Security Intelligence Limited	100%	UK	Retail trade of computer products, maintenance, repair and related services
EZS Informática S.A.	100%	Brazil	Retail trade of computer products, maintenance, repair and related services
ID IT Tecnologia da Informação Ltda.	100%	Brazil	Development and licensing of customizable computer programs, information technology consulting, data processing, application service providers and internet hosting services
<b>Embraer GPX Ltda.</b>	<b>100%</b>	<b>Brazil</b>	<b>No operations</b>
<b>Embraer Netherlands Finance B.V.</b>	<b>100%</b>	<b>Netherlands</b>	<b>Financial operations raising and investing funds of the Embraer Group</b>
Embraer Netherlands B.V.	100%	Netherlands	Concentrates corporate activities in Europe for leasing and selling used aircraft
Embraer Asia Pacific PTE. Ltd.	100%	Singapore	Sale of spare parts and support services in Asia
Embraer Portugal S.A.	100%	Portugal	Coordinates investments and economic activities in subsidiaries in Portugal
Embraer (China) Aircraft Technical Services Co. Ltd.	100%	China	Sale of spare parts and support services in China
EZ Air Interior Limited	50%	Ireland	Fabrication of interiors for commercial aircraft
<b>Embraer Overseas Ltd.</b>	<b>100%</b>	<b>Cayman Islands</b>	<b>Financial operations raising and investing funds of the Embraer Group</b>
<b>Embraer Spain Holding Co. SL</b>	<b>100%</b>	<b>Spain</b>	<b>Concentrates corporate activities abroad</b>
ECC Investment Switzerland AG	100%	Switzerland	Coordinates investments in subsidiaries abroad
ECC Insurance & Financial Company Limited.	100%	Cayman Islands	Covers financial guarantees offered in aircraft sale structuring
Embraer Finance Ltd.	100%	Cayman Islands	Support to the Company in structuring specific operations
<b>Fundo de Investimento em Participações Embraer Ventures</b>	<b>100%</b>	<b>Brazil</b>	<b>Exclusive fund created with the objective of technological and financial aggregation based on investment and support to small and medium-sized companies focused on disruptive innovation in areas related to the A&amp;D sector.</b>
<b>Yaborã Indústria Aeronáutica S.A.</b>	<b>100%</b>	<b>Brazil</b>	<b>Concentrates the production and commercialization of Commercial Aviation</b>

Embraer S.A.

Notes to the Consolidated Financial Statements  
In millions of U.S. dollar, unless otherwise stated

As of December 31, 2021:			
Entity	Interest Embraer	Country	Core activities
<b>Airholding S.A.</b>	<b>100%</b>	<b>Portugal</b>	<b>Coordinates investments in subsidiaries in Portugal</b>
OGMA - Indústria Aeronáutica de Portugal S.A.	65%	Portugal	Aviation maintenance and production
<b>Yaborã Indústria Aeronáutica S.A.</b>	<b>100%</b>	<b>Brazil</b>	<b>Concentrates the production and commercialization of Commercial Aviation</b>
ELEB – Equipamentos Ltda.	100%	Brazil	Sale of hydraulic and mechanical equipment for the aviation industry
Embraer Overseas Ltd.	100%	Cayman Islands	Financial operations raising and investing funds of the Embraer Group
Embraer Netherlands Finance B.V.	100%	Netherlands	Financial operations raising and investing funds of the Embraer Group
Embraer Netherlands B.V.			Concentrates corporate activities in Europe for leasing and selling used aircraft
Embraer Asia Pacific PTE. Ltd.	100%	Netherlands	Sale of spare parts and support services in Asia
Embraer Portugal S.A.	100%	Singapore	Sale of spare parts and support services in Asia
	100%	Portugal	Coordinates investments and economic activities in subsidiaries in Portugal
Embraer - Portugal Estruturas Metálicas S.A	100%	Portugal	Fabrication of steel parts and products for the aviation industry
Embraer - Portugal Estruturas em Compósitos S.A.	100%	Portugal	Fabrication of composite parts and products for the aviation industry
Embraer (China) Aircraft Technical Services Co. Ltd.	100%	Portugal	Fabrication of composite parts and products for the aviation industry
EZ Air Interior Limited	50%	China	Sale of spare parts and support services in China
<b>Embraer Aircraft Holding Inc.</b>	<b>100%</b>	<b>Ireland</b>	<b>Fabrication of interiors for commercial aircraft</b>
Embraer Aircraft Customer Services, Inc.	100%	EUA	Sale of spare parts and support services in North America and the Caribbean
Embraer Aircraft Maintenance Services Inc.	100%	EUA	Sale of spare parts and support services in North America and the Caribbean
Embraer Business Innovation Center, Inc.	100%	EUA	Maintenance of aircraft and components
Embraer Executive Jet Services, LLC	100%	EUA	R&D of technological innovations in the aerospace sector and related areas
Embraer Executive Aircraft, Inc.	100%	EUA	After sale support and aircraft maintenance
Embraer Engineering & Technology Center USA, Inc.	100%	EUA	Final assembly and delivery of executive jets
Embraer Defense and Security Inc.	100%	EUA	Engineering services related to aircraft research and development
Embraer CAE Training Services LLC	51%	EUA	Supply of Super Tucano aircraft to the American Air Force (LAS)
Embraer Solutions, LLC	100%	EUA	Pilot, mechanic and crew training
EVE UAM, LLC.			Sale of spare parts and support services for the Executive Aviation
	100%	EUA	Aircraft development, design, manufacturing, selling, certification and support and solutions for urban air traffic management, related to Urban Air Mobility (UAM)
EVE Soluções De Mobilidade Aérea Urbana Ltda.	100%	EUA	Aircraft development, design, manufacturing, selling, certification and support and solutions for urban air traffic management, related to Urban Air Mobility (UAM)
<b>Embraer Aviation Europe - EAE</b>	<b>100%</b>	<b>Brazil</b>	<b>Eve’s subsidiary with operations in Brazil</b>
Embraer Aviation International - EAI	100%	France	<b>Concentrates corporate activities abroad, specifically Europe</b>
Embraer Aviation France - EAF	100%	France	Sale of parts and after sale services in Europe, Africa and the Middle East
Embraer Europe SARL			Sale of spare parts and support services in Europe
	100%	France	Commercial representation of the Company in Europe, Africa and the Middle East
<b>Embraer Defesa &amp; Segurança Participações S.A.</b>	<b>100%</b>	<b>Brazil</b>	<b>Coordinates investments in the Defense &amp; Security segments</b>
Atech - Negócios em Tecnologias S.A.	100%	Brazil	Development and control, communications, computer and intelligence services
Visiona Tecnologia Espacial S.A.	51%	Brazil	Supply and development of satellite solutions
Visiona Internacional B.V.	100%	Netherlands	International subsidiary of Visiona
Tempest Serviços de Informática S.A.			Research, development and services in the areas of Information Technology, Information Security and Intelligence
	61%	Brazil	Retail trade of computer products, maintenance, repair and related services
Tempest Security Intelligence Limited	100%	UK	Retail trade of computer products, maintenance, repair and related services
EZS Informática S.A.			Retail trade of computer products, maintenance, repair and related services
	100%	Brazil	Retail trade of computer products, maintenance, repair and related services
ID IT Tecnologia da Informação Ltda.			Development and licensing of customizable computer programs, information technology consulting, data processing, application service providers and internet hosting services
	99%	Brazil	Development and licensing of customizable computer programs, information technology consulting, data processing, application service providers and internet hosting services
<b>Embraer GPX Ltda</b>	<b>100%</b>	<b>Brazil</b>	<b>No operations</b>
<b>Embraer Spain Holding Co. SL</b>	<b>100%</b>	<b>Spain</b>	<b>Concentrates corporate activities abroad</b>
ECC Investment Switzerland AG	100%	Switzerland	Coordinates investments in subsidiaries abroad
ECC Insurance & Financial Company Limited.	100%	Cayman Islands	Covers financial guarantees offered in aircraft sale structuring
Embraer Finance Ltd.	100%	Cayman Islands	Support to the Company in structuring specific operations
<b>Fundo de Investimento em Participações Embraer Ventures</b>			<b>Exclusive fund created with the objective of technological and financial aggregation based on investment and support to small and medium-sized companies focused on disruptive innovation in areas related to the A&amp;D sector.</b>
	<b>100%</b>	<b>Brazil</b>	<b>Exclusive fund created with the objective of technological and financial aggregation based on investment and support to small and medium-sized companies focused on disruptive innovation in areas related to the A&amp;D sector.</b>

2.1.4 Associates

Águas Azuis Construção Naval SPE Ltda. – Special purpose entity established by Embraer S.A., Atech - Negócios em Tecnologia S.A. and Thyssenkrup Marine Systems GmbH with the purpose of execution of Frigate Class Tamandaré Program signed with Brazilian Navy (supply of four military vessels of high technological complexity), with total interest of 25% by Embraer. The transactions performed by this entity are recognized using the equity method and are presented as operating income of the Company.

Equity Investment Fund (“FIP”) Aeroespacial – Equity investment fund established with BNDES, FINEP and *Desenvolve SP*, created with the aim of strengthening the aerospace, aviation, defense and security supply chain and promoting integration of systems related to these sectors through support for small and medium enterprises. The investment fund is not consolidated in the Company’s financial statements, its results are recorded using the equity method and presented as part of the operating income based in the Company’s equity interest of 34%.

**2.2 Summary of significant accounting policies**

We present below the significant accounting policies adopted in the preparation of these consolidated financial statements.

**2.2.1 Functional and presentation currency**

A Company’s functional currency is the currency of the primary economic environment in which it operates and is the currency that best reflects company’s business and operations. Based on our analysis, management has concluded that the U.S. dollar (“US\$” or “Dollar”) is the Company’s functional currency, of the following indicators:

- Currency that most influences the prices of goods and services; this is the currency in which the sales price of its goods and services are expressed and settled.
- Currency of the country whose competitive forces and regulations most influence the Company’s business.
- Currency that most influences the costs of providing goods or services, i.e., the currency in which the Company’s costs are normally expressed and settled.
- Currency in which the Company largely obtains funds for financial operations and in which it normally receives for its sales and accumulates cash.

**2.2.2 Transactions in foreign currencies**

Transactions in other currencies (other than the functional currency) are translated into the functional currency at the foreign exchange rates in force on the transaction dates. The amounts in other currencies are updated at the exchange rates of the reporting dates. Foreign exchange gains and losses resulting from this translation (in relation to monetary assets and liabilities indexed in currencies other than the functional currency) are recognized in the consolidated statements of income as foreign exchange gain (loss), net. Customer advances and advances to suppliers for goods and/ or services in foreign currencies are translated to the Company’s functional currency in the transaction date and no subsequent translation is recognized.

The results and financial position of foreign subsidiaries that have a functional currency different from the Company’s functional currency are translated into the functional currency as follows:

- Assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statements of financial position.
- Income and expenses for each statement of income and statements of comprehensive income are translated at monthly average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions), and
- All resulting exchange differences are recognized in the statements of comprehensive income in the line of translation adjustments.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate, with foreign exchange gain (loss) being recognized as other comprehensive income.

**2.2.3 Financial Instruments**

**a) Financial assets**

**a.1) Recognition and measurement**

Financial assets are recognized when the Company becomes part of the instrument’s contractual arrangements. They are initially measured at fair value, plus transaction costs attributable to their acquisition or issuance, except for instruments measured at fair value through profit or loss, for which these costs are recognized immediately in the consolidated statements of income.

The Company classifies its financial assets under the following categories: (i) measured as at amortized cost, (ii) measured as at fair value through other comprehensive income and (iii) measured at fair value through profit or loss.

Financial assets are not reclassified subsequent to initial recognition, unless the Company modifies the business model for the management of these financial assets, in which case all affected assets are reclassified on the first day of the new business model.

Financial assets are derecognized when the contractual rights to receive cash flows from the asset expires or are transferred in a transaction in which substantially all the risks and benefits of ownership of the financial asset are transferred by the Company.

**a.2) Classification and subsequent measurement**

The Company classifies financial assets as measured at amortized cost only if both criteria are met:

- The asset is held within a business model whose objective is to collect the contractual cash flows; and
- The contractual terms give rise to cash flows, at specific dates, which relate only to the payments of principal and interest.

Financial assets measured as at amortized cost by the Company includes cash and cash equivalents, certain financial investments, trade accounts receivable, customer and commercial financing, guarantee deposits and other financial assets.

Financial assets measured as at fair value through other comprehensive income (FVOCI) are assets held within a business model whose purpose is achieved both through the receipt of contractual cash flows and the sale of financial assets, as well as their contractual terms generate, on specific dates, cash flows that are related only to payments of principal and interest.

Changes in fair value of FVOCI financial assets are recognized in other comprehensive income (loss) in the consolidated changes in shareholders’ equity. Gains or losses due to impairment and exchange variation, including interest calculated using the effective interest method, are recognized in the consolidated statements of income as financial expense, net, except for the exchange variation recognized as foreign exchange gain (loss), net. In the derecognition of these financial assets, any amounts accumulated in the consolidated statements of other comprehensive income are reclassified to the consolidated statements of income.

All financial assets not classified by the Company as measured at amortized cost or as FVOCI are classified as at fair value through profit or loss (FVTPL). These assets include financial assets held for active and frequent trading and derivative financial instruments.

(i) *Business model evaluation*

The Company evaluates the business model objective for the management of financial assets as part of the accounting classification of the instruments. The factors considered in this evaluation are:

- The current financial policy and the objectives set for portfolio management, which includes assessing whether the strategy focuses on contractual interest income, maintaining a determined interest rate profile, the relationship between the duration of the financial assets and related liabilities, expected cash outflows, or the collection of cash flows through the sale of underlying financial assets.
- How portfolio performance is assessed and reported to Management.
- Risks that affect the performance of the business model and how they are managed.
- The frequency, volume and timing of assets sales in prior periods, the reasons for such transactions and future expectations.

(ii) *Evaluation if contractual cash flows are only principal and interest payments*

To assess whether contractual cash flows are only principal and interest payments, the principal is defined as the fair value of the financial asset at the initial recognition, and interest as a consideration for the time value of money, the credit risk associated with value of principal outstanding during contractual terms, other risks and general costs of loans, as well as the profit margin in the transaction.

This evaluation is made by considering the contractual terms of the financial assets, which includes, in addition to evaluating whether the contractual cash flows are only principal and interest payments, the existence of terms that could change the timing or value of the contractual cash flows which would not meet the definition, including: contingent events, terms that can adjust contractual rates, prepayment and extension of due dates, and terms that limit access to cash flows of specific assets.

**b) Financial liabilities**

The Company classifies its financial liabilities in the following categories: (i) measured at amortized cost and (ii) fair value through profit or loss. A financial liability is measured at fair value through profit or loss if it is held for trading or is a derivative financial instrument, and its changes, including interest, are recognized in the consolidated statements of income. Changes in other financial liabilities measured as at amortized cost, including interest and exchange variation, are recognized in the consolidated statements of income under financial income (expenses), net caption, except for the exchange variation recognized as foreign exchange gain (loss), net.

Financial liabilities are derecognized when contractual obligations are withdrawn, canceled or expired. The difference between the extinct book value and the consideration paid (including transferred assets or assumed liabilities) is recognized in the consolidated statements of income.

**2.2.4 Cash and cash equivalents and financial investments**

Cash and cash equivalents include cash in hand, cash in transit (amounts paid by our customers or debtors that are pending release by the intervening bank at the reporting date), bank deposits, net of bank overdrafts and highly liquid short-term investments, maturing within 90 days of the investment date, readily convertible into a known amount of cash and subject to an insignificant risk of change in value.

Amounts related to cash and cash equivalents, which are however not available for use by the Company, are presented within other assets in the consolidated financial statements. Other financial investments with maturities of more than 90 days from the acquisition date are presented as financial investments.



**2.2.5 Trade accounts receivable and customer and commercial financing**

When making a sale, the Company evaluates its payment terms. If the sale amount is not received immediately, which is the case with aircraft sales, it will be recognized in the trade accounts receivable. The amount receivable when the payment is deferred by the customer is adjusted to present value if applicable, identifying an interest rate compatible with the market at the time of sale and applying it to the amount receivable according to the transaction payment terms.

Expected credit losses are recognized using actual credit loss experiences from the last years and follow-up of prospective trends in the markets and segments that the Company operates. The identified factor is applied to the measurement of expected credit losses and recognition of impairment losses in the consolidated statements of income. The methodology data is reviewed and updated periodically in respect of economic circumstances and market conditions in which the Company operates.

Customer and commercial financing relate to accounts receivable transactions identified with significant financing component.

The Company applies the lifetime model to estimate the expected credit losses over receivables recorded as customer and commercial financing. The expected credit losses are estimated considering the customer’s probability of default based on contractual term as defined on each applicable agreement and updated on a reporting date basis. The fair value of collateral components is considered to cover and reduce the credit exposure assumed (whether partially or in its entirety) as well as the expected credit losses recognized.

**2.2.6 Derivative financial instruments**

The Company uses derivative instruments to hedge its operations against the risk of fluctuations in foreign exchange, interest rates and share prices; they are not used for speculative purposes.

Gains and losses on derivative transactions are recorded in consolidated statements of income, considering the fair value of these instruments. The unearned gains and losses are recognized in the consolidated statements of financial position under derivative financial instruments, and the counterpart in consolidated statements of income under financial expense, net, (Note 32), except for operations to hedge exposure to changes in exchange rate or designated as cash flow hedge, which is recognized as other comprehensive income (loss) in shareholders’ equity.

**a) Warrants**

**Public and Private Warrants**

Public Warrants are listed and traded on the NYSE under the ticker EVEX.WS, so their fair value is derived directly from observable market prices. The measurement of Public and Private Warrants is identical since the differences between them do not affect their fair value.

**Strategic Warrants**

Strategic Warrants are measured as follows:

- a) Penny warrants: the share price of the EVEX.WS ticker on the NYSE minus the warrant’s strike price;
- b) Market warrants: measurement identical to that of Public Warrants, except for those issued with a different strike price, which are measured based on the Black-Scholes pricing model.

Certain Strategic Warrants are exercisable subject to the occurrence of future events. In the initial measurement and subsequent recognition of the financial instrument, the probability of occurrence of these events that would allow investors to exercise the right to purchase the shares is considered.

The initial recognition of Warrants was recorded as other operating expenses and changes in their fair value are recorded in financial income. Additional information is described in Note 12.5.3.

**2.2.7 Hedge accounting**

The Company uses hedge accounting to record certain derivative financial instruments applied to hedge risks of fluctuations in foreign exchange and interest rates in transactions associated with firm commitments and highly probable forecast transactions.

On the hedge’s initial designation, the Company formally documents the relationship between hedge instruments and hedged items, including the risk management objectives and the strategy for conducting the transaction, together with the methods used to evaluate the effectiveness of hedge relationship.

The fair value of derivative financial instruments designated as hedge accounting is presented in Note 8. Changes in fair value of hedge instruments and hedge costs are recorded in other comprehensive income (loss) in shareholders’ equity and are also presented in Note 8.

**a) Fair value hedge**

Fair value hedge is applied for derivative financial instruments that hedge the Company against risk of fluctuations in interest rates (hedged risk) of loans and financing.

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in income or loss, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The gain or loss relating to the effective portion of interest rate swaps is recognized in income or loss as financial expense, net. The gain or loss relating to the ineffective portion is recognized in income or loss within financial expense, net.

**b) Cash flow hedge**

Cash flow hedge is applied for hedging risks associated with the volatility of cash flows in foreign currency associated with highly probable forecast transaction that will impact income or loss, in this case the payroll expenses of personnel in Brazil settled in Brazilian Real.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in the cash flow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognized immediately in income or loss, within financial expenses, net.

Where option contracts are used to hedge forecast transactions (put and call options of foreign currency), the Company designates only the intrinsic value of the options as the hedging instrument. Gains or losses relating to the effective portion of the change in intrinsic value of the options are recognized in the cash flow hedge reserve within the shareholders’ equity. The changes in the time value of put and call options that relate to the hedged item (‘aligned time value’) are recognized as hedge costs in other comprehensive income (loss) within shareholders’ equity.

Amounts accumulated in shareholders’ equity are reclassified in the periods when the hedged item affects income or loss.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in shareholders’ equity at that time remains in shareholders’ equity until the highly probable forecast transaction occurs, when it is reclassified to income or loss along with the gain or loss of forecast transaction. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in shareholders’ equity are immediately reclassified to income or loss within financial expense, net.

**c) Effectiveness of hedge accounting**

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments, to ensure that an economic relationship exists between the hedged item and hedging instrument.

For fair value hedges, the Company enters into interest rate swaps where the critical terms of the hedging instrument match exactly with the terms of the hedged item, as notional value, payment term and cash outflow dates. Since all critical terms matched during the year the hedge relationship was 100% effective.

In the case of cash flow hedges designated to hedge the volatility of payroll expenses settled in Brazilian Real, the Company enters into zero-cost collar financial instruments by buying put options and selling call options of foreign currency with the same counterparty and risk premium zero. The critical terms of financial instruments matched with the terms of hedged risk the put and call options notional value hedges the risk 1:1 (forecast of payroll cash flows in Brazilian Real for fiscal year) and its due date is within the forecast dates of cash outflows throughout the year. The Company assesses on a qualitative and prospective basis the cash flow hedge effectiveness. If relevant changes in circumstances affect the terms of the hedged item, as changes in the forecast value of hedged cash outflows in Brazilian Real in comparison to the effective value, the Company performs on a prospective basis the balance of hedge relationship and any ineffective portion is recognized in income or loss within financial expense, net.

**2.2.8 Inventories**

The Company’s inventories are largely comprised of raw material, work in progress, spare parts and finished goods. Inventories of raw materials are recognized at acquisition cost. Inventories of work in process comprise raw materials, direct labor, other direct costs and general production costs attributable to the cost of the inventories. Once the products have been completed, they are recognized as finished products.

Inventories of raw material and spare parts are recognized as at the weighted average cost. Manufactured aircrafts (finished goods) and work in progress are measured at their individual production cost, which is recognized as cost of sales and services in the consolidated statements of income when aircraft are delivered to the customer.

Inventories are assessed periodically to determine whether the net realizable value is higher than its cost and impairment loss is recognized if the book value is higher as cost of goods sold and services rendered.

Provision for obsolescence is recorded for items without activity for over two years and with no planned use in the production program, and to cover expected losses from excess inventories or obsolete work in progress, except for inventories of spare parts, for which the provision is based on technical obsolescence of items without activity for over two years.

The Company may have used aircraft for resale, usually received in trade-in transactions to facilitate new aircraft sales. The book value of these assets is compared periodically with its net realizable value, which is the assets estimated selling price in the ordinary course of business less estimated costs to sell. Any loss identified is recognized in the consolidated statements of income as other operating expenses, net. Management, together with its external appraisers, estimates the sale price based on aircraft appraisals.

**2.2.9 Income tax and social contribution**

Tax expenses for the year comprise current and deferred income tax. Income tax is recognized in the consolidated statements of income, except the portion of deferred income tax related to items recognized directly in the consolidated shareholders’ equity in other comprehensive income.

The current income tax is calculated considering the effective tax laws on reporting date in the countries which the Company operates and generates taxable income, wherein 34% in Brazil, composed of 25% income tax and 9% social contribution on net income.

Management evaluates on a recurring basis uncertain tax positions taken by the Company in the current income tax calculation based on the applicable tax laws, and records a provision, when appropriate, based on the estimated amount to be paid to tax authorities.

Deferred income tax is recognized on temporary differences arising between the tax and accounting basis of assets and liabilities. Deferred income tax asset is recognized solely based on future taxable income available to reverse the temporary differences.

Deferred income tax assets and liabilities are presented net in the statements of financial position when there is intention and the legal right is enforceable to offset the amounts in the current income tax calculation, and mainly related to the same legal entity and same tax authority. Therefore, deferred tax assets and liabilities of different legal entities and/or tax jurisdictions are generally presented gross.

**2.2.10 Assets held for sale**

An asset or group of assets and liabilities is held for sale when its carrying amount is expected to be recovered mainly through the sale transaction rather than through continuing use. This occurs if the asset is available for immediate sale “as is”, subject only to usual and customary terms for completion of the transaction, when the sale is defined as highly probable.

The group of assets and liabilities held for sale (disposal group) are measured at the lower of their carrying amount and fair value less incremental costs directly attributable to the conclusion of sale transaction.

Upon the classification as assets held for sale, the depreciation and amortization of non-current assets, including property, plant and equipment, intangible assets and right of use, are ceased and no longer recognized in the statements of income due to the expectation of realization of these assets by sale instead of continuous use.

Impairment losses of assets held for sale, or group of assets and liabilities held for sale, are recognized as other operating expense, net in the statements of income.

**2.2.11 Investments**

Investments in associates are recorded and valued in the consolidated financial statements using the equity method of accounting. In the case of exchange variations on foreign investments that use a functional currency other than that used by the Company, such exchange variations are recognized in cumulative translation adjustments within shareholders’ equity and are only recognized in the consolidated statements of income when the investment is sold or expensed.

**2.2.12 Property, plant and equipment, net**

Property, plant and equipment are recognized by the acquisition, formation or construction cost, less accumulated depreciation and impairment losses.

Depreciation is calculated by the straight-line method based on the asset’s estimated useful life, Note 14. Land is not depreciated. The estimated useful lives are reviewed and adjusted, if appropriate, at the end of each fiscal year.

Subsequent costs are included in the asset’s carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company.

The Company estimates the residual value for certain aircraft spare parts included in the exchange pool program, which is reviewed by Management and, if necessary, adjusted at the end of each reporting period. The Company does not attribute residual values to other assets as assets are not usually sold and in the event of a sale, the amount is not significant.

The items comprising property, plant and equipment are summarized below:

- a) **Land** - mainly comprises areas on which the industrial, engineering and administrative buildings are located.
- b) **Buildings and land improvements** - mainly plants, engineering departments and offices, and land improvements include parking lots, road systems and water and sewage networks.
- c) **Facilities** - comprise auxiliary industrial facilities that directly or indirectly support the Company’s industrial operations, as well as facilities of the engineering and administrative departments.

- d) **Machinery and equipment** - machinery and other equipment directly or indirectly used in the manufacturing process.
- e) **Furniture and fixtures** - furniture and fixtures used in the production, engineering and administrative departments.
- f) **Vehicles** - mainly industrial vehicles and automobiles.
- g) **Aircraft** - mainly aircraft leased to airlines, and those used to assist in testing new projects.
- h) **Computers and peripherals** - information technology equipment used mainly in the production process, engineering and administration.
- i) **Tooling** - tools used in the Company’s production process.
- j) **Property, plant and equipment in progress** - construction works to expand the manufacturing plants and aircraft maintenance centers.
- k) **Exchange pool program** - the exchange pool program is an operation in which the customer contracts the availability of spare parts for aircraft maintenance. In this program, when it is necessary to change a damaged part, the customer delivers the damaged part to the Company and the Company provides the customer with a part in working order. The damaged part is in turn reconditioned and added to the pool.

2.2.13 Intangible assets, net

a) Development

Research costs are recorded as an expense when they are incurred. Project costs, comprised mainly of expenditure on product development, including drawings, engineering designs and construction of prototypes, are recorded as intangible assets when it is probable that the projects will generate future benefits, taking into account their commercial and technological feasibility, availability of technological and financial resources, and only if the cost can be reliably measured.

Capitalized development costs are amortized from the time at which benefits begin to accrue based on units produced, and the amortized amounts are appropriated to production cost. Revision of the amortization quota is made at least annually.

The Company has agreements with certain key suppliers, hereby denominated partners, who participate in the Company’s research and development projects by contributing cash. The Company records such contributions as financial liability on receipt and when the milestones are completed and amounts not refundable, the contributions are reclassified as reduction of intangible assets (development expenditure) and amortized following the same intangible amortization criteria.

b) Computer software

Software licenses are capitalized and amortized over their estimated useful lives.

Costs associated with maintaining computer software programs are recognized as expense as incurred. Development costs directly attributable to identifiable and unique software, controlled by the Company and that is expected to generate benefits greater than the costs for more than one year, are recorded in intangible assets.

2.2.14 Impairment of long-lived assets

At the end of each fiscal year, the Company performs impairment test for all cash-generating units (CGUs) with goodwill generated from business combination allocated and for CGUs with intangible assets still under development and not yet producing (undefined useful life).

CGUs with definite-lived assets (property, plant and equipment, and intangibles) allocated are analyzed, at each quarter, whether there is any indication it might be impaired to perform the impairment test.

Assets are grouped in CGUs taking into consideration the Company’s business model and its monitoring of cash flows. In general, the CGUs are defined in accordance with the families or platforms of aircrafts or other goods and services produced by the Company, irrespective of its geographic location.

The Company applies the value in use concept, using discounted cash flow projections, discounted at an appropriate rate which reflects the investors’ expectations of return. The cash flow projections for the CGUs take into consideration the Company’s medium and long-term strategic plan, based on the characteristics and expectations of the business.

When the impairment test is performed, Management compares the carrying amounts of the Company’s CGUs with its recoverable amounts, which is determined at the higher between its value in use and fair value less cost to sell. An impairment charge is recognized when the carrying amount exceeds the recoverable amount.

Any impairment losses of a CGU are recognized in the consolidated statements of income in the line of other operating income/expense, net and allocated to relevant assets of the impaired CGU.

The exception to this concept is aircraft that the Company held in its property, plant and equipment for operating leases purposes, in which the Company acts as lessor. In this case, the aircraft are tested individually using the higher of their value in use and its market value to determine the recoverable amount. For impairment test purposes, the market value is estimated with the assistance of an assessment prepared by third party appraisals and the value in use is determined by the discounted cash flow of lease agreement associated with each aircraft tested, when applicable.

Long-lived assets, except goodwill, adjusted for impairment losses are reviewed subsequently for a potential reversal scenario on the reporting date. Impairment losses recognized over goodwill are not reversed.

The reversal of impairment losses for a cash-generating unit is allocated to the CGU assets, except goodwill, on a pro rata basis and up to the carrying amount of these assets (net of depreciation and amortization). Reversal of impairment losses is recognized in the line of other operating expense, net.

Assets held for sale are tested for impairment in accordance with practice described in Note 2.2.10.

**2.2.15 Leases**

The lease agreements which the Company act as lessee and are accounted under IFRS 16 mainly refers to lease of buildings, offices, lands and vehicles signed by subsidiaries domiciliated outside Brazil (United States and Europe). The term of those agreements varies in the range of 2 to up 20 years, and the average discount rate applied to the agreements with maturity higher than 5 years is 6.7% p.a.

**a) Right-of-use assets**

The Company recognizes right-of-use assets on the lease inception date (that is, the date in which the asset is available for use). The right-of-use assets are measured at cost, less any depreciation or impairment losses and are adjusted for any revaluation of lease liabilities. The cost of right-of-use assets includes the amount of the recognized lease liability, the initial direct costs incurred less any lease incentives received. The right-of-use assets are depreciated on a straight-line basis considering the lease term and the Company’s intention in renewal options, based on the best estimate on each reporting date. Right-of-use assets are subject to impairment test if there is evidence that their carrying amount may be higher than the recoverable amount.

Expenses on the depreciation of the right-of-use asset are recognized as operating expenses in the statements of income for the year.

**b) Lease liabilities**

On the lease inception date, the Company recognizes lease liabilities measured at the present value of lease payments to be made during the lease term, which is measured based on the contract term and renewal options. Lease payments include fixed payments less any lease incentives received. Variable lease payments not dependent on an index or rate are recognized as expenses in the period in which the event or condition that triggers the payment occurs.

When calculating the present value of lease payments, the Company uses the incremental borrowing rate. After the inception date, the amount of the lease liability is increased to reflect the increase of interest, adjustments of installments and reduced for lease payments made. Moreover, the carrying amount of the lease liability is remeasured in case of any modification, a change in the lease term, a change in fixed lease payments or a change in valuation to acquire the underlying asset. Interest is recognized as financial expense, net in the statements of income for the year.

(i) *Determination of the lease term:*

The Company determines the contractual term as the non-cancelable lease term, plus any period covered by a renewal option, if it is reasonably certain that it is exercised, or any option to terminate the lease, if it is reasonably certain that it will not be exercised. The Company has the option, under some of its leases, to maintain the assets for additional periods from three to five years. The Company applies judgment when assessing if it is reasonably certain that it will exercise the renewal option, considering all significant factors that create an economic incentive for the exercise of the renewal.

The Company reassesses the lease term if there is an event or significant change under circumstances that are under its control and affect its capacity to exercise (or not exercise) the option to renew (e.g. a change in the business strategy).

(ii) *Short-term leases and low-value asset leases:*

The Company applies the short-term lease recognition exemption to all its leases with the contractual term below or equal to 12 months from the inception date and without a purchase option. The practical expedient of recognition exemption for low-value assets leases for which the individual amount is below US\$ 5 thousand is also applied. Short-term and low-value lease payments are recognized as expenses on a straight-line basis over the lease term.

**2.2.16 Loans and financing**

Loans are recognized initially at fair value, net of transaction costs, and subsequently carried at amortized cost (plus charges and interest on a pro rata basis), considering the effective interest rate on each transaction.

Loans are classified as current or non-current liabilities based on contractual terms.

When a substantial period is required for construction or production of an asset before it is ready for use (qualifying asset), the borrowing costs are capitalized as part of the cost of such assets. The costs are allocated based on the average rate for all active loans, weighted in accordance with additions in the period. Borrowing costs are interest and other costs incurred by the Company in obtaining funding.

**2.2.17 Financial guarantees and residual value guarantees**

In certain aircraft sales transaction of the Commercial Aviation, the Company might grant financial or residual value guarantees on delivery of these aircraft, as part of the aircraft sale and financing structure.

The residual amount is guaranteed to the customer in the residual value guarantees based on the expected future value of the aircraft at the end of the funding, subject to a maximum limit, agreed by the contract. Residual value guarantee is measured at fair value through profit or loss on each reporting date with changes recognized as financial expenses, net. The exercise of residual value guarantee can be claimed by the customer at the end of guaranteed term if contractual conditions are met or through settlement agreement. The adjustment of the recognized financial liability to the settlement amount is recognized as an increase or decrease in financial expense, net.

Financial guarantees are measured at the time of aircraft delivery (premium received) and recognized as a reduction in sales revenue. The premium income is amortized on a monthly basis based on the guaranteed coverage term.

If the financial guarantee exercise is probable as a result of significant events occurred, such as filing for bankruptcy of a customer covered by financial guarantee granted, the Company may record an additional provision regarding the probable estimated cash outflow, based on the best estimate of potential losses.

**2.2.18 Unearned income**

Unearned income comprises government grants received by the Company and its subsidiaries.

Government grants are recognized against the expenses in which the resources were used. When government grants are received in advance for research investments they are recorded as unearned income and recognized in the consolidated statements of income to the extent that the resources are invested and contractual milestones are met, as reduction of research expenses.

Government grants for the acquisition of property, plant and equipment are recognized as debt (loans and financing) in liabilities until the milestones determined by the granting entity are met. Once the milestones are completed, the grant is recognized as unearned income. This unearned income is recognized in the consolidated statements of income as a reduction of the depreciation expense of the underlying asset it is proposed to subsidize in proportion with the recognition of the expense.

Income earned with non-distributable government grants is allocated from the income of the year to the government grants reserve in shareholders' equity.

**2.2.19 Provisions, contingent assets and liabilities, legal obligations and court-mandated escrow deposit**

Provisions – provisions are recognized based on the judgment of the Company's Management and its legal counsel, the nature of the lawsuits, legal precedent, complexity and court interpretations, whenever the loss is considered probable, when such loss would result in a probable outflow of resources to settle the obligations and when the amounts involved can be reasonably estimated, the provision is recognized. The provision for labor claims is recognized based on the Company's historical percentage of cash outflows of each demand. The amounts provided represent the Company's best estimate of the anticipated outflow of resources.

Tax positions - for income tax matters a provision is recognized when the Company's Management evaluates with the assistance of its legal advisors that an uncertainty over income tax treatments taken during the fiscal years subject to tax authorities' examinations, or under discussions in administrative or legal instances with tax authorities, is not probable to be accepted by decisions of the court of last resort.

Contingent liabilities – amounts for which disbursement is classified as possible risk of loss are disclosed but not recorded in the consolidated financial statements. Where the probability of loss is classified as remote, neither provision nor disclosure are required. For income tax matters under administrative discussion or legal demand with tax authorities, the Company discloses the amounts of income tax treatments taken that in its assessment is probable to be accepted by decisions of the court of last resort.

Legal obligations - relates to tax payables under the Brazilian law for which the Company has accrued the corresponding liability but initiated legal disputes challenging their applicability. Such tax liabilities under discussion are fully recognized as tax payables in the consolidated financial statements.

Court-mandated escrow deposits - recorded as other assets and periodically updated for monetary correction.

**2.2.20 Product warranties**

Warranty expenditure on aircraft is estimated on the delivery of these products. The estimates are based on historical data that includes, among other, warranty claims and related repair or replacement costs, warranties given by the suppliers, contractual coverage period and warranty patterns for new aircrafts, for which the Company expects higher warranty costs in the launch of new models until the production process matures and increases the platform in service period. The coverage period varies from 3 to 6 years.



The Company may be obliged to modify the product to meet the requirements of the certification authorities, or after delivery, due to improvements or to the aircraft’s performance. The costs of such modifications are provisioned when the new requirements or improvements are requested and known.

Management reviews the assumptions and the evolution of warranty related costs periodically, and if appropriated, adjustments to the provision is recorded.

The product warranties balances are presented in the provisions caption in the consolidated statements of financial position, Note 24.1.

**2.2.21 Post-retirement benefits**

**a) Defined contribution**

The Company sponsors a closed pension plan of defined contribution for its employees that for companies based in Brazil, is administered by EMBRAERPREV - Complementary Pension Society.

For the defined contribution plan, the Company’s obligation is restricted to the monthly contribution linked to a predefined percentage of the remuneration of employees linked to this plan.

Obligations for contributions to defined contribution plans are recognized in the result as personnel expenses when related services are provided by employees.

**b) Post-retirement healthcare benefits**

The Company and some of its subsidiaries provide healthcare benefits to retired employees.

The planned costs of offering post-retirement healthcare benefits and coverage for dependents are recorded as a provision during the period of employment based on actuarial studies conducted to identify future exposure, based on the following main premises:

- i) Discount rate - brings future benefit flows to present value and is defined based on the ratio of Brazilian government securities.
- ii) Increase of medical costs rate - represents the increase in the value of medical care and is not applied linearly, as the companies historically tend to take measures to reduce the cost, or even change health plan providers.
- iii) Morbidity rate (aging factor) - measures the increased use of health plans considering the aging population.
- iv) Mortality rate - uses the RP-2000 generational table provided by Society of Actuaries (SOA), which shows the rate by age and sex.
- v) Probability of Retirement - estimates the probability of retirement by age group.
- vi) Termination rate - uses the T-3 Table Service available from the Society of Actuaries (SOA), which shows the average rate of termination of employees by age.

The Company recognizes changes in the provision for the plan against other comprehensive income in consolidated shareholders’ equity, net of taxes, to the extent that there are changes in the assumptions and against consolidated statements of income if there are changes in the costs of the current benefit plan or in the plan’s contractual characteristics.

This provision is reviewed at least annually.

**2.2.22 Employee profit-sharing plan**

The Company provides a profit-sharing plan for its employees, which is linked to performance targets established in action plans set and agreed at the beginning of each year. The profit-sharing approved by current policy is equivalent to a percentage of a monthly compensation of each employee (varying from 40% to 90%) associated with fulfillment of individual and corporative targets. Provisions are recognized monthly by applying the agreed percentage to the payroll of the Company, recognized in the consolidated statements of income accounts related to the function performed by each employee (costs or expenses).

The Company performs advance payment of up to 40% of amounts due for each employee under the profit-sharing plan during the fourth quarter of fiscal year being evaluated, and the remaining portion is not paid until April of next fiscal year when the evaluation of results and targets for fiscal year ended is already completed.

**2.2.23 Share-based payment**

The Executive Remuneration Policy (PRE) determines that the remuneration of the Company’s management shall be granted as a Long-Term Incentive (LTI) with the objective of retaining and attracting qualified personnel who will make an effective contribution to the Company’s performance. The Company provides one type of share-based remuneration in the form of LTIs during the current fiscal year:

Cash-settled phantom shares plan, in which the amounts attributed to the services provided by the participants are converted into virtual share units based on the market value of the Company’s shares. At the end of the vesting period the participant receives the quantity of virtual shares converted into Real, at the shares’ current market value. The Company recognizes the obligation during the vesting period (quantity of virtual shares proportional to the period) in the same group as the participant’s normal remuneration. This obligation is presented as an account payable to employees and the fair value is calculated based on the market price of the shares and registered as financial expense, net in the consolidated statements of income. The phantom shares plan is a cash-settled share-based payment transaction and therefore has no impact on the calculation of diluted earnings per share.

**2.2.24 Earnings per share**

Basic and diluted earnings per common share are computed by dividing net income attributable to Embraer shareholders by the weighted average number of common shares outstanding during the fiscal year. The Company has no stock options available which could potentially dilute outstanding common shares.

**2.2.25 Revenue from contract with customers**

Revenue comprises the fair value of the consideration received or to be received for the sale of products and services in the ordinary course of business. Revenue is presented net of taxes, returns, reductions and discounts, and in the consolidated financial statements, after eliminating intercompany sales.

**a) Revenue from sales of aircraft and spare parts**

Revenues from aircraft and spare parts sales are recognized when the control is transferred to the customer, that is, when all recognition conditions are met. Revenues from commercial, executive and agricultural aircraft and spare parts are generally recognized upon delivery or shipment to the customer.

For the spare parts sale contracts, the client makes the payment after the transfer of control, with average payment term of 30 days.

In sales of aircraft contracts, other performance obligations, such as supply of spare parts, training services, technical assistance and other obligations may be presented, which may or may not be delivered simultaneously to the aircraft delivery. For the Commercial and Executive Aviation contracts, the individual selling price is allocated for these additional performance obligations, and the variable considerations (as discounts), are allocated using the cost-plus margin method. In the Defense & Security aircraft sales, there is no stand-alone price basis considering its high customization, the price is allocated in the performance obligation considering the cost-plus margin method.

For these performance obligations, the revenue is recognized when the control of related product or service is transferred to the customer.

**b) Revenue from services**

Revenues from services are recognized over time as services are provided. Services mainly includes technical services, training, maintenance of aircraft and parts, modernization services and support programs.

The average payment term is 30 days, and for some services, such as modernization of Defense aircraft, the client’s payment schedule follows a schedule agreed between the parties.

Exchange pool programs and total support programs revenues are recognized monthly during the contract period, because there is no customer use pattern that can be reliably projected and consist of a fixed rate and part of a variable rate directly related to the hours actually flown by the aircraft covered in these programs.

**c) Revenue from long-term contracts (Defense & Security)**

In the Defense & Security segment, most of the sales contracts are characterized by the high customization of the products and development of new technologies whose transfer of control to the customer occurs over time of development and production of aircraft or new technology as a single performance obligation. In such contracts, their revenues are recognized over time at amounts equal to the ratio of actual cumulative costs incurred at the end of reporting period divided by total estimated costs at completion, multiplied by the allocated price less the cumulative revenue recognized in prior reporting period.

The adequacy of revenue recognition related to development contracts in the Defense & Security segment is based on Management’s best estimates of total estimated costs at completion, as they become evident.

The Company understanding is that the cost incurred method provides the most reliable basis for estimating the progress of contracts whose revenues are recognized over time.

There are no significant financing components in the long-term contracts of the Defense & Security segment. The payment terms are mainly aligned with the stages of execution and deliveries of each contract, as agreed by the Company and the customers, and there is no willingness on either side to finance the other.

**d) Contract assets and liabilities**

The contract assets relate to the Company’s rights to the consideration for the work completed and not billed at the date of the consolidated financial statements, mainly from long-term Defense & Security contracts that are recognized over time as noted above, and net of any expected credit losses recognized. Contract assets are transferred to trade accounts receivable when the rights become unconditional. Expected credit losses are calculated over the contract assets balances, as detailed in Note 2.2.5.

Contract liabilities refer to non-refundable advance payments received by the Company prior to the delivery of the aircraft and advances of consideration received from customers related to the acceptance of managerial stages/ tasks under long-term contracts of Defense & Security (customer advances), as well as to the supply of spare parts, training, technical assistance and other obligations included in aircraft sales contracts (multiple element).

**e) Costs to obtain a contract**

Refers to incremental costs incurred by the Company solely to obtain contracts with customers that will be recovered in the fulfillment of these contracts, such as costs incurred with sales commissions and bank guarantees granted in Defense & Security long-term contracts. Assets for obtaining contracts are capitalized as other assets and amortized when (or as) the related contract revenue is recognized.

2.2.26 Cost of sales and services

Cost of sales and services consists of the cost of the aircraft, spare parts and services rendered, comprising:

- a) **Material** - Materials used in the production process, substantially acquired from foreign suppliers.
- b) **Labor** - comprises salaries and related charges, primarily in Brazilian reais.
- c) **Depreciation** - The Company’s fixed assets are depreciated using the straight-line basis over their useful lives.
- d) **Amortization** - Internally generated intangible assets are amortized in accordance with the estimated sales of the series of aircraft. Intangible assets acquired from third parties are amortized on straight-line bases over their estimated useful lives.
- e) **Product warranties** - The Company estimates and records a liability for guaranteed obligations related to its products on the date of delivery of the aircraft, based on historical experience and recorded as cost of goods sold.
- f) **Multiple-element arrangements** - The Company enters into transactions that represent multiple-element arrangements, such as for providing training, technical assistance, spare parts and other concessions. These costs are recognized when the product or service is delivered or provided to the customer.

2.2.27 Financial expense, net and foreign exchange gain (loss), net

Financial expense, net and foreign exchange gain (loss), net principally comprise interest income on cash and cash equivalents and financial investments measured as at amortized cost and FVOCI, financial charges on loans, tax updates and foreign exchange gain (loss) on assets and liabilities expressed in currencies other than the functional currency (U.S. dollar), on an accrual basis. Gains or losses on fair value changes of FVTPL financial instruments are also recognized as financial expense, net.

Changes in the fair value of the residual value guarantees and income or loss on the provision and implementation of derivative financial instruments capitalized are also recorded as financial expense, net in the consolidated statements of income.

Financial income and expense exclude borrowing costs attributable to acquisitions, buildings or the contribution of qualifying assets that require a substantial period to be ready for use or sale.

2.2.28 Statement of cash flows

The statement of cash flows was prepared using the indirect method.

2.2.29 Segment reporting

Operating segment information is presented in a manner consistent with the internal reports provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources among and assessing the performance of the operating segments and for making strategic decisions, is the Chief Executive Officer.

Generally, balances and transactions that are not directly allocated to a specific operating segment but contributed to its operations, such as corporate area expenses, are appropriated on pro-rata basis, using revenue from each segment as an allocation factor.

3. Critical accounting estimates and significant judgements

Preparation of the consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and adopt assumptions that affect the reported amounts of assets and liabilities, revenue and expense and their disclosure. Therefore, variables and assumptions derived from historical experience and other factors deemed relevant were used in preparing accompanying consolidated financial statements included in this report. These estimates and assumptions are reviewed on an ongoing basis and the changes to accounting estimates are recognized in the period in which the estimates are revised on a prospective basis.

The significant accounting policies, including the variables and assumptions used in the estimates, and the relevant sensitivity of those judgments to different scenarios and conditions are described below:

3.1. Revenue from long-term contracts (Defense & Security)

3.1.1 Estimated costs at completion of contracts

In the Defense & Security segment, a significant portion of revenue is derived from long-term contracts with the Brazilian and foreign governments, recognized over time by the cost incurred method (Note 2.2.25 – c), using the ratio of actual cumulative costs incurred divided by total estimated costs at completion for progress measurement.

During the contract execution, the Company assesses the costs incurred, adjusting total estimated costs at completion, if necessary, to reflect variations in costs in relation to the projections, mainly due to changes in circumstances and new events, such as contract modification. Any resulting increase or decrease in estimated revenues or costs at completion is recognized as catch-up adjustment in the consolidated statements of income, increasing or decreasing revenue and gross margin, in the reporting period which the circumstances that give rise to the change become known by Management.

In a hypothetical scenario of 10% increase or decrease over Management’s projection of estimated costs at completion of long-term contracts in progress during 2022, the Company’s revenue and gross margin in the year would be lower in US\$ 91.8 or would increase by US\$ 101.4, respectively.

3.1.2 Contract modifications

Contract modification is a change in scope, price or both of contracts with customers. On long-term contracts of the Defense & Security segment, contract modification might occur as a result of changes in price due to escalation, rebalance of price due to changes in cost structure, increase or decrease of scope, as well as adjustment to deliverables timeline. Management is required to review the assumptions of revenue recognition for long-term contracts recognized over time when a contract modification is enforceable (revenue and estimated costs at completion).

Contract modification is solely adjusted in revenue recognition of a long-term contract when the subject of modification is approved by the parties of the original contract, which is usually achieved in the signature of contract amendment in the Defense & Security segment. A contract modification might also exist when the parties to the original contract had discussions regarding scope or price (or both) of the modification, if the changes in rights and obligations of the parties as a result of modification are enforceable under the terms of the original contract and/or the applicable law.

In 2021, the Brazilian Air Force publicly announced its decision to unilaterally reduce the total contract value by 25%, reducing the total number of KC-390 Millennium aircraft to be delivered from 28 to 22. The effects of the contract modification generated by these contractual amendments resulted in a revenue adjustment of US\$ 41 on December 31, 2021, reducing the Company’s revenue, gross margin and contract assets for the year ended.

In 2022, as disclosed in Note 1.1.1., Embraer and the Brazilian Air Force engaged in negotiations on the subject, conducting a new negotiation process, which resulted, among others, in the conclusion of amendments to the Contracts to (i) reduce from 22 to 19 the total number of KC-390 Millennium aircraft to be

delivered under the Contracts, definitively ending the possibility of further reductions by the Brazilian Air Force pursuant to the law; (ii) redefine and reschedule the delivery schedule in order to distribute in time the effect of the reduction in the number of aircraft; and (iii) adjust contractual clauses in order to maintain their economic and financial balance.

Thus, the effects of the contract modification generated by these contractual additives resulted in an adjustment reducing the net income by US\$ 5 for the year ended December 31, 2022.

3.2. Impairment of long-lived assets

The impairment test performed considers the Company’s medium and long-term strategic plan cash flows, brought to present value at the weighted average cost of capital (WACC) for the year ended on December 31, 2022. In preparing or using this information, the Company uses certain estimates, as follows:

- a) **Gross expected cash flow** - the Management projects inflows and outflows based on past performance considering its business strategy and market development expectations. These projections also consider the efficiency gains planned for the product cycle.
- b) **Growth rates** - the growth rates are reflected in the revenue flow and the gross margin budgeted by the Company, consistent with the forecasts included in industry reports.
- c) **Discount rates** - an appropriate discount rate is used that reflects the expected return of investors at the time the calculation is made. This rate is also compared with the market to confirm its consistency.
- d) **Foreign exchange rate USD/BRL** - future cash flows for certain cash-generating units with revenue primarily consisting of U.S. dollars (such as the Commercial and Executive Aviation units) are sensitive to volatility and structural changes at the level of US\$/R\$ exchange rates since certain general production costs and expenses are incurred in Brazilian Real (such as payroll). The depreciation of R\$ in relation to US\$ may have a positive impact on future cash flows, while appreciation of R\$ may result in a reduction in future cash flows at these cash-generating units and possible impairment losses. The Company makes use of derivative financial instruments providing protection for short-term volatility as described in Note 8.

Additional information on the impairment test is disclosed in Note 17.

3.3 Warrants

In measuring the value of Strategic Warrants, both in the initial measurement and in the subsequent recognition of the financial instrument, there was significant judgment in defining the probability of occurrence of future contingent events that would allow investors to exercise the right to purchase the shares, as per Note 12.3.3.

4. New standards and interpretations

The main standards issued by the IASB that have not yet come into force and have not been adopted by the Company before December 31, 2022 are set out as follows:

*Effective date: January 1, 2023*

- Disclosure of Accounting Policies - Amendments to IAS 1 and IFRS Practice Statement 2.
- Definition of Accounting Estimates - Amendments to IAS 8.
- Insurance Contracts - IFRS 17.
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction - Amendments to IAS 12.

*Effective date: January 1, 2024*

- Classification of liabilities as current or non-current - Amendments to IAS 1.

The Company estimates that there are no material impact on the application in its consolidated financial statements.

5. Cash and cash equivalents

	12.31.2022	12.31.2021
Cash and banks	846.1	998.3
	846.1	998.3
Cash equivalents		
Bank deposit certificate (i)	129.7	75.2
Fixed deposits (ii)	841.1	765.1
	970.8	840.3
	1,816.9	1,838.6
(-) Reclassification - Assets held for sale	—	(20.3)
	1,816.9	1,818.3

- (i) Applications in Bank Deposit Certificates (CDBs), issued by financial institutions in Brazil, available for redemption in up to 90 days at time of purchase without impact on contracted remuneration.
- (ii) Fixed term deposits in U.S. dollars with original maturities of 90 days or less at time of purchase. In an event of early redemption there is a minimum or no impact on contracted remuneration.

6. Financial investments

	12.31.2022				12.31.2021			
	Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss	Total	Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss	Total
Financial instruments								
Public securities (i)	66.7	—	—	66.7	51.6	—	—	51.6
Private securities (ii)	105.0	—	—	105.0	—	—	—	—
Structured Notes (iii)	—	—	—	—	14.1	—	79.0	93.1
Investment funds	—	—	22.7	22.7	—	—	22.1	22.1
Fixed-Term Deposits								
(iv)	178.8	194.7	—	373.5	13.7	541.0	—	554.7
Others (v)	—	—	96.5	96.5	—	—	94.9	94.9
	350.5	194.7	119.2	664.4	79.4	541.0	196.0	816.4
Current portion	180.5	194.7	119.2	494.4	13.8	541.0	196.0	750.8
Non-current	170.0	—	—	170.0	65.6	—	—	65.6

- (i) Debt securities issued by the Brazilian government with maturity in 2030.
- (ii) Debt securities issued by certain financial institutions with long-term maturities.
- (iii) Structured notes associated with the credit risk of financial institution issuer and the Brazilian government.
- (iv) Fixed-term deposits in U.S. dollars issued by financial institutions, with a maturity of more than 90 days from the date of contracting.
- (v) It mainly relates to shares of the Republic Airways Holdings, arising from the request for the judicial reorganization of the former entity Republic Airways and received by the Company.

The weighted average nominal interest rates on December 31, 2022, related to cash equivalents and financial investments made in Brazilian Reais were 12.54% p.a., equivalent to 100.72% of the Interbank deposit rate (CDI), and in U.S. dollars 2.23% p.a. (4.34% p.a., equivalent to 98.83% of the Interbank deposit rate (CDI), and in U.S. dollars 0.54% p.a., on December 31, 2021).

7. Trade accounts receivable, net

	12.31.2022	12.31.2021
Foreign customers	181.0	181.6
Brazilian Air Force	8.7	10.7
Domestic customers	28.1	27.4
	217.8	219.7
Expected credit losses	(12.6)	(30.7)
	205.2	189.0
Current portion	202.9	189.0
Non-current portion	2.3	—

The amounts and maturities of these trade accounts receivable are shown below:

	12.31.2022	12.31.2021
Not due	191.9	193.8
Up to 90 days	13.6	16.4
From 91 to 180 days	4.6	2.0
More than 180 days	7.7	7.5
	217.8	219.7

The following schedule presents the changes in the expected credit losses provision during the year:

	12.31.2022	12.31.2021	12.31.2020
Beginning balance	(30.7)	(58.5)	(11.1)
Additions/Reversal	1.0	(1.8)	(57.1)
Write-off	17.0	29.4	15.0
Reclassification	—	—	29.6
Foreign exchange variation	0.1	0.2	(4.9)
Assets held for sale	—	—	(30.0)
Ending balance	(12.6)	(30.7)	(58.5)

8. Derivative financial instruments

Derivative financial instruments are contracted to protect the Company’s operations from exchange and interest rate fluctuations and are not used for speculation.

As of December 31, 2022 and 2021, the Company had the following operations:

- Swap operations, with the main objective of changing the debts index, from floating rates to fixed interest rates or vice versa, exchange of Real to U.S. dollars and vice versa. The fair values of these instruments are measured by the future cash flow, determined by applying contractual interest rates to maturity, and discounted to present value at the date of the financial statements by the prevailing market rates.
- Purchase of sell and by currency options, in order to protect cash flows for the parent company’s wage costs denominated in Reais, against the risk of currency fluctuations. The financial instrument used by the Company is a zero-cost collar, which consists of the purchasing of a put option and the sale of a call option, contracted with the same counterparty and with a zero-net premium. The fair value of this instrument is determined by the observable market pricing model (through market information providers).
- Non-deliverable forward (NDF), with the purpose of protecting the Company against the risks of exchange rate fluctuations. The fair value is determined by the observable market pricing model.



Notes to the Consolidated Financial Statements  
In millions of U.S. dollar, unless otherwise stated

Purpose	Risk	Instrument	Notional	Settlement date	12.31.2022	12.31.2021
Cash flow hedge designated as hedge accounting					2.4	(1.1)
Payroll expenses settled in Brazilian Reais	Exchange rate	Zero-cost collar derivative financial instruments, with purchase of put options at the exercise price of R\$ 5.20 and sale of call options at the weighted average exercise price of R\$ 6.12.	281.9	2023	2.4	—
		Zero-cost collar derivative financial instruments, with purchase of put options at the exercise price of R\$ 5.20 and sale of call options at the weighted average exercise price of R\$ 6.52.	—	2022	—	(1.1)
Fair value hedge designated as hedge accounting					0.1	0.1
Project development	Interest rate	Interest swap to exchange fixed interest rate debt in Brazilian Reais for a floating rate CDI.	6.4	2023	0.1	0.1
Others derivatives not designated as hedge accounting					(88.9)	(4.8)
Acquisition of property, plant and equipment	Interest rate	Interest swap to exchange floating interest debt in US Dollars for a fixed interest rate.	—	2024	—	(0.1)
Export	Exchange rate	Non-Deliverable Forwards to exchanges Euro currency debt to US Dollars currency.	10.0	2023	(0.2)	—
Export	Interest rate	Interest swap to exchange floating interest debt in US Dollars for a fixed interest rate.	100.0	2027	8.4	(4.7)
Equity	Embraer Share Price	Equity Swap	17.8	2023	(1.6)	—
EVE Shares (i)	EVE Share Price	Private Warrants - EVEX	14.2	2027	(3.6)	—
EVE Shares (i)	EVE Share Price	Public Warrants - EVEX	11.5	2027	(2.9)	—
EVE Shares (i)	EVE Share Price	Strategic Warrants - EVEX	40.9	2027	(89.0)	—
					(86.4)	(5.8)

- (i) The Company recognized derivative financial liabilities measured at fair value through profit or loss related to warrants issued by subsidiary EVEX, which became exercisable on May 9, 2022. Subsequent remeasurement depends on the option class issued, and can be an option traded on the market, so its fair value is calculated from the unit price of this option, multiplied by the number of options, or else the option, when not traded on the market, has its fair value calculated using its own methodology based on the Black-Scholes options pricing model. The impacts are presented in Note 12.3.3.

In April 2022, the Company entered into contracts with Banco Santander for the exchange of results of future financial flows with financial settlement only, having as reference 6.7 million shares issued by the Company (“Equity Swap”) on B3 with maturity of 18 months. The Company is exposed to price fluctuations in the number of shares in question on the asset and liability side adjusted by CDI + 1.17% p.a. On December 31, 2022, the Company had no margin calls related to this operation.

On December 31, 2022 and 2021, the fair value of derivative financial instruments was recognized in the Company’s assets and liabilities as follows:

	12.31.2022	12.31.2021
Assets		
Current portion	5.4	0.1
Non-current	5.7	—
Liabilities		
Current portion	(57.4)	(2.9)
Non-current	(40.1)	(3.0)
Net derivative financial instruments	(86.4)	(5.8)

As of December 31, 2022, the cash flow hedge movement with impact on other comprehensive results occurred as below:

	31.12.2022	31.12.2021
Reclassified items for results		
Cash Flow Hedge		
Hedge reserve	4.2	(8.9)
(-) Reclassified for results	1.7	0.2

9. Customer and commercial financing

	12.31.2022	12.31.2021
Aircraft (i)	70.1	7.9
Spare parts (ii)	55.1	29.8
	125.2	37.7
Expected credit losses	(24.0)	(5.7)
	101.2	32.0
Current portion	50.8	9.6
Non-current portion	50.4	22.4

The Company maintains the following transactions of customer financing as of December 31, 2022:

- (i) Aircraft – Customer financing related to the acquisition of aircraft. The fair value of used aircraft provided as collateral in the used aircraft customer financing structure, which could minimize the losses in case of default (collateral assets), were considered to reduce the expected credit losses (ECL) for such transaction.
- (ii) Spare parts and services – Customer financing provided as a result of the COVID-19 impacts over certain customers of the Commercial Aviation segment related to the supply of spare parts and services mainly provided during the year of 2020. The agreement establishes interest and annual principal payments until the final maturity date (2025). There are no guarantees financing of spare parts and services transactions, however, the continuous supply of spare parts and services to the financed customers depends on the fulfillment of said agreements.

There are no overdue balances of the customer financing as of December 31, 2022, however, the increase of credit risk of certain customers during the year caused an increase of expected credit losses recognized.

The changes in ECL provision during the periods are presented below:

	12.31.2022	12.31.2021
Beginning balance	(5.7)	(19.1)
(Additions)/Reversal	(18.3)	13.4
Ending balance	(24.0)	(5.7)

In the Company’s assessment, the highest risk rating for financing customers is CCC- with a loss rate of 42% for the period.

As of December 31, 2022, the maturity schedules of the long-term customer financing are:

Year	
2024	35.5
2025	8.7
2026	6.2
	50.4

10. Inventories

	12.31.2022	12.31.2021
Raw materials	995.1	822.7
Work in process	687.7	524.7
Spare parts	445.6	474.3
Finished goods (i)	55.4	54.2
Held by third parties	79.2	79.3
Advances to suppliers	33.8	30.8
Inventory in transit	116.6	80.0
Consumption materials	47.4	43.5
Used aircraft	—	28.4
	2,460.8	2,137.9
Loss on adjustment to fair value (ii)	(5.7)	(1.0)
Loss due to obsolescence (iii)	(126.1)	(150.9)
	(131.8)	(151.9)
	2,329.0	1,986.0

- (i) The following aircrafts were held in the finished goods inventory:
- December 31, 2022: two Phenom 300, one Praetor 500, two Praetor 600 and one Super Tucano.
  - December 31, 2021: one Phenom 100, one Phenom 300, one Praetor 500, two Praetor 600 and one Super Tucano.
- (ii) Changes in the provision for adjustments to the realizable value of work in process, finished goods and used aircraft were as follows:

	12.31.2022	12.31.2021	12.31.2020
Beginning balance	(1.0)	(4.4)	(0.9)
Additions	(5.9)	(13.9)	(17.3)
Disposals	1.2	17.3	14.6
Assets held for sale	—	—	(0.8)
Ending balance	(5.7)	(1.0)	(4.4)

- (iii) Changes in the provision for obsolescence were as follows:

	12.31.2022	12.31.2021	12.31.2020
Beginning balance	(150.9)	(210.3)	(95.6)
Additions	(38.4)	(45.6)	(42.2)
Disposals	54.0	84.0	23.9
Reversals	8.6	17.3	1.7
Foreign exchange	0.6	1.6	(3.4)
Assets held for sale	—	2.1	(94.7)
Ending balance	(126.1)	(150.9)	(210.3)

11. Other assets

	12.31.2022	12.31.2021
Taxes recoverable (i)	141.6	105.0
Prepaid expenses	69.6	36.2
Other debtors (ii)	65.4	73.7
Loan with a joint operation	26.8	25.7
Court-mandated escrow deposits (iii)	26.7	24.9
Advances to employees	15.0	19.6
Advances for services to be rendered	9.2	13.7
Guarantee deposits	6.8	3.0
Collateralized accounts receivable	5.8	9.9
Others	14.6	10.6
	381.5	322.3
Current portion	246.3	194.3
Non-current portion	135.2	128.0

(i) Taxes recoverable

	12.31.2022	12.31.2021
ICMS (State Value-added Tax) and IPI (Excise Tax)	56.6	59.5
PIS (Social Integration Program) and COFINS (Contribution for Social Security)	63.2	27.6
Value added tax	7.4	6.2
Income tax and social security on net income withheld	6.2	5.6
Advance service tax (ISS- Service tax)	5.4	4.4
Others	2.8	1.7
	141.6	105.0
Current portion	76.7	37.4
Non-current portion	64.9	67.6

- In 2022, the Company recognized the amount of US\$ 38.8 referring to extemporaneous PIS and COFINS credits related to the nationalization (payment of taxes) of goods imported under the RECOF (Special Tax Regime).
- (ii) Corresponds mainly to rework done on materials and parts received from suppliers, which will be reimbursed in cash by the supplier or through credits granted that can be used to offset trade accounts payable when requested by the Company and approved by the supplier.
- (iii) Refers to deposits arising from lawsuits, substantially to federal taxes and contributions, in which there is a liability recorded Note 24.

12. Interest in entities

12.1 Subsidiaries

Subsidiaries controlled directly or indirectly by the Company are described in Note 2.1.3 and are consolidated.

There are no contractual or legal restrictions on the Company’s access to assets or settlement of liabilities of the subsidiaries.

There are inherent risks to the operations of these entities, the most significant of which are described below:

- Economic Risks: potential losses from fluctuations in market conditions (price of products, exchange rate and interest).
- Operational risk: potential losses resulting from the emergence of new technologies or failure of current processes.
- Credit risk: potential losses that might occur if a third party (customer) becomes unable to meet its obligations, and
- Liquidity risk: financial inability to meet financial obligations.

12.2 Subsidiaries with non-controlling interests

Non-controlling shareholders have interests in the entities listed below, however, based on contractual agreements and analysis of the applicable accounting standards, the Company has control and consolidate the following entities:

12.31.2022					
Entity	Country	Interest Embraer Group	Non-controlling interest		Income (loss)
OGMA - Indústria Aeronáutica de Portugal S.A.	Portugal	65.0%	35.0%	43.5	(19.5)
Visiona Tecnologia Espacial S.A.	Brazil	51.0%	49.0%	14.4	(2.5)
Embraer CAE Training Services	United States of America	51.0%	49.0%	33.1	11.8
Tempest Serviços de Informática S.A.	Brazil	61.0%	39.0%	10.0	0.7
EVE Holding Inc.	United States of America	89.7%	10.3%	20.1	(308.5)
EVE Holding Inc. - Listing Expenses	United States of America	0.0%	100.0%	135.7	—
				256.8	

12.31.2021					
Entity	Country	Interest Embraer Group	Non-controlling interest		Income (loss)
OGMA - Indústria Aeronáutica de Portugal S.A.	Portugal	65.0%	35.0%	54.0	(4.2)
Visiona Tecnologia Espacial S.A.	Brazil	51.0%	49.0%	15.8	(2.4)
Embraer CAE Training Services	United States of America	51.0%	49.0%	27.3	8.9
Tempest Serviços de Informática S.A.	Brazil	61.0%	39.0%	10.0	(1.1)
				107.1	

Embraer holds 51.0% of the entities Visiona Tecnologia Espacial S.A. and Embraer CAE Training Services. The powers described in the contractual agreements show that the Board of Directors is mainly comprised of Embraer representatives, as well as Embraer directs the principal operating activities of the entity.

The financial position of the most significant entity with non-controlling interests is summarized below, which is OGMA - Indústria Aeronáutica de Portugal S.A. and Eve Holding, Inc. respectively. Other entities combined represent less than 5% of consolidated profit before taxes on income.

OGMA - Indústria Aeronáutica de Portugal S.A.

	12.31.2022	12.31.2021
Cash and cash equivalents	5.9	38.8
Current assets	178.6	194.1
Non-current assets	74.9	65.4
Current liabilities	112.1	99.4
Non-current liabilities	17.0	5.9
Noncontrolling interest	43.5	54.0

	12.31.2022	12.31.2021	12.31.2020
Revenue	216.5	244.7	287.1
Net Income (loss) for the year	(19.5)	(4.2)	3.9

Eve Holding, Inc.

	12.31.2022
Cash and cash equivalents	49.1
Current assets	337.5
Non-current assets	279.3
Current liabilities	98.2
Non-current liabilities	44.9
Noncontrolling interest	20.1
Net loss for the year	(377.8)

Subsidiaries with non-controlling interests are subject to the same risks as the wholly owned subsidiaries, except for the restriction on the subsidiary Eve Holding, Inc, as per Note 12.3.

12.3 Completion of the transaction with Zanite Acquisition Corp. and changes in the ownership of Eve

12.3.1 Background

In December 2021, the Company and its two wholly owned subsidiaries, Eve UAM, LLC. (“Eve”) and Embraer Aircraft Holding, Inc. (“EAH”), entered into a Contribution Agreement in preparation for the transaction with Zanite Acquisition Corp. (“Zanite”). Zanite is a publicly held special purpose acquisition company incorporated under the laws of the State of Delaware in the United States. Under the Contribution Agreement, the Company transferred certain assets and liabilities related to the Company’s Urban Air Mobility (UAM) business to Eve and transferred Eve’s equity interests to EAH at book value. As a result of this transaction, Eve became a wholly owned subsidiary of EAH (common control transaction).

On December 21, 2021, Embraer, Eve and EAH entered into a Business Combination Agreement (BCA) with Zanite. Under the BCA, the Company’s UAM business transferred to Eve, which included the development and certification of electric vertical take-off and landing vehicles (eVTOL), the creation of a maintenance and services network for eVTOLs and the creation of an air traffic management system for eVTOLs (the “UAM Business”), would be combined with Zanite and a resulting entity would continue as a public company in the United States (the “SPAC Transaction”). The SPAC Transaction has been unanimously approved by Zanite and the Company’s board of directors prior to its completion.

In connection with the SPAC Transaction, Embraer also entered into agreements to provide products, inputs, and services, including engineering expertise, to Eve that continue to be effective after the completion of the SPAC Transaction.

On May 9, 2022, the SPAC Transaction was completed through an exchange of all issued and outstanding equity interests of Eve to 220,000,000 shares of Zanite common stock. As a result, Eve became a wholly owned subsidiary of Zanite and Zanite changed its corporate name to Eve Holding, Inc. (EVEX), a public company with shares listed on the New York Stock Exchange (“NYSE”) controlled by Embraer.

The completion of the SPAC Transaction included a capital contribution of US\$ 377.0 to EVEX, being: (i) US\$ 19.7 of Zanite’s cash held in trust, (ii) US\$ 172.3 provided by certain third-party investors in the Private Investment in Public Equity (PIPE) structure with the issuance of 17,230,000 shares totaling a contribution from external investors of US\$ 192.0 million and (iii) US\$ 185.0 contributed by the Company with the receipt of 18,500,000 additional shares, as a result of Embraer through EAH held a total of 238,500,000 shares of EVEX common stock.

EVEX is a company at an early stage with products in study phase that still does not show significant revenue or operating results. Research expenses incurred by Eve’s business are recognized in the statement of income for the year. As a result, the subsidiary is not reported as a separate operating segment in the segment information presented in Note 36.

The Company has significant access restrictions to EVEX’s cash balances and financial investments to settle other subsidiaries obligations not directly related to Eve’s business as defined in EVEX’s shareholders’ agreement (protective right).

Upon conclusion of the Transaction, EAH’s interest decreased to 90.2%. With the issuance of put options, the participation increased to 91.2% in the 4th quarter of 2022 due to the new warrants for PIPE investors, as well as the exercise of some warrants, EAH’s final interest on December 31, 2022, decreased to 89.7%. For more details, see notes 12.3.2 and 12.3.3.2.

12.3.2 Accounting

Put Options

Prior to the Transaction, Eve was an indirect wholly owned subsidiary of Embraer. As of completion of the Transaction, Embraer’s interest in Eve’s business decreased from 100% to 90.2% due to the exchange of 100% of Eve’s units for Zanite’s shares and the entry of new private investors, as disclosed in the previous topic.

As part of the strategic commitments signed with some PIPE investors, the Company granted financial instruments that protect the capital contribution of these investors in EVEX. The Company has issued put options to these investors so that they can sell the shares they hold in EVEX to EAH in exchange for a parts and service credit. Management recorded put options as a financial liability by US\$30 million (Note 21(iv)) , reducing the participation of these non-controlling shareholders. As a result, there was an increase from 90.2% to 91.2% in the Company’s participation, and in the 4th quarter, participation decreased to 89.7%, as per Note 12.3.1.

Under IFRS 10 - Consolidated Financial Statements, Management determined that Embraer continues to exercise indirect control over Eve’s business after the conclusion of the Transaction, since the Company has power and voting rights on substantive decisions, including the majority of members of the Board of Directors.

Listing expenses

The transaction is not within the scope of IFRS 3 - Business Combination since Zanite was a specific purpose entity for the acquisition of businesses and did not meet the definition of business by the standard, thus being accounted for in accordance with the standard IFRS 2 - Share-Based Payment. According to this standard, Embraer recognized a non-cash expense of US\$ 136 million as a listing expense based on the difference between the fair value of Zanite’s net assets against the fair value of the financial instruments issued by EVEX.

Transaction costs

The Company considered the requirements of IAS 32 and IFRS 9 for the accounting treatment of transaction costs. The costs incurred during the Transaction were analyzed to determine which costs are direct and incremental for the Business Combination. Costs, which were considered incremental were recorded against funds received from shareholders, in shareholders’ equity (US\$ 13 million) while costs not considered incremental were treated as other operating expenses (US\$ 11 million).

12.3.3 Warrants

12.3.3.1 Public and private warrants

Zanite issued 11,500,000 redeemable public warrants and 14,250,000 Private Placement Warrants prior to the closing. The exercise period for these warrants began 30 days after the transaction date (May 9, 2022) and will end on the later of a) May 9, 2027, b) liquidation of EVEX c) the date set by EVEX to redeem all warrants. These warrants are exercisable at an exercise price of US\$ 11.50 per share.

The aforementioned warrants are financial instruments and are within the scope of IAS 32/IFRS 9 and, under IAS 32.11, which were classified as derivative financial instruments in liabilities initially measured at fair value against other operating expenses on the date the Business Combination was completed. The subsequent measurement of fair value has been recognized in the Company’s financial expense/income account.

12.3.3.2 Strategic Warrants

Upon Closing, EVEX common stock was held by EAH (90.2%), Zanite public shareholders, Zanite sponsors, and some third-party investors who entered into subscription agreements to purchase common stock upon the closing of the SPAC Transaction (“Strategic Investors PIPE”). In addition to the PIPE Investment, EVEX

entered into Options Contracts with a total of nine PIPE Strategic Investors. During the third quarter of 2022, EVEX entered into another subscription agreement and an Options Agreement with a PIPE Strategic Investor.

In total, EVEX has issued or agreed to issue warrants to PIPE Strategic Investors (“Strategic Warrants”) in the total amount of (i) 24,095,072 Strategic Warrants with an exercise price of US\$0.01 per share, (ii) 12,000,000 Strategic Warrants with an exercise price of US\$15.00 per share and (iii) 5,000,000 Strategic Warrants with an exercise price of US\$ 11.50 per share. Of the total number of Strategic Warrants issued, 3,522,536 were exercised for the same number of EVEX shares. This exercise, added to the investment made by a PIPE Strategic Investor of 2,039,353 shares, resulted in EAH’s final stake in EVEX on December 31, 2022, of approximately 89.7%.

Strategic Warrants issued pursuant to their respective contracts can be categorized as follows:

**Penny Warrants:** Strategic Warrants with an exercise price of US\$ 0.01 per share. Penny warrants were issued to PIPE Strategic Investors because they are linked to potential future commercial partnership agreements.

**Market Warrants:** Strategic Warrants issued with an exercise price of US\$ 15.00 and US\$ 11.50 per share and were issued at transaction closing.

Since the Strategic Warrants were not issued at fair value, they required separate recognition and measurement as they represent a separate accounting unit from the common shares issued to PIPE Strategic Investors.

Strategic Warrants issued to potential customers, suppliers and lenders are financial instruments classified as derivative financial instruments liabilities, which were initially measured at fair value against the other operating expenses line, on the date the Business Combination was completed. The subsequent measurement of fair value has been recognized in the Company’s financial expense/income line.

There are also some warrants issued to suppliers that are within the scope of IFRS 2 - Share-based payments, which were measured at fair value and accounted for as operating expenses, against shareholders’ equity.

13. Related parties

13.1 Related party transactions

These are transactions made between Embraer with its direct or indirect subsidiaries described in Note 2.1.3 and basically refer to:

- (i) Assets: (i) accounts receivable for spare parts, aircraft sales and product development, under conditions agreed between the parties, considering the volumes, risks involved and corporate policies (ii) balances of financial investments; and (iii) bank deposits.
- (ii) Liabilities: (i) purchase of aircraft components and spare parts, under conditions agreed between the parties, considering the volumes, risks involved, and corporate policies (ii) advances received on sales contracts, according to contractual agreements; (iii) commission for sale of aircraft and spare parts (iv) financing for research and product development at market rates for this kind of financing (v) loans and financing; and (vi) export financing, and
- (iii) Profit or Loss: (i) purchases and sales of aircraft, components and spare parts and development of products for the defense and security market; (ii) financial income and expenses from financial investments and expenses from loans and financing, and (iii) supplementary pension plan.

13.2 Brazilian Federal Government

Transactions with related parties also involve transactions with the Brazilian Federal Government.



Embraer S.A.

Notes to the Consolidated Financial Statements  
In millions of U.S. dollar, unless otherwise stated

The Brazilian Federal Government maintains direct and indirect participation through the ownership of a common share called golden share. As of December 31, 2022, the Brazilian Federal Government held an indirect interest of 5.37% in the Company’s capital through BNDESPAR, a wholly owned subsidiary of the *Banco Nacional do Desenvolvimento Econômico e Social* (the Brazilian Development Bank, or “BNDES”), which, in turn, is controlled by the Brazilian Federal Government.

The Brazilian government plays a key role in the Company’s business activities, including as:

- Major customer for Defense & Security products (through the Brazilian Air Force, Brazilian Army, and Brazilian Navy).
- Source of research and development financing through technology development institutions (*Financiadora de Estudos e Projetos* - FINEP and BNDES).
- Export credit agency (through the BNDES), and
- Source of short-term and long-term financing and a provider of asset management and commercial banking services (through Banco do Brasil).

13.3 December 31, 2022

	Current		Non-current		Financial Results	Operating Results
	Assets	Liabilities	Assets	Liabilities		
Banco do Brasil S.A.	329.0	—	73.5	—	6.2	—
Banco Nacional de Desenvolvimento Econômico e Social – BNDES	—	1.3	—	300.0	(6.3)	—
Comando da Aeronáutica (Brazilian Air Force)	363.1	59.9	—	—	—	29.6
Exército Brasileiro (Brazilian Army)	5.7	7.9	—	—	—	2.1
Embraer Prev - Sociedade de Previdência Complementar	—	—	—	—	—	(9.7)
Ez Air Interior Limited	5.2	5.2	21.7	21.7	—	—
Financiadora de Estudo e Projetos – FINEP	—	6.4	—	—	(0.4)	—
FIP Aeroespacial	—	—	—	11.2	—	—
Governo Brasileiro - Bonds (Brazilian government -Bonds)	0.1	—	66.5	—	2.5	—
Marinha do Brasil (Brazilian Navy)	1.7	1.8	—	—	—	(1.4)
	<u>704.8</u>	<u>82.5</u>	<u>161.7</u>	<u>332.9</u>	<u>2.0</u>	<u>20.6</u>

The operating results of the Brazilian Air Force presented in the table above includes the revenue cumulative adjustment of US\$ 5.0 recognized in the end of 2022 as a result of the contract modification for scope reduction in the sales order of KC-390 Millennium. For further information, see Notes 1.1.1 and 3.1.2.

13.4 December 31, 2021

	Current		Non-current		Financial Results	Operating Results
	Assets	Liabilities	Assets	Liabilities		
Banco do Brasil S.A.	50.6	—	—	—	(1.8)	—
Banco Nacional de Desenvolvimento Econômico e Social – BNDES	—	1.4	—	300.5	(6.2)	—
Comando da Aeronáutica (Brazilian Air Force)	410.3	153.2	—	—	—	(42.0)
Embraer Prev - Sociedade de Previdência Complementar	—	4.2	—	—	—	(12.0)
Exército Brasileiro (Brazilian Army)	2.4	1.6	—	—	—	3.3
Ez Air Interior Limited	4.8	4.8	20.9	20.9	—	—
Financiadora de Estudo e Projetos – FINEP	—	8.2	—	5.9	(0.7)	—
FIP Aeroespacial	—	—	—	7.2	—	—
Marinha do Brasil (Brazilian Navy)	0.4	2.6	—	—	—	(2.0)
	<u>468.5</u>	<u>176.0</u>	<u>20.9</u>	<u>334.5</u>	<u>(8.7)</u>	<u>(52.7)</u>

The operating results of the Brazilian Air Force presented in the table above includes the revenue cumulative adjustment of US\$ 41 recognized in the end of 2021 as a result of the contract modification for scope reduction in the sales order of KC-390 Millennium. For further information, see Note 3.1.2.

13.5 December 31, 2020

	Financial Results	Operating Results
Banco do Brasil S.A.	(1.3)	—
Banco Nacional de Desenvolvimento Econômico e Social – BNDES	(2.4)	—
Comando da Aeronáutica (Brazilian Air Force)	—	(34.0)
Marinha do Brasil (Brazilian Navy)	—	(3.2)
Embraer Prev - Sociedade de Previdência Complementar	—	(12.0)
Exército Brasileiro (Brazilian Army)	—	1.5
Financiadora de Estudo e Projetos – FINEP	(0.1)	—
	<u>(3.8)</u>	<u>(47.7)</u>

13.6 Remuneration of key management personnel:

	12.31.2022	12.31.2021	12.31.2020
Short-term benefits (i)	8.5	6.1	5.8
Share based payment (ii)	(1.0)	2.4	(1.7)
Labor contract termination	—	—	0.5
Total remuneration	<u>7.5</u>	<u>8.5</u>	<u>4.6</u>

- (i) Includes wages, salaries, profit sharing, bonuses and indemnities distributed to the key management personnel, which are settled in Brazilian Real, as well as the compensation of external members engaged in the statutory advisory committees.
- (ii) Accounts payable were reduced in 2022 and increased in 2021 due to the stock price of the Company in each period, which is applied to measure the share-based payment plan settled in cash, as disclosed in Note 27.

The Company considers as key management personnel the members of the statutory Board of Directors and statutory Executive Directors.

14 Property, plant and equipment

The Company applied the following useful lives for the depreciation of fixed assets:

Class of assets	Estimated life
Buildings and improvements	30 to 60 years
Installations	10 to 50 years
Machinery and equipment	10 to 40 years
Furniture and fixtures	5 to 30 years
Vehicles	10 to 15 years
Aircraft	4 to 20 years
Computers and peripherals	2 to 10 years
Tooling	5 to 29 years
Exchange pool program assets	8 to 30 years

Notes to the Consolidated Financial Statements  
In millions of U.S. dollar, unless otherwise stated

	12.31.2022												
	Land	Buildings and improvements	Installations	Machinery and equipment	Furniture and fixtures	Vehicles	Aircraft	Computers and peripherals	Tooling	Other assets	Exchange pool program assets	Construction in progress	Total
Cost													
At December 31, 2021	10.2	656.9	88.4	727.8	46.5	12.0	23.7	116.4	672.2	18.5	712.5	35.2	3,120.3
Additions	—	1.2	—	23.3	1.5	0.4	—	3.3	7.2	—	70.1	29.2	136.2
Disposals	—	(4.2)	—	(19.9)	(5.0)	(0.4)	(19.2)	(3.7)	(56.2)	—	(31.0)	—	(139.6)
Reclassifications*	—	3.6	0.5	(2.1)	(0.1)	0.1	—	(0.6)	(7.4)	—	(27.2)	(11.7)	(44.9)
Translation adjustments	—	(1.7)	(0.5)	(4.8)	(0.2)	(0.2)	—	(0.4)	(0.2)	—	(15.0)	(1.2)	(24.2)
At December 31, 2022	10.2	655.8	88.4	724.3	42.7	11.9	4.5	115.0	615.6	18.5	709.4	51.5	3,047.8
Accumulated depreciation													
At December 31, 2021	—	(183.2)	(34.8)	(394.0)	(30.1)	(9.5)	(22.9)	(107.7)	(416.5)	(18.5)	(215.5)	—	(1,432.7)
Depreciation	—	(18.4)	(2.6)	(26.2)	(3.2)	(0.5)	(0.1)	(3.3)	(23.4)	—	(13.9)	—	(91.6)
Disposals	—	2.4	—	14.5	3.7	0.3	18.7	3.3	42.9	—	11.3	—	97.1
Reclassifications*	—	3.0	0.7	5.5	0.2	—	—	0.7	7.5	—	0.3	—	17.9
Interest on capitalized assets	—	(1.1)	—	—	—	—	—	—	—	—	—	—	(1.1)
Translation adjustments	—	0.5	0.1	3.8	0.2	0.2	—	0.4	0.1	—	6.5	—	11.8
At December 31, 2022	—	(196.8)	(36.6)	(396.4)	(29.2)	(9.5)	(4.3)	(106.6)	(389.4)	(18.5)	(211.3)	—	(1,398.6)
Net													
At December 31, 2021	10.2	473.7	53.6	333.8	16.4	2.5	0.8	8.7	255.7	—	497.0	35.2	1,687.6
At December 31, 2022	10.2	459.0	51.8	327.9	13.5	2.4	0.2	8.4	226.2	—	498.1	51.5	1,649.2

Notes to the Consolidated Financial Statements  
In millions of U.S. dollar, unless otherwise stated

	12.31.2021												
	Land	Buildings and improvements	Installations	Machinery and equipment	Furniture and fixtures	Vehicles	Aircraft	Computers and peripherals	Tooling	Other assets	Exchange pool program assets	Construction in progress	Total
Cost													
At December 31, 2020	11.0	716.9	93.6	881.0	49.0	12.3	23.7	121.1	655.6	18.4	737.5	65.4	3,385.5
Additions	—	0.6	—	13.1	0.6	0.3	—	0.9	5.2	0.1	62.4	18.5	101.7
Disposals	—	(14.9)	—	(14.2)	(2.7)	(0.4)	—	(3.2)	(0.4)	—	(35.9)	—	(71.7)
Impairment	—	—	—	12.4	—	—	—	—	1.4	—	—	—	13.8
Reclassifications*	—	21.2	0.5	6.0	0.5	0.1	—	0.7	10.4	—	(23.2)	(39.3)	(23.1)
Translation adjustments	—	(2.6)	(0.6)	(7.8)	(0.4)	(0.3)	—	(1.1)	—	—	(28.3)	(0.8)	(41.9)
Assets held for sale	(0.8)	(64.3)	(5.1)	(162.7)	(0.5)	—	—	(2.0)	—	—	—	(8.6)	(244.0)
At December 31, 2021	10.2	656.9	88.4	727.8	46.5	12.0	23.7	116.4	672.2	18.5	712.5	35.2	3,120.3
Accumulated depreciation													
At December 31, 2020	—	(180.1)	(33.8)	(422.2)	(25.8)	(9.5)	(22.4)	(107.7)	(397.8)	(18.4)	(211.8)	—	(1,429.5)
Depreciation	—	(20.9)	(2.5)	(30.7)	(7.3)	(0.7)	(0.5)	(5.7)	(18.6)	(0.1)	(21.0)	—	(108.0)
Disposals	—	5.1	—	13.9	2.6	0.4	—	3.0	0.2	—	11.8	—	37.0
Impairment	—	—	—	(2.3)	—	—	—	—	(0.3)	—	—	—	(2.6)
Reclassifications*	—	—	—	—	—	—	—	—	—	—	1.1	—	1.1
Interest on capitalized assets	—	(1.1)	—	—	—	—	—	—	—	—	—	—	(1.1)
Translation adjustments	—	1.0	0.2	6.3	0.3	0.3	—	0.9	—	—	4.4	—	13.4
Assets held for sale	—	12.8	1.3	41.0	0.1	—	—	1.8	—	—	—	—	57.0
At December 31, 2021	—	(183.2)	(34.8)	(394.0)	(30.1)	(9.5)	(22.9)	(107.7)	(416.5)	(18.5)	(215.5)	—	(1,432.7)
Net													
At December 31, 2020	11.0	536.8	59.8	458.8	23.2	2.8	1.3	13.4	257.8	—	525.7	65.4	1,956.0
At December 31, 2021	10.2	473.7	53.6	333.8	16.4	2.5	0.8	8.7	255.7	—	497.0	35.2	1,687.6

Notes to the Consolidated Financial Statements  
In millions of U.S. dollar, unless otherwise stated

	12.31.2020												
	Land	Buildings and improvements	Installations	Machinery and equipment	Furniture and fixtures	Vehicles	Aircraft	Computers and peripherals	Tooling	Other assets	Exchange pool program assets	Construction in progress	Total
Cost													
At December 31, 2019	5.1	459.2	60.1	481.8	38.1	10.4	14.7	101.5	443.8	25.5	321.0	48.2	2,009.4
Additions	—	1.3	—	14.2	0.5	0.2	—	1.4	11.4	—	51.2	22.1	102.3
Additions - business combination	—	0.8	—	0.1	0.2	—	—	0.9	—	—	—	—	2.0
Disposals	(0.4)	(8.5)	(0.1)	(8.4)	(1.0)	(0.4)	—	(4.0)	(1.6)	(0.1)	(16.9)	(1.6)	(43.0)
Impairment	—	—	—	1.6	—	—	(0.8)	—	0.5	—	—	—	1.3
Reclassifications*	—	26.6	3.2	15.2	—	—	(38.4)	—	37.0	(10.8)	(18.2)	(71.4)	(56.8)
Translation adjustments	—	1.0	0.6	8.5	0.1	0.3	—	—	—	—	25.6	0.4	36.5
Assets held for sale	6.3	236.5	29.8	368.0	11.1	1.8	48.2	21.3	164.5	3.8	374.8	67.7	1,333.8
At December 31, 2020	11.0	716.9	93.6	881.0	49.0	12.3	23.7	121.1	655.6	18.4	737.5	65.4	3,385.5
Accumulated depreciation													
At December 31, 2019	—	(131.6)	(25.6)	(301.5)	(21.5)	(8.5)	(4.1)	(88.7)	(352.6)	(18.4)	(88.0)	—	(1,040.5)
Depreciation	—	(28.7)	(4.1)	(50.9)	(2.8)	(0.9)	(1.5)	(11.2)	(37.0)	—	(15.2)	—	(152.3)
Depreciation - business combination	—	(0.2)	—	(0.1)	(0.1)	—	—	(0.4)	—	—	—	—	(0.8)
Disposals	—	1.9	0.1	7.1	0.7	0.4	—	1.1	0.6	—	6.1	—	18.0
Reclassifications*	—	—	—	—	—	—	2.2	—	—	—	(1.8)	—	0.4
Interest on capitalized assets	—	(1.1)	—	—	—	—	—	—	—	—	—	—	(1.1)
Translation adjustments	—	0.1	(0.1)	(6.2)	(0.1)	(0.3)	—	(0.1)	—	—	(2.4)	—	(9.1)
Assets held for sale	—	(20.5)	(4.1)	(70.6)	(2.0)	(0.2)	(19.0)	(8.4)	(8.8)	—	(110.5)	—	(244.1)
At December 31, 2020	—	(180.1)	(33.8)	(422.2)	(25.8)	(9.5)	(22.4)	(107.7)	(397.8)	(18.4)	(211.8)	—	(1,429.5)
Net													
At December 31, 2019	5.1	327.6	34.5	180.3	16.6	1.9	10.6	12.8	91.2	7.1	233.0	48.2	968.9
At December 31, 2020	11.0	536.8	59.8	458.8	23.2	2.8	1.3	13.4	257.8	—	525.7	65.4	1,956.0

\* Non-cash transactions (reclassification between accounts within property, plant and equipment and inventories).

As of December 31, 2022, US\$ 0.3 of the Company’s fixed assets were included as collateral of legal demands. Fixed assets included as collateral for loans and financing raised by the Company are disclosed on Note 20.1.

15 Assets held for sale

15.1 Transaction

The sale of all the shares of the Company’s subsidiaries Embraer Portugal Estruturas Metálicas S.A. (“EEM”) and Embraer Portugal Estruturas em Compósitos S.A. (“EEC”) to Aernnova Aerospace, SAU, headquartered in Spain (“Aernnova”), was approved by the Board of Directors on November 11, 2021, and concluded through a binding agreement signed by the Company on January 11, 2022.

EEM and EEC were dedicated to supplying certain components used in the manufacture of aircraft by the Company and by Embraer Executive Aircraft, LLC (United States).

The Transaction is an integral part of the Company’s assets optimization which aims at maximizing facilities use and profitability improvement. In this context, the Company and Aernnova established supply agreements effective as of the closing of the Transaction that would aim to provide the continuous supply of metallic and composite components at fixed prices consistent with the Company’s Strategic Plan.

The closing of the transaction took place on May 2, 2022, the date on which Aernnova took over the operation of the EEM and EEC industrial plants upon payment of US\$ 175. The net assets derecognized included US\$ 15.7 of cash and cash equivalents, therefore, the net cash inflow in the statements of cash flows with this transaction was US\$ 158.2.

The Company recognized in the annual financial statements as of December 31, 2021, an estimated impairment loss measured based on the fair value of the contract less selling expenses in the group of assets held for sale of US\$ 45.0 At the closing of the Transaction, an additional loss of US\$ 5.9 was recognized arising from the price adjustment and certain conditions approved by the parties in an amendment signed on May 2, 2022.

ASSETS HELD FOR SALE	04.30.2022	12.31.2021	LIABILITIES HELD FOR SALE	04.30.2022	12.31.2021
Cash and cash equivalents	15.7	20.3	Trade accounts payable	13.5	13.7
Trade accounts receivable, net	1.3	0.9	Other payables	3.6	2.5
Inventories	60.4	59.0	Taxes and payroll charges payable	0.6	0.4
Income tax and social contribution	—	0.5	Income tax and social contribution	0.1	—
Other assets	6.0	6.3	Unearned income	27.9	28.5
Guarantee deposits	0.2	0.2			
Deferred income tax and social contribution	1.6	1.7			
Property, plant and equipment, net*	136.1	141.9		45.7	45.1
Intangible assets, net	0.2	0.1	Net assets to be disposed	175.8	185.8
Total	221.5	230.9	Total	221.5	230.9

\* Property, plant and equipment included in the assets held for sale (US\$ 136.1) are presented net of impairment losses in the amount of US\$ 50.9 measured based on the fair value less cost to sell.

16 Intangible assets

Internally developed intangible assets relate to expenditures incurred in developing new aircraft, including support services, production labor, materials and direct labor allocated to the construction of aircraft prototypes or significant components, and the use of advanced technologies to make the aircraft lighter, quieter, more comfortable and energy-efficient and to reduce emissions, in addition to speeding up design and manufacture, while optimizing the use of resources.

	12.31.2022									
	Internally developed					Acquired from third party				
	Commercial	Executive	Defense and Security	Service and Support	Others	Development	Software	Goodwill	Others	Total
Intangible cost										
At December 31, 2021	1,234.2	1,405.8	55.8	—	4.6	11.8	310.6	21.4	169.6	3,213.8
Additions	40.4	48.6	13.7	9.0	—	—	4.1	—	4.0	119.8
Disposals	—	—	—	—	—	—	(1.6)	—	(5.3)	(6.9)
Reclassifications	(0.2)	90.2	62.0	—	—	(11.8)	(10.1)	—	(157.7)	(27.6)
Translation adjustments	—	—	0.9	—	—	—	(1.0)	0.9	—	0.8
At December 31, 2022	1,274.4	1,544.6	132.4	9.0	4.6	—	302.0	22.3	10.6	3,299.9
Accumulated amortization										
At December 31, 2021	(80.1)	(617.4)	(43.9)	—	(1.8)	(3.6)	(234.2)	—	(19.4)	(1,000.4)
Amortization	(31.6)	(42.9)	(2.4)	—	(0.6)	—	(25.6)	—	(0.6)	(103.7)
Amortization of contribution from suppliers	10.2	10.9	—	—	—	—	—	—	—	21.1
Disposals	—	—	—	—	—	—	1.6	—	1.1	2.7
Reclassifications	20.4	(12.2)	(5.2)	—	—	3.6	4.1	—	17.0	27.7
Interest on capitalized assets	—	(1.4)	—	—	—	—	—	—	—	(1.4)
Translation adjustments	—	—	(0.4)	—	—	—	1.0	—	—	0.6
At December 31, 2022	(81.1)	(663.0)	(51.9)	—	(2.4)	—	(253.1)	—	(1.9)	(1,053.4)
Intangible, net										
At December 31, 2021	1,154.1	788.4	11.9	—	2.8	8.2	76.4	21.4	150.2	2,213.4
At December 31, 2022	1,193.3	881.6	80.5	9.0	2.2	—	48.9	22.3	8.7	2,246.5

	12.31.2021									
	Internally developed					Acquired from third party				
	Commercial	Executive	Defense and Security	Others		Development	Software	Goodwill	Others	Total
Intangible cost										
At December 31, 2020	1,126.0	1,339.8	52.0	4.6		10.7	308.1	21.7	136.7	2,999.6
Additions	108.2	16.6	3.8	—		1.6	6.3	—	30.0	166.5
Disposals	—	—	—	—		—	(1.1)	—	—	(1.1)
Impairment	—	49.0	—	—		—	—	—	4.1	53.1
Interest on capitalized assets	—	0.4	—	—		—	—	—	—	0.4
Translation adjustments	—	—	—	—		(0.5)	(1.9)	(0.3)	(1.2)	(3.9)
Assets held for sale	—	—	—	—		—	(0.8)	—	—	(0.8)
At December 31, 2021	1,234.2	1,405.8	55.8	4.6		11.8	310.6	21.4	169.6	3,213.8
Accumulated amortization										
At December 31, 2020	(60.5)	(589.0)	(43.5)	(1.5)		(3.6)	(212.4)	—	(13.5)	(924.0)
Amortization	(19.6)	(34.9)	(0.4)	(0.3)		—	(25.1)	—	(6.3)	(86.6)
Amortization of contribution from suppliers	—	10.1	—	—		—	—	—	—	10.1
Disposals	—	—	—	—		—	1.0	—	—	1.0
Impairment	—	(2.3)	—	—		—	—	—	—	(2.3)
Interest on capitalized assets	—	(1.3)	—	—		—	—	—	—	(1.3)
Translation adjustments	—	—	—	—		—	1.6	—	0.4	2.0
Assets held for sale	—	—	—	—		—	0.7	—	—	0.7
At December 31, 2021	(80.1)	(617.4)	(43.9)	(1.8)		(3.6)	(234.2)	—	(19.4)	(1,000.4)
Intangible, net										
At December 31, 2020	1,065.5	750.8	8.5	3.1		7.1	95.7	21.7	123.2	2,075.6
At December 31, 2021	1,154.1	788.4	11.9	2.8		8.2	76.4	21.4	150.2	2,213.4

	12.31.2020								
	Internally developed				Acquired from third party				
	Commercial	Executive	Defense and Security	Others	Development	Software	Goodwill	Others	Total
<b>Intangible cost</b>									
At December 31, 2019	—	1,292.3	49.3	3.6	9.4	213.7	10.0	75.0	1,653.3
Additions	63.3	13.5	2.7	1.0	1.8	3.1	—	36.0	121.4
Additions - business combination	—	—	—	—	—	9.4	13.8	7.8	31.0
Disposals	—	—	—	—	(0.6)	(1.9)	—	—	(2.5)
Impairment	—	6.6	—	—	—	—	—	(9.5)	(2.9)
Interest on capitalized assets	—	0.9	—	—	—	—	—	—	0.9
Translation adjustments	—	—	—	—	0.1	1.6	(2.1)	(1.8)	(2.2)
Assets held for sale	1,062.7	26.5	—	—	—	82.2	—	29.2	1,200.6
At December 31, 2020	1,126.0	1,339.8	52.0	4.6	10.7	308.1	21.7	136.7	2,999.6
<b>Accumulated amortization</b>									
At December 31, 2019	—	(550.1)	(32.8)	(1.3)	(3.7)	(165.6)	—	(5.7)	(759.2)
Amortization	(46.6)	(28.3)	(10.7)	(0.2)	—	(38.1)	—	(4.6)	(128.5)
Amortization - business combination	—	—	—	—	—	—	—	(1.2)	(1.2)
Amortization of contribution from suppliers	—	8.3	—	—	—	—	—	—	8.3
Disposals	—	—	—	—	0.1	1.6	—	—	1.7
Interest on capitalized assets	—	(1.1)	—	—	—	—	—	—	(1.1)
Translation adjustments	—	—	—	—	—	(1.5)	—	0.6	(0.9)
Assets held for sale	(13.9)	(17.8)	—	—	—	(8.8)	—	(2.6)	(43.1)
At December 31, 2020	(60.5)	(589.0)	(43.5)	(1.5)	(3.6)	(212.4)	—	(13.5)	(924.0)
<b>Intangible, net</b>									
At December 31, 2019	—	742.2	16.5	2.3	5.7	48.1	10.0	69.3	894.1
At December 31, 2020	1,065.5	750.8	8.5	3.1	7.1	95.7	21.7	123.2	2,075.6

17 Impairment of assets

For the fiscal year ended December 31, 2022, the Company performed impairment tests over its long-lived assets (fixed assets, intangible assets, including goodwill, and right of use assets) of the cash-generating units (product lines) to which goodwill and indefinite-lived assets are allocated, as well as for the additional CGUs with long-lived assets.

As a result of the impairment tests performed, the Company did not identify a scenario of devaluation or reversal of impairment losses. The following chart presents the changes on impairment losses during 2021:

	12.31.2020	Additions	Reversal	Amortization	12.31.2021
<b>Cash-generating units</b>					
Mid-Size / Super Mid-Size Platform	60.4	—	(57.9)	(2.5)	—
Satellites	3.8	1.6	—	—	5.4
	64.2	1.6	(57.9)	(2.5)	5.4
<b>Allocation of impairment losses</b>					
Fixed assets - Machinery and equipment	11.3				—
Fixed assets - Tooling	1.5				—
Intangibles - Internally developed	51.4				5.4
	64.2				5.4
<b>Operating segments (Note 36)</b>					
Executive Aviation	60.4				—
Defense & Security	3.8				5.4
	64.2				5.4

Except for the sensitivity analysis presented as follows of the main CGUs of the Company, the remaining CGUs present headroom falling in a range of approximately 50% to 1,000% when comparing the recoverable amount measured by its value-in-use and carrying amount in reporting date. Therefore, Management concludes there was no significant risk of impairment loss in these CGUs, considering the assumptions applied in the sensitivity analysis of this reporting period.



The sensitivity analysis presented demonstrates how changes to certain key assumptions in the impairment test of the main CGUs of the Company would change the test results.

E2 Platform (Commercial Aviation)

The impacts over future cash flows related to the decision to pause for three years in the development of the E175-E2 aircraft, approved by the Board of Directors on February 18, 2022, was considered by Management in the impairment test of the E2 Platform CGU as of December 31, 2022, and did not result in impairment losses.

Key assumption	Factor	Sensitivity	Impact in impairment test
Estimated aircraft deliveries during the useful life of platform up to 2045 and keeping current market share	—	5%	Negative changes of 5% in the estimated volume of deliveries would cause reduction in the CGU headroom from US\$ 287 to US\$ 175
Discount rate	9.9%	100bps	Increase of 100bps in the discount rate would cause reduction in the CGU headroom from US\$ 287 to US\$ 158
Foreign exchange rate (US\$/R\$) – rate applied to translate cash flows generated in foreign currency (R\$) to the functional currency (US\$)	R\$ 5.2177	10%	Reduction of 10% in foreign exchange rate (US\$/R\$) would cause impairment losses of US\$ 99

17. 1 Key assumptions of impairment test:

- Impairment tests as of December 31, 2022 were prepared based on value-in-use applying the expected cash flow and the ‘traditional’ approach defined by IAS 36, which the Company understands is not substantially different of the CGUs fair value less cost to sell under current market conditions. The process of estimating the value-in-use involves assumptions, judgments and estimates of future cash flows.
- The Company identified a new CGU as of December 31, 2022. The “E1 Cargo” UGC is linked to the “Services & Support” segment and encompasses the commercialization, development, certification, and conversion of E195-E1 and E190-E1 to freighter version and after-sales cargo.
- Future cash flows were projected for a period of 5 years (2023 to 2027) and discounted using a weighted average cost of capital (WACC) rate, reconciled to an estimated pre-tax rate of 9.9% and 10.7% on December 31, 2022, and 2021, respectively.
- Part of the future cash flows were budgeted in Reais and translated to the Company’s functional currency (U.S. dollar) based on the observable rate on 12/31/2022 of R\$ 5.2177. The 6.5% appreciation of the Real against the U.S. dollar in 2022 did not have a significant impact on future cash flows.

18 Trade accounts payable

	12.31.2022	12.31.2021
Foreign suppliers	355.5	259.0
Domestic suppliers	162.6	99.0
Risk partners	221.4	137.2
	<u>739.5</u>	<u>495.2</u>

19 Trade accounts payable – Supplier finance arrangements

The Company has entered into agreements with financial institutions with the purpose of carrying out commercial operations with domestic and foreign suppliers. During these transactions, suppliers can exclusively transfer at their discretion, the right to receive titles issued against the Company to these financial institutions, which in turn comes to be the creditor of discounted instruments. The suppliers that carry out this operation receive the resources before the commercial term of the security, discounting the costs and financial charges of the transaction.

This operation does not significantly alter the prices and commercial conditions negotiated with suppliers, nor are there any financial charges for the Company. On December 31, 2022, the average payment period for securities transferred by suppliers to financial institutions was 89 days.

20    Loans and financing

	Currency	Contractual interest rate - %	Effective interest rate - %	Maturity	12.31.2022	12.31.2021
Other currencies:						
Guaranteed notes	US\$	5.05% to 6.95% p.a.	5.05% to 7.42% p.a.	2028(i)	2,643.2	3,283.5
		4.42% to 4.50% p.a.	4.42% to 4.50% p.a.	2030	24.4	187.3
Working capital		Libor 1M + 1.30% p.a.	Libor 1M + 1.30% p.a.	2023	8.4	50.2
	US\$	Libor 1M + 1.40%	Libor 1M + 1.40%	2023	1.10	—
		Libor 6M + 2.60% p.a.	Libor 6M + 2.60% p.a.	2027	101.90	100.8
		SOFR + 0.75%	SOFR + 3.02%	2029	50.20	—
	Euro	Euribor 12 M + 1.3080% p.a.	Euribor 12 M + 1.3080% p.a.	2026	4.4	26.1
		2.44% p.a. to 4.00%p.a.	2.44% p.a. to 4.00%p.a.	2023	26.9	—
Export financing	US\$	Libor 3 M +1.76% p.a.	Libor 3 M +1.76% p.a.	2024(ii)	301.3	313.2
Property. plant and equipment	US\$	SIFMA + 3.66%	SIFMA + 3.66%	2035	21.1	37.7
Others	US\$	10.5% p.a.	10.5% p.a.	2028	10.0	9.8
					3,192.9	4,008.6
In local currency:						
Working capital	R\$	CDI + 2.60% p.a.	CDI + 2.60% p.a.	2026	4.0	3.6
Project development		3.5% p.a.	3.5% p.a.	2023	6.3	14.1
		IPCA + 5.92% p.a.	IPCA + 5.92% p.a.	2027	—	0.6
					10.3	18.3
Total					3,203.2	4,026.9
Current portion					308.5	574.2
Non-current portion					2,894.7	3,452.7

- (i)    Issuance of Bonds:
- Between August and September 2013, through its subsidiary Embraer Overseas Limited, Embraer made an offer to exchange existing bonds maturing in 2017 (settled in January 2017) and 2020 for “New Notes” maturing in 2023. In the case of bonds maturing in 2017, the exchange offer resulted in US\$ 146.4 of the aggregate principal of existing notes and US\$ 337.2 of the aggregate principal of the 2020 Notes, representing approximately 54.95% of the Notes exchanged. The total of the exchange offer, considering the effects of the exchange price on the negotiations and the total New Notes issued closed at approximately US\$ 540.5 in principal at a rate of 5.696% p.a., maturing on September 16, 2023. The Company repurchased part of the outstanding securities in the amount of US\$ 82.3 in September 2020, US\$ 18.9 in December 2021 and US\$ 228.6 in March 2022, remaining the outstanding balance of US\$ 210.8 and the other conditions unchanged. The principal repurchased was extinct and derecognized as loans and financing. The operation is fully and unconditionally guaranteed by the Company.

In June 2015, the Company’s wholly owned finance subsidiary Embraer Netherlands Finance B.V, which only performs financial operations, issued US\$ 1,000.0 in guaranteed notes at 5.05% p.a., due on June 15, 2025. This operation is fully and unconditionally guaranteed by the Company. Embraer Netherlands Finance B.V is a wholly owned subsidiary of Embraer, whose objective is to perform financial operations. The Company repurchased part of the outstanding securities in the amount of US\$ 43.0, remaining the outstanding balance of US\$ 957.0 in December 2022 and the other conditions unchanged. The principal repurchased was extinct and derecognized as loans and financing on December 31, 2022.

In February 2017, Embraer Netherlands Finance B.V., Embraer subsidiary, issued an offering of US\$ 750.0 with a nominal interest rate of 5.40% p.a. maturing February 1, 2027. The operations are fully and unconditionally guaranteed by the Company. Embraer Netherlands Finance B.V. is a wholly owned subsidiary of Embraer, whose objective is to perform financial operations. The Company repurchased part of the outstanding securities in the amount of US\$ 20.0, remaining the outstanding

balance of US\$ 730.0 and the other conditions unchanged. The principal repurchased was extinct and derecognized as loans and financing on December 31, 2022.

In September 2020, the Company’s wholly owned finance subsidiary Embraer Netherlands Finance B.V, issued US\$ 750.0 in notes at 6.95% p.a., due on January 17, 2028. This operation is fully and unconditionally guaranteed by the Company. Embraer Netherlands Finance B.V is a wholly owned subsidiary of Embraer. The Company repurchased part of the outstanding securities in the amount of US\$ 36.0, remaining the outstanding balance of US\$ 714.0 and the other conditions unchanged. The principal repurchased was extinct and derecognized as loans and financing on December 31, 2022.

- (ii) It refers to financing contracts for working capital for exports totaling US\$ 615.0, signed in 2020 with the National Bank for Economic and Social Development - BNDES and private banks (Banco do Brasil, Bradesco, Morgan Stanley, Natixis, and Santander). In 2021, US\$ 303.0 was settled and in 2022 U\$ 12.0 was settled.

In October 2022, Embraer, through its subsidiaries Embraer Aircraft Holding Inc. and Embraer Netherlands Finance B.V. obtained a revolving credit line of US\$ 650.0 due in October 2025. This revolving credit line was made with 14 international financial institutions being guaranteed by the Company and some other subsidiaries of the Company, and loans under the Revolving Credit Line will accrue interest at a rate composed of the Term SOFR plus a margin of 1.50% or 1.85% per year, depending on the Company’s corporate rating. This credit line may be amended by October 2023 to include sustainability-related resources, which will provide an annual margin adjustment applicable based on the Company’s performance in relation to certain sustainability goals.

In December 2022 Embraer signed a contract to finance working capital for exports totaling US\$ 400.0 with BNDES, the loan has a maturity of 5 years.

On December 31, 2022, 2021 and 2020, the changes in loans and financing were as follows:

	12.31.2022	12.31.2021	12.31.2020
Opening balance	4,026.9	4,448.0	91.0
Principal addition	146.6	60.4	2,093.1
Interest addition	182.1	200.2	197.2
Principal payment	(961.8)	(478.2)	(1,061.8)
Interest payment	(183.7)	(207.4)	(173.2)
Foreign exchange	11.1	18.0	(6.5)
Liabilities held for sale	(18.0)	—	3,301.2
Business Combination	—	—	7.0
Transfer	—	(14.1)	—
Total	3,203.2	4,026.9	4,448.0

On December 31, 2022, 2021 and 2020, the changes in lease liabilities were as follows:

	12.31.2022	12.31.2021	12.31.2020
Opening balance	63.8	64.7	38.6
Additions	22.5	14.4	27.8
Additions - business combination	—	—	1.6
Disposals	(2.8)	(1.7)	(3.8)
Interest expense	4.2	3.0	2.8
Payments	(11.8)	(10.4)	(9.0)
Assets and liabilities held for sale	—	—	9.4
Translation adjustments	(4.9)	(6.2)	(2.7)
Total	71.0	63.8	64.7
Current portion	12.0	11.5	11.4
Non-current portion	59.0	52.3	53.3

As of December 31, 2022, the maturity schedules of the long-term financing were:

Year	
2024	309.5
2025	954.8
2026	6.8
Thereafter 2026	1,623.6
	<u>2,894.7</u>

20.1 Interest and guarantees

On December 31, 2022, loans denominated in U.S. dollars (98.7% of the total) are mainly subject to floating interest rates. The weighted average rate was 5.39% p.a. (5.16% p.a. on December 31, 2021).

On December 31, 2022, loans denominated in Reais (0.32% of the total) are subject to interest rate based on the Brazilian Long-term Interest Rate (“TJLP”) and CDI. The weighted average rate was 8.31% p.a. (5.24% p.a. on December 31, 2021).

On December 31, 2022, loans denominated in Euros (0.98% of the total) had a weighted average interest rate of 2.75% p.a. (0.29% on December 31, 2021).

Real estate, machinery, equipment, commercial pledges, and bank guarantees totaling US\$ 470.8 as of December 31, 2022 (US\$ 452.9 as of December 31, 2021) were provided as collateral for loans.

20.2 Restrictive clauses

Loans and financing contracts are subject to restrictive clauses, and includes restrictions on the creation of new liens on assets, significant changes in the Company’s share control, significant sale of assets and payment of dividends in excess the minimum required by law in cases of default in financing and in transactions with controlled companies.

As of December 31, 2022, the Company had one contract subject to restrictive clauses related to the liquidity indicator.

21 Other payables

	12.31.2022	12.31.2021
Provisions related to payroll	100.7	105.0
Provision for employee profit sharing	51.3	26.0
Long-term incentive (i)	34.0	24.9
Other accounts payable (ii)	33.6	40.4
Non-controlling purchase options - Tempest (iii)	31.0	17.1
Non-controlling purchase options - EVE (iv)	30.0	—
Mutual with jointly controlled operation	26.8	25.7
Contractual obligations (v)	22.3	14.8
Commission payable	16.0	21.9
Insurance	6.1	7.2
Training simulator	5.9	—
Recourse and non-recourse debt	5.8	9.9
Accounts payable from financial guarantees	3.0	18.7
Brazilian air force	2.6	4.8
Facility accounts payable	1.9	0.8
Accounts payable of acquisitions (deferred consideration)	—	0.4
	<u>371.0</u>	<u>317.6</u>
Current portion	319.9	257.1
Non-current portion	51.1	60.5

(i) Accounts payable of the share-based payment program granted to certain employees of the Company in the form of phantom shares as described in Note 27

- (ii)

Represents, substantially, provision for expenses already incurred as of the date of the consolidated financial statements and for which payments are made during the following month.
- (iii)

As part of the acquisition of control of Tempest Serviços de Informática S.A. (2020), the Company received call options and granted put options to non-controlling shareholders in symmetrical and exercisable terms after the lock-up period at fair value for the purposes of the purchase of non-controlling interest. The Company recorded this derivative financial instrument as a reduction of shareholders' equity held by controlling shareholders, taking the risks and benefits of minority interests that continue to be held by non-controlling shareholders.
- (iv)

Refers to the purchase option of certain minority shareholders of Eve Holding, Inc., recorded as a reduction in the non-controlling interest, as per Note 12.3.2.
- (v)

Represents amounts recorded regarding contractual obligations assumed by the Company in contracts with customers mainly related to commercial concessions and costs to obtain contracts.

22 Taxes and payroll charges payable

	12.31.2022	12.31.2021
INSS (social security contribution) (i)	30.9	27.9
IRRF (withholding tax)	11.8	8.1
PIS and COFINS	2.0	4.0
IPI (manufacturing tax)	0.7	0.7
FGTS (government employee severance indemnity fund)	3.9	3.1
Others	11.1	6.6
	60.4	50.4
Current portion	47.2	40.4
Non-current portion	13.2	10.0

- (i)

Corresponds substantially to:
  - The Company is challenging in court the levy of social contributions on the prior notice, among other indemnity amounts. The partial success was confirmed in November 2017. Currently, the remaining amount involved in the discussion, regarding the prior notice established in the collective agreement and 1/3 of vacation, among other amounts, is US\$ 13.0 on December 31, 2022 (US\$ 9.8 on December 31, 2021).
  - The Company has a discussion to ensure the right not to pay social security contributions according to the system established by Law 12,546/2011 during the month of July 2017. On December 31, 2022, the amount involved and respectively provisioned is US\$ 5.7.

23 Income taxes

As the tax basis for the majority of the Company's assets and liabilities is maintained in reais and the accounting basis is measured in U.S. dollars (functional currency), the fluctuations in the exchange rate significantly impacted the tax basis and, in turn, the deferred income tax expense (benefit).

Deferred tax assets relating to temporary differences on non-deductible provisions, represented mainly by contingencies loss provisions, product warranties, financial guarantees and unearned income will be realized as such proceedings are concluded.

23.1 Deferred income tax and social contribution

The components of deferred tax assets and liabilities are as follows:

	12.31.2022	12.31.2021
Temporarily non-deductible provisions (i)	111.8	155.3
Tax loss carryforwards	16.6	7.1
Functional currency effect of the non monetary assets	(428.8)	(529.1)
Gains not realized from sales of the Company to subsidiaries	20.8	14.7
Effect of differences by fixed asset	(39.0)	(21.4)
Other differences between basis: account x tax (ii)	(3.9)	(33.1)
Assets and liabilities held for sale	—	(1.7)
<b>Deferred tax assets (liabilities), net</b>	<b>(322.5)</b>	<b>(408.2)</b>
Total deferred tax asset	48.1	97.6
Total deferred tax liability	(370.6)	(505.8)

- (i) Temporarily non-deductible provision includes accounting provisions, foreign exchange rate gains or losses included in income tax calculation when cash-settled and other differences which will be included or excluded in income tax calculation when realized for fiscal purposes.
- (ii) Refers to differences between the accounting and tax bases of assets and liabilities, such as adjustments to Contract revenues, Borrowing costs, Impairment, among others.

	From the statement of income	Other comprehensive income	Total
<b>At December 31, 2019</b>	<b>(314.1)</b>	<b>42.5</b>	<b>(271.6)</b>
Temporarily non-deductible provisions	68.5	—	68.5
Tax loss carryforwards	0.3	—	0.3
Functional currency effect of the non-monetary assets	(211.9)	—	(211.9)
Gains not realized from sales of Parent Company to subsidiaries	(8.6)	—	(8.6)
Effect of differences by fixed asset	26.1	—	26.1
Other differences between basis: account x tax	20.9	6.2	27.1
<b>At December 31, 2020</b>	<b>(418.8)</b>	<b>48.7</b>	<b>(370.1)</b>
Temporarily non-deductible provisions	21.6	—	21.6
Tax loss carryforwards	6.6	—	6.6
Functional currency effect of the non-monetary assets	(19.8)	—	(19.8)
Gains not realized from sales of Parent Company to subsidiaries	0.2	—	0.2
Effect of differences by fixed asset	(35.5)	—	(35.5)
Differences between basis: account x tax	(11.5)	2.0	(9.5)
Discontinued operation	(1.7)	—	(1.7)
<b>At December 31, 2021</b>	<b>(458.9)</b>	<b>50.7</b>	<b>(408.2)</b>
Temporarily non-deductible provisions	(43.5)	—	(43.5)
Tax loss carryforwards	9.5	—	9.5
Functional currency effect of the non-monetary assets	100.3	—	100.3
Gains not realized from sales of Parent Company to subsidiaries	6.1	—	6.1
Effect of differences by fixed asset	(17.6)	—	(17.6)
Other differences between basis: account x tax	32.0	(1.1)	30.9
<b>At December 31, 2022</b>	<b>(372.1)</b>	<b>49.6</b>	<b>(322.5)</b>

23.2 Recoverability of deferred tax assets

In order to recognize deferred tax assets related to temporary differences and tax losses carryforwards, the Company assessed the expectation of future taxable income in which these temporary differences and tax losses would be compensated. As of December 31, 2022, the Company did not recognize deferred tax assets in the total amount of US\$ 79.2 (US\$ 0.9 of temporary differences and US\$ 78.3 of tax losses carryforwards).

23.3 Reconciliation of income tax expense

	12.31.2022	12.31.2021	12.31.2020
Loss before income tax	(205.8)	27.4	(635.2)
<b>Income tax and social contribution at the nominal Brazilian enacted tax rate - 34%</b>	<b>70.0</b>	<b>(9.3)</b>	<b>216.0</b>
Tax on profits of overseas subsidiaries	(76.8)	(92.1)	(21.3)
Transfer Pricing and Thin Capitalization	(2.6)	(36.3)	(47.7)
Functional currency effect of the non-monetary assets	134.4	(60.0)	(250.4)
Research and development tax incentives	4.0	1.2	1.6
Equity in the earnings of subsidiaries	2.7	0.4	0.8
Fiscal assets (non recognized)	(125.4)	(68.2)	(104.6)
Tax rate difference	33.2	28.2	10.4
Other differences between accounting and fiscal basis	(37.2)	165.2	195.6
Effects of Dropdown	—	—	(93.5)
	(67.7)	(61.6)	(309.1)
<b>Income tax and social contribution income (expense) benefit as reported</b>	<b>2.3</b>	<b>(70.9)</b>	<b>(93.1)</b>
<b>Current income tax and social contribution expense as reported</b>	<b>(84.5)</b>	<b>(32.5)</b>	<b>11.6</b>
<b>Deferred income tax and social contribution income (expense) benefit as reported</b>	<b>86.8</b>	<b>(38.4)</b>	<b>(104.7)</b>
Effective rate	-1.1%	-258.8%	14.7%

23.4 Uncertainty over income tax treatments (IFRIC 23)

The Company and its subsidiaries held certain discussions with Brazilian tax authorities over administrative and judicial matters related to uncertain treatments adopted when calculating income tax and social contribution on net income, their prognostic assessment was that the chosen tax positions will probably be accepted by the authorities, based on internal and external evaluation by legal advisors, except for a lawsuit that discusses a notice of infraction that disallowed the compensation of CSLL with income tax credit paid abroad. The process is currently awaiting a decision from the Tribunal Regional Federal (TRF) for the 3rd region, of the Company’s appeal. To this process, the Company recognized a provision in the amount of US\$ 4, classified as non-current liabilities.

24 Provisions and contingent liabilities

24.1 Provision

	12.31.2022	12.31.2021
Product warranties (i)	77.6	77.5
Provisions for labor, taxes and civil (ii)	58.6	53.7
Taxes (iii)	44.6	36.6
Post retirement benefits	36.1	39.4
Provision of third-party materials	25.3	—
Environmental provision	0.4	0.7
Others	34.1	21.5
	<b>276.7</b>	<b>229.4</b>
Current portion	126.5	108.9
Non-current portion	150.2	120.5

- (i) Recorded to cover product-related expenditure, including warranties and contractual obligations to implement improvements to aircraft delivered in order to meet performance targets.
- (ii) Provisions for labor, tax or civil contingencies, as shown in the table below Note 24.1.1.
- (iii) Accrual of tax provisions mainly relates to indirect taxes recognized in relation to revenue recognition of long-term contracts.

Changes in provision:								
	Product warranties	Provisions labor, taxes and civil	Post retirement benefits	Taxes	Environment provision	Provision of third-party materials	Others	Total
At December 31, 2019	67.1	66.4	11.7	41.7	0.3	—	15.7	202.9
Additions	42.0	8.5	2.5	147.2	0.4	—	4.5	205.1
Interest	—	5.4	3.6	—	—	—	—	9.0
Used/payments	(30.4)	(4.7)	(2.2)	(154.4)	(0.6)	—	—	(192.3)
Reversals	(15.8)	(8.0)	—	—	(0.4)	—	—	(24.2)
Translation adjustments	(1.0)	(13.6)	(7.4)	—	(0.9)	—	(4.4)	(27.3)
Reclassification - Liabilities held for sale	12.0	1.4	19.7	—	2.6	—	3.8	39.5
At December 31, 2020	73.9	55.4	27.9	34.5	1.4	—	19.6	212.7
Additions	43.3	6.0	11.8	37.9	0.5	—	1.9	101.4
Interest	—	3.8	1.7	—	—	—	—	5.5
Used/payments	(25.9)	(4.8)	(0.3)	(32.4)	(0.9)	—	—	(64.3)
Reversals	(13.6)	(2.7)	—	—	—	—	—	(16.3)
Translation adjustments	(0.2)	(4.0)	(1.7)	(3.4)	(0.3)	—	—	(9.6)
At December 31, 2021	77.5	53.7	39.4	36.6	0.7	—	21.5	229.4
Additions	35.6	6.2	—	29.5	0.6	25.6	12.6	110.1
Interest	—	7.2	3.5	—	—	—	—	10.7
Used/payments	(20.9)	(5.8)	—	(23.9)	(1.1)	—	—	(51.7)
Reversals	(14.9)	(2.8)	(9.4)	—	—	—	—	(27.1)
Translation adjustments	0.3	0.1	2.6	2.4	0.2	(0.3)	—	5.3
At December 31, 2022	77.6	58.6	36.1	44.6	0.4	25.3	34.1	276.7

24.1.1 Labor, tax and civil provisions

	12.31.2022	12.31.2021
Tax related		
IRRF (i)	8.3	10.5
PIS and COFINS (ii)	2.8	4.0
Social security contributions (iii)	1.8	1.7
Import taxes (iv)	0.6	0.6
Others	6.5	5.4
	20.0	22.2
Labor related		
Plurimas 461/1379 (v)	0.6	0.5
Class action 1379/1991 (vi)	7.6	6.2
Reintegration (vii)	11.3	6.9
Overtime (viii)	5.0	3.9
Dangerousness (ix)	2.4	2.0
Insalubrity (x)	0.2	—
Indemnity (xi)	4.2	3.8
Third parties (xii)	3.0	1.0
Others (xiii)	4.1	7.0
	38.4	31.3
Civil related		
Indemnity (xiv)	0.2	0.2
	0.2	0.2
	58.6	53.7
Current portion	18.7	18.7
Non-current portion	39.9	35.0

- (i) The Company has obtained an injunction to suspend income tax collection related to certain operations of transfers abroad. The related legal demand is pending completion.
- (ii) Since 2013, the Company has been discussing with Brazilian Tax Authorities the appropriation of extemporaneous PIS and COFINS credits in the non-cumulative regime, the discussions are segregated into several lawsuits and this item shows the amount of the provisioned lawsuits that are in the judicial stage. Also, under this heading there are other provisions related to federal taxes.
- (iii) The company has INSS discussions derived from notifications which are divided into several notifications related to the withholding of 11% to be applied in the payment for contracting third parties in the amount of US\$ 1.8.



- (iv) Deficiency and Penalty Notices issued against the Company involving the drawback regime, disputing possible differences in relation to the tax classification of certain products and is at the analysis stage in the Federal Supreme Court - STJ (*Supremo Tribunal de Justiça*).
- (v) It refers to claims for backdated salary increases and productivity payments, on salaries from former employees.
- (vi) Class action filed by the Metalworkers Union of São José dos Campos with a request for retroactive salary readjustments and productivity payments.
- (vii) It refers to labor lawsuits from former employees claiming reinstatement with the Company for various reasons.
- (viii) It reflects several requests for payment of alleged differences due to allegations of overtime hours.
- (ix) It refers to requests that seek recognition of hazardous activities.
- (x) Requests that seek recognition of the activity in unhealthy conditions and the respective payments.
- (xi) Indemnity claims in connection with alleged work-related accidents or work-related illness.
- (xii) Those are requests for various orders, filed by employees of third-party companies that had some legal relationship with the Company seeking the subsidiary conviction of the Company in the event of default by their employer.
- (xiii) Other labor lawsuits refer to general matters different from the categories above-mentioned, such as, salary parity, salary differences, and others.
- (xiv) Other indemnity claims brought by parties that had some type of legal relationship with the Company.

The tax, labor and civil provisions are recorded in accordance with the Company’s accounting policy and the amounts shown here represent the estimated amounts that the Company’s legal department, supported by its external counsel, expect the Company to have to disburse to settle the lawsuits.

**24.2 Contingent liabilities**

Contingent liabilities are amounts classified as possible losses, in accordance with the Company’s accounting policy, in the opinion of the Company’s legal department, supported by its external counsel. When the contingent liability arises from the same set of circumstances as an existing provision, the type of the corresponding provision is indicated at the end of the description. The Company’s main contingent liabilities are listed below:

- (i) The Company has a legal dispute over AIIM on SAT / *Agentes Nocivos* from 2003 in the amount of US\$ 6.3 on December 31, 2022 (US\$ 5.6 on December 31, 2021).
- (ii) The Company is involved in a legal dispute related to tax credits paid by its subsidiaries abroad amounting to US\$ 91.6 on December 31, 2022 (US\$ 82.7 on December 31, 2021).
- (iii) The Company has a dispute on the 2007 Tax Assessment Notice regarding the validity of the provisions contained in the Normative Instruction No. 213/02, which determined the taxation of profits from abroad through the application of Brazilian rules. The dispute involves transfer pricing in loans between associates, equity method, among other. On September 1, 2010, decadence had been accepted to exclude the requirements of the first three quarters of 2002, and it was determined to carry out diligence to collect information requested by the National Treasury Attorney (*Procuradoria da Fazenda Nacional* - PNF). In April 2019 the judge trial was converted into diligence. The amount is US\$ 166.7 on December 31, 2022 (US\$ 155.9 on December 31, 2021).

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(iv)	The Company has a discussion on the disallowance of credits launched in several PERDCOMPs (electronic request for reimbursement or refund and tax offset statement program in Brazil) in the amount of US\$ 69.8 on December 31, 2022 (US\$ 58.1 on December 31, 2021).
(v)	The Company is discussing administratively and judicially the disallowance of appropriation of extemporaneous PIS/COFINS credits, this discussion is guaranteed by surety bond in the amount of US\$ 6.5 and at the administrative level the value of the discussion on December 31, 2022 is US\$ 3.1.
(vi)	The Company is discussing the non-approval of offsetting PIS/COFINS Import credits arising from a final and unappealable court decision, totaling the historic amount of US\$ 11.4, the amount under discussion on December 31, 2022, is US\$ 19.2 (US\$ 16.4 on December 31, 2021).
(vii)	Other tax lawsuits in the amount of US\$ 1.5 on December 31, 2022. This topic includes discussions on IRRF (divergence of DCTF x DIRF) and INSS requirement on Stock Option.
(viii)	The Company has a legal discussion in Tax Enforcement questioning the requirement of the ICMS (Tax on Commerce and Services) for the period from April/2017 to October/2017, the value of the discussion on December 31, 2022, is US\$ 7.1.
(ix)	The Company has an administrative discussion whose object of the AIIM (Deficiency Notice) is related to the requirement of ISS (Tax on Services) by the municipality of São José dos Campos/SP, supposedly due in the performance of after-sales services, whose value of the discussion on December 31,2022 is US\$ 63.1.
(x)	The Company has contingent liabilities related several labor claims amounting to US\$ 24.0 on December 31, 2022 (US\$ 20.7 on December 31, 2021).

**24.3 FCPA investigations and settlements**

In October 2016, the Company entered into definitive agreements with the United States and Brazilian authorities for the resolution of criminal and civil violations of the United States (Foreign Corrupt Practices Act of 1977 or FCPA) and for the resolution of allegations regarding violations of certain Brazilian laws in four aircraft transactions outside Brazil between 2007 and 2011. In February 2017, the Company entered into an Exoneration Agreement with the Mozambican authorities for collaboration with the investigations in that country and under which there are no financial obligations for Embraer. In July 2018, the Company and the Attorney General’s Office of the Dominican Republic entered into a collaboration agreement whereby the Company undertook to collaborate with the investigations in that country.

Several individuals and entities are defendants in a criminal case in India related to the sale by Embraer of three aircraft AEW EMB-145 to the Indian Defense Research & Development Organization. Such transaction has been investigated and its results have been the subject of the aforesaid settlement agreement between Embraer and the Brazilian and U.S. authorities in 2016. Embraer S.A. and ECC Investment Switzerland AG are parties to this criminal case and have been served in November of 2021.

The Company is not aware of other procedures that relate to the scope of the agreements entered into with the United States and the Brazilian authorities in 2016. To date, the Company believes that there is no adequate basis for estimating provisions or quantifying possible contingencies related to other procedures and developments mentioned herein.

**24.4 Arbitration Proceedings - The Boeing Company (“Boeing”)**

Embraer is pursuing all appropriate remedies against Boeing for damages suffered by Embraer due to wrongful termination and violation of the Master Transaction Agreement and Contribution Agreement by Boeing, including by means of arbitration proceedings initiated by both sides in connection with the termination of the Master Transaction Agreement and/or the Contribution Agreement by Boeing. There are no guarantees with respect to the timing or outcome of arbitration proceedings or any remedies that Embraer may receive or loss that Embraer may suffer as a result of or in connection with such arbitration proceedings.

24.5 Post-retirement benefits

24.5.1 Post-retirement healthcare benefits provided by the Company

The Company provided healthcare plan for employees in Brazil, which based on its conditions, is classified as a post-employment benefit. Under this healthcare plan, employees who retire from the Company have the option of remaining in the plan, contributing the full amount charged by the insurance company. However, due to certain rules for increases under Brazilian law, there could be times the contribution made by the retired employees is insufficient to cover the medical plan costs, which would represent exposure for the Company. The actuarial liability recognized as of December 31, 2022 was US\$ 34.2 (US\$ 36.5 as of December 31, 2021).

Embraer Aircraft Holding, Inc. (domiciliated in the United States of America) sponsors a post-retirement healthcare plan for employees hired up to 2007. The expected costs of pension and provision of post-employment medical benefit for the individual employees and their dependents are provided on an accrual basis based on actuarial studies and the calculation is reviewed annually. The actuarial liability recognized as of December 31, 2022 was US\$ 1.9 (US\$ 2.9 as of December 31, 2021).

24.5.2 Defined contribution pension plan

The Company and certain subsidiaries in Brazil sponsor a defined contribution pension plan for their employees, participation in which is optional. The Company’s contributions to the plan for the years ended December 31, 2022, 2021 and 2020 were US\$ 9.7, US\$ 12.0 and US\$ 12.3, respectively.

24.6 STF decision on the relativization of res judicata in tax matters

On February 8, 2023, the Federal Supreme Court (STF) concluded the judgment on the annulment of final decisions in tax matters by holding that individual final and unappealable decisions can be considered immediately annulled in cases where the STF later issues a general opposite decision. Based on their assessment and that of their external legal advisors, the Company and its subsidiaries conclude that this matter has no material impact to be recognized on these financial statements.

25 Financial instruments

25.1 Financial instruments by category

12.31.2022					
	Note	Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss	Total
Assets					
Cash and cash equivalents	5	1,816.9	—	—	1,816.9
Financial investments	6	350.5	194.7	119.2	664.4
Trade accounts receivable, net	7	205.2	—	—	205.2
Customer and commercial financing	9	101.2	—	—	101.2
Derivative financial instruments	8	—	—	11.1	11.1
Other assets		60.3	—	—	60.3
		2,534.1	194.7	130.3	2,859.1
Liabilities					
Loans and financing	20	3,196.8	—	6.4	3,203.2
Trade accounts payable	18	739.5	—	—	739.5
Trade accounts payable supplier finance	19	27.5	—	—	27.5
Other payables	21	340.0	31.0	—	371.0
Lease liability	20	71.0	—	—	71.0
Derivative financial instruments	8	—	—	97.5	97.5
Other liabilities		172.8	—	—	172.8
		4,547.6	31.0	103.9	4,682.5

12.31.2021					
	Note	Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss	Total
<b>Assets</b>					
Cash and cash equivalents	5	1,816.0	2.3	—	1,818.3
Financial investments	6	79.4	541.0	196.0	816.4
Guarantee deposits		3.0	—	—	3.0
Trade accounts receivable, net	7	189.0	—	—	189.0
Customer and commercial financing	9	32.0	—	—	32.0
Derivative financial instruments	8	—	—	0.1	0.1
Other assets		50.7	—	—	50.7
		<u>2,170.1</u>	<u>543.3</u>	<u>196.1</u>	<u>2,909.5</u>
<b>Liabilities</b>					
Loans and financing	20	4,026.9	—	—	4,026.9
Trade accounts payable	18	495.2	—	—	495.2
Trade accounts payable supplier finance	19	14.8	—	—	14.8
Other payables	21	300.5	17.1	—	317.6
Lease liability	20	63.8	—	—	63.8
Derivative financial instruments	8	—	—	5.9	5.9
Other liabilities		158.2	—	—	158.2
		<u>5,059.4</u>	<u>17.1</u>	<u>5.9</u>	<u>5,082.4</u>

25.2 Fair value of financial instruments

The fair value of the Company’s financial assets and liabilities was determined using available market information and appropriate valuation methodologies. However, considerable judgment is required in interpreting market data to generate estimates of fair values. Consequently, the estimates presented below are not necessarily indicative of the amounts that might be realized in current market exchange. The use of different assumptions and/or methodologies could have a material effect on the estimated realizable values.

The following methods were used to estimate the fair value of each category of financial instrument for which it is possible to estimate the fair value.

The carrying amounts of cash, financial investments, accounts receivable, customer and commercial financing, other financial assets and current liabilities approximate at their fair values. The methods below were used to estimate the fair value of other class of financial instruments for which fair value is adopted.

Financial investments – The fair value of securities is estimated by the discounted cash flow methodology. For investments in bonds, the unit price on the last trading day at the end of the reporting period is multiplied by the amount invested.

Loans and financing – The fair value of bonds is the unit price on the last trading day at the end of the reporting period multiplied by the quantity issued.

For other loans and financing, fair value is based on the amount of contractual cash flows and the discount rate used is based on the rate for contracting a new transaction in similar conditions or in the lack thereof, on the future curve for the flow of each obligation.

Warrants – The measurement of the fair value of the stock purchase options depends on which option modality is issued, and can be an option traded on the market, in this way its fair value is calculated from the unit price of this option, multiplied by the amount of options, or else the option, when not traded on the market, has its fair value calculated using its own methodology based on the Black-Scholes pricing model.

The Company considers “fair value” to be the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The Company utilizes market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique. The Company

utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The Company is able to classify fair value balances based on the observable inputs. The three Levels of the fair value hierarchy are as follows:

- **Level 1** - quoted prices are available in active markets for identical assets or liabilities at the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. Level 1 primarily consists of financial instruments such as exchange-traded derivatives and listed equities.
- **Level 2** - pricing inputs other than quoted prices in active markets included in level 1, which are either directly or indirectly observable as of the reporting date. Level 2 includes those financial instruments that are valued using models or other valuation methodologies. These models are primarily industry-standard models that consider various assumptions, including quoted forward prices for commodities, time value, volatility factors, and current market and contractual prices for the underlying instruments, as well as other relevant economic measures. Substantially all these assumptions are observable in the marketplace throughout the full term of the instrument, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace. Instruments in this category include non-exchange traded derivatives such as swaps or over-the-counter forwards and options.
- **Level 3** - pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in Management’s best estimate of fair value. At each reporting date, the Company performs an analysis of all instruments and includes in Level 3 all of those whose fair value is based on significant unobservable inputs. Changes in the fair value of financial instruments classified as Level 3 are recognized in profit or loss for the year.

The following table lists the Company’s financial assets and liabilities by level within the fair value hierarchy. The Company’s assessment of the significance of an input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy levels. On December 31, 2022, there were no changes in the fair value methodology of the financial instruments and, therefore, there were no transfers between levels.

12.31.2022							
	Note	Level 1	Level 2	Level 3	Total fair value	Amortized cost of the other financial instruments	Carrying amount
<b>Assets</b>							
Cash and cash equivalents	5		—	—	—	1,816.9	1,816.9
Financial investments	6		217.4	96.5	313.9	350.5	664.4
Trade accounts receivable, net	7		—	—	—	205.2	205.2
Customer and commercial financing	9		—	—	—	101.2	101.2
Derivative financial instruments	8		11.1	—	11.1	—	11.1
Other assets			—	—	—	60.3	60.3
		—	228.5	96.5	325.0	2,534.1	2,859.1
<b>Liabilities</b>							
Loans and financing	20		6.4	—	6.4	3,196.8	3,203.2
Trade accounts payable	18		—	—	—	739.5	739.5
Trade accounts payable supplier finance	19		—	—	—	27.5	27.5
Other payables	21		—	31.0	31.0	340.0	371.0
Lease liability	20		—	—	—	71.0	71.0
Derivative financial instruments	8	7.7	89.8	—	97.5	—	97.5
Other liabilities			—	—	—	172.8	172.8
		7.7	96.2	31.0	134.9	4,547.6	4,682.5

12.31.2021						
	Note	Level 2	Level 3	Total fair value	Amortized cost of the other financial instruments	Carrying amount
<b>Assets</b>						
Cash and cash equivalents	5	2.3	—	2.3	1,816.0	1,818.3
Financial investments	6	642.1	94.9	737.0	79.4	816.4
Guarantee deposits		—	—	—	3.0	3.0
Trade accounts receivable, net	7	—	—	—	189.0	189.0
Customer and commercial financing	9	—	—	—	32.0	32.0
Derivative financial instruments	8	0.1	—	0.1	—	0.1
Other assets		—	—	—	50.7	50.7
		<u>644.5</u>	<u>94.9</u>	<u>739.4</u>	<u>2,170.1</u>	<u>2,909.5</u>
<b>Liabilities</b>						
Loans and financing	20	—	—	—	4,026.9	4,026.9
Trade accounts payable	18	—	—	—	495.2	495.2
Trade accounts payable supplier finance	19	—	—	—	14.8	14.8
Other payables	21	—	17.1	17.1	300.5	317.6
Lease liability	20	—	—	—	63.8	63.8
Derivative financial instruments	8	5.9	—	5.9	—	5.9
Other liabilities		—	—	—	158.2	158.2
		<u>5.9</u>	<u>17.1</u>	<u>23.0</u>	<u>5,059.4</u>	<u>5,082.4</u>

The fair value measurements of Republic shares (assets), note 6(v), and Tempest Put Options (liabilities), note 21(iii), were classified as level 3 in the valuation method used. This method is the discounted cash flow, which considers the present value of the free cash flows expected to be generated by the evaluated company, considering a terminal value that is calculated based on a perpetuity with a certain cash flow growth. Free cash flows are discounted at a rate calculated by the weighted average capital cost (WACC).

The unobservable inputs are:

1. Cash flow growth rate in perpetuity;
2. Discount rate (WACC).

The table below shows the reconciliation of the opening balance and the closing balance of level 3 fair values:

	Fair value of financial instruments using significant unobservable inputs (level 3)	
	Assets	Liabilities
<b>At 12.31.2020</b>	<b>55.9</b>	<b>108.4</b>
Reversal	—	(50.1)
Transfer	—	(33.6)
Changes in fair value	35.2	(3.9)
Exchange variation	3.8	(3.7)
<b>At 12.31.2021</b>	<b>94.9</b>	<b>17.1</b>
Changes in fair value	0.8	12.8
Exchange variation	0.8	1.1
<b>At 12.31.2022</b>	<b>96.5</b>	<b>31.0</b>

25.3 Financial risk management policy

The Company has and follows a risk management policy, which involves the diversification of transactions and counterparties, with the objective of identifying the risks related to the financial transactions, as well as the operational directives related to these financial transactions. The policy provides for regular monitoring and management of the nature and general situation of the financial risks in order to assess the results and the financial impact on cash flows. The credit limits and risk rating of the counterparties are also reviewed periodically.

The Company’s risk management policy is part of the financial management policy established by the Executive Directors and approved by the Board of Directors and provides for monitoring by a Financial Management Committee. Under this policy, the market risks are mitigated when there are no offsetting elements in the Company’s operations and when it is considered necessary to support the corporate strategy. The Company’s internal control procedures provide for consolidated monitoring and supervision of the financial results and of the impact on cash flows.

The Financial Management Committee assists the Financial Department in examining and reviewing information in relation to the economic scenario and its potential impact on the Company’s operations, including significant risk management policies, procedures, and practices.

The financial risk management policy includes the use of derivative financial instruments to mitigate the effects of interest rate fluctuations and to reduce the exposure to exchange rate risk. The use of these instruments for speculative purposes is forbidden.

**25.3.1 Capital management**

The Company uses capital management to ensure the continuity of its investment program and offer a return to its shareholders and benefits to its stakeholders and maintain an optimized capital structure in order to reduce costs.

The Company may review its dividends payment policy, pay back capital to the shareholders, issue new shares or sell assets in order to maintain or adjust its capital structure (to reduce indebtedness, for instance).

Liquidity and the leverage level are monitored in order to mitigate refinancing risk and to maximize the return to the shareholders. The ratio between the liquidity and the return to the shareholders may be changed pursuant to the assessment of the Board of Directors.

**25.3.2 Credit risk**

Credit risk is the risk of a counterparty to a transaction not meeting an obligation established in a financial instrument, or in the negotiation of sales to customers, leading to a financial loss. The Company is exposed to credit risk in its operational activities, cash held in banks and other investments in financial instruments held in financial institutions.

- **Cash and cash equivalents and financial investments**

The credit risk of cash and cash equivalents and financial investments which is managed by the Financial Department is in accordance with the risk management policy. The credit limit of counterparties is reviewed on a daily basis in order to not to exceed the limits established mitigating possible losses generated by the bankruptcy of a counterparty, as well as transactions are carried out with counterparties with investment grade by risk rating agencies (*Fitch, Moody’s e Standard and Poor’s*). The Financial Management Committee assists the Financial Department in examining and reviewing operations with counterparties.

- **Trade accounts receivable, and contract assets with customers**

The Company may incur losses on accounts receivable arising from invoicing of spare parts and services to customers. To reduce the credit risk associated with installment sales, the respective credit risk analysis is carried out which considers qualitative aspects, which include the experience of past transactions and quantitative aspects, when applicable, based on financial information. Any increased risk and/ or late payment by the customer may impact the continuity of the supply of parts and services, which may make it impossible for the aircraft to operate.

The Company applies IFRS 9 simplified approach to the measurement of expected credit losses on trade accounts receivable balances (Note 7).

In order to calculate the expected credit losses, receivables are grouped by the period the items are outstanding, and an expected loss factor is applied based on actual credit loss experiences of each past period, which gradually increases as long as the receivable remains outstanding in the portfolio. For receivables not overdue, the expected credit loss is calculated using the past 10 years' experience of losses and monitoring of forwarding trends. As of December 31, 2022, the initially expected loss factor under the methodology was 1.8% (1.3% in 2021), except for the Commercial Aviation segment as explained below.

As a result of the economic downturn environment generated by the crisis of the COVID-19 pandemic and its significant impacts mainly related to the commercial jets market (Commercial Aviation), the Company applied economy trends and customers data based of the main rating agencies in order to estimate the expected credit losses over the short-term receivables of such segment during the crisis and defined the expected loss factor in the period to 7.6% (7.7% as of December 31, 2021). Customers with a significant increase in credit risk in the period (under judicial recovery measures or bankruptcy processes), were subject to a case-by-case analysis and an additional provision was recognized based on the Management's best estimate.

Contract assets refer to contracts in progress that have not been billed, mainly related to development contracts recognized over time in the Defense & Security segment.

The credit risk characteristic of the Company's customers is different for the Defense & Security segment since the counterparties refer only to government entities and agencies. The risk in this case is associated with the sovereign risk of each country, especially Brazil, as well as with the continuity of strategic projects under development, for which the Company usually has the enforceable right to receive for the performance completed to date. The Company historically has not presented losses in the trade accounts receivable and contract assets balances with these counterparties.

Trade accounts receivable and contract assets are written off when there is no reasonable expectation of recovery. Indications include, among other, the inability of the debtor to participate in a plan to renegotiate its debt or possible legal actions have been exhausted.

**25.3.3 Liquidity risk**

This is the risk of the Company not having enough funds to honor its financial commitments as a result of a mismatch of terms or volumes of estimated receipts and payments.

Projections and assumptions are established to manage the liquidity of cash in U.S. dollars and Reais, in accordance with the financial management policy, based on contracts for future disbursements and receipts, and monitored periodically by the Company.



The following table provides additional information related to undiscounted contractual obligations and commercial commitments and their respective maturities:

	Cash Flow	Less than one year	One to three years	Three to five years	More than five years
At December 31, 2022					
Loans and financing	3,789.6	395.2	1,572.4	1,031.4	790.6
Trade accounts payable	739.5	739.5	—	—	—
Trade accounts payable - supplier finance	27.5	27.5	—	—	—
Lease liability	71.0	12.0	25.9	10.8	22.3
Other liabilities	172.8	3.2	157.5	10.3	1.8
Other payables	371.0	320.4	16.3	33.2	1.1
Derivative financial instruments	97.5	57.4	—	40.1	—
Total	5,268.9	1,555.2	1,772.1	1,125.8	815.8
At December 31, 2021					
Loans and financing	4,842.0	712.5	683.4	1,602.4	1,843.7
Trade accounts payable	495.2	495.2	—	—	—
Trade accounts payable supplier finance	14.8	14.8	—	—	—
Lease liability	63.8	11.5	20.1	9.9	22.3
Other liabilities	158.2	14.2	127.5	9.9	6.6
Other payables	317.6	258.7	37.0	17.9	4.0
Derivative financial instruments	5.9	2.9	3.0	—	—
Total	5,897.5	1,509.8	871.0	1,640.1	1,876.6

The table above shows the outstanding principal and interest if applicable at the maturity dates. In the case of the fixed rate liabilities, interest expense was calculated based on the rate established in each debt contract. Interest expense on floating rate liabilities was calculated based on a market forecast for each period.

25.3.4 Market risk

a) Interest rate risk

This risk arises from the possibility of the Company incurring losses on the fluctuation of floating interest rates, which might increase financial expenses of financial liabilities, and/ or decrease financial income of financial assets, as well as negatively impacting the fair value of financial assets measured as at fair value. The lines of the consolidated financial statements most affected by interest rate risks are:

- Cash, cash equivalents and financial investments – the Company’s policy for managing the risk of fluctuations in interest rates on financial investments is to maintain a system to measure market risk, which consists of an aggregate analysis of variety of risk factors that might affect the return of those investments.
- Loans and financing – the Company monitor financial markets with the purpose of evaluating hedge structures (derivative transactions) in compliance with the financial and risk management policy to protect its exposure risks of volatility in foreign currency and interest rates.

On December 31, 2022, the Company’s cash, cash equivalents, financial investments and loans and financing were indexed as follows:

Without derivative effect	Fixed Rate		Floating Rate		Total	
	Amount	%	Amount	%	Amount	%
Cash, cash equivalents and financial investments	2,351.5	94.77%	129.7	5.23%	2,481.2	100.00%
Loans and financing	2,704.0	84.42%	499.2	15.58%	3,203.2	100.00%
With derivative effect	Fixed Rate		Floating Rate		Total	
	Amount	%	Amount	%	Amount	%
Cash, cash equivalents and financial investments	2,351.5	94.77%	129.7	5.23%	2,481.2	100.00%
Loans and financing	3,100.9	96.80%	102.4	3.20%	3,203.3	100.00%

On December 31, 2022, the Company’s cash equivalents, and variable interest rate loans and financing were indexed as follows, considering the contractual cash flows (without derivative effect) and the cash flows changed due to interest rate swaps (with derivative effect):

	Without derivative effect		With derivative effect	
	Amount	%	Amount	%
Cash equivalents and financial investments	129.7	100.00%	129.7	100.00%
CDI	129.7	100.00%	129.7	100.00%
Loans and financing	499.2	100.00%	102.4	100.00%
Libor	412.7	82.67%	9.5	9.27%
CDI	4.0	0.80%	10.4	10.16%
SIFMA	21.1	4.23%	21.1	20.61%
EURIBOR	4.4	0.88%	4.4	4.30%
SOFR	57.0	11.42%	57.0	55.66%

b) Foreign exchange rate risk

The Company’s operations most exposed to foreign exchange gains/losses are those denominated in Reais (labor costs, tax issues, local expenses and financial investments) as well as investments in subsidiaries in currencies other than the U.S. dollar.

Company policy for protection against foreign exchange risks on assets and liabilities is mainly based on seeking to maintain a balance between assets and liabilities indexed in each currency and management of foreign currency purchases and sales to ensure that, on the realization of the transactions contracted, this natural hedge will occur. This policy minimizes the effect of exchange rate changes on assets and liabilities already contracted but does not protect against the risk of fluctuations in future results due to appreciation or depreciation of the real that can, when measured in U.S. dollars, result in an increase or reduction in the portion of costs denominated in Reais.

Under certain market conditions, the Company may protect itself against potential future mismatches of expenses and revenues denominated in foreign currency, to minimize the effects of future exchange variations on the Company’s consolidated statements of income.

Efforts to minimize the foreign exchange risk for rights and liabilities denominated in currencies other than the functional currency may involve transactions with derivatives, such as swaps, exchange options and Non-Deliverable Forwards.

On December 31, 2022, the Company had the following amounts of financial assets and liabilities denominated in several currencies as follows:

	12.31.2022	12.31.2021
Loans and financing		
Brazilian reais	10.3	18.3
U.S. dollars	3,161.6	3,982.5
Euro	31.3	26.1
	<u>3,203.2</u>	<u>4,026.9</u>
Trade accounts payable		
Brazilian reais	89.9	77.6
U.S. dollars	602.3	385.6
Euro	44.9	31.3
Other currencies	2.4	0.7
	<u>739.5</u>	<u>495.2</u>
Trade accounts payable - Supplier finance		
Brazilian reais	7.6	2.8
U.S. dollars	19.9	12.0
	<u>27.5</u>	<u>14.8</u>
Total (1)	<u>3,970.2</u>	<u>4,536.9</u>
Cash and cash equivalents and financial investments		
Brazilian reais	131.3	94.9
U.S. dollars	2,283.9	2,493.6
Euro	62.0	42.4
Other currencies	4.1	3.8
	<u>2,481.3</u>	<u>2,634.7</u>
Trade accounts receivable:		
Brazilian reais	96.9	33.3
U.S. dollars	82.5	134.8
Euro	25.4	20.8
Other currencies	0.4	0.1
	<u>205.2</u>	<u>189.0</u>
Total (2)	<u>2,686.5</u>	<u>2,823.7</u>
Net exposure (1 - 2):		
Brazilian reais	(120.4)	(29.5)
U.S. dollars	1,417.4	1,751.7
Euro	(11.2)	(5.8)
Other currencies	(2.1)	(3.2)

The Company has other financial assets and liabilities that are also influenced by foreign exchange variations that are not included in the table above. These are used to minimize exposure to the currencies presented.

25.4 Sensitivity analysis

In order to present positive and negative variations of 25% and 50% in the risk variable considered, a sensitivity analysis of the financial instruments, including derivatives, is presented below describing the effects on the monetary and foreign exchange variations on the financial income and expense, as well as in the consolidated shareholders' equity, determined on the balances recorded on December 31, 2022, in the event of such variations in the risk component.

However, statistical simplifications were made in isolating the variability of the risk factors in question. Consequently, the following estimates do not necessarily represent the amounts that might be determined in future consolidated financial statements. The use of different hypotheses and/or methodologies could have a material effect on the estimates presented below.

25.4.1 Methodology

Considering the assumption that balances remain constant as compared to December 31, 2022, the Company calculates the interest and exchange variation differential for each of the projected scenarios.

The assessment of the amounts exposed to interest rate risk considers only the risks for the financial statement, therefore operations subject to fixed interest rates were not included. The probable scenario is supported by an average of market projections, observed through Bloomberg, for the related financial indexes and rates in a period of up to 3 months from reporting date, and positive and negative variations of 25% and 50% were applied to the indexes and rates in force as of the reporting date.

In the sensitivity analysis of derivative contracts, positive and negative variations of 25% and 50% were applied to the market yield curve (as observed in B3) as of the reporting date.

25.4.2 Interest risk factor

	Risk factor	Amounts exposed at 12.31.2022	Additional variations in book balances (*)				
			-50%	-25%	Probable scenario	+25%	+50%
Cash equivalents and financial investments	CDI	129.7	(8.8)	(4.3)	0.1	4.6	9.0
Loans and financing	CDI	(4.0)	0.3	0.1	—	(0.1)	(0.3)
Net impact	CDI	125.7	(8.5)	(4.2)	0.1	4.5	8.7
Loans and financing	LIBOR	(412.7)	10.0	4.4	(1.2)	(6.9)	(12.5)
Net impact	LIBOR	(412.7)	10.0	4.4	(1.2)	(6.9)	(12.5)
Loans and financing	SOFR	(57.0)	1.1	0.4	(0.2)	(0.9)	(1.6)
Net impact	SOFR	(57.0)	1.1	0.4	(0.2)	(0.9)	(1.6)
Rates considered	CDI	13.65%	6.88%	10.31%	13.75%	17.19%	20.63%
Rates considered	LIBOR 6M	5.14%	2.72%	4.08%	5.44%	6.80%	8.16%
Rates considered	TJLP	7.20%	3.69%	5.53%	7.37%	9.21%	11.06%
Rates considered	IPCA	5.73%	2.27%	3.41%	4.54%	5.68%	6.81%
Rates considered	SOFR	4.30%	2.35%	3.52%	4.70%	5.87%	7.04%

(\*) The positive and negative variations of 25% and 50% were applied on the rates

25.4.3 Foreign exchange risk factor

	Risk factor	Amounts exposed at 12.31.2022	Additional variations in book balances (*)				
			-50%	-25%	Probable scenario	+25%	+50%
Assets		412.8	203.1	98.3	(6.5)	(111.3)	(216.1)
Cash, cash equivalents and financial investments	R\$	131.3	64.6	31.3	(2.1)	(35.4)	(68.7)
Other assets	R\$	281.5	138.5	67.0	(4.4)	(75.9)	(147.4)
Liabilities		(411.1)	(202.4)	(98.0)	6.5	110.9	215.3
Loans and financing	R\$	(10.3)	(5.1)	(2.5)	0.2	2.8	5.4
Other liabilities	R\$	(400.8)	(197.3)	(95.5)	6.3	108.1	209.9
Net impact		1.7	0.7	0.3	—	(0.4)	(0.8)
Exchange rate considered		5.2177	2.6500	3.9750	5.3000	6.6250	7.9500

(\*) The positive and negative variations of 25% and 50% were applied on the rates

25.4.4 Derivative contracts

		Amounts exposed at 12.31.2022	Additional variations in book balances (*)				
	Risk factor		-50%	-25%	Probable scenario	+25%	+50%
Derivative designated as hedge accounting							
Interest swap - fair value hedge	CDI	0.1	—	(0.1)	(0.1)	(0.1)	(0.1)
Hedge destined as cash flow hedge	US\$/R\$	2.3	8.9	2.4	(2.7)	(7.9)	(13.7)
Other derivatives							
Interest swap	LIBOR	8.4	(4.4)	2.2	8.7	15.1	21.3
Foreign exchange option	EUR/US\$	(0.2)	(5.0)	(2.5)	0.1	2.6	5.2
Equity SWAP	Embraer share prices	(1.6)	(9.6)	(5.2)	(0.8)	3.6	8.0
EVE warrants	EVE share prices	(95.4)	51.5	28.7	—	(40.7)	(94.6)
Total		(86.4)	41.4	25.5	5.2	(27.4)	(73.9)
Rate considered	LIBOR	5.14%	2.72%	4.08%	5.44%	6.80%	8.16%
Rate considered	CDI	13.65%	6.88%	10.31%	13.75%	17.19%	20.63%
Rate considered	US\$/R\$	5.2177	2.65	3.975	5.3	6.625	7.95
Rate considered	EUR/US\$	1.0666	0.52	0.78	1.04	1.3	1.56

(\*) The positive and negative variations of 25% and 50% were applied on the rates

25.4.5 Fair value sensitivity analysis

For the fair values of Republic shares and Tempest Put options, possibly reasonable changes as of December 31, 2022, in the significant unobservable inputs, and holding other inputs constant, would have the following effects.

• Republic Shares

December 31, 2022	Result		
	Increase	Probable Scenario	Decrease
Growth rate (25% change)	109.5	96.4	83.9
Discount rate (8% change)	64.1	96.4	134.7

• Tempest Put options

December 31, 2022	Result		
	Increase	Probable Scenario	Decrease
Growth rate (25% change)	33.0	31.0	28.0
Discount rate (8% change)	25.0	31.0	37.0

26 Shareholders’ equity

26.1 Capital

The authorized capital is divided into 1,000,000,000 common shares. The Company’s subscribed and paid-up capital as of December 31, 2022 was US\$ 1,551.6 and was comprised of 740,465,044 common shares, without par value, of which 5,832,238 shares were held in treasury.

The capital is comprised entirely of common shares. As per Article 14 of the Company’s bylaws, each common share generally empowered with one vote at general shareholders’ meeting, considering that: (a) no shareholder or group of shareholders, Brazilian or foreign, may exercise votes representing more than 5% of the quantity of shares into which our capital stock is divided. Votes that exceed this 5% threshold will not be considered; and (b) the set of foreign shareholders and groups of foreign shareholders may not exercise votes in number greater than 2/3 of the total votes given to the group of Brazilian shareholders present.

26.2 Brazilian Federal Government Golden Share

The Federal Government holds one *golden share* with the same voting rights as other holders of common shares.

26.3 Treasury Shares

Common shares acquired with resources from the investments and working capital reserve. This operation occurred in accordance with rules approved by the Statutory Board of Directors in a meeting held on December 7, 2007, and corresponds to 5,832,238 common shares and US\$ 28.2 as of December 31, 2022. These shares lose voting and economic rights during the period in which they are held in Treasury. The movement is shown below:

	USD	Quantity	Share value in unit (USD)
At December 31, 2020	25.7	4,291,938	6.0
Repurchase of shares in the period	2.5	1,540,300	1.6
At December 31, 2021	28.2	5,832,238	4.8
At December 31, 2022	28.2	5,832,238	4.8

As of December 31, 2022, the market value of the shares held in Treasury was US\$ 15.9 (US\$ 25.9 as of December 31, 2021).

26.4 Investment subsidy reserve (Government grants)

This reserve was formed as allowed by article 195-A of Brazilian Corporate Law (as amended by Law 11.638, of 2007) and corresponds to the appropriation of the portion of retained earnings derived from government grants received by the Company, which cannot be distributed to shareholders in the form of dividends. It is recognized in the consolidated statements of income in the same expense line to which the subsidy refers. These subsidies are not included in the calculation of the minimum mandatory dividends.

26.5 Legal reserve

The legal reserve is a revenue reserve recorded annually as an appropriation of 5% of the net income for the year as defined under the Brazilian Corporate Law. The reserve may not exceed 20% of capital, or 30% of capital and capital reserves.

26.6 Investment and working capital reserve

The purpose of this revenue reserve is to shield funds which might otherwise be subject to distribution and are earmarked for: (i) investments in property, plant and equipment, without detriment to retained earnings, pursuant to art. 196 of Law 6.404/76; (ii) the Company’s working capital (iii) redeem, reimburse or purchase shares of the Company and (iv) be distributed to the shareholders.

The previously mentioned statutory reserves are generated of earnings retained from past fiscal years.

Since Embraer is established and domiciled in Brazil, the components of shareholders’ equity are required under the Brazilian Corporate Law to be measured accounted and maintained in historical Brazilian Real, including amounts to be distributed to shareholders (dividends and interest on own capital). Such a requirement is different from the Company’s original accounting records in its functional currency, which is prepared and maintained in historical U.S. dollars (as described in Note 2.2.1). Net earnings or losses incurred by the Company at the end of each fiscal year in U.S. dollars are translated to Brazilian Real for Corporate Law accounting purposes at average exchange rate observed on that period end, and then distributed, retained or absorbed by the statutory reserves. Embraer files audited consolidated financial statements in Brazil (translated to Brazilian Real based on requirements of IAS 21), which discloses the components of shareholders’ equity accounted as required by the Brazilian Corporate Law.

As of January 1<sup>st</sup>, 2020, the Company had retained earnings recorded in the statutory reserves in the historical amount of US\$ 2,110.0, out of which US\$ 1,856.7 would be available for distribution under the Company’s by-laws. These components in historical Brazilian Real as of January 1<sup>st</sup>, 2020 were R\$ 2,595.4 million and R\$ 2,058.2 million, respectively. Mainly as a result of losses incurred in 2020 of US\$ 731.9, the statutory reserves reduced to US\$ 1,377.8, out of which US\$ 1,124.4 would be available for distribution, however in Brazilian Real the reserves were fully absorbed due to the translation of losses incurred at average exchange rate observed in 2020, which cause the losses translated to Brazilian Real of R\$ 3,616.0 million to be higher than the previously accumulated statutory reserves. Therefore, the Company presented retained losses of R\$ 1,021.0 million as of December 31, 2020 under the Brazilian Corporate Law requirements, which restricts the Company to distribute earnings to shareholders while the accumulated retained losses are not consumed by future net earnings. In 2022, the losses incurred of US\$ 185.4 reduced again the retained earnings in historical U.S. dollars to US\$ 1,116.1, out of which US\$ 862.7 would be available for distribution in case no restriction exist, but such losses in the amount of R\$ 953.7 million as translated to Brazilian Real further increased the retained losses translated to Brazilian Real to R\$ 2,376.6 million.

**26.7 Other comprehensive income (loss)**

Consists of the following adjustments:

- Cumulative translation adjustment: foreign exchange gains/losses resulting from translation of the foreign subsidiaries’ financial statements measured in other functional currencies to the Company’s functional currency (dollar); and
- Other comprehensive income: unrealized actuarial gains (losses) resulting from the healthcare plans sponsored by the Company, changes in fair value of financial instruments measured at FVOCI and changes in the fair value of the cash flows hedges structures (Note 8).

**26.8 Result in transactions with non-controlling interest**

Consists of the transactions with EVE’s operation which include: transaction costs, dilution gains, contingent warrants and changes in fair value of Tempest’s Put Options.

**27 Share-based compensation**

The Company maintains as part of its Executive Compensation Policy long-term incentives plan (“LTI”), applicable to executive officers, executives and key employees, with the main objectives of (i) maintain and attract highly qualified personnel for the Company, (ii) assure those who are able to contribute to improving the Company’s performance of the right to participate in the results of their contribution, and (iii) also to ensure the continuity of the Company’s management by aligning the interests of executives with those of shareholders.

The current ILP includes a compensation plan based on virtual shares.

The value of LTI will be converted at the average price of the Company’s shares in the last 30 trading days (based on the EMBR3 shares listed in the Brazilian stock exchange - B3) by determining the quantity of virtual shares allocated to each participant, divided into two classes: (i) in the form of restricted virtual shares (associated with the service period) and (ii) in the form of virtual performance shares. The Company will pay the LTI by converting the quantity of virtual shares into Reais at the average quoted price (weighted by trading volume) of the Company’s shares in the last 10 trading days, as follows:

Grants made until the year 2020:

- restricted virtual shares: (i) 33% on the third anniversary of the grant date; (ii) 33% on the fourth anniversary of the grant date, and (iii) 34% on the fifth anniversary of the grant date.
- virtual performance shares: 100% on the third anniversary of the grant.

Grants made until the year 2021:

- restricted virtual shares: 100% on the third anniversary of the grant.

- virtual performance shares: 100% on the third anniversary of the grant.

For grants made until 2018, the amounts resulting from the conversion of virtual shares are included to the equivalent amounts of dividends and interest on equity effectively distributed by the Company during the vesting period. Grants made from 2018 do not consider the dividends accumulated in the period between grant and vesting.

The fair value of virtual shares is determined based on the average price of Company’s shares in the last 10 trading days of the Embraer share on B3, in accordance with the plan’s rules and applied to the number of virtual shares attributed to each participant in proportion to the vesting period and recorded as accounts payable (Note 21).

Amounts shown in the tables below refer to the Consolidated balance and are net of charges:

	Amount of virtual stock	Grant value (i)	Amount of virtual stock (ii)	Fair value of shares (R\$) (iii)	Fair value of shares (US\$) (iii)
Grants on April 12, 2018	1,622,986	35.2	167,347	2.3	0.4
Grants on March 12, 2019	1,349,153	26.0	323,415	4.4	0.8
Grants on March 24, 2020	1,633,741	27.7	1,157,029	15.8	3.0
Grants on November 13, 2020	6,530,000	43.6	4,326,111	59.2	11.4
Grants on March 18, 2021	2,181,442	24.6	1,293,066	17.7	3.4
Grants on March 11, 2022	2,292,434	40.4	631,352	8.6	1.7
Grants on September 05, 2022	13,662,385	187.1	2,074,484	28.4	5.5
Grants on November 18, 2022	6,254,302	78.7	542,908	7.4	1.4
At December 31, 2022	35,526,443	463.3	10,515,712	143.8	27.6

	Amount of virtual stock	Grant value (i)	Amount of virtual stock (ii)	Fair value of shares (R\$) (iii)	Fair value of shares (US\$) (iii)
Grants on August 24, 2017	1,930,350	30.5	230,750	5.0	1.0
Grants on April 12, 2018	1,622,986	35.2	314,552	6.8	1.3
Grants on March 12, 2019	1,160,552	22.4	885,237	19.3	3.7
Grants on March 24, 2020	1,401,293	23.8	710,127	15.5	3.0
Grants on November 13, 2020	6,530,000	43.6	2,399,444	52.2	10.0
Grants on March 18, 2021	2,181,442	24.6	591,938	12.9	2.5
At December 31, 2021	14,826,623	180.1	5,132,048	111.7	21.5

- (i) Refers to the estimated fair value of total virtual shares to be granted in each grant date.
- (ii) Outstanding virtual shares until December 31, 2022 and December 31, 2021 considering the plan’s vesting period and less the virtual shares already paid to the beneficiaries.
- (iii) Fair value of virtual shares as of December 31, 2022 and December 31, 2021 considering the plan’s vesting period and fair value of Embraer’s shares in the market on each date based on the plan’s requirements.

28 Earnings per share

Basic and diluted earnings per common share are computed by dividing net income/(loss) for the year by the weighted average number of shares outstanding during the period, excluding shares held in treasury.

	12.31.2022	12.31.2021	12.31.2020
Losses attributable to owners of Embraer	(185.4)	(44.7)	(731.9)
	(185.4)	(44.7)	(731.9)
Weighted average number of shares (in thousands)	734,633	734,730	736,164
Basic and diluted loss per share - U.S. dollars	(0.25)	(0.06)	(0.99)



As of December 31, 2022, 2021 and 2020, the Company does not have outstanding potential ordinary shares which can be converted in new shares and diluted earnings per share, therefore, basic and diluted earnings per share are equivalent in the period as disclosed.

29 Revenue from contracts with customers

a) Revenue disaggregation

- Revenue by category on December 31, 2022:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total
Aircraft	1,540.6	26.0	1,244.4	—	31.1	2,842.1
Long-term contracts – aircraft	—	312.4	—	—	—	312.4
Others	3.3	6.5	—	1.4	0.8	12.0
Service	—	94.6	—	838.2	—	932.8
Spare Parts	—	8.1	—	427.2	5.8	441.1
Total	1,543.9	447.6	1,244.4	1,266.8	37.7	4,540.4

	North America	Latin America	Asia Pacific	Brazil	Europe	Others	Total
Aircraft	2,150.8	20.2	—	114.5	474.3	82.3	2,842.1
Long-term contracts – aircraft	—	—	—	163.2	148.9	0.3	312.4
Others	1.4	—	—	8.9	1.7	—	12.0
Service	428.8	24.6	81.2	158.4	193.6	46.2	932.8
Spare Parts	276.7	8.2	19.7	60.2	65.9	10.4	441.1
Total	2,857.7	53.0	100.9	505.2	884.4	139.2	4,540.4

- Revenue by category on December 31, 2021:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total
Aircraft	1,313.2	148.8	1,098.7	—	17.5	2,578.2
Long-term contracts – aircraft	—	320.6	—	—	—	320.6
Others	3.2	23.2	31.4	8.7	1.4	67.9
Service	—	87.9	—	795.6	—	883.5
Spare Parts	—	13.9	—	327.9	5.2	347.0
Total	1,316.4	594.4	1,130.1	1,132.2	24.1	4,197.2

	North America	Latin America	Asia Pacific	Brazil	Europe	Others	Total
Aircraft	1,525.3	4.1	102.8	79.5	731.2	135.3	2,578.2
Long-term contracts – aircraft	—	—	—	202.4	117.5	0.7	320.6
Others	30.2	0.4	3.7	22.9	9.8	0.9	67.9
Service	417.8	20.9	72.9	129.7	203.3	38.9	883.5
Spare Parts	194.9	12.4	30.2	44.1	54.9	10.5	347.0
Total	2,168.2	37.8	209.6	478.6	1,116.7	186.3	4,197.2

- Revenue by category on December 31, 2020:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total
Aircraft	1,103.7	239.5	1,015.3	—	7.7	2,366.2
Long-term contracts – aircraft	—	296.9	—	—	—	296.9
Others	10.7	19.9	56.2	4.9	1.1	92.8
Service	—	73.7	—	712.7	—	786.4
Spare Parts	—	23.9	—	202.4	2.5	228.8
Total	1,114.4	653.9	1,071.5	920.0	11.3	3,771.1

	North America	Latin America	Asia Pacific	Brazil	Europe	Others	Total
Aircraft	1,962.7	49.7	77.1	6.9	237.7	32.1	2,366.2
Long-term contracts - aircraft	—	0.3	0.1	230.9	64.9	0.7	296.9
Others	61.0	0.4	8.6	13.3	5.0	4.5	92.8
Service	385.6	22.4	56.4	91.9	198.7	31.4	786.4
Spare Parts	123.2	3.2	19.4	40.0	37.7	5.3	228.8
Total	<u>2,532.5</u>	<u>76.0</u>	<u>161.6</u>	<u>383.0</u>	<u>544.0</u>	<u>74.0</u>	<u>3,771.1</u>

b) Contract balances, including contract costs

	12.31.2022	12.31.2021
Contract assets	<u>506.1</u>	<u>582.3</u>
Current portion	505.4	582.3
Non-current portion	0.7	—

Contract assets – US\$ 306.6 included in the contract assets position as of December 31, 2021, were billed and collected by the Company in 2022. Expected credit losses of US\$ 3.6 were recognized over the contract assets balances as of December 31, 2022 (US\$ 2.5 of December 31, 2021).

	12.31.2022	12.31.2021
Advances from customers - Aircraft and Defense long-term contracts	1,748.8	1,312.4
Deferred revenue - Parts and services	215.2	200.9
Contract liabilities	<u>1,964.0</u>	<u>1,513.3</u>
Current portion	1,469.0	1,204.6
Non-current portion	495.0	308.7

Contract liabilities – Out of the total balances of contract liabilities as of December 31, 2021, US\$ 645.4 were recognized as revenues in 2022.

c) Performance obligations

The Company has a portfolio of firm orders (“Backlog”), whose performance obligations are unsatisfied or partially satisfied. The amount of revenue allocated to performance obligations not yet satisfied (or partially satisfied) as of December 31, 2022 was US\$ 17.5 billion (US\$ 17.0 billion on December 31, 2021), out of which US\$ 15.5 billion is expected to be satisfied in the next 5 years (US\$ 14.0 billion on December 31, 2021), as estimated by the Company.

30 Revenue (expenses) by nature

The Company opted to present the consolidated statements of income by function. The table below shows the detailed revenue, costs and expenses by nature:

	12.31.2022	12.31.2021	12.31.2020
As presented in the statements of income:			
Revenue	4,540.4	4,197.2	3,771.1
Cost of sales and services	(3,628.2)	(3,537.6)	(3,293.5)
Administrative	(184.9)	(153.2)	(143.4)
Selling	(274.4)	(226.4)	(194.0)
Expected credit (losses) reversals over financial assets and contract assets	(17.4)	13.0	(61.8)
Research	(110.0)	(43.0)	(29.8)
Other operating expense, net	(444.5)	(49.8)	(374.7)
Equity in associates	8.5	1.1	2.7
Operating profit before financial income	(110.5)	201.3	(323.4)
Revenue (expenses) by nature:			
Revenue from sales of goods	3,821.6	3,490.1	3,194.5
Revenue from sales of services	784.2	742.3	620.9
Sales deductions and tax on revenue (i)	(65.4)	(35.2)	(44.3)
General manufacturing costs (ii)	(2,997.2)	(3,059.6)	(2,753.8)
Depreciation	(106.6)	(122.0)	(163.6)
Amortization	(103.7)	(86.6)	(128.5)
Personnel expenses	(669.3)	(493.6)	(441.8)
Selling expenses	(64.1)	(47.6)	(48.1)
Equity in associates	8.5	1.1	2.7
Research	(110.0)	(43.0)	(29.8)
Expected credit (losses) reversals over financial assets and contract assets	(17.4)	13.0	(61.8)
Services provided	(74.5)	(82.2)	(74.5)
Other operating expenses, net (Note 31)	(444.5)	(49.8)	(374.7)
Miscellaneous (iii)	(72.1)	(25.6)	(20.6)
Operating profit before financial income	(110.5)	201.3	(323.4)

- (i) Refers to sales taxes and other deductions.
- (ii) Refers to costs of materials, direct labor and general manufacturing expenses.
- (iii) Refers mainly to expenses with insurance, taxes and fees.

31 Other operating expense, net

	12.31.2022	12.31.2021	12.31.2020
Warrants -EVEX (i)	(158.2)	—	—
Listing expenses - EVEX (ii)	(135.7)	—	—
Corporate projects (iii)	(78.2)	(59.4)	(56.4)
Restructuring expenses (iv)	(36.9)	(31.8)	(69.2)
Taxes on other sales	(15.5)	(23.7)	(20.3)
Transaction costs - EVEX (v)	(11.5)	—	—
Expenses system project	(1.4)	(10.8)	(6.7)
Residual value of fixed assets disposed	(12.8)	(10.5)	—
Aircraft maintenance and flights costs - fleet	(5.6)	(7.8)	(2.8)
Flight safety standards	(3.6)	(3.1)	(3.1)
Product modification	(2.3)	(2.7)	(2.5)
Training and development	(2.0)	(1.5)	(4.7)
Depreciation and amortization - Commercial Aviation	—	—	(101.2)
Costs with personnel	—	—	(44.8)
Carve-Out Expenses	—	—	(82.8)
Additional losses with financial guarantees exercised	—	—	(5.9)
Contractual fines	—	(1.0)	(3.9)
Reversal of tax provisions	—	—	8.1
Recovery of expenses	—	—	12.7
Contractual fines revenue	17.8	7.1	15.1
Disposal of production units in Évora	4.2	—	—
Other sales	12.8	7.3	6.2
Impairment of assets	—	11.2	4.2
Royalties	10.4	16.5	7.0
Reversal (Provision) for contingencies	(7.4)	22.1	(0.3)
Fair value changes - Republic Airways shares	1.7	39.1	(4.1)
Others	(20.3)	(0.8)	(19.3)
	<u>(444.5)</u>	<u>(49.8)</u>	<u>(374.7)</u>

- (i) Initial recognition of the warrants covered by the BCA, which became exercisable on May 9, 2022.
- (ii) Listing Expenses – EVEX are non-cash expenses, based on the difference between the value of Zanite’s identifiable net assets against the fair value of financial instruments issued by EVEX Note 12.3.2.
- (iii) Corporate project expenses mainly relate to disbursements with demands approved by Management associated with efficiency and restructuring of processes, IT, cyber security, and legal demands.
- (iv) Restructuring expenses include expenses incurred by the Company as part of the corporate restructuring project started in 2021 and ended in 2022 with the reintegration of Commercial Aviation, including expenses related to excess manufacturing capacity, mainly wages, during the collective vacation period that occurred in January 2022 to complete the reintegration process.
- (v) Transaction costs – EVEX are the direct expenses attributable to the Business Combination such as law firms, auditors, banks, and other services associated with carrying out the transaction. As per Note 12.3.2, all transaction costs considered non-incremental were recognized in Other operating expenses.

32 Financial expenses, net

	12.31.2022	12.31.2021	12.31.2020
Financial income:			
Warrants	62.9	—	—
Interest on cash and cash equivalents and financial investments	43.8	17.9	18.3
Interest on receivables	4.2	3.1	10.6
Residual value guarantee	—	52.0	3.7
Taxes over financial revenue	(2.1)	(2.2)	(3.9)
Phantom shares (LTI)	5.0	—	5.1
Derivative financial instruments	5.2	—	—
Others	2.9	4.0	(4.7)
Total financial income	121.9	74.8	29.1
Financial expenses:			
Interest on loans and financing	(204.6)	(240.7)	(214.9)
IOF - (tax on financial transactions)	(2.1)	(0.9)	(9.1)
Interest on taxes, social charges and contributions	(6.8)	(3.2)	(4.9)
Financial restructuring costs	(12.1)	(2.4)	—
Phantom shares (LTI)	—	(17.7)	—
Derivative financial instruments	—	—	(16.8)
Others	(19.8)	(9.3)	(16.1)
Total financial expenses	(245.4)	(274.2)	(261.8)
Financial expenses, net	(123.5)	(199.4)	(232.7)

33 Foreign exchange gain (loss), net

	12.31.2022	12.31.2021	12.31.2020
Monetary and foreign exchange variations			
Assets:			
Tax credits	3.4	(14.2)	(33.7)
Trade accounts receivable and contract assets	41.6	(1.9)	(37.6)
Cash and cash equivalents and financial investments	4.4	2.4	(37.7)
Others	(12.3)	4.0	(24.3)
	37.1	(9.7)	(133.3)
Liabilities:			
Loans and financing	0.3	3.9	4.9
Advances from customers	—	(1.0)	(0.5)
Provisions	(6.5)	12.3	34.7
Taxes and charges payable	(1.4)	4.0	12.8
Other payables	(6.6)	5.9	(33.0)
Suppliers	(1.0)	(2.7)	19.0
Provisions for contingencies	(2.1)	3.2	18.7
Others	5.0	5.5	(0.4)
	(12.3)	31.1	56.2
Net monetary and foreign exchange variations	24.8	21.4	(77.1)
Derivative financial instruments	3.4	4.1	(2.0)
Foreign exchange gain (loss), net	28.2	25.5	(79.1)

34 Responsibilities and commitments

34.1 Backstop commitments (Commercial Aviation)

In certain firm sales contracts of commercial jets included in backlog, the Company has entered into backstop commitments to provide financing in case the customer fails to obtain sufficient credit lines upon the aircraft deliveries.

Past experience demonstrates the Company was requested and provided financing on limited cases to its customers during the deliveries of E-Jets family, which demonstrates existence of alternative funding sources in the market to transfer the backstop commitments and remote probability of exercise. In addition, the Company retains property of the assembled aircraft until the customer fulfils the payments on delivery, then not being exposed to risks of loss.

With the purpose of mitigating the credit risk exposure, the exercise of backstop commitments relies on current financial conditions of the customer upon exercise notice and conditions precedent to be accomplished. If the Company effectively provides the financing on delivery, the related aircraft is kept as collateral in the financing structure.

35 Supplemental cash flow information

35.1 Payments made during the year and transactions not affecting cash and cash equivalents

	12.31.2022	12.31.2021	12.31.2020
Non-cash financing and investing transactions			
Acquisition of inventories through assumption of financing	—	—	14.1
Write off on Property, plant and equipment by transfer to pool parts inventory	(27.2)	(23.2)	(18.2)
Property, plant and equipment, transfer for providing for the sale of inventory	—	—	(38.4)
Non-controlling purchase options	—	—	22.2

36 Segment information

Management defined the Company’s operating segments based on the reports used for strategic decision making, reviewed by the chief operating decision-maker.

The chief operating decision-maker evaluates the segments based on its consolidated operating results, dividing it geographically and in terms of markets for specific products. From a geographic perspective, Management considers the performance of the operations in Brazil, North America, Europe, Latin America (except Brazil) and Asia Pacific.

36.1 Commercial Aviation segment

The Commercial Aviation segment mainly involves the development, production and sale of commercial jets and aircraft leases.

- ERJ 145 family, comprising the ERJ 135, ERJ 140 and ERJ 145 jets, certified to operate with 37, 44 and 50 seats, respectively.
- EMBRAER 170/190 family, comprising the EMBRAER 170, a 70-seat jet, EMBRAER 175, a 76-seat jet, EMBRAER 190, a 100-seat jet and the EMBRAER 195, a 108-seat jet. The EMBRAER 170 model has been operating commercially since 2004, the EMBRAER 175 and EMBRAER 190 models started commercial operations in 2006, and the EMBRAER 195 model in 2007.
- E-Jets E2, the second generation of the E-Jets family of commercial aircraft, consists of three new aircraft – E175-E2 with capacity of up to 88 seats, E190-E2 with up to 106 seats and E195-E2, with up to 146 seats in a typical single-class configuration. The E190-E2 started commercial operations in the first half of 2018. First production E195-E2 was delivered in September 2019 and the E175-E2 will entry into service between 2027 and 2028.

**36.2 Defense & Security segment**

The Defense & Security segment operations mainly involve research, development, production, modification and support for military defense and security aircraft, as well as a wide range of products and integrated solutions that include radars, special space systems (satellites), cyber security solutions and advanced information and communication systems, such as Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance systems (C4ISR).

The expansion and diversification of the portfolio, previously focused on military aircraft, was facilitated by a strategy of partnerships, acquisitions and organic growth.

The Company’s principal customer is currently the Brazilian Defense Ministry and, in particular, the Brazilian Air Force, although the diversification of the portfolio has resulted in a corresponding diversification of customers: the Brazilian Army and Navy and the Communications Ministry, as well as a growing international presence of our products and solutions.

Main products in the Embraer Defense & Security portfolio:

- C-390 Millennium/ KC-390 Millennium - joint project between the Brazilian Air Force and Embraer to develop and produce a tactical military transport aircraft, including aerial refueling capability. The CGU represents a significant advance in terms of technology and innovation for the airspace Industry. The aircraft is designed to establish new standards in its category, delivering lower operating costs than its competitors, and the flexibility to accomplish a variety of missions: troop and cargo transport, aerial resupply, aerial refueling, search & rescue, aerial firefighting, among other missions.
- A-29 Super Tucano - military turboprop that combines advanced operational capacities with low acquisition and operating costs. The A-29 Super Tucano is a true multi-mission aircraft – its main mission segments are: (1) aerial support to land operations, (2) reconnaissance, and (3) tactical training. The A-29 Super Tucano possesses the operational capabilities to accomplish border surveillance, close air support and counter insurgency missions (COIN).
- Software and Systems Development - combining the expertise of Atech Negócios em Tecnologia S.A. with Embraer capabilities in system development and integration, we provide specialized engineering services for the development, installation, revitalization and maintenance of critical control, defense and monitoring systems. As part of the solution packages, Embraer Defense & Security also provides the equipment and tools for total integration with our services.
- Border Surveillance and protection of Strategic Structures - based on our expertise in systems integration, Embraer develops, designs, certifies, produces, integrates and implements systems and services in the field of border surveillance and control, as well as protection of critical infra-structures.
- Radars - having a proven track record in developing and producing radars for Defense and Remote Sensing applications, Embraer Defense & Security offers multiple solutions in the Radars & Land Systems field: anti-aircraft artillery, land surveillance, civil and military air traffic control, communications intelligence systems, synthetic aperture radar for cartography and precision-monitoring services, etc.
- Cybersecurity - through Tempest, Embraer Defense & Security provides cybersecurity solutions in the civil, government and defense markets. Cybersecurity solutions include specialized diagnostic services, cybersecurity systems architecture and implementation, as well as software and technical products for control and protection of cyber environments.
- Satellites and Space Services - Visiona Tecnologia Espacial is a joint venture of Embraer and Telebrás. After the successful program to provide and integrate the Brazilian Geostationary Defense and Communications Satellite system (SGDC), the company is currently developing the Nano Satellite VCUB. This new program will validate the software developed by Visiona for the satellites of the Brazilian Space Program, and perform observation missions of the earth, as well as collect data. Visiona also provides remote sensing services through satellite images or airborne radars.

Other portfolio capabilities of Embraer Defense & Security:

- Aircraft Modernization - the Company is also prepared to offer aircraft modernization services. Four active contracts represent successful programs in this area, all of them at the final delivery stage. The first one, known as F-5BR, is focused on the structural and electronic upgrade of the Brazilian Air Force’s F-5 fighter jet. The second program, A-1M, concerns upgrading the AMX, an advanced jet that is part of the assets of the Brazilian Air Force. The scope of third program, contracted by the Brazilian Navy, comprises the revitalization of the A-4 Skyhawk aircraft (denominated AF-1 by the customer), as well as the incorporation of new technologies to the platform. On the fourth program, which also supports the Brazilian Air Force, the Company was contracted to modernize the airborne sensors on the EMB-145 AEW&C aircraft.
- ISR family (Intelligence, Surveillance and Reconnaissance) - originally developed to support the SIVAM program, and based on the ERJ-145 platform, some customized versions have been ordered by the governments of Greece, Mexico and India. A new solution is currently being marketed, which uses the Praetor 600 platform to deliver the AEW&C (Airborne Early Warning and Control) capability.
- Transportation of Authorities and Special Missions - derived from Commercial Aviation and Executive Aviation aircraft platforms, these are aircraft used to transport government and/ or armed forces authorities, or to carry out special missions.

Furthermore, Embraer Defense & Security also partners with foreign companies to execute Strategic Projets and other relevant endeavors of the Brazilian Armed Forces, such as the F-39 Gripen and the Tamandaré Class Frigates.

**36.3 Executive Aviation segment**

Executive Aviation market operations comprise the development, production and sale of executive jets, and leases of the following product lines:

- Phenom family - executive jets in the Entry Jet and Light Jet categories, respectively. The first deliveries of the Phenom 100 were made in 2008, and deliveries of the Phenom 300 started in 2009.
- Praetor 500 and Praetor 600 - most disruptive executive jets in the Midsize and Super Midsize categories, introduced in Q4 2018 with deliveries starting in 2nd half 2019.

**36.4 Services & Support segment**

Segment created to provide after-service solutions and support to its customers through a portfolio of solutions to ensure operational efficiency of products manufactured by Embraer and by other aircraft manufacturers, extending the useful life of commercial, executive and defense aircraft.

In addition to its experience in proposing support solutions to customers, OGMA (Embraer’s subsidiary in Portugal) offers MRO (Maintenance, Repair and Overhaul) services for a wide range of commercial, executive and defense aircraft, aircraft components and engines and it is a significant supplier of steel and composite aviation structures to several aircraft manufacturers.

The Services & Support segment consist of the following macro processes:

- Capture customer needs and develop integrated support and services solutions: To develop integrated and competitive support solutions, technical services, materials, or MRO activities that meet the needs and expectations of Embraer customers.
- Sell and administrate support and services solution: To sell integrated and competitive technical support, service solutions, materials, or MRO activities, and administer support and service contracts.



- Deliver Material Solutions: To provide parts to customers, by direct sale or availability through special programs, manage component repair, provide inventory management services and advice on inventory formation.
- Deliver Technical Solutions: To provide technical, operational and maintenance support to customers fleets with services such as providing training for pilots and commissioners, aircraft modification and enhancement projects, review of technical, operational and maintenance publications, and sustaining digital solutions.
- Deliver MRO Solutions: To provide maintenance services for aircraft, engines and landing gear (scheduled and unscheduled), aircraft modernization and component repair.

36.5 Other Segments

Operations reported as other relate to the supply of structural parts and mechanical and hydraulic systems, and production of agricultural crop-spraying aircraft. The segment related to the development and certification of electric vertical take-off and landing vehicles (eVTOLs), the creation of a maintenance and services network for eVTOLs and the creation of an air traffic management system for eVTOLs (UAM Business) did not have relevant operations in the Company’s operations for 2022, therefore are being presented as other in the operating segment information. The operating income (expenses) presented in this segment refers substantially to expenses incurred in the transaction with Zanite, for additional information see Note 12.3.

Consolidated statements of income data by operating segment - year ended December 31, 2022:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total reportable Segments	Unallocated	Total
Revenue	1,543.9	447.6	1,244.4	1,266.8	37.7	4,540.4	—	4,540.4
Cost of sales and services	(1,382.3)	(350.8)	(953.2)	(912.3)	(29.6)	(3,628.2)	—	(3,628.2)
Gross profit	161.6	96.8	291.2	354.5	8.1	912.2	—	912.2
Operating income (expense)	(145.5)	(86.8)	(141.5)	(193.2)	(386.1)	(953.1)	(69.6)	(1,022.7)
Operating profit before financial income (expense)	16.1	10.0	149.7	161.3	(378.0)	(40.9)	(69.6)	(110.5)
Financial income (expense), net							(123.5)	(123.5)
Foreign exchange loss, net							28.2	28.2
Loss before taxes on income								(205.8)
Income tax expense							2.3	2.3
Loss for the period								(203.5)

Unallocated items from operating income (expense) refer to expenses incurred as part of the corporate restructuring of the Company and expenses with certain corporate demands not directly related to any operating segment.

Revenue by geographic area - year ended December 31, 2022:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total
North America	1,234.7	2.9	914.1	706.0	—	2,857.7
Europe	234.9	194.1	212.6	242.8	—	884.4
Asia Pacific	—	3.6	—	97.3	—	100.9
Latin America, except Brazil	—	1.4	20.0	31.6	—	53.0
Brazil	2.4	245.1	87.8	132.2	37.7	505.2
Others	71.9	0.5	9.9	56.9	—	139.2
Total	1,543.9	447.6	1,244.4	1,266.8	37.7	4,540.4

Assets by operating segment - year ended December 31, 2022:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total reportable Segments	Unallocated	Total
Property, plant and equipment	542.8	194.3	396.5	510.3	5.3	1,649.2	—	1,649.2
Intangible assets	1,193.3	80.3	881.3	9.0	33.4	2,197.3	49.2	2,246.5
Total	1,736.1	274.6	1,277.8	519.3	38.7	3,846.5	49.2	3,895.7

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Notes to the Consolidated Financial Statements  
In millions of U.S. dollar, unless otherwise stated

Assets by geographic area - year ended December 31, 2022:					
	North America	Europe	Asia Pacific	Brazil	Total
Property, plant and equipment	351.1	263.0	69.0	966.1	1,649.2
Intangible assets	107.8	45.3	—	2,093.4	2,246.5
Total	458.9	308.3	69.0	3,059.5	3,895.7

Consolidated statements of income data by operating segment – year ended December 31, 2021:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total reportable Segments	Unallocated	Total
Revenue	1,316.4	594.4	1,130.1	1,132.2	24.1	4,197.2	—	4,197.2
Cost of sales and services	(1,263.9)	(488.4)	(923.4)	(827.6)	(34.3)	(3,537.6)	—	(3,537.6)
Gross profit	52.5	106.0	206.7	304.6	(10.2)	659.6	—	659.6
Operating income (expense)	(57.1)	(89.0)	(76.9)	(143.2)	(23.1)	(389.3)	(69.0)	(458.3)
Operating profit before financial income (expense)	(4.6)	17.0	129.8	161.4	(33.3)	270.3	(69.0)	201.3
Financial income (expense), net							(199.4)	(199.4)
Foreign exchange gain (loss), net							25.5	25.5
Loss before taxes on income								27.4
Income tax benefit (expense)							(70.9)	(70.9)
Loss for the period								(43.5)

Unallocated items from operating income (expense) refer to expenses incurred as part of the corporate restructuring of the Company and expenses with certain corporate demands not directly related to any operating segment.

Revenue by geographic area – year ended December 31, 2021:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total
North America	687.6	58.1	807.2	614.0	1.3	2,168.2
Europe	494.5	158.7	229.1	234.4	—	1,116.7
Asia Pacific	3.3	80.8	27.6	97.9	—	209.6
Latin America, except Brazil	—	3.0	4.1	30.7	—	37.8
Brazil	1.8	285.8	62.1	106.1	22.8	478.6
Others	129.2	8.0	—	49.1	—	186.3
Total	1,316.4	594.4	1,130.1	1,132.2	24.1	4,197.2

Assets by operating segment - year ended December 31, 2021:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total reportable Segments	Unallocated	Total
Property, plant and equipment	498.2	253.8	344.9	589.7	1.0	1,687.6	—	1,687.6
Intangible assets	1,154.1	11.8	788.0	—	182.7	2,136.6	76.8	2,213.4
Total	1,652.3	265.6	1,132.9	589.7	183.7	3,824.2	76.8	3,901.0

Assets by geographic area - year ended December 31, 2021:

	North America	Europe	Asia Pacific	Brazil	Total
Property, plant and equipment	337.7	305.9	44.4	999.6	1,687.6
Intangible assets	96.6	43.2	—	2,073.6	2,213.4
Total	434.3	349.1	44.4	3,073.2	3,901.0

Consolidated statements of income data by operating segment – year ended December 31, 2020:								
	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total reportable Segments	Unallocated	Total
Revenue	1,114.4	653.9	1,071.5	920.0	11.3	3,771.1	—	3,771.1
Cost of sales and services	(1,086.8)	(549.1)	(886.1)	(751.4)	(20.1)	(3,293.5)	—	(3,293.5)
Gross profit	27.6	104.8	185.4	168.6	(8.8)	477.6	—	477.6
Operating income (expense)	(300.8)	(72.2)	(95.5)	(240.7)	(22.6)	(731.8)	(69.2)	(801.0)
Operating profit before financial income (expense)	(273.2)	32.6	89.9	(72.1)	(31.4)	(254.2)	(69.2)	(323.4)
Financial income (expense), net							(232.7)	(232.7)
Foreign exchange gain (loss), net							(79.1)	(79.1)
Profit before taxes on income								(635.2)
Income tax expense							(93.1)	(93.1)
Loss for the period								(728.3)

Revenue by geographic area – year ended December 31, 2020:

	Commercial Aviation	Defense & Security	Executive Aviation	Services & Support	Other Segments	Total
North America	858.4	108.8	1,054.4	509.7	1.2	2,532.5
Europe	215.4	108.4	17.1	203.1	—	544.0
Asia Pacific	4.8	81.6	—	75.2	—	161.6
Latin America, except Brazil	0.4	49.2	—	26.4	—	76.0
Brazil	3.0	297.6	—	72.3	10.1	383.0
Others	32.4	8.3	—	33.3	—	74.0
Total	1,114.4	653.9	1,071.5	920.0	11.3	3,771.1

37 Subsequent events

37.1 Credit US EXIM

Embraer completed a credit operation of US\$ 200 million to finance purchases of supplies made by Embraer in the United States. This operation became effective in January 2023, and disbursements will be made according to proof of purchases of inputs from suppliers. This credit was granted by Citibank and guaranteed by Exim Bank, the official US export credit agency.

37.2 Investment in the fund MSW MultiCorp 2

On January 27, 2023, Embraer announced an initial investment of R\$ 20 million (US\$ 3.8) in MSW MultiCorp 2, fund managed by MSW Capital, a Venture Capital manager, with the objective of attracting and boosting innovative Brazilian startups that have synergy with the company’s innovation strategy.

On February 13, 2023, Embraer paid in an amount of R\$ 1.3 million (US\$ 0.3). As a result of this event, Embraer now holds 40% of the shares of MSW MultiCorp.

\* \* \*

**BYLAWS OF**  
**EMBRAER S.A.**

**ARTICLE I**

**NAME, PRINCIPAL PLACE OF BUSINESS, PURPOSE AND DURATION**

**Section 1** - Embraer S.A. (the “Company”) is a corporation governed by these Bylaws and the applicable law.

**PARAGRAPH 1** - The Company was incorporated as a federal mixed-capital company (*sociedade de economia mista*) pursuant to an authorization under Decree-Law No. 770, of August 19, 1969, and was privatized in accordance with Law No. 8,031, of April 12, 1990, and Public Notice No. PND-A-05/94-EMBRAER issued by the Executive Committee of the Brazilian Privatization Program, published in the Official Gazette, Part 3, on April 4, 1994, pages 5,774 to 5,783.

**PARAGRAPH 2** - Considering that the Company has joined the *Novo Mercado* of *B3 S.A.– Brasil, Bolsa Balcão* (“Novo Mercado” and “B3”, respectively), the Company, its shareholders, including controlling shareholders, directors, officers and members of the fiscal council, when convened, are required to comply with the *Novo Mercado* Regulations (“Novo Mercado Regulations”).

**PRINCIPAL PLACE OF BUSINESS**

**Section 2** - The Company shall have its principal place of business and headquarters in the City of São José dos Campos, State of São Paulo, and may incorporate companies and open branches and other offices as well as appoint agents or representatives anywhere in Brazil or abroad.

**CORPORATE PURPOSE**

**Section 3** - The corporate purpose of the Company is as follows:

- I. to design, build and market aircraft and aerospace materials and related accessories, components and equipment, according to the highest standards of technology and quality;
- II. to perform and carry out technical activities related to the manufacturing and servicing of aerospace materials;
- III. to contribute to the training of technical personnel as necessary for the aerospace industry;
- IV. Perform other technological, industrial, commercial and service activities related to the aerospace industry;
- V. to design, build and trade in equipment, materials, systems, software, accessories and components for the defense, security and energy industries, as well as promote and carry out technical activities related to the manufacturing and servicing thereof, in accordance with the highest technological and quality standards; and
- VI. to conduct other technological, manufacturing, trading and services activities related to the defense, security and energy industries.

**PRINCIPLES**

**Section 4** - The organization and operation of the Company shall be guided by the following principles:

- I. the securities of the Company shall be traded on domestic and/or international capital markets in compliance with all applicable legal requirements and the requirements of the supervisory institutions of such markets, in order to raise the necessary capital for the growth of the Company as well as preservation of its competitiveness and continuing existence;
  - II. all shares of the capital stock of the Company shall be common shares;
  - III. with respect to the resolutions passed by the Shareholders’ Meetings:
    - a) no shareholder or group of shareholders, whether Brazilian or foreign, may exercise voting rights in excess of 5% of the shares of the capital stock; and
    - b) foreign shareholders and groups of foreign shareholders, in the aggregate, may not exercise voting rights in excess of two-thirds (2/3) of all voting rights held by the Brazilian shareholders in attendance;
  - IV. with due regard for the provisions of Section 56 hereof, no majority group may be formed in advance of the Shareholders’ Meetings under shareholders’ agreements that regulate the exercise of voting rights, so as to create blocks holding voting rights in excess of the individual limit established in letter “a” of item III of this Section;
  - V. the resolutions and acts by the bodies of the Company listed in Section 9 hereof shall be subject to a veto right of the Brazilian Federal Government; and
  - VI. the Company shall not issue profit-sharing bonds (*partes beneficiárias*).
- SECTION 5** - The duration of the Company shall be for an indefinite period of time.

Article II

**CAPITAL STOCK AND SHARES**

**CAPITAL STOCK**

- SECTION 6** - The capital stock of the Company, which is fully subscribed and paid in, is five billion, one hundred and fifty-nine million, six hundred and seventeen thousand, fifty-two reais and forty-two cents (R\$ 5,159,617,052.42), divided into seven hundred forty million, four hundred sixty-five thousand, forty-four (740,465,044) registered common shares, one of which shall be a Golden Share (Section 9), and all of which with no par value.
- PARAGRAPH 1** – At all times the capital stock of the Company shall be divided into common shares only, no preferred shares being permitted.
- PARAGRAPH 2** - The single Golden Share of the Brazilian Federal Government shall be entitled to all prerogatives attached thereto for as long as such Golden Share is owned by the Brazilian Federal Government (pursuant to Section 8 of Law No. 9,491/97).
- SECTION 7** - According to Section 168 of Law No. 6,404/76, the capital stock of the Company may be increased up to one billion (1,000,000,000) common shares, by a resolution of the Board of Directors, irrespective of any amendment to these Bylaws.

**PARAGRAPH 1** - It is incumbent on the Board of Directors to establish the price and the number of shares to be issued, as well as the time and terms of payment; provided, however, that a subscription to be paid in kind shall be contingent on approval of the relevant appraisal report by the Shareholders’ Meeting, as required by law.

**PARAGRAPH 2** - Within the limit of the authorized capital, the Board of Directors may:

- a) resolve on the issuance of warrants, including when attributed as an additional advantage to subscribers of shares or debentures convertible into shares;
- b) in accordance with the plan approved by the Shareholders’ Meeting, grant stock options to the members of management and employees of the Company or its controlled companies, without the shareholders having preemptive rights of purchase with respect to such shares; and
- c) approve an increase of the capital stock by way of capitalization of earnings or reserves, with or without a stock dividend.

**PARAGRAPH 3** - In the event of an issuance of shares in connection with an increase of the capital stock, where such shares will be placed through a sale on a stock exchange or a public offering, the preemptive rights of the existing shareholders may be excluded or the time limit for exercise of such rights may be reduced.

**PARAGRAPH 4** - The provisions of this Section shall also apply to an issuance of convertible debentures or warrants, unless these securities are offered as an additional advantage to subscribers of shares or convertible debentures.

**FORM OF SHARES**

**Section 8** - All shares of the Company shall be in book-entry form and shall be held in deposit accounts in the name of their owners with a financial institution authorized to operate by the Brazilian Securities Commission (*Comissão de Valores Mobiliários*, “CVM”), as selected by the Board of Executive Officers.

**PARAGRAPH 1** - Such registrar of the book-entry shares shall charge directly to the Company the cost of its services.

**PARAGRAPH 2** - Such registrar shall control the number of shares owned by Brazilian and foreign individuals and legal entities, with due regard for the provisions of Paragraph 2 of Section 10 hereof.

**GOLDEN SHARE OF THE BRAZILIAN FEDERAL GOVERNMENT**

**SECTION 9** - The Golden Share confers on the Brazilian Federal Government veto powers over the following matters:

- I. change in the name of the Company or its corporate purposes;
- II. modification and/or use of the Company’s logo;
- III. creation of and/or changes in military programs involving the Federative Republic of Brazil or otherwise;
- IV. technological training of third parties in connection with military programs;
- V. discontinuance of a supply of spare parts to service military aircraft;

VI. transfer of a controlling interest in the Company;

VII. any amendments to: (i) the provisions of this Section, Section 4, the leading paragraph of Section 10, Sections 11, 14 and 15, item III of Section 18, Paragraphs 1 and 2 of Section 27, item X of Section 33, item XII of Section 41 and Article VII; and (ii) the rights conferred by these Bylaws on the Golden Share.

**PARAGRAPH 1** - The conduct of a public offering for the purchase of the Company's shares, as referred to in Section 56 hereof, shall require the prior approval of the Brazilian Federal Government as the owner of the Golden Share.

**PARAGRAPH 2** - Subject to the provisions of Law No. 6,404/76 and Section 18, item III, of these Bylaws, the matters listed in this Section shall fall be subject to the decision- making authority of the Board of Directors of the Company and shall comply with the following procedures:

I. the matter shall be subject to resolution by the Board of Directors.

II. if the matter is approved by the Board of Directors, the Chairman of the Board shall notify the director elected by the Brazilian Federal Government to either exercise his or her veto right or express his or her approval, within a period of 30 days from receipt of such notice.

III. upon expiration of the period mentioned in item II above, a new meeting of the Board of Directors shall be convened: (i) to reconsider the resolution, if the Brazilian Federal Government exercised its veto right; or (ii) to confirm the resolution, if the Brazilian Federal Government expressed its approval or failed to voice an opinion within the period referred to above; and.

IV. if the resolution is confirmed by the Board of Directors, the matter shall be submitted to the Shareholders' Meeting for approval, where so required by applicable legislation, at which time the Brazilian Federal Government may yet again exercise its veto power under this Section.

**PARAGRAPH 3** - Without prejudice to the procedure defined in Paragraph 2 above, all matters to be acted on by the Board of Directors that are subject to veto by the Brazilian Federal Government, as holder of the Golden Share, shall also be communicated in advance by the Company to the Ministry of Economy by notice given concurrently with the notice mentioned in item II above, and the Ministry of the Economy shall reply within 30 days from receipt of the notice referred to in item II above.

**ARTICLE III**  
**SHAREHOLDERS**

**BRAZILIAN SHAREHOLDERS**

**SECTION 10** - For the purposes of these Bylaws, the following are deemed as Brazilian shareholders (“Brazilian Shareholders”):

I - individuals born or naturalized in Brazil, residing in Brazil or abroad;

II - legal entities organized under Brazilian private law and having their management based in in Brazil; provided that such entities:

a) do not have a foreign controlling shareholder or parent company, unless the latter falls under letter “b” of this item I; and;

b) are controlled either directly or indirectly by one or more individuals referred to in item I;

III - investment funds or investment clubs organized under the laws of Brazil and having their management based in Brazil; provided that their administrators and/or majority of its quota holders are individuals or entities as mentioned in items I or II.

**PARAGRAPH 1** - The Company shall keep a registry of its Brazilian Shareholders and Foreign Shareholders, as defined in this Section and Section 11 hereof.

**PARAGRAPH 2** - A Brazilian Shareholder shall be required to show evidence to the Company and the registrar of its book-entry shares that such Brazilian Shareholder meets the requirements of this Section, and only after such evidence is produced shall the name of such Brazilian Shareholder be entered on the registry of Brazilian Shareholders.

**FOREIGN SHAREHOLDERS**

**SECTION 11** - For the purposes of these Bylaws, foreign shareholders (“Foreign Shareholders”) shall be individuals, legal entities, investment funds or investment clubs and any other organizations not encompassed by the provisions of Section 10 hereof, as well as those that fail to provide evidence that they meet the requirements for registration as Brazilian Shareholders, according to Paragraph 2 of Section 10 hereof.

**SHAREHOLDER GROUPS**

**SECTION 12** - For the purposes of these Bylaws, two or more shareholders of the Company shall be deemed to form a group of shareholders (each a “Shareholder Group”) if:

I - such shareholders are parties to a voting agreements, either directly or through a parent company, a controlled company or a company under common control;

II – one shareholder is directly or indirectly a controlling shareholder or parent company of the other shareholder(s);

III – such shareholders are companies directly or indirectly controlled by the same person or entity, or the same group of persons or entities, who may or may not be shareholders themselves; or

IV – such shareholders are companies, associations, foundations, cooperatives and trusts, investment funds or portfolios, pools of rights or any other form of organization or undertaking having the same administrators or managers, or having administrators or managers that are companies directly or indirectly controlled by the same person or entity, or the same group of persons or entities, who may or may not be shareholders themselves.

**PARAGRAPH 1** – In the case of investment funds having a common administrator, only those funds with policies on investments and exercise of voting at Shareholders’ Meetings, according to the relevant Bylaws, that fall under the discretionary duties of such common administrator shall be deemed to form a Shareholder Group.



**PARAGRAPH 2** – For the purposes of these Bylaws, holders of securities issued in connection with the Company’s Depositary Receipts program shall not be deemed as a Shareholder Group, unless they fit the provisions of the preceding items of this Section.

**PARAGRAPH 3** – A Shareholder Group shall be deemed to be foreign (a “Foreign Shareholder Group”) if one or more of its members is a Foreign Shareholder.

**PARAGRAPH 4** - In addition to the foregoing provisions of this Section, at a given Shareholders’ Meeting, any shareholders or Shareholder Groups represented by the same attorney-in-fact, executive officer, director or representative in any capacity, shall be deemed to be part of the same Shareholder Group, except in the case of holders of securities issued in connection with a Depositary Receipts program of the Company, when represented by the relevant Depositary Bank.

**PARAGRAPH 5** – In the case of a shareholders’ agreement that regulates the exercise of voting rights, all signatories thereto shall be deemed to be members of the same Shareholder Group, according to the terms of this Section, for the purpose of limitation of number of votes, as referred to in Section 14 hereof.

**OBLIGATION TO DISCLOSE**

**SECTION 13** – Every shareholder or Shareholder Group is required to disclose, by notice to the Company and the stock exchanges on which the securities of the Company are traded, any negotiation of securities through which its direct or indirect equity interest regarding the type or class of shares representing the capital stock of the Company increases or decreases by five percent (5%), ten percent (10%), fifteen percent (15%) and so on successively.

**PARAGRAPH 1** - The same requirement applies to the holders of convertible debentures and warrants carrying rights to acquire shares in the amounts mentioned in this Section.

**PARAGRAPH 2** - A violation of the provisions of this Section shall result in the imposition of the penalties described in Section 16 below.

**VOTING RIGHTS**

**SECTION 14** - Each common share shall be entitled to one vote on the resolutions adopted at the Shareholders’ Meetings, subject to the following limitations:

- I - no shareholder or Shareholder Group, whether Brazilian or foreign, may cast votes in excess of 5% of the number of shares in which the Company’s capital stock is divided;
- II - the Foreign Shareholders, in the aggregate, may not cast, at each Shareholders’ Meeting, votes in excess of two-thirds (2/3) of the number of votes that may be cast by the Brazilian Shareholders in attendance.

**SOLE PARAGRAPH** - Any votes that exceed the limits established in this Section shall not be computed with respect to the resolutions of the Shareholders’ Meetings.

**SECTION 15** - For purposes of the provision of item II of Section 14, after a Shareholders’ Meeting is called to order:

I - the Chairman of the Meeting shall determine, based on the Shareholder Attendance List, and shall announce to the Meeting (as required by Section 22, Paragraph 3 below), the total number of votes that may be cast by the Brazilian Shareholders and the Foreign Shareholders in attendance, with due regard for the provisions of items I and II of Section 14; and;

II - if the total votes of the Foreign Shareholders exceed two-thirds (2/3) of the votes that may be cast by the Brazilian Shareholders, then the number of votes of each Foreign Shareholder shall be reduced on a pro rata basis from the excess percentage, so that the total votes of the Foreign Shareholders do not exceed the limit of 40% of the total votes that may be cast at such Shareholders’ Meeting.

**PARAGRAPH 1** - In the case of Foreign Shareholders and Foreign Shareholder Groups, the limits mentioned above shall be applied jointly and successively.

**PARAGRAPH 2** - The Chairman of the Shareholders’ Meeting shall inform the number of votes that may be cast by each shareholder in attendance, after application of the rules in Section 14 and this Section.

**SUSPENSION OF RIGHTS**

**SECTION 16** - The Shareholders’ Meeting may suspend the rights, including the voting rights, of a shareholder that fails to comply with any obligation imposed by law and the regulations issued thereunder, or these Bylaws, including the requirement to evidence Brazilian nationality as per Paragraph 2 of Section 10 hereof.

**PARAGRAPH 1** - Such suspension of rights may be acted on by any Shareholders’ Meeting, whether annual or extraordinary; provided that the matter is included in the agenda of the Meeting.

**PARAGRAPH 2** - The shareholders representing at least 5% of the capital stock of the Company may call a Shareholders’ Meeting, where the Board of Directors fails to comply, within eight days, with a request for a Shareholders’ Meeting, indicating the breach of an obligation and the name of the breaching shareholder.

**PARAGRAPH 3** – It shall be incumbent on the Shareholders’ Meeting that approves suspension of the political rights of a shareholder to also define, *inter alia*, the scope and duration of such suspension, provided, however, that no suspension of the statutory rights to oversight and to request information shall be permitted.

**PARAGRAPH 4** – A suspension of rights shall cease as soon as the obligation in question is fulfilled.

**SHAREHOLDERS’ AGREEMENT**

**SECTION 17** - The Company shall not file any shareholders’ agreement on the exercise of voting rights that conflicts with the provisions of these Bylaws.

**ARTICLE IV**  
**SHAREHOLDERS' MEETING**

**AUTHORITY**

**SECTION 18** - In addition to the duties mentioned in Section 122 and other provisions of Law No. 6,404/76, the Shareholders' Meeting shall have sole authority to take the following actions:

- I. to elect and remove the members of the Board of Directors;
- II. to elect and remove the members of the Fiscal Council and to determine their compensation;
- III. when required by applicable legislation, to decide on the matters subject to the veto power of the Brazilian Federal Government as holder of the Golden Share, pursuant to Section 9 hereof;
- IV. to determine the aggregate annual compensation of the directors and executive officers of the Company;
- V. to select the expert firm responsible for appraising the Company and preparing the relevant report in those cases mentioned in Article VIII hereof;
- VI. to approve stock option plans for the directors, executive officers and/or employees of the Company or companies controlled by the Company, according to the terms of Section 7, Paragraph 2, letter "b" hereof;
- VII. to allocate profit sharing to the directors, executive officers and/or employees of the Company, subject statutory limitations and the human resources policy of the Company;
- VIII. to decide on any allocation of earnings and payment of dividends by the Company, as proposed by the management;
- IX. to elect the liquidator as well as the Fiscal Council that will operate during the period of liquidation of the Company; and
- X. to dismiss the requirement of conducting a tender offer to delist the Company from the *Novo Mercado*.

**SOLE PARAGRAPH** - The resolution referred to in item X of this Section shall be taken by majority vote of the shareholders of outstanding shares attending the Meeting, disregarding blank votes. If the Meeting is convened on first call, shareholders representing at least two-thirds (2/3) of total outstanding shares must be in attendance; and, on second call, the Meeting shall be convened with any number of shareholders representing outstanding shares.

**CALL**

**SECTION 19** - The Shareholders' Meetings shall be called by the Board of Directors or, where provided by law, by the shareholders or the Fiscal Council; provided that notice of the Shareholders' Meetings shall be given at least 30 days in advance, as counted from first publication of notice. In the event the Meeting is not held, a second notice shall be published at least 15 days in advance.

**QUALIFICATION AND REPRESENTATION**

**SECTION 20** - The shareholders present at a Shareholders' Meeting shall evidence their qualification as Brazilian Shareholders (Section 10) or Foreign Shareholders (Section 11) by producing a valid identification document or lodging with the Company, no later than 48 hours prior to the time scheduled for the Shareholders' Meeting, proof furnished by the registrar of book-entry shares or the custodian of any shares, in accordance with Section 40 of Law No. 6,404/76.

**PARAGRAPH 1** - The Company shall waive submission of proof of ownership by a holder of book-entry shares whose name appears on the list of shareholders provided by the financial institution acting as registrar.

**PARAGRAPH 2** - A shareholder may be represented at a Shareholders’ Meeting by an attorney-in-fact appointed pursuant to Paragraph 1 of Section 126 of Law No. 6,404/76, who shall file the relevant proxy statement at the principal place of business of the Company within 48 hours prior to the time scheduled for the Shareholders’ Meeting.

**QUORUM**

**SECTION 21** – A Shareholders’ Meeting shall be called to order, on first call, upon attendance by shareholders representing at least 25% of the voting capital stock, except where a statute requires a higher quorum; and on second call, with any number of shareholders in attendance.

**SHAREHOLDER ATTENDANCE BOOK**

**SECTION 22** - Before the proceedings at a Shareholders’ Meeting are opened, the shareholders shall sign the “Shareholder Attendance Book”, informing their name and domicile, number of shares owned, and their qualification as Brazilian Shareholders (Section 10) or Foreign Shareholders (Section 11).

**PARAGRAPH 1** - The list of shareholders present shall be closed by the Chairman of the Shareholders’ Meeting once the Meeting is called to order.

**PARAGRAPH 2** - The shareholders that arrive at a Shareholders’ Meeting after the attendance list is closed may participate in the meeting, but shall not be entitled to vote on any of its resolutions. Additionally, their shares shall not be counted to determine the total votes attributed to the Brazilian Shareholders and the Foreign Shareholders.

**PARAGRAPH 3** - After the list of shareholders is closed, the Chairman of the Meeting shall announce the number of votes that may be cast by each Brazilian Shareholder and each Foreign Shareholder, subject to the provisions of Sections 14 and 15 hereof.

**PRESIDING OFFICERS**

**SECTION 23** - The proceedings of the Shareholders’ Meeting shall be chaired by the Chairman of the Board of Directors or, in his or her absence or impediment, by the Vice Chairman of the Board; in the case of absence or impediment of both of them, a shareholder elected by the Shareholders’ Meeting from among those present shall act as Chairman.

**PARAGRAPH 1** - The Secretary of the Shareholders’ Meeting shall be appointed by the Chairman.

**PARAGRAPH 2** - The Investor Relations Officer or his or her designee shall necessarily attend all Shareholders’ Meetings in order to provide any clarification and information to the shareholders and the Presiding Officers about the matters comprised within his or her duties under these Bylaws. Notwithstanding the foregoing, it shall be solely incumbent on the Chairman of the meeting, with due regard for the rules established in these Bylaws, to make any decisions concerning the number of votes of each shareholder or the qualification of each shareholder as a Brazilian Shareholder or a Foreign Shareholder.

**VOTING**

**SECTION 24** - With respect to the resolutions of the Shareholders’ Meetings, the votes cast by the Brazilian Shareholders shall be computed separately from those cast by the Foreign Shareholders (Sections 10 and 11), with due regard for the voting limits referred to in Sections 14 and 15 hereof.

**SOLE PARAGRAPH** - The Shareholders’ Meeting shall only take action on the matters expressly contemplated in the agenda for the meeting, as set forth in the relevant notice, provided that the approval of matters under a general item contained in the agenda is forbidden.

**ARTICLE V**

**BOARD OF DIRECTORS, BOARD OF EXECUTIVE OFFICERS AND FISCAL COUNCIL**

**MANAGEMENT OF THE COMPANY**

**Section 25** - The management bodies of the Company are the Board of Directors and the Board of Executive Officers.

**SOLE PARAGRAPH** – The Board of Directors is the collegiate decision-making body of the Company, while representation of the Company shall be incumbent on the Executive Officers only.

**ACCEPTANCE OF OFFICE**

**Section 26** - The directors, executive officers and members of the Fiscal Council shall take office by executing an instrument of investiture recorded in the Book of Minutes of the Board of Directors or the Board of Executive Officers, or in the Book of Minutes and Opinions of the Fiscal Council, as the case may be.

**PART I**

**BOARD OF DIRECTORS**

**COMPOSITION**

**Section 27** - The Board of Directors shall be composed of at least nine and no more than eleven members, all of whom shall be elected by the Shareholders’ Meeting for a unified two- year term, reelection being permitted, with due regard for the provisions in Paragraphs 1 and 2 below.

**PARAGRAPH 1** - The Brazilian Federal Government, as the holder of the Golden Share, is entitled to elect one acting Board member and his or her alternate.

**PARAGRAPH 2** - The employees of the Company shall be entitled to elect, by separate vote, two acting Board members and their alternates as follows: one Board member and his or her alternate shall be appointed by the Employee Investment Club of the Company (*CIEMB - Clube de Investimentos dos Empregados da Embraer*), and one Board member and his or her alternate shall be appointed by the non-shareholder employees of the Company.

**PARAGRAPH 3** - The remaining Board members shall be elected by the other shareholders of the Company, subject to the provisions of Sections 31 and 32 hereof. It shall be incumbent on the Chairman of the Shareholders’ Meeting, when conducting the proceedings related to the election of the members of the Board of Directors, to determine the voting mechanism for election of Board members, as contemplated in this Paragraph (Section 31 or Section 32).

**PARAGRAPH 4** - Subject to the leading provision and paragraphs 1 and 2 of this Section, the number of members of the Board of Directors in each term of office shall be determined at the Shareholders’ Meeting held for the election of members of the Board of Directors.

**PARAGRAPH 5** - No member of the Board of Directors may hold a position as Executive Officer of the Company.

**PARAGRAPH 6** - At least two (2) or twenty percent (20%), whichever is higher, of the directors shall be Independent Directors, as defined in the *Novo Mercado* Regulations, and the qualification of the nominees to the Board of Directors as independent directors shall be decided at the Shareholders’ Meeting that elects such directors, provided that, in the event there is a controlling shareholder, the director(s) elected as provided in Section 141, Paragraph 4 of Law No. 6,404/76, shall also be deemed as Independent Director(s), subject to the provision of Section 32, Paragraph 7 hereof.

**PARAGRAPH 7** - If the calculation of the percentage referred to in the preceding Paragraph results in a fractional number of directors, this percentage shall be rounded up to the next whole number.

**SECTION 28** - The Board of Directors shall have a Chairman and a Vice Chairman, who shall be elected by the Shareholders’ Meeting immediately after election of the Board members.

**SECTION 29** - The replacement of the members of the Board of Directors in the case of absence, impediment, or as a result of a vacancy, shall be conducted as follows:

- I. except as provided in items IV, V and VI below, in the event of impediment or vacancy with respect up to two directors, the Board of Directors shall continue to be composed of the remaining members until the end of their terms of office or, at the discretion of the Board of Directors, the remaining members of the Board of Directors shall appoint the substitute(s) that shall serve until the following Shareholders’ Meeting, at which time the replacement(s) shall be elected. In the event of vacancy with respect to more than two directors, the following rules apply: (x) if the vacancy does not refer to the majority of positions, the other members of the Board of Directors may call a Shareholders’ Meeting to elect the substitute(s) or directly appoint the substitute(s), provided that no more than two seats in the Board of Directors may remain vacant; (y) if the vacancy refers to the majority of positions, a Shareholders’ Meeting shall be called to elect their substitutes. In both cases, substitutes shall serve for the remaining terms of office of the substituted directors;
- II. in the event of temporary absence or impediment of the Chairman of the Board, his or her duties shall be exercised by the Vice Chairman of the Board on a temporary basis;

III. in the event of a vacancy in the office of the Chairman of the Board of Directors, the Vice Chairman of the Board shall serve as Chairman until the end of the current term of office, and the remaining members of the Board of Directors shall promptly appoint a new Vice Chairman of the Board, who shall hold such position until the following Shareholders’ Meeting, at which time a replacement shall be elected;

IV. in the event of impediment of any acting director referred to in Paragraphs 1 and 2 of Section 27, his or her alternate shall serve as acting director until the impediment ceases;

V. in the event of a vacancy with respect to any acting director referred to in Paragraphs 1 and 2 of Section 27, his or her alternate shall serve as acting director until the following Shareholders’ Meeting, which shall elect the respective replacement; and

VI. in the event of simultaneous vacancy with respect to both an acting and an alternate director referred to in Paragraphs 1 and 2 of Section 27, the Board shall promptly call a Shareholders’ Meeting to fill the vacant positions.

**MEMBERS OF THE BOARD OF DIRECTORS**

**SECTION 30** - The members of the Board of Directors shall be persons of upstanding reputation and, unless a waiver is given by the Shareholders’ Meeting, may not:

I - hold positions in companies that could be regarded as competitors of the Company; or

II - have or represent interests that conflict with those of the Company.

**PARAGRAPH 1** - For purposes of the provision in Section 115 of Law No. 6,404/76, a vote cast by a shareholder for election of a Board member that fails to meet the requirements of this Section shall be deemed an abusive vote.

**PARAGRAPH 2** - No member of the Board of Directors may have access to information, participate in Board meetings or cast a vote where such member has or represents interests that conflict with those of the Company.

**PARAGRAPH 3** - With regard to the election of the members of the Board of Directors referred to in Paragraph 3 of Section 27 hereof, and irrespective of the election mechanism to be adopted (Section 31 or Section 32), any shareholder who wishes to nominate a slate, in the case of election by slate, or candidate, in the case of adoption of the multiple voting process, who is not a member of the Board of Directors or of the slate indicated by the Board of Directors, shall give written notice to the Company to that effect, no later than 10 days prior to the relevant Shareholders’ Meeting, informing the name, qualification and professional résumés of each such person together with a consent signed by the candidate agreeing to run for office. At least eight days prior to the Shareholders’ Meeting, the Company shall publish a notice to the shareholders informing the shareholders where they can obtain a list of all candidates proposed as provided in this Paragraph and a copy of their qualification and professional résumés.

**ELECTION BY SLATE**

**SECTION 31** - Except as provided in Section 32 hereof, election of members of the Board of Directors as contemplated in Paragraph 3 of Section 27 shall be conducted according to a slate system, whereby no vote may be cast for an individual candidate.

**PARAGRAPH 1** - In the case of an election as referred to in this Section 31, the Board of Directors shall nominate a slate; provided that the management of the Company shall, no later than 30 days prior to the date scheduled for the Shareholders’ Meeting, send to the stock exchange, post on the Company’s website and make available to the shareholders at the Company’s principal place of business, a document containing the names, the qualification and résumés of the candidates for the positions of Board members listed on the slate referred to in this Paragraph.

**PARAGRAPH 2** - Any shareholder or group of shareholders may propose another slate for the Board of Directors, subject to the following rules:

- a) the proposal shall be notified in writing to the Company no later than 10 days prior to the date of the Shareholders’ Meeting, provided that the same shareholder or group of shareholders may not submit more than one slate;
- b) the notice shall indicate the names for the slate and, for members who are not members of the Board of Directors or members of the slate indicated by the Board of Directors, the notice shall indicate the respective qualification and professional résumés, and contain an executed instrument certifying acceptance to run in the election, as well as other information documents required by applicable law;
- c) no later than 8 days prior to the date of the Shareholders’ Meeting, the Company shall publish a notice, which shall be posted on the Company’s website, informing the place where the shareholders may obtain a copy of the proposed slate and a copy of the qualification and professional résumés of the candidates.

**PARAGRAPH 3** - The name of a same person may appear in two or more slates, including the slate referred to in Paragraph 1.

**PARAGRAPH 4** - Each shareholder may only vote for one slate, and all votes shall be computed with due regard for the limitations provided for in Sections 14 and 15 hereof. The candidates in the slate receiving the largest number of votes at the Shareholders’ Meeting shall be elected.

**ELECTION BY CUMULATIVE VOTING**

**SECTION 32** - In connection with the election of the members of the Board of Directors as provided in Paragraph 3 of Section 27, the shareholders representing at least 5% of the voting capital stock may request the adoption of the cumulative voting method, no later than 48 hours prior to the date of the Shareholders’ Meeting.

**PARAGRAPH 1** - Promptly upon receiving such a request, the Company shall publish a notice to the shareholders communicating that the election will be conducted according to the method of cumulative voting.

**PARAGRAPH 2** - After the Shareholders’ Meeting is called to order, the Presiding Officers shall determine, based on the Brazilian Shareholders and the Foreign Shareholders that have signed the Shareholder Attendance Book and the number of their shares, the number of votes that each Brazilian or foreign shareholder may cast, subject to the following rules:

- a) firstly, the number of votes that each shareholder may cast according to the provision of item I of Section 14 shall be determined, ascribing, to each share that does not exceed 5% of the total of the shares of the Company’s capital stock, the number of votes corresponding to the number of members of the Board of Directors to be elected; and;



b) if the aggregate votes of the Foreign Shareholders exceed two-thirds (2/3) of the aggregate votes of the Brazilian Shareholders, then a percentage reduction factor shall be applied to the votes of each Foreign Shareholder for compliance with the limit set forth in item II of Section 14.

**PARAGRAPH 3** - The following persons may be candidates for positions on the Board of Directors:

- a) the persons on the slates referred to in Paragraphs 1 and 2 of Section 31; and
- b) a candidate that is nominated by any shareholder and is not a member of the proposed slate shall send his or her qualification and professional résumé, the executed instrument certifying his or her acceptance to run in the election and other information and documents required by applicable regulations.

**PARAGRAPH 4** - Each shareholder shall have the right to give the votes ascribed to him or her pursuant to Paragraph 2 to a single candidate, or to distribute such votes among several candidates. The members who receive the largest number of votes shall be elected.

**PARAGRAPH 5** - Any offices not filled due to a tie vote shall be subject to a new vote, by the same method, adjusted for the number of votes that each shareholder will be entitled to cast given the number of positions to be filled.

**PARAGRAPH 6** - Whenever an election is conducted according to the foregoing method, removal of any Board member by the Shareholders’ Meeting shall entail removal of all other members and the holding of a new election; if a vacancy occurs for any other reasons, the subsequent Shareholders’ Meeting shall hold a new election of the entire Board.

**PARAGRAPH 7** - Paragraph 4 of Section 141 of Law No. 6,404/76 shall only be applicable if the Company has a controlling shareholder.

**AUTHORITY**

**SECTION 33** - It is incumbent on the Board of Directors:

- I. to establish the general business guidelines of the Company;
- II. to elect and remove the executive officers of the Company and to establish their duties, subject to the provisions of these Bylaws;
- III. to designate from among the executive officers of the Company, the officer that will serve as the Investor Relations Officer, pursuant to the regulations issued by the CVM;
- IV. to oversee the performance of the executive officers of the Company, examining at any time the corporate books and documents, and to request information on agreements entered into or about to be entered into, and any other acts;
- V. to review the quarterly results of the operations of the Company;
- VI. to review the management report and the accounts of the Board of Executive Officers, and to make a decision regarding their submission to the Shareholders’ Meeting;
- VII. to call on the independent auditors in order to provide clarification on the affairs of the Company, as deemed necessary;

VIII. to call the Annual Shareholders' Meeting and, where appropriate, the Extraordinary Shareholders' Meeting;

IX. to approve annual and multiannual budgets, strategic plans, expansion programs and investment programs of the Company, as well as to monitor their implementation;

X. to review the matters subject to the veto power of the Brazilian Federal Government and to submit such matters to the Shareholders' Meeting for consideration, where required by Law No. 6,404/76;

XI. to issue a prior opinion on any matter to be submitted to the Shareholders' Meeting;

XII. to take action on:

- a) the issuance of shares of the authorized capital, subject to the provisions of Section 7 and its Paragraph 1;
- b) the issuance of warrants and, subject to the provisions of Paragraph 2 of Section 7 and the relevant plan approved by the Shareholders' Meeting, the grant of stock options referred to therein;
- c) acquisition by the Company of shares of its own capital stock to be kept as treasury shares or for subsequent cancellation or disposal;

XIII. to approve the disposal or encumbrance of fixed assets having a value in excess of one percent (1%) of the Shareholder's Equity of the Company recorded in the latest consolidated financial statements of the Company released prior to the resolution of the Board of Directors in question, by way of a Standard Financial Statement Form (*Formulário Demonstrações Financeiras Padronizadas - DFP*) or Quarterly Information Form (*Formulário de Informações Trimestrais - ITR*), whichever is more recent;

XIV. to take action on the issuance of non-convertible ordinary unsecured debentures by the Company, in compliance with the regulations in force;

XV. to authorize the issuance by the Company of credit instruments for the raising of funds, such as bonds, notes, commercial papers and other instruments, according to usual market practices, and to establish the terms for issuance and redemption of such instruments;

XVI. to approve (i) the incorporation and termination of directly or indirectly controlled companies, affiliates, consortiums, joint ventures and/or any entities of any nature; (ii) the direct holding by the Company of an ownership interest in other companies, the sale of such ownership interest (except for companies of the same group of the Company, which resolution is incumbent on the Board of Executive Officers), as well as new capital contributions to such companies;

XVII. to authorize the Company to obtain any loans and borrowings, incur indebtedness, assume debt, provide guarantees, including, for example, security, accommodation, suretyship, expense, advance or credit offer in benefit of third parties, without prejudice to the provisions of item XI of Section 41 below;

XVIII. to create and extinguish operating units of the Company;

XIX. to approve the following policies: (i) appointment of members of the board of directors, its advisory committees and statutory board of executive officers; (ii) risk management; (iii) related party transactions; (iv) securities trading; and (v) compensation and human resources policies of the Company, including criteria for compensation, rights and benefits;

XX. to authorize a transfer of corporate funds to employee associations, charitable, recreational and private pension entities, as well as any donation of corporate funds to a third party;

XXI. to select and remove the Company's independent auditors;

XXII. to approve the execution of any agreements or transactions of any kind involving, on the one part, the Company and, on the other part: (i) any shareholder of the Company that holds more than 5% of its capital stock; (ii) any directors or executive officers of the Company, or their spouses and relatives up to the 4th degree of kinship; or (iii) any companies controlling, controlled by or under common control or affiliated with any one of the parties referred to in clauses "i" and "ii";

XXIII. to issue a prior favorable or unfavorable opinion with respect to any tender offer for the shares of the capital stock of the Company, as expressed in a well-reasoned report to be issued no later than 15 days after publication of the notice for such tender offer, covering at least (i) the convenience and timeliness of the tender offer in light of the interests of the Company and the interests of shareholders, including with respect to the price and potential impacts on the liquidity of the shares; (ii) the strategic plans announced by the offeror with respect to the Company; (iii) alternatives in the market to the acceptance of the tender offer; and (iv) other matters that the Board of Directors deems relevant;

XXIV. with due regard for the provisions of these Bylaws and legislation in force, to provide for the orderly conduct of the proceedings of the Board of Directors, and to approve the internal regulations of the Board of Directors and its Advisory Committees;

XXV. to regulate the activities of the Company and to take responsibility for all matters subject to the exclusive authority of the Shareholders' Meeting or the Board of Executive Officers;

XXVI. to elect the members of statutory advisory committees of the Board of Directors and their respective coordinators, and approve the internal regulations of the statutory advisory committees of the Board of Directors;

XXVII. to authorize the Company to obtain any loans and borrowings, incur indebtedness, assume debt, provide guarantees, including security, accommodation, suretyship, expense, advance or credit offer in benefit of its controlled companies, special purpose companies and other companies that are directly or indirectly controlled by the Company, duly consolidated in its financial statements, in an amount above one percent (1%) of the Company's Shareholder's Equity recorded in the last consolidated financial statements of the Company and disclosed before the date of the relevant resolution taken by the Board of Directors, through the Standardized Financial Statements Form (*Formulário Demonstrações Financeiras Padronizadas - DFP*) or Quarterly Information Form (*Formulário de Informações Trimestrais - ITR*), whichever is more recent.

**PARAGRAPH 1** – The removal of an Executive Officer shall require an affirmative vote of at least seven Directors.

**PARAGRAPH 2** - Subject to any limitations imposed by the Shareholders' Meeting, the Board of Directors shall determine the compensation of each of its members, each member of the Committees (articles 34 to 37) and each Executive Officer of the Company, taking into account their responsibilities, the time devoted to their duties, their skills, their professional reputation and the market value of their services.

**PARAGRAPH 3** - It shall be incumbent on the Chairman of the Board of Directors, in addition to his or her other duties provided for in these Bylaws, to call and preside over the meetings of the Board of Directors and the Shareholders' Meetings.

**COMMITTEES OF THE BOARD OF DIRECTORS**

**SECTION 34** - The Board of Directors shall appoint a permanent Strategy and Innovation Committee, a People and ESG Committee and an Audit, Risk and Ethics Committee, which shall have no decision-making or managerial authority, to assist the Board in the performance of its functions.

**PARAGRAPH 1** - The Strategy and Innovation Committee and the People and ESG Committee shall be composed of at least three (3) and no more than five (5) members, most of whom shall be independent members of the Board of Directors, provided that the others may be External Members, pursuant to paragraph 3 of Section 37 of these Bylaws.

**PARAGRAPH 2** - The members of the Board of Directors appointed as members of these bodies and the Audit, Risk and Ethics Committee may accumulate the compensation applicable for each position so held.

**SECTION 35** - The Audit, Risk and Ethics Committee, an advisory body linked to the Board of Directors, shall perform the functions of an “Audit Committee” for purposes of U.S. legislation, particularly the Sarbanes-Oxley Act.

**PARAGRAPH 1** - The Audit, Risk and Ethics Committee shall be composed of at least three (3) and no more than five (5) members, of whom: the majority shall be independent members of the board of directors, at least one (1) shall be an External Member, pursuant to paragraph 3 of Section 37 of these Bylaws, and one (1) shall have recognized experience in corporate accounting issues.

**PARAGRAPH 2** - A member of the Audit, Risk and Ethic Committee may meet both the requirements of being an independent member of the Board of Directors with acknowledged experience in corporate accounting matters, or being an External Member with acknowledged experience in corporate accounting matters.

**PARAGRAPH 3** - The Audit, Risk and Ethics Committee shall be coordinated by one of the independent members of the Board of Directors who shall be part of such Committee. The activities of the committee coordinator shall be defined in its internal regulations, approved by the Board of Directors.

**SECTION 36** - It is incumbent on the Audit, Risk and Ethics Committee, in addition to the duties assigned by applicable legislation and its internal regulations:

- a) to make a recommendation to the Board of Directors regarding the selection or replacement of the independent auditors and their compensation;
- b) to oversee the work of the independent auditors, and to issue an opinion on the engagement of the independent auditors to render other services to the Company;
- c) to take action and adopt measures as required to learn about and verify any claims involving matters related to financial statements, internal controls and independent auditing;
- d) to mediate any conflicts and disputes between the management of the Company and the independent auditors;
- e) to review quarterly information, interim financial information and financial statements;
- f) to monitor the internal audit activities and the activities of the internal controls area of the Company;

- g) to review and monitor the Company’s risk exposure;
- h) to review, monitor and make recommendations to management regarding the correction or improvement of the Company’s internal policies, including the related party transactions policy; and
- i) to have the means to receive and process information regarding non-compliance with legal provisions and regulations applicable to the Company, in addition to internal regulations and codes, including provisions on specific procedures to protect providers of information and the confidentiality of information.

**PARAGRAPH 1** - The Company shall publish, in an annual basis, a summary report prepared by the Audit, Risk and Ethic Committee, contemplating the meetings held and the main matters discussed, highlighting the recommendations made by such committee to the Board of Directors;

**PARAGRAPH 2** - The officers of the Company and the officers of the Company’s controlled companies, controlling shareholder, if any, affiliates or companies under common control, cannot be members of the Audit, Risk and Ethics Committee.

**SECTION 37** - The Board of Directors may create advisory committees to assist the Board of Directors of the Company, such committees to have limited, specific purposes and a defined duration. The Board of Directors shall appoint the members of the advisory committees and shall determine their compensation, subject to the aggregate limit established by the Shareholders’ Meeting.

**PARAGRAPH 1** - Each of the Advisory Committees of the Board of Directors will be composed of at least three (3) and no more than five (5) members, most of whom shall be independent members of the Board of Directors, provided that the others may be External Members, pursuant to paragraph 3 hereof.

**PARAGRAPH 2** - The members of the Board of Directors appointed to compose the aforementioned bodies may accumulate the compensation applicable for each position so held.

**PARAGRAPH 3** - External Members of any of the aforementioned Committees shall meet the following requirements:

- a) shall not be a member of the Board of Directors or Board of Executive Officers of the Company or its controlled companies;
- b) shall have unblemished reputation and extensive knowledge of the rules applicable to publicly-held companies, as well as the guiding concepts and principles of the highest corporate governance level in the Brazilian Capital Market;
- c) shall not be a spouse or relative up to the second degree of (1) members of the management of the Company or its controlled companies or (2) individuals who are employees of the Company or its controlled companies, to the extent that it compromises his or her independence as External Member; and
- d) shall not hold positions in companies that may be deemed as competitors of the Company or its controlled companies, and shall not have, nor represent, interests that are conflicting with those of the Company or its controlled companies.

**PARAGRAPH 4** - The External Members of all the Committees have the same duties and responsibilities of directors and executive officers, pursuant to Section 160 of Law No. 6,404/76, and shall take office upon execution of the applicable instrument of investiture, which shall acknowledge the requirements for holding each position.

**PART II**  
**BOARD OF EXECUTIVE OFFICERS**

**COMPOSITION**

**SECTION 38** - The Board of Executive Officers shall be composed of no less than four and no more than eleven executive officers, one of whom will be the Chief Executive Officer. All executive officers shall serve for a term of office of two years, reelection being permitted. The titles and duties of each executive officer shall be assigned by the Board of Directors, which shall designate one officer to serve as the Investor Relations Officer.

**PARAGRAPH 1** - During his or her impediment or absence, the Chief Executive Officer shall appoint a substitute among the remaining Executive Officers, who shall then serve in both positions.

**PARAGRAPH 2** - In the event of a vacancy in the position of Chief Executive Officer, such position shall be filled on an interim basis by one of the remaining Executive Officers, as designated by the Chairman of the Board of Directors. Such executive officer shall so serve until the following meeting of the Board of Directors, which shall then appoint a new Chief Executive Officer.

**PARAGRAPH 3** - During their temporary absences or impediments, the remaining Executive Officers shall be replaced by another Executive Officer to be chosen by the Chief Executive Officer.

**PARAGRAPH 4** – In the event of a vacancy in a position of Executive Officer, one of the remaining Executive Officers, as designated by the Chief Executive Officer, shall assume such position in an interim basis, and shall so serve until the following meeting of the Board of Directors.

**PARAGRAPH 5** - An Executive Officer who substitutes the Chief Executive Officer or any of the remaining Executive Officers in accordance with this Section shall not be entitled to any additional compensation.

**DUTIES OF THE EXECUTIVE OFFICERS**

**SECTION 39** - It will be incumbent on the Executive Officers to comply with and ensure compliance with these Bylaws, the resolutions of the Board of Directors and the Shareholders' Meeting, as well as to perform all acts, within the scope of their authority, which are necessary for the regular conduct of the Company's business.

**PARAGRAPH 1** - It is incumbent on the Chief Executive Officer:

- a) to call and preside over the meetings of the Board of Executive Officers;
- b) to propose to the Board of Directors the composition of the Board of Executive Officers;
- c) to propose to the Board of Directors the duties to be assigned to the other Executive Officers;
- d) to guide and coordinate the performance of the other Executive Officers;
- e) to oversee the general planning activities of the Company and its controlled companies;

- f) to keep the directors abreast of the affairs of the Company and the development of its business; and
- g) to carry out such other duties as may be assigned to him by the Board of Directors.

**PARAGRAPH 2** - It is incumbent on the remaining Executive Officers to assist and support the Chief Executive Officer in the management of the Company’s business and to perform such functions as may be assigned to them by the Board of Directors, under the guidance and coordination of the Chief Executive Officer.

**AUTHORITY AND DUTIES OF THE BOARD OF EXECUTIVE OFFICERS**

**SECTION 40** - The Board of Executive Officers has authority to perform all acts that are required to achieve the purposes of the Company, subject to the applicable provisions of law and these Bylaws, and to the resolutions of the Shareholders’ Meeting and the Board of Directors.

**SECTION 41** – In addition to any other functions provided for by law and these Bylaws, it is incumbent on the Board of Executive Officers:

- I. to comply with and ensure compliance with these Bylaws and the resolutions of the Board of Directors and the Shareholders’ Meeting;
- II. to prepare and submit to the Board of Directors, on an annual basis, the Company’s business plan and general budget, in addition to its strategic plan and the annual revisions thereof, as well as see to the implementation of the foregoing;
- III. to propose to the Board of Directors the basic guidelines for the business of the Company;
- IV. to submit on an annual basis, to the Board of Directors, for review, the Management Report and the accounts of the Board of Executive Officers, together with an opinion of the independent auditors, as well as a proposal for allocation of the earnings for the preceding fiscal year;
- V. to appoint and remove the directors and officers of the controlled companies of the Company, and to appoint and remove the managers of its operating units;
- VI. to prepare on an annual basis the Action and Target Plan for each Board of Executive Officers, and to submit such Plans, together with the performance and results thereof, to the Board of Directors during its regular meetings;
- VII. to submit to the Board of Directors and the Fiscal Council a detailed quarterly economic and financial balance sheet of the Company;
- VIII. to authorize the opening, relocation or closing of offices, branches, premises or other establishments of the Company, in Brazil and abroad;
- IX. to propose to the Board of Directors the incorporation and termination of controlled companies of the Company, in Brazil and abroad, and other acts set forth in Section 33, item XVI of these Bylaws, as well as to approve the direct or indirect holding by the Company of an ownership interest in other companies and the sale of such ownership interest, in both case for companies of the same group of the Company;
- X. to prepare and submit to the Board of Directors the compensation policies of the Company and its controlled companies;

XI. to authorize the Company to obtain any loans and borrowings, incur indebtedness, assume debt, provide guarantees, including security, accommodation, suretyship, expense, advance or credit offer in benefit of its controlled companies, special purpose companies and other companies directly or indirectly controlled by the Company, duly consolidated with the Company in its financial statements, up to the amount of one percent (1%) of the Stockholders' Equity recorded in the last consolidated financial statements of the Company and disclosed before the date of the relevant resolution taken by the Board of Directors, through the Standardized Financial Statements Form (*Formulário Demonstrações Financeiras Padronizadas*) (DFP) or Quarterly Information Form (*Formulário de Informações Trimestrais*) (ITR), whichever is more recent; and

XII. to submit to the Board of Directors, for review, all matters subject to a veto by the Brazilian Federal Government as the holder of the Golden Share, pursuant to Section 9 and item III of Section 18 hereof.

**REPRESENTATION OF THE COMPANY**

**SECTION 42** - The Company shall be validly bound whenever represented by two Executive Officers, by the signature of one Executive Officer and one attorney-in-fact, or by two attorneys-in-fact acting within the scope of their respective powers.

**PARAGRAPH 1** - The acts for which these Bylaws require prior authorization of the Board of Directors shall only be valid once such requirement is satisfied.

**PARAGRAPH 2** - The Company may be represented by a single Executive Officer, who may grant powers of attorney for the purposes listed below, or a single attorney-in-fact in the performance of the following acts:

- I. receipt of discharge of the amounts due to the Company;
- II. issuance, trading, endorsement and discount of trade bills related to the Company's sales;
- III. representation of the Company in stockholders' meetings of companies in which the Company holds an equity interest;
- IV. granting of powers of attorney for representation of the Company in judicial or administrative proceedings;
- V. representation of the Company in judicial and/or administrative proceedings, except for performance of acts involving waiver of rights; and
- VI. performance of administrative acts, including before public offices, government-controlled companies, boards of trade, labor courts, INSS (National Social Security Institute), FGTS (Severance Pay Fund) and their collecting banks, and similar entities.

**PARAGRAPH 3** - The Board of Directors may authorize the performance of specific acts whereby the Company will be bound by the signature of a single Executive Officer or a single duly appointed attorney-in-fact; and may in addition define authorities and limits for performance of acts by a single representative.

**PARAGRAPH 4** - The following rules shall apply to the appointment of attorneys-in-fact:



- I. all powers of attorney shall be granted by the Chief Executive Officer or his or her substitute, acting together with another Executive Officer, and shall have a defined scope and term, except for powers for representation in judicial or administrative proceedings, in which case the term may be indefinite; and
- II. a power of attorney for performance of an act that requires prior authorization of the Board of Directors may only be granted after such authorization, which shall be mentioned in the power of attorney.

**PART III**  
**FISCAL COUNCIL**

**SECTION 43** - The Fiscal Council of the Company shall operate on a permanent basis and shall be composed of at least three (3) and no more than five (5) members and an equal number of alternate members, who may be shareholders or non-shareholders, shall reside in Brazil, shall be elected by the Shareholders’ Meeting, and shall have such duties as are provided for by law.

**PARAGRAPH 1** - The rules in Section 31 hereof for election of the members of the Board of Directors of the Company shall apply to election of the members of the Fiscal Council, to the extent that such rules are pertinent and do not conflict with the provisions of this Section.

**PARAGRAPH 2** - The Shareholders’ Meeting shall appoint the Chairman and the Vice Chairman of the Fiscal Council from among its elected members.

**PARAGRAPH 3** - If, in accordance with the terms of Section 56 hereof, the Company comes under the control of a controlling shareholder or a parent company, as defined by law, the minority shareholders, as long as they represent in the aggregate 10% or more of the outstanding shares, shall have the right to elect, in a separate vote, one committee member and his alternate.

**PARAGRAPH 4** - The compensation of the members of the Fiscal Council shall be determined by the Shareholders’ Meeting that elects such members, in compliance with applicable statutory requirements and limitations and with due regard for their experience, background and reputation.

**SECTION 44** - The Fiscal Council shall hold regular meetings every calendar quarter to examine the interim balance sheet and other financial statements prepared from time to time by the Company; provided that the Fiscal Council may hold extraordinary meetings whenever called by the Chairman, on his own initiative or at the request of any its members.

**PARAGRAPH 1** - Extraordinary meetings shall be called by written notice containing the agenda for the meeting, as well as an indication of the meeting’s place, date and time.

**PARAGRAPH 2** - A meeting of the Fiscal Council may be called to order upon attendance by at least three (3) members or alternates, and the Fiscal Council shall pass its resolutions by a majority vote of the members in attendance.

**SECTION 45** - The legal provisions and these Bylaws regarding the Fiscal Council shall be regulated in its internal regulations, which shall be approved by the Fiscal Council.

**PARAGRAPH 1** - It shall be incumbent on the Chairman of the Fiscal Council to convey to all members of the Fiscal Council the communications received from the management bodies of the Company and its independent auditors, and to forward to such management bodies any requests received from its members.

**PARAGRAPH 2** - The members of the Fiscal Council shall exercise their functions in the interest of the Company, regardless of whether they have been elected by a group or a class of shareholders.

**PARAGRAPH 3** - In light of the illegality of the act in question and based on a well- grounded decision, the Fiscal Council may refuse to comply with a request for provision of information, clarification or special financial statements, or for determination of any specific fact.

**PART IV**

**MEETINGS OF THE MANAGEMENT BODIES**

**INTERVAL OF MEETINGS**

**SECTION 46** - The Board of Directors of the Company shall meet, on a regular basis, eight times a year, according to a schedule to be announced during the first month of each fiscal year by the Chairman of the Board of Directors, provided, further, that extraordinary meetings may be held whenever necessary.

**CALL**

**SECTION 47** - The directors and executive officers of the Company shall be called to attend the meetings of the relevant bodies by personal written notice given at least three business days in advance by letter, e-mail or any other means that permits acknowledgement of receipt by the recipient.

**PARAGRAPH 1** – Such notice shall be accompanied by a list of the matters to be discussed and considered during the meeting, as well as all required supporting documentation.

**PARAGRAPH 2** – The meetings of the management bodies may be called to order, irrespective of notice, whenever all members are in attendance.

**PARAGRAPH 3** – In case of duly justified urgency, the Chairman of the Board of Directors may call meetings, pursuant to paragraph 1 of this Section, in which case, the meeting shall only be called to order with the attendance of at least two-thirds (2/3) of its members.

**QUORUM AND VOTING REQUIREMENT**

**SECTION 48** - The meetings of the management bodies may only be called to order and resolve matters if a majority of the relevant members are in attendance; Directors or Officers shall be deemed to be present at a meeting if they participate via telephone conference, video conference, telepresence, e-mail or any other means of communication that allows identification of such Directors or Officers. In this case, Directors and Officers shall be deemed to be in attendance for purposes of quorum and voting, and their vote shall be deemed valid for all legal purposes and shall be included in the minutes of the meeting.

**SECTION 49** - Except as otherwise expressly provided in these Bylaws, the resolutions at the meetings of the management bodies shall be passed by a majority vote of the members in attendance.

**ARTICLE VI**  
**FINANCIAL STATEMENTS AND**  
**DISTRIBUTION OF INCOME**

**FISCAL YEAR AND FINANCIAL STATEMENTS**

**SECTION 50** - The fiscal year of the Company shall begin on January 1 and shall end on December 31 of each year.

**PARAGRAPH 1** - At the end of each fiscal year, the Board of Executive Officers shall prepare the following financial statements, in accordance with the applicable provisions of law:

- I. balance sheet;
- II. statement of changes in shareholders' equity;
- III. income statement;
- IV. statement of changes in financial position; and
- V. statement of cash flows.

**PARAGRAPH 2** - Together with the financial statements for the fiscal year, the Board of Directors shall submit to the Annual Shareholders' Meeting a proposal for allocation of the net income of the Company, subject to the provisions of these Bylaws and applicable law.

**MANDATORY DIVIDEND**

**SECTION 51** - The shareholders shall be entitled to receive each fiscal year, as a mandatory dividend, a percentage equivalent to 25% of the net income for the year, as adjusted according to the following rules:

I - the net income for the fiscal year will be reduced or increased by the following amounts:

- a) the amounts allocated to the legal reserve; and
- b) the amounts allocated to a contingency reserve for anticipated losses, and reversal of any such reserve established in a preceding year;

II - payment of dividend pursuant to item I above may be capped at the amount of the net income realized during the year, provided that the difference is recorded in an unrealized revenue reserve;

III - profits recorded in the unrealized revenue reserve, once realized and to the extent not offset by losses in subsequent years, will be added to the first dividend to be paid after realization.

**PARAGRAPH 1** - The dividend provided for in this Section shall not be mandatory for a given fiscal year if the Board of Directors informs the Shareholders’ Meeting that such dividend is not consistent with the financial condition of the Company; The Fiscal Council shall issue an opinion on such information and the managers of the Company shall submit to CVM, within five days after the Shareholders’ Meeting, an explanation justifying the information conveyed to the Shareholders’ Meeting.

**PARAGRAPH 2** - Any income that fails to be distributed pursuant to Paragraph 1 shall be recorded in a special reserve and, to the extent not offset by losses in subsequent years, shall be paid as a dividend as soon as the financial condition of the Company so permits.

**PARAGRAPH 3** - In accordance with prevailing income tax regulations, during each fiscal year, the Board of Directors may pay or credit interest on shareholders’ equity, contingent on a subsequent confirmation by the Annual Shareholders’ Meeting that will review the financial statements for the year.

**PARAGRAPH 4** - Interest on shareholders’ equity shall be applied against any dividends declared by the Company.

**INVESTMENT AND WORKING CAPITAL RESERVE**

**SECTION 52** - The Company shall maintain an Investment Reserve towards which up to 75% of the adjusted net income for the year may be applied by a proposal of the Board of Directors in order to: (i) secure funds for investments in fixed assets, without prejudice to retention of earnings pursuant to Section 196 of Law No. 6,404/76; (ii) increase working capital; or (iii) carry out a redemption or purchase of shares of the Company’s capital stock or make payment to dissenting shareholders.

**PARAGRAPH 1** - Subject to the applicable statutory limitation, such reserve may not exceed 80% of capital stock.

**PARAGRAPH 2** - According to a proposal of the Board of Directors, the Shareholders’ Meeting may at any time declare a dividend to be paid with funds standing to the credit of the reserve referred to in this Section, or apply the balance thereof, in whole or in part, to an increase of the capital stock, including by way of a stock dividend.

**INTERIM DIVIDENDS**

**SECTION 53** - The Board of Directors may approve the preparation of semi-annual balance sheets and may declare interim dividends. The Board may also prepare balance sheets and distribute dividends in shorter periods, provided that all dividends paid during the semi- annual period of each fiscal year do not exceed the capital reserves of the Company.

**SOLE PARAGRAPH** - The Board of Directors may declare dividends to be paid out of retained earnings or an earnings reserve shown in the latest annual or semi-annual balance sheet.

**PROFIT SHARING**

**SECTION 54** - The Shareholders’ Meeting may grant profit sharing to the directors and executive officers of the Company, subject to applicable statutory limitations.

**PARAGRAPH 1** - Profit sharing may only be granted with respect to a fiscal year in which the mandatory dividend referred to in Section 51 hereof is paid to the shareholders.

**PARAGRAPH 2** - Whenever the Company pays an interim dividend based on earnings recorded in a semi-annual balance sheet, in an amount equal to at least 25% of the net income for the period calculated pursuant to Section 53 hereof, the Board of Directors may approve payment of profit sharing to the directors and executive officers with respect to such semi-annual period, contingent on subsequent confirmation by the Shareholders’ Meeting.

**ARTICLE VII**  
**PROTECTION MECHANISM**

**MONITORING OF EQUITY INTERESTS**

**SECTION 55** In addition to the provisions of Paragraph 2 of Section 8 and Paragraph 2 of Section 10 hereof, and without prejudice to the remaining provisions of these Bylaws, the Company, through a working group coordinated by the Investor Relations Officer, shall monitor changes in the equity interests in the Company held by its shareholders, in order to prevent and, as the case may be, report any breach of these Bylaws and applicable rules and regulations, pursuant to Paragraph 1 below, as well as recommend to the Shareholders’ Meeting imposition of the penalties provided for in Section 16 hereof.

**PARAGRAPH 1** - If at any time, the Investor Relations Officer detects a breach of any restriction as to the limit of shares owned by a single shareholder or Shareholder Group, the Investor Relations Officer shall immediately report such fact: (i) to the Chairman of the Board of Directors; (ii) to the Board Member elected by the Brazilian Federal Government, as holder of the Golden Share; (iii) to the Chief Executive Officer; (iv) to the members of the Fiscal Council; (v) to B3; and (vi) to CVM.

**PARAGRAPH 2** – The Investor Relations Officer may require the shareholders or Shareholder Groups of the Company to disclose their direct and/or indirect capital structure as well as the composition of their direct and/or indirect tranche of control stock and, as the case may be, the corporate and business groups to which they belong, *de facto* or *de jure*.

**TENDER OFFER IN THE EVENT OF PURCHASE**

**OF SUBSTANTIAL INTEREST OR SALE OF CONTROLLING INTEREST**

**SECTION 56** - Any shareholder or Shareholder Group that purchases or becomes the holder for any reason of: (i) 35% or more of the total outstanding shares of the Company; or (ii) other rights, including under a usufruct or trust by will (*fideicomisso*), related to outstanding shares of the Company that represent more than 35% of the capital stock (an “Acquiring Shareholder”) shall, within 15 days after such acquisition or event that resulted in ownership of shares or rights in excess of the foregoing limit, submit to the Brazilian Federal Government, as the holder of the Golden Share, through the Ministry of Economy, a request to conduct a tender offer for all outstanding shares of the Company, subject to the provisions of applicable regulations, the rules issued by the B3 and the provisions of this Section.

**PARAGRAPH 1** - The Brazilian Federal Government, as the holder of the Golden Share, may accept or refuse such request for a tender offer, at its sole discretion. If the request is accepted, the Acquiring Shareholder shall carry out the tender offer within 60 days from the approval, in the manner described in this Section. If the request is denied, the Acquiring Shareholder, within 30 days after being informed of the denial, shall sell all the shares that exceed the aforementioned limit.

**PARAGRAPH 2** - The Acquiring Shareholder shall provide the Chief Executive Officer of the Company with a copy of all the documents related to the request for a tender offer delivered to or sent by the Brazilian Federal Government.

**PARAGRAPH 3** - During the period from the request for a tender offer until a positive or negative reply from the Brazilian Federal Government, the Acquiring Shareholder may not acquire or dispose of any shares or convertible securities of the Company.

**PARAGRAPH 4** - The price at which each share of the Company may be purchased in the tender offer cannot be less than the result obtained by applying the following formula:

TO Price = Value of Share + Premium

where:

“TO PRICE” corresponds to the purchase price for each outstanding share of the Company in the tender offer provided for in this Section.

“VALUE OF SHARE” corresponds to the highest value among: (i) the highest unit quotation obtained for the shares issued by the Company during the 12-month period prior to the tender offer among values recorded on any stock exchange on which such shares were traded; (ii) the highest price paid by the Acquiring Shareholder, during the 36-month period prior to the tender offer, for a share or tranche of shares issued by the Company; (iii) an amount equivalent to 14.5 times the Average Consolidated EBITDA of the Company (as defined below) reduced by the consolidated net indebtedness of the Company, divided by the total number of outstanding shares; and (iv) an amount equivalent to 0.6 times the backlog of the Company, according to the latest information disclosed by the Company, reduced by the consolidated net indebtedness of the Company, divided by the total number of outstanding shares.

“PREMIUM” corresponds to 50% of the Value of Share.

“CONSOLIDATED EBITDA OF THE COMPANY” is the consolidated operating profit of the Company before net financial expenses, income tax and social contribution, depreciation, depletion and amortization, based on the audited consolidated financial statements for the most recent full fiscal year of the Company already audited and published.

“AVERAGE CONSOLIDATED EBITDA OF THE COMPANY” is the arithmetic average of the Consolidated EBITDAs of the Company for the two most recent full fiscal years.

**PARAGRAPH 5** - For the purposes of Paragraph 4 above, in the case of shares represented by depositary certificates (including shares covered by a Depositary Receipts program), the quoted price of each share shall be determined by the division: (i) of the quoted price of the relevant depositary certificate in the market in which it is traded; by (ii) the number of shares represented by such certificate.

**PARAGRAPH 6** - A tender offer as mentioned in the leading paragraph of this Section shall not preclude another shareholder of the Company from carrying out a competing tender offer, pursuant to applicable regulations.

**PARAGRAPH 7** - The Acquiring Shareholder shall comply with any requests or requirements that may be made by CVM, within the time periods prescribed by applicable regulations.

**PARAGRAPH 8** - The tender offer shall necessarily follow the principles and procedures listed below, in addition to those expressly contemplated in Section 4 of CVM Instruction No. 361, of March 5, 2002, and in the *Novo Mercado* Regulations, where applicable:

- I. be addressed to all shareholders of the Company, without any distinction;
- II. be carried out through an auction to be conducted on B3;
- III. be made so as to assure equal treatment to all shareholders, providing them with adequate information on the Company and the offeror, as well as with elements necessary to support a careful and independent decision as to acceptance of the tender offer;
- IV. be irrevocable and not subject to any changes after publication of the public notice for the offer, pursuant to CVM Instruction No. 361/02;
- V. be launched at a set price calculated according to the provisions of this Section, be paid upfront, in Brazilian currency, as consideration for the purchase of shares of the Company in the tender offer; and
- VI. be supported by an appraisal report of the Company prepared by a firm of recognized international standing, independence, and expertise in economic and financial appraisal of public companies, prepared in accordance with the criteria listed in Section 8 of CVM Instruction No. 361/02, with due regard for the criteria in Paragraph 4 above as regards the minimum price for the offer.

**PARAGRAPH 9** - In the event the Acquiring Shareholder fails to meet the obligations imposed by this Section, including as regards compliance with time limits: (i) to request the authorization of the Brazilian Federal Government to conduct the tender offer; (ii) to conduct the tender offer; or (iii) to meet any requests or requirements made by CVM, then the Board of Directors of the Company shall call an Extraordinary Shareholders' Meeting, at which the shareholder or Shareholder Group in question shall be barred from voting, to take action on the suspension of shareholder's rights with respect to such shareholder or Shareholder Group, as provided in Section 16 hereof.

**PARAGRAPH 10** - For purposes of determining the percentage of 35% of the total outstanding shares of the Company, as mentioned in the leading paragraph of this Section, any involuntary percentage increases in ownership interests resulting from a cancellation of treasury shares shall be disregarded.

**ARTICLE VIII**

**REGISTRATION AS A PUBLICLY-HELD COMPANY AND *NOVO MERCADO***

**SECTION 57** - The voluntary delisting from the Novo Mercado segment may occur: (i) regardless of any tender offer, in the event of dismissal approved by the shareholders' meeting of the Company, pursuant to Section 18, item X, of these Bylaws, or (ii) in the absence of such dismissal, if preceded by a tender offer that complies with the procedures set forth in the regulation enacted by CVM on tender offers for delisting as a publicly-held company and with the following requirements:

- I. the offered price shall be fair, and, therefore, the Company may request a new appraisal, pursuant to Section 4-A of Law No. 6,404/76; and
- II. shareholders holding more than one-third (1/3) of the outstanding shares shall accept the tender offer or expressly agree with the delisting from the Novo Mercado segment without carrying out the sale of shares.

**PARAGRAPH 1** – For the purposes of this Section 57, outstanding shares are only the shares whose holders expressly agree to delist from the Novo Mercado segment or qualify for the tender offer auction, pursuant to the regulation enacted by CVM applicable to tender offers of publicly-held companies for delisting.

**PARAGRAPH 2** – If the quorum mentioned in the paragraph above is reached: (i) those who accepted the tender offer cannot be submitted to an apportionment in the sale of their equity interest, subject to the procedures of dismissal of the limits set forth in the regulation enacted by CVM applicable to tender offers; and (ii) the offeror shall purchase the remaining outstanding shares within one (1) month from the date of the auction, for the final tender offer price, adjusted until the date of effective payment, pursuant to the tender offer notice and applicable regulation, which shall occur within fifteen (15) days from the date of exercise of this option by shareholders.

**SECTION 58** - The tender offer for the delisting of the Company or category conversion at CVM’s registry shall be carried out at a fair price, in accordance with the applicable legal and regulatory rules.

**SECTION 59** - Subject to the provisions of these Bylaws and without prejudice to the provisions of Section 56 above, the direct or indirect sale of control of the Company, in a single transaction or a series of successive transactions, shall be agreed upon under the condition that the purchaser undertakes to carry out a tender offer for the shares issued by the Company and held by the other shareholders, subject to the terms of and within the time limits set forth in the regulations in force and the *Novo Mercado* Rules, so that the holders of such shares receive the same treatment as that accorded to the seller.

**SECTION 60** - A single tender offer of shares may be conducted for more than one of the purposes contemplated in this Article VIII, the *Novo Mercado* Regulations or the regulations issued by CVM, provided that the procedures of the various types of tender offer can be harmonized and there is no loss to the offerees, and provided, further, that CVM gives its consent, where required by applicable law.

**SECTION 61** - The Company or the shareholders responsible for a tender offer under these Bylaws, the *Novo Mercado* Regulations or the regulations issued by the CVM may ensure the conduct thereof through any shareholder, a third party or, as the case may be, the Company. The Company or the shareholder, as the case may be, shall not be released from the obligation to carry out a tender offer its completion in compliance with the applicable rules.



## **ARTICLE IX**

### **ARBITRATION**

**SECTION 62** - The Company, its shareholders, directors, executive officers and members of the fiscal council, including effective and alternate members, if any, agree to settle by arbitration, to be conducted by the Market Arbitration Panel (*Câmara de Arbitragem do Mercado*), pursuant to its regulation, any disputes among them arising from or in relation to the condition of issuer, shareholders, directors, executive officers and members of the fiscal council, in particular, pursuant to the provisions of Law No. 6,385, Law No. 6,404/76, the Bylaws of the Company, the rules issued by the National Monetary Council, the Central Bank of Brazil and CVM, as well as other rules applicable to the operation of the capital markets in general, in addition to the provisions contained in the *Novo Mercado* Regulations, other B3 regulations and the *Novo Mercado* Participation Agreement.

**PARAGRAPH 1** – The provisions of this Section shall not apply in the event of disputes or disagreements related to or deriving from the Golden Share held by the Brazilian Federal Government or the rights and prerogatives thereof, under the law or these Bylaws, which shall be submitted to the jurisdiction of the central courts of the judicial district of the City of Brasília (Federal District).

**PARAGRAPH 2** – The investiture of directors, executive officers and members of the fiscal council, including effective and alternate members, is contingent on the execution of the investiture instrument, which shall set forth that they are subject to the arbitration clause set forth in this Section 62.

## **ARTICLE X**

**Section 63** - The Company may enter into agreements with, or approve indemnity policies covering the members of, the Board of Directors, Fiscal Council, Board of Executive Officers and committees of the Company or its controlled companies, as well as the employees of the Company or its controlled companies (“**Beneficiaries**”), by which the Company agrees to bear or reimburse certain expenses, costs and damages effectively incurred by the Beneficiaries, during or after the period of their relationship with the Company, related to arbitration, judicial or administrative proceedings, involving acts carried out in the regular exercise of the Beneficiaries’ duties, as of the date of their investiture or beginning of the employment relationship with the Company, as applicable.

**PARAGRAPH 1** – Without prejudice to other events set forth in agreements or indemnity policies approved by the Board of Directors, the Company shall not make disbursements in favor of Beneficiaries based on these agreements or indemnity policies in the following cases:

- I. acts performed outside the regular exercise of the Beneficiaries’ duties;
- II. acts performed by Beneficiaries in bad faith, intentionally, with gross fault or upon fraud;
- III. acts performed by Beneficiaries in their own interest or the interests of third parties, to the detriment of the corporate interest of the Company; or
- IV. indemnifications resulting from the action for damages provided in Section 159 of Law No. 6,404/76 or reimbursement for losses provided in Section 11, paragraph 5, item II, of Law No. 6,385/76.

**PARAGRAPH 2** – The indemnity agreements or policies shall be adequately disclosed and provide for, without limitation:

- I. the applicable terms and conditions;
- II. mechanisms to identify and handle conflicts of interest; and
- III. the procedure to be adopted in the decision-making process about the execution of indemnity agreements by the Company and the payment of amounts by the Company.

**PARAGRAPH 3** – In the cases that, after a final and unappealable judgment is rendered, it is confirmed that the act practiced by a Beneficiary is not indemnifiable pursuant to the indemnity agreement or policy approved by the Board of Directors, any amounts paid by the Company relating to this act based on the Beneficiary’s obligations set forth in these indemnity agreements or policies shall be returned by the Beneficiaries.

**ARTICLE XI**

**TRANSITIONAL PROVISIONS**

Section 64. Only for the 2021/2023 biennium, the Company’s Board of Directors shall have 10 members elected in accordance with paragraph 3 of Section 27 of the Bylaws (in addition to the provisions contained in paragraphs 1 and 2 of such Section). The 2 additional effective members shall be elected, by the shareholders, at a Shareholder’s Meeting, exceptionally, on an individual basis and not through the slate system.

Section 65. Section 64 hereof shall lose its effectiveness as soon as the term of office of the Board of Directors for the biennium 2021/2023 ends.

As approved by the Extraordinary General Shareholders’ Meeting on September 1<sup>st</sup> , 2021.

DESCRIPTION OF SECURITIES REGISTERED  
UNDER SECTION 12 OF THE U.S. SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

As of December 31, 2022, the registrant had the following series of securities registered pursuant to Section 12 of the U.S. Securities Exchange Act of 1934, as amended:

Table	Title of each class:	Trading Symbol	Name of each exchange on which registered
I	Common shares, without par value	—	New York Stock Exchange*
II	American Depositary Shares (evidenced by American Depositary Receipts), each representing four common shares	ERJ	New York Stock Exchange

\* Not for trading purposes, but only in connection with the trading on the New York Stock Exchange of American Depositary Shares representing those common shares.

Capitalized terms used but not defined herein have the meanings given to them in our Annual Report on Form 20-F for the fiscal year ended December 31, 2022 to which this Exhibit 2.3 is an exhibit.

I. Common Shares

Set forth below is certain information concerning our authorized and issued share capital and a brief summary of certain significant provisions of our bylaws and Brazilian corporate law. This description does not purport to be complete and is qualified by reference to our bylaws (an English translation of which we have filed with the SEC) and to Brazilian corporate law.

A copy of our bylaws is attached to our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit as Exhibit 1. We encourage you to read our bylaws and the applicable sections of our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit for additional information.

Share Capital

As of the date of our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit, we had a total authorized capital of 1,000,000,000 shares, of which 740,465,044 common shares were issued, including one special “golden share” held by the Brazilian government, and 734,632,806 common shares are outstanding. The golden share provides the Brazilian government with veto rights in certain specific circumstances. Our common shares are publicly traded in Brazil on the B3, under the ticker symbol EMBR3.

There have been no significant changes in percentage ownership by any major shareholder in the past three years. On December 31, 2022, we had approximately 101,736 holders of common shares, including common shares in the form of ADSs. On December 31, 2022, an aggregate of 95,454,084 common shares in the form of ADSs were held by 152 record holders, including DTC in the United States.

Changes to our Share Capital

Our bylaws authorize the issuance of up to 1,000,000,000 common shares by a resolution of the board of directors, irrespective of any amendment to our bylaws and of shareholder approval.

Each of our shareholders has a general preemptive right to subscribe for shares in the event of any capital increase, or securities convertible into shares, in proportion to its shareholding, except in the event of the grant and exercise of any option to acquire shares of our capital stock. For additional information on the preemptive rights assigned to our shareholders, see “—Preemptive Rights.”

The golden share entitles the Brazilian government to veto any proposed change in the bylaws relating to the rights afforded to the golden share, among other things. For additional information on the golden share, see “—Voting Rights—Golden Share”.

Our bylaws provide that our capital stock shall be divided exclusively into common shares.

Changes to rights granted to common shares under our bylaws would generally require an amendment to our bylaws. Under the Brazilian Corporate Law, an amendment to our bylaws requires shareholder approval in a shareholders’ meeting. Changes to our bylaws would generally require approval by a simple majority vote of holders of common shares, except for matters that require the approval of shareholders representing at least one-half of the issued and outstanding voting shares or for matters subject to the approval of our golden share. For additional information on qualified quorum matters and on voting rights relating to the golden share, see “—Voting Rights—Qualified Quorum Matters” and “—Voting Rights—Golden Share,” respectively.

**Voting Rights**

Each common share is generally empowered with one vote at the general shareholders’ meeting. Pursuant to our bylaws and the B3 listing agreement in connection with the listing of our shares on the *Novo Mercado* listing segment of B3, we cannot issue shares without voting rights or with restricted voting rights.

The Brazilian Corporate Law requires that all our shareholders’ meetings be called by publication of a notice in a newspaper of general circulation in the city where our headquarters are located, in a summarized form and with simultaneous disclosure of the full text of the documents on the page of the same newspaper online, which must provide digital certification of the authenticity of the documents kept on the page issued by a certifying authority accredited by the Brazilian Public Key Infrastructure (ICP-Brazil), currently the *O Vale* in São José dos Campos, at least 30 days prior to the meeting. In addition, publications are made in a newspaper of general circulation in São Paulo, where the São Paulo Stock Exchange is located, currently the *Valor Econômico*. The quorum to hold shareholders’ meetings at first call is the presence of shareholders representing 25% of the common shares (except for meetings convened to amend our bylaws or to waive the public tender offer required for delisting from *Novo Mercado*, which require a quorum of at least two-thirds of the common shares at first call); and at second call the meeting can be held with the presence of any number of shareholders.

According to our bylaws, in order to attend a shareholders’ meeting, a shareholder must show the evidence of ownership of the shares it intends to vote by showing an identification document and a proof of share ownership. Our shareholders may be represented at shareholders’ meetings by a proxy, issued within a one-year period prior to the meeting to (1) one of our directors or officers, (2) a lawyer or (3) a financial institution. Notwithstanding the above, the CVM decided on November 4, 2014 that shareholders that are legal entities may be represented at shareholders’ meetings by their legal representatives or by a duly appointed attorney-in-fact, pursuant to the bylaws and related corporate instruments of the legal entities and pursuant to the Brazilian Civil Code. Investment funds must be represented by their administrator.

Alternatively, the shareholders might participate in a shareholders’ meetings through a remote voting mechanism, which is regulated by CVM Resolution No.80, as amended, and aims to facilitate the participation of shareholders in general meetings either through the vote or through the submission of proposals and candidates for the election of members of the board of directors or fiscal council. For this purpose, this regulation provided the following:

- the remote voting bulletin through which shareholders may exercise their right to vote prior to the date the shareholders’ meeting is held;
- the possibility of inclusion of candidates and proposals of deliberation of minority shareholders in that bulletin, with due observance of certain percentages of equity interest, in order to facilitate shareholders’ participation in shareholders’ meetings; and

- the deadlines, procedures and ways of sending this bulletin, which may be forwarded by the shareholder: (a) to the custodian (if the shares held by the shareholder are kept at a centralized deposit) or; (b) to the book-entry agent of the shares issued by the company (if such shares are not kept at a centralized deposit); or (c) directly to the company.

According to the Brazilian Corporate Law, the common shares are entitled to dividends in proportion to their share of the amount available for distribution. For additional information on payment of dividends on our shares, see “Item 8. Financial Information—8A. Consolidated Statements and Other Financial Information—Dividends and Dividend Policy” of our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit. In addition, upon any liquidation of the company, the common shares are entitled to return of capital in proportion to their share of our shareholders’ equity.

According to the Brazilian Corporate Law, neither our bylaws nor actions taken at a shareholders’ meeting may deprive a shareholder of the following rights:

- the right to participate in the distribution of profits;
- the right to participate equally and proportionally in any remaining residual assets in the event of liquidation of the company;
- preemptive rights in the event of issuance of shares, convertible debentures or warrants, except in some specific circumstances under Brazilian law described in “—Preemptive Rights;”
- the right to supervise our management in accordance with Article 109 of the Brazilian Corporate Law; and
- the right to appraisal rights in the cases specified in the Brazilian Corporate Law, which are described in “Redemption and Right of Withdrawal.”

### ***Qualified Quorum Matters***

Under the Brazilian Corporate Law, the approval of shareholders representing at least one-half of the issued and outstanding voting shares is required for the matters described below:

- reducing the mandatory distribution of dividends;
- changing our corporate purpose;
- merging into or consolidating with another company, subject to the conditions set forth in the Brazilian Corporate Law;
- transferring all of our shares to another company or receiving shares of another company in order to make the company whose shares were transferred a wholly owned subsidiary of the other company, known as a merger of shares (incorporação de ações);
- participating in a centralized group of companies as defined under the Brazilian Corporate Law and subject to the conditions set forth therein;
- conducting a spin-off;
- dissolving or liquidating us;
- canceling any ongoing liquidation of us; or

- creating preferred shares with greater privileges than the existing shares or changing a priority, preference, privilege or condition of redemption or amortization of preferred shares.

In the event of the last item described above, the approval of shareholders representing the majority of issued and outstanding shares of the affected class would also be required. Our bylaws currently provide that our capital stock shall be divided exclusively into common shares and the only special class is our golden share. For additional information on the golden share, see “—Golden Share.”

#### ***Limitations on the Voting Rights of Certain Holders of Common Shares***

Our bylaws provide that, at any shareholders’ meeting, no shareholder or group of shareholders, including brokers acting on behalf of one or more holders of ADSs, may exercise votes representing more than 5% of the quantity of shares into which our capital stock is divided. Votes that exceed this 5% threshold will not be considered. For additional information on the limitations on the voting rights of certain holders of common shares, see “Item 10. Additional Information—Memorandum and Articles of Association—Description of Capital Stock—Voting Rights of Shares—Limitations on the Voting Rights of Certain Holders of Common Shares” of our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit.

#### ***Limitations on the Voting Rights of Non-Brazilian Shareholders***

In accordance with the *edital* (invitation to bid) issued by the Brazilian government in connection with the privatization of Embraer in 1994, voting participation of non-Brazilian holders of Embraer common shares was limited to 40% of Embraer common shares votes at the shareholders’ meeting.

Our bylaws provide that, at any shareholders’ meeting, non-Brazilian shareholders and groups of non-Brazilian shareholders may not exercise voting rights representing more than two-thirds of the total votes of all of the Brazilian shareholders present at the meeting. The total number of votes that may be exercised by Brazilian shareholders and by non-Brazilian shareholders will be assessed after giving effect to the 5% voting limitation described above in “—Limitations on the Voting Rights of Certain Holders of Common Shares.” Votes of non-Brazilian shareholders that exceed this two-thirds threshold will not be considered. If the total vote of non-Brazilian shareholders at any shareholders’ meeting exceeds two-thirds of the votes that may be exercised by the Brazilian shareholders present at such meeting, the number of votes of each non-Brazilian shareholder will be proportionately reduced so that the total vote of non-Brazilian shareholders does not exceed two-thirds of the total votes that can be exercised by Brazilian shareholders present at the shareholders’ meeting.

For additional information on the limitations on the voting rights of non-Brazilian shareholders, see “Item 10. Additional Information—Memorandum and Articles of Association—Description of Capital Stock—Voting Rights of Shares—Limitations on the Voting Rights of Non-Brazilian Shareholders” of our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit.

#### ***Golden Share***

The golden share is held by the Federative Republic of Brazil. The golden share is entitled to the same voting rights as the holders of common shares. In addition, the golden share entitles the holder thereof to veto rights over the following corporate actions:

- change of our name and corporate purpose;
- modification and/or application of our logo;
- creation and/or alteration of military programs (whether or not involving Brazil);
- development of third-party skills in technology for military programs;
- discontinuance of the supply of spare parts and replacement parts for military aircraft;

- transfer of our control;
- any amendments to the list of corporate actions over which the golden share carries veto rights, including the right of the Brazilian government to appoint one acting member to our board of directors and the right of our employees to appoint two acting members to our board of directors and to the rights conferred to the golden share; and
- changes to certain provisions of our bylaws pertaining to voting restrictions, rights of the golden share and the mandatory tender offer requirements applicable to holders of 35% or more of our outstanding shares.

The matters listed above are subject to prior approval by our board of directors, followed by prior notices to the Brazilian government and to the Brazilian Ministry of Finance. Within 30 days from the notice, the Brazilian government, as holder of the golden share, may exercise its veto rights. After such period or the pronouncement from the Brazilian government, the board of directors shall meet. In case of rejection of the Brazilian government, the board of directors shall reconsider the previous resolution. In case of approval or in the absence of a response from the Brazilian government within the 30-day period, the previous resolution will be ratified and will be deemed to have been approved by our board of directors. In certain cases, pursuant to our bylaws or applicable law, the matter must be subject to approval at a shareholders' meeting, and the Brazilian government shall also be entitled to exercise its veto rights related to that matter.

### ***Shareholders' Agreement***

Our bylaws prohibit any shareholder or group of shareholders from exercising voting control over us.

### **Redemption and Right of Withdrawal**

The Brazilian Corporate Law provides that, under limited circumstances, a shareholder has the right to withdraw from the company and to receive payment for his shares. This right of withdrawal may be exercised by dissenting shareholders if at least half of voting shares outstanding authorize us to:

- reduce the mandatory distribution of dividends;
- change our corporate purpose;
- merge into or consolidate with another company, subject to the conditions set forth in the Brazilian Corporate Law;
- transfer all of our shares to another company or receive shares of another company in order to make the company whose shares were transferred a wholly owned subsidiary of the other company, known as a merger of shares (*incorporação de ações*);
- acquire control of another company at a price which exceeds the limits set forth in the Brazilian Corporate Law;
- participate in a centralized group of companies as defined under the Brazilian Corporate Law and subject to the conditions set forth therein; or
- conduct a spin-off that results in (i) a change of our corporate purposes, except if the assets and liabilities of the spun-off company are contributed to a company that is engaged in substantially the same activities, (ii) a reduction in the mandatory dividend or (iii) any participation in a centralized group of companies, as defined under the Brazilian Corporate Law.

In addition, if the entity resulting from a merger, merger of shares (*incorporação de ações*), as described above, or a consolidation or a spin-off of a listed company fails to become a listed company within 120 days of the shareholders' meeting at which this decision was taken, the dissenting shareholders may also exercise their right of withdrawal.

The dissenting shareholders may exercise the right of withdrawal only in relation to the shares held on the date that is the earliest between the date of the publication of the first call notice for the shareholders’ meeting that approved the resolution giving rise to the right of withdrawal, or the date of publication of the material fact in relation to such resolution.

The Brazilian Corporate Law contains provisions that restrict withdrawal rights and allow companies to redeem their shares at their economic value, subject to certain requirements. As our bylaws currently do not provide that our shares would be redeemable at their economic value, our shares would be redeemable at their book value, determined on the basis of the last statement of financial position approved by the shareholders. If the shareholders’ meeting giving rise to withdrawal rights occurs more than 60 days after the date of the last approved statement of financial position, a shareholder may demand that its shares be valued on the basis of a new statement of financial position that is as of a date within 60 days of such shareholders’ meeting.

According to the Brazilian Corporate Law, in events of consolidation, merger, merger of shares (*incorporação de ações*), participation in a group of companies, and acquisition of control of another company, the right to withdraw does not apply if the shares in question meet certain tests relating to market liquidity and float. Shareholders would not be entitled to withdraw their shares if the shares are a component of a general stock index and shares held by persons unaffiliated with the controlling shareholder represent more than half of the outstanding shares of the relevant type or class. According to CVM Resolution N° 78, the applicable general stock index is the Bovespa index, or Ibovespa, of which we are a component.

**Preemptive Rights**

Each of our shareholders has a general preemptive right to subscribe for shares in the event of any capital increase, or securities convertible into shares, in proportion to its shareholding, except in the event of the grant and exercise of any option to acquire shares of our capital stock. A period of at least 30 days following the publication of notice of the issuance of shares or securities convertible into shares is allowed for exercise of the right, and the right is negotiable. According to the Brazilian Corporate Law and our bylaws, the board of directors may, in its discretion, eliminate the preemptive rights of the shareholders in the event that we issue shares, debentures convertible into shares, or subscription warrants that will be offered either through a stock exchange or in a public offering, or through an exchange of shares in a public offering, the purpose of which is to acquire control of another company, as established by law.

In the event of a capital increase by means of the issuance of new shares, holders of ADSs, or of common shares, would, except under the circumstances described above, have preemptive rights to subscribe to any class of our newly issued shares. However, a holder may not be able to exercise the preemptive rights relating to the common shares underlying the ADSs unless a registration statement under the Securities Act is effective with respect to those shares to which the rights relate or an exemption from the registration requirements of the Securities Act is available. For further information on the risks related to our preemptive rights, see “Item 3. Key Information—3D. Risk Factors—Risks Relating to Our Common Shares and ADSs—Holders of our ADSs might be unable to exercise preemptive rights with respect to the common shares” of our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit.

**Dividends and Dividend Policy**

*Amounts Available for Distribution*

At each annual shareholders’ meeting, the board of directors is required to recommend how net profits for the preceding fiscal year are to be allocated. For purposes of the Brazilian Corporate Law, net profits are defined as net income after income taxes and social contribution taxes for the fiscal year, net of any accumulated losses from prior fiscal years and any amounts allocated to employees’ and management’s participation in our profits, determined under IFRS. In accordance with the Brazilian Corporate Law and our bylaws, the amounts available for dividend distribution are the amounts determined under IFRS in our parent company financial statements. The amount for distribution is equal to our net income after taxes less (or plus):



- any amounts allocated from the net income after taxes to the legal reserve, and
- any amounts allocated from the net income after taxes to a contingency reserve for anticipated losses or the reversion of the reserve constituted on previous fiscal years.

For additional information on amounts available for distributions, see Note 26 to our 2022 audited consolidated financial statements.

We are required to maintain a legal reserve, to which we must allocate 5% of net profits for each fiscal year until the amount for the reserve equals 20% of our capital stock. However, we are not required to make any allocations to our legal reserve in respect of any fiscal year in which the legal reserve, when added to our other established capital reserves, exceeds 30% of our capital stock. Net losses, if any, may be charged against the legal reserve. As of December 31, 2022, the balance of our legal reserve was US\$204.4 million, which was equal to 13% of our capital stock.

The Brazilian Corporate Law also provides for two additional, discretionary allocations of net profits that are subject to approval by the shareholders at the annual meeting. First, a percentage of net profits may be allocated to a contingency reserve for anticipated losses that are deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year for which the anticipated loss was forecasted if the loss does not in fact occur, or written off in the event that the anticipated loss occurs. Second, the amount for distribution may be limited to the fiscal year's net profit already realized, and the difference between the amounts shall be allocated to an unrealized revenue reserve. Under the Brazilian Corporate Law, unrealized revenue is defined as the sum of:

- price-level restatement of statement of financial position accounts;
- the share of equity earnings of affiliated companies; and
- profits from installment sales to be received after the end of the next succeeding fiscal year.

According to our bylaws and subject to shareholder approval, our board of directors may allocate to an investment and working capital reserve up to 75% of our parent company adjusted net income after taxes. The reserve may not exceed 80% of our capital stock. The purpose of the investment and working capital reserve is to make investments in fixed assets or increase our working capital. The balance of the investment and working capital reserve may be used:

- in the deduction of accumulated losses, whenever necessary;
- in the distribution of dividends, at any time;
- in the redemption, withdrawal, purchase or open market repurchase of shares, as authorized by law; and
- to increase our capital, including by means of an issuance of new shares.

We may also grant a participation in our net income to our management and employees. However, the allocation to the investment and working capital reserve or the participation of our management and employees cannot reduce the mandatory distributable amount, as discussed below.

Otherwise, the reserved amounts, except for the contingency reserve and the unrealized revenue reserve that exceeds our capital stock must be used to increase our capital or be distributed as a cash dividend.

The amounts available for distribution may be further increased by a reversion of the contingency reserve for anticipated losses constituted in prior years but not realized, or further increased or reduced as a result of the allocations of revenues to or from the unrealized revenue reserve. The amounts available for distribution are determined on the basis of financial statements prepared in accordance with the Brazilian Corporate Law method. We have not established a contingency reserve.

As of December 31, 2022, our accumulated retained earnings accounted for US\$862.7 million. As of December 31, 2022, the amounts are net of minimum dividends and interest on shareholders' equity paid or payable, as determined by the Brazilian Corporate Law.

***Mandatory Distribution***

The Brazilian Corporate Law generally requires that the bylaws of each Brazilian corporation specify a minimum percentage of the amounts available for distribution by the corporation for each fiscal year that dividends must be distributed to shareholders, also known as the mandatory distributable amount. Under our bylaws, the mandatory distribution is based on a percentage of adjusted net income, not lower than 25%, and not on a fixed monetary amount per share. The Brazilian Corporate Law, however, permits a publicly held company to suspend the mandatory distribution of dividends if the board of directors and fiscal council report presented at the shareholders' meeting indicate that the distribution would be inadvisable in view of Embraer's financial condition. This suspension is subject to approval of holders of common shares. In this case, the board of directors shall file a justification for the suspension with the CVM. Profits not distributed by virtue of the suspension will be attributed to a special reserve and, if not absorbed by subsequent losses, will be paid as dividends as soon as the financial condition of the corporation permits the payments.

***Payment of Dividends***

We are required by the Brazilian Corporate Law and by our bylaws to hold an annual shareholders' meeting by the end of the fourth month after the end of each fiscal year at which, among other things, the shareholders have to decide on the payment of an annual dividend. The payment of annual dividends is based on our parent company financial statements prepared under IFRS for the relevant fiscal year. Brazilian companies, including us, are permitted to make a special distribution to shareholders referred to as interest on shareholders' equity, which may be distributed *in lieu* of dividends as part of the mandatory distributable amount. Payments of interest on shareholders' equity are treated as a tax-deductible expense for IRPJ and CSLL purposes. Under the Brazilian Corporate Law, dividends generally are required to be paid within 60 days following the date the dividend was declared, unless a shareholders' resolution sets forth another date of payment, which, in either case, must occur prior to the end of the fiscal year in which the dividend was declared. A shareholder has a three-year period from the dividend payment date to claim dividends (or payments of interest on shareholders' equity) in respect of its shares, after which the amount of the unclaimed dividends reverts to the Company.

The Brazilian Corporate Law allows a company to pay interim dividends out of preexisting and accumulated profits determined under IFRS for the preceding fiscal year or semester, based on financial statements approved by its shareholders. According to our bylaws, the shareholders may declare, at any time, interim dividends based on the preexisting and accumulated profits, provided that the mandatory dividend has already been distributed to the shareholders. Our bylaws also permit us to prepare financial statements semiannually and for shorter periods. Our board of directors may approve the distribution of dividends calculated with reference to those financial statements, even before they have been approved by the shareholders. However, the dividends cannot exceed the amount of capital reserves.

In general, shareholders who are not residents of Brazil must register with the Central Bank to have dividends, sales proceeds or other amounts with respect to their shares eligible to be remitted outside of Brazil. The common shares underlying our ADSs will be held in Brazil by Banco Itaú S.A., also known as the custodian, as agent for the depositary, which will be the registered owner on the records of the registrar for our shares. Our current registrar is Itaú Corretora de Valores S.A. The depositary electronically registers the common shares underlying our ADSs with the Central Bank and, therefore, is able to have dividends, sales proceeds or other amounts with respect to these shares eligible to be remitted outside Brazil.

Payments of cash dividends and distributions, if any, will be made in Brazilian currency to the custodian on behalf of the depositary, which will then convert the proceeds into U.S. dollars and will cause the U.S. dollars to be delivered to the depositary for distribution to holders of ADSs. Under current Brazilian law, dividends paid to shareholders who are not Brazilian residents, including the holders of ADSs, will not be subject to Brazilian withholding income tax, except for dividends declared based on profits generated prior to December 31, 1995. For additional information on Brazilian taxes, see “Item 10. Additional Information—10E. Taxation—Material Brazilian Tax Consequences” of our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit.

***History of Dividend and Interest on Shareholders’ Equity Payments and Dividend Policy***

Law No. 9,249, dated December 26, 1995, as amended, provides for distribution of interest on shareholders’ equity as an alternative form of payment to shareholders and treats those payments as a deductible expense for purposes of calculating Brazilian corporate income tax and social contribution on net profits. These distributions may be paid in cash. The interest is limited to the daily pro rata variation of the TJLP (long term interest rate) and cannot exceed the greater of:

- 50% of net income (after the deduction of social contribution on net profits, but before taking into account the provision for corporate income tax and the amounts attributable to shareholders as net interest on shareholders’ equity) for the period in respect of which the payment is made; or
- 50% of the sum of retained profits and profit reserves as of the beginning of the period in respect of which the payment is made.

Any payment of interest on shareholders’ equity to holders of ADSs or common shares, whether or not they are Brazilian residents, is subject to Brazilian withholding income tax at the rate of 15% or 25% if the beneficiary is resident in a tax haven jurisdiction, that is, a country or location that does not impose any income tax or which imposes the tax at a maximum rate of less than 20%, or in which the domestic legislation imposes restrictions on the disclosure of the shareholding composition or the ownership of the investment. For additional information on Brazilian taxes, see “Item 10. Additional Information—10E. Taxation—Material Brazilian Tax Consequences” of our Annual Report on Form 20-F to which this Exhibit 2.3 is an exhibit. The amount paid to shareholders as interest on shareholders’ equity, net of any withholding tax, may be included as part of any mandatory distributable amount.

Under Brazilian law, we are obligated to distribute to shareholders an amount sufficient to ensure that the net amount received by them, after payment by us of applicable Brazilian withholding taxes in respect of the distribution of interest on shareholders’ equity, plus the amount of declared dividends, is at least equal to the mandatory distributable amount. When we distribute interest on shareholders’ equity, and that distribution is not accounted for as part of the mandatory distribution, Brazilian withholding tax will apply. All payments to date were accounted for as part of the mandatory distribution.

**Form and Transfer**

As our shares are in registered book-entry form, the transfer of shares is governed by the rules of article 35 of the Brazilian Corporate Law. This article provides that a transfer of shares is effected by an entry made by Banco Itaú S.A., also known as the registrar, in its books, by debiting the share account of the transferor and crediting the share account of the transferee. Banco Itaú S.A. also performs all the services of safe-keeping and transfer of shares and related services for us.

Transfers of shares by a non-Brazilian shareholder are made in the same way and entered into by that shareholder’s local agent on the shareholder’s behalf except that if the original investment was registered with the Central Bank pursuant to Resolution No. 4,373, the foreign investor must also seek amendment, if necessary, through its local agent, of the electronic registration to reflect the new ownership.

The B3 operates as a central clearing system. A holder of our shares may choose, in its discretion, to participate in this system and all shares elected to be put into this system will be deposited in the custody of the B3 (through a Brazilian institution duly authorized to operate by the Central Bank and having a clearing account with the B3). The fact that those shares are held in the custody of the B3 will be reflected in our register of shareholders. Each participating shareholder will, in turn, be registered in our register of beneficial shareholders maintained by the B3 and will be treated in the same way as registered shareholders.

**Disclosure of Significant Interest**

***Brazilian Requirements***

Brazilian law provides that all shareholders or groups of shareholders will be required to disclose, through notice to us and to the stock exchanges on which our securities are traded, the negotiation of securities that results in the shareholder surpassing or decreasing the thresholds of 5%, 10%, 15%, and so on, of participation in a certain class or type of share representative of a company’s capital stock. In addition, our bylaws provide that all shareholders or groups of shareholders will be required to disclose, through notice to us and to the stock exchanges on which our securities are traded, the acquisition of shares that, together with those already held by them, exceed 5% of our capital stock. A violation of these disclosure obligations could result in the suspension of rights, including voting rights, by a resolution of shareholders at a shareholders’ meeting.

***Certain U.S. Legal Requirements***

In addition, the U.S. Exchange Act imposes reporting requirements on shareholders or groups of shareholders who acquire beneficial ownership (as this term is defined under Rule 13d-3 of the U.S. Exchange Act) of more than 5% of our common shares. In general, shareholders must file, within ten days after the acquisition, a report of beneficial ownership with the SEC containing the information prescribed by the regulations under the U.S. Exchange Act. This information is also required to be sent to us and to each U.S. securities exchange on which our common shares are traded. Shareholders should consult with their own legal advisor regarding their reporting obligations under the U.S. Exchange Act.

**Mechanism to Promote Dispersed Ownership of Our Shares**

Our bylaws contain provisions that have the effect of avoiding concentration of our shares in the hands of an investor or a small group of investors in order to promote more dispersed ownership of our shares. To this end, these provisions place certain obligations on a shareholder or group of shareholders that becomes a holder of 35% or more of our total capital stock, or an Acquiring Shareholder. Not later than 15 days after a shareholder becomes an Acquiring Shareholder, this shareholder must submit a request to the Brazilian government, through the Ministry of Finance, to make a public tender offer to acquire all of our capital stock. The Brazilian government will have full discretion to accept or deny this request. The Acquiring Shareholder may not purchase any additional shares until the Brazilian government provides its opinion on the public offer. If the request is accepted by the Brazilian government, the Acquiring Shareholder must make a public offer for all shares within 60 days of acceptance. The offer must be made in accordance with the CVM and the B3 regulations and the provisions of our bylaws. If the request is denied by the Brazilian government, the Acquiring Shareholder must sell all shares the Acquiring Shareholder owns in excess of 35% of our total capital stock within 30 days. Failure to comply with these provisions will subject the Acquiring Shareholder to the potential suspension of all voting rights inherent to the shares the Acquiring Shareholder holds, if a resolution to this effect is approved at a general meeting of our shareholders called by our management. These provisions are not applicable to shareholders who become holders of 35% or more of our total capital stock in certain transactions specified in our bylaws as, for example, cancellation of our common shares held in treasury.

The public tender offer must be (i) directed to all of our shareholders, (ii) made through an auction to take place on the B3, (iii) launched at a set price calculated in accordance with the procedure set forth below, (iv) paid upfront, in *reais*, (v) made so as to assure equal treatment to all shareholders, (vi) irrevocable and not subject to any changes after publication of the bidding offer and (vii) based on a valuation report to be prepared in accordance with the rules set forth in our bylaws and in applicable CVM rules and regulations.

The price to be offered for the shares in the public tender offer will be calculated as follows:

Tender Offer Price = Value of the Share + Premium,

where:

“Tender Offer Price” corresponds to the acquisition price for each share issued by us in the public offering of shares provided hereunder.

“Value of the Share” corresponds to the greater of:

- (i) the highest unit quotation obtained for the shares issued by us during the 12-month period prior to the tender offer among values recorded on any stock exchange on which the shares were traded;
- (ii) the highest price paid by the Acquiring Shareholder, during the 36-month period prior to the tender offer, for a share or tranche of shares issued by us;
- (iii) the amount equivalent to 14.5 times our Consolidated Average EBITDA, as defined below, reduced by our net consolidated indebtedness, divided by the total number of shares issued by us; or
- (iv) the amount equivalent to 0.6 times the amount of our firm backlog orders, according to the last information disclosed by the latter, reduced by our net consolidated indebtedness, divided by the total number of shares issued by us.

“Premium” corresponds to 50% of the Value of the Share.

“Consolidated EBITDA” is our consolidated operating profit before net financial expenses, income tax and social contribution, depreciation, depletion and amortization, as assessed based on the audited statements for our most recent complete fiscal year.

“Average Consolidated EBITDA” is the arithmetic average of our consolidated EBITDA for the two most recent complete fiscal years.

The launch of a public tender offer does not preclude us or any of our shareholders from launching a competing public tender offer, in accordance with applicable regulations.

## **II. American Depositary Shares**

JPMORGAN CHASE BANK, N.A., as depositary (the “Depositary”), registers and delivers American depositary shares, also referred to as ADSs. Each ADS represents four common shares (or rights to receive shares) (the “Shares” and, together with any other securities, cash or property from time to time held by the Depositary in respect or in lieu of deposited Shares, the “Deposited Securities”) of Embraer S.A. (the “Company”), a corporation organized under the laws of the Federative Republic of Brazil, deposited under the Deposit Agreement dated as of July 20, 2000, as last amended and restated as of November 18, 2019 (as amended from time to time, the “Deposit Agreement”) among the Company, the Depositary and all Holders and Beneficial Owners from time to time of American Depositary Receipts issued thereunder (“ADRs”).

The depositary’s office at which the ADSs are administered and its principal executive office are located at 383 Madison Avenue, Floor 11, New York, New York.

We do not treat ADS holders as one of our shareholders and they do not have shareholder rights. Brazilian law governs shareholder rights. The depositary is the holder of the common shares underlying the ADSs. As a registered holder of ADSs, they have ADS holder rights. A deposit agreement between us, the depositary, ADS holders and all other persons indirectly or beneficially holding ADSs sets out ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs.

The following is a summary of the material provisions of the deposit agreement. For more complete information, you should read the entire deposit agreement and the form of ADR.

(1) Issuance of ADRs. The ADRs are issued pursuant to the terms of the Deposit Agreement. Subject to the terms of the Deposit Agreement, the Depositary may so issue ADRs for delivery at the Transfer Office (as defined in the Deposit Agreement) only against deposit of: (a) Shares in form satisfactory to the Custodian; (b) rights to receive Shares from the Company or any registrar, transfer agent, clearing agent or other entity recording Share ownership or transactions. In its capacity as Depositary, the Depositary shall not lend Shares or ADSs.

Every person depositing Shares under the Deposit Agreement represents and warrants that (a) such Shares and the certificates therefor are duly authorized, validly issued and outstanding, fully paid, nonassessable and legally obtained by such person (b) all pre-emptive and comparable rights, if any, with respect to such Shares have been validly waived or exercised, (c) the person making such deposit is duly authorized so to do, (d) the Shares presented for deposit are free and clear of any lien, encumbrance, security interest, charge, mortgage or adverse claim and (e) such Shares (A) are not “restricted securities” as such term is defined in Rule 144 under the Securities Act of 1933 (“Restricted Securities”) unless at the time of deposit the requirements of paragraphs (c), (e), (f) and (h) of Rule 144 shall not apply and such Shares may be freely transferred and may otherwise be offered and sold freely in the United States or (B) have been registered under the Securities Act of 1933. To the extent the person depositing Shares is an “affiliate” of the Company as such term is defined in Rule 144, the person also represents and warrants that upon the sale of the ADSs, all of the provisions of Rule 144 which enable the Shares to be freely sold (in the form of ADSs) will be fully complied with and, as a result thereof, all of the ADSs issued in respect of such Shares will not be on the sale thereof, Restricted Securities. Such representations and warranties shall survive the deposit and withdrawal of Shares and the issuance and cancellation of ADSs in respect thereof and the transfer of such ADSs. The Depositary will not knowingly accept for deposit under the Deposit Agreement any Shares required to be registered under the Securities Act of 1933 and not so registered. The Depositary may refuse to accept for such deposit any Shares identified by the Company in order to facilitate compliance with the requirements of the laws, rules and regulations of the United States, including, but not limited to, Securities Act of 1933 and the rules and regulations promulgated thereunder.

(2) Withdrawal of Deposited Securities. Holders of ADRs will be entitled to withdraw the Deposited Securities at any time subject only to the reasons set forth in General Instruction I.A.(1) of Form F-6 (as such instructions may be amended from time to time) under the Securities Act of 1933, including (i) temporary delays caused by closing the transfer books of the Depositary or the Company or the deposit of Shares in connection with voting at a shareholders’ meeting, or the payment of dividends, (ii) the payment of fees, taxes and similar charges, and (iii) compliance with any laws or governmental regulations relating to the ADRs or the withdrawal of Deposited Securities. Subject to paragraphs (4) and (5), upon surrender of (i) a certificated ADR in a form satisfactory to the Depositary at the Transfer Office or (ii) proper instructions and documentation in the case of a Direct Registration ADR, the Holder hereof is entitled to delivery at, or to the extent in dematerialized form from, the Custodian’s office of the Deposited Securities at the time represented by the ADSs evidenced by this ADR. At the request, risk and expense of the Holder hereof, the Depositary may deliver such Deposited Securities at such other place as may have been requested by the Holder.

(3) Transfers of ADRs. The Depositary or its agent will keep, at a designated transfer office (the “Transfer Office”), (a) a register (the “ADR Register”) for the registration, registration of transfer, combination and split-up of ADRs, and, in the case of Direct Registration ADRs, shall include the Direct Registration System, which at all reasonable times will be open for inspection by Holders and the Company for the purpose of communicating with Holders in the interest of the business of the Company or a matter relating to the Deposit Agreement and (b) facilities for the delivery and receipt of ADRs. The term ADR Register includes the Direct Registration System. Title to this ADR (and to the Deposited Securities represented by the ADSs evidenced hereby), when properly endorsed (in the case of ADRs in certificated form) or upon delivery to the Depositary of proper instruments of transfer, is transferable by delivery with the same effect as in the case of negotiable instruments under the laws of the State of New York; provided that the Depositary, notwithstanding any notice to the contrary, may treat the person in whose name this ADR is registered on the ADR Register as the absolute owner hereof for all purposes and neither the Depositary nor the Company will have any obligation or be subject to any liability under the Deposit Agreement or any ADR to any beneficial owner of an ADS, unless such beneficial owner is the Holder hereof. Subject to paragraphs (4) and (5),

this ADR is transferable on the ADR Register and may be split into other ADRs or combined with other ADRs into one ADR, evidencing the aggregate number of ADSs surrendered for split-up or combination, by the Holder hereof or by duly authorized attorney upon surrender of this ADR at the Transfer Office properly endorsed (in the case of ADRs in certificated form) or upon delivery to the Depositary of proper instruments of transfer and duly stamped as may be required by applicable law; provided that the Depositary may close the ADR Register at any time or from time to time when deemed expedient by it or, in the case of the issuance book portion of the ADR Register, when reasonably requested by the Company solely in order to enable the Company to comply with applicable law or regulations of the CVM. At the request of a Holder, the Depositary shall, for the purpose of substituting a certificated ADR with a Direct Registration ADR, or vice versa, execute and deliver a certificated ADR or a Direct Registration ADR, as the case may be, for any authorized number of ADSs requested, evidencing the same aggregate number of ADSs as those evidenced by the certificated ADR or Direct Registration ADR, as the case may be, substituted.

(4) Certain Limitations. Prior to the issue, registration, registration of transfer, split-up or combination of any ADR, the delivery of any distribution in respect thereof, or, subject to the last sentence of paragraph (2), the withdrawal of any Deposited Securities, and from time to time in the case of clause (b)(ii) of this paragraph (4), the Company, the Depositary or the Custodian may require: (a) payment with respect thereto of (i) any stock transfer or other tax or other governmental charge, (ii) any stock transfer or registration fees in effect for the registration of transfers of Shares or other Deposited Securities upon any applicable register and (iii) any applicable charges as provided in paragraph (7) of this ADR; (b) the production of proof satisfactory to it of (i) the identity of any signatory and genuineness of any signature and (ii) such other information, including without limitation, information as to citizenship, residence, exchange control approval, beneficial or other ownership of any securities, compliance with applicable law, regulations, provisions of or governing Deposited Securities and terms of the Deposit Agreement and this ADR, as it may deem necessary or proper; and (c) compliance with such regulations as the Depositary may establish consistent with the Deposit Agreement and any regulations which the Depositary is informed of in writing by the Company which are deemed desirable by the Depositary, the Company or the Custodian to facilitate compliance with any applicable rules or regulations of the Central Bank or CVM.

The issuance of ADRs, the acceptance of deposits of Shares, the registration, registration of transfer, split-up or combination of ADRs or, subject to the last sentence of paragraph (2), the withdrawal of Deposited Securities may be suspended, generally or in particular instances, when the ADR Register or any register for Deposited Securities is closed or when any such action is deemed advisable by the Depositary.

(5) Liability for Taxes, Duties and Other Charges. If any tax or other governmental charge shall become payable by or on behalf of the Custodian or the Depositary with respect to the ADR, any Deposited Securities represented by the ADSs or any distribution thereon, such tax or other governmental charge shall be paid by the Holder hereof to the Depositary, and by holding or having held this ADR or any ADSs evidenced hereby, the Holder and all beneficial owners hereof and thereof, and all prior Holders and beneficial owners hereof and thereof, jointly and severally, agree to indemnify, defend and save harmless each of the Depositary and its agents in respect of such tax or other governmental charge. The Depositary may refuse to effect any registration, registration of transfer, split-up or combination hereof or, subject to the first sentence of paragraph (2), any withdrawal of such Deposited Securities until such payment is made. The Depositary may also deduct from any distributions on or in respect of Deposited Securities, or may sell by public or private sale for the account of the Holder hereof any part or all of such Deposited Securities, and may apply such deduction or the proceeds of any such sale in payment of such tax or other governmental charge, the Holder hereof remaining liable for any deficiency, and, if appropriate, shall reduce the number of ADSs to reflect any such sales of Shares and shall distribute the net proceeds of any such sale or the balance of any such property after deduction of such tax or other governmental charge. In connection with any distribution to Holders, the Company will remit to the appropriate governmental authority or agency all amounts (if any) required to be withheld and owing to such authority or agency by the Company; and the Depositary and the Custodian will remit to the appropriate governmental authority or agency all amounts (if any) required to be withheld and owing to such authority or agency by the Depositary or the Custodian. If the Depositary determines that any distribution in property other than cash (including Shares or rights) on Deposited Securities is subject to any tax that the Depositary or the Custodian is obligated to withhold, the Depositary may dispose of all or a portion of such property in such amounts and in such manner as the Depositary deems necessary and practicable to pay such taxes, by public or private sale, and the Depositary shall distribute the net proceeds of any such sale or the balance of any such property after deduction of such taxes to the Holders entitled thereto. Each Holder and beneficial owner of ADSs agrees to indemnify the Depositary, the Company, the Custodian and any of their respective officers, directors, employees, agents and affiliates against, and hold each of them harmless from, any claims by any governmental authority with respect to taxes, additions to tax, penalties or interest arising out of any refund of taxes, reduced rate of withholding at source or other tax benefit obtained. The obligations of Holders and beneficial owners of ADSs under this paragraph (5) shall survive any transfer of ADSs, any surrender of ADSs, the withdrawal of Deposited Securities and any termination of the Deposit Agreement.

(6) Disclosure of Interests. Holders and holders of interests in ADSs will be subject to the provisions of the Company's Articles of Incorporation, to Instruction No. 358/02 of the CVM ("Instruction No. 358/02") and any other regulations of Brazil or the U.S. securities laws relating to disclosure of interests in Shares. To the extent that the provisions of or governing any Deposited Securities may require disclosure of or impose limits on beneficial or other ownership of Deposited Securities, other Shares and other securities and may provide for other rights to enforce such disclosure or limits, Holders and all persons holding ADRs agree to comply with all such disclosure requirements and ownership limitations and to cooperate with the Depositary in the Depositary's compliance with any Company instructions in respect thereof, and the Depositary will use reasonable efforts to comply with such Company instructions. The Company reserves the right to instruct Holders (and through any such Holder, the beneficial owners of, or in, ADSs evidenced by the ADRs registered in such Holder's name) to deliver their ADSs for cancellation and withdrawal of the Deposited Securities so as to permit the Company to deal directly with the Holder and/or beneficial owner thereof as a holder of Shares and Holders and beneficial owners agree to comply with such instructions.

(7) Charges of Depositary. The Depositary may charge, and collect from, each person to whom ADRs are issued against deposits of Shares, including deposits in respect of Share Distributions, Rights and Other Distributions (as such terms are defined in paragraph (10)), and each person surrendering ADRs for withdrawal of Deposited Securities, U.S.\$5.00 for each 100 ADSs (or portion thereof) evidenced by the ADRs delivered or surrendered. The Depositary may sell (by public or private sale) sufficient securities and property received in respect of Share Distributions, Rights and Other Distributions prior to such deposit to pay such charge. The Holders, the beneficial owners of, or in, ADSs, any party depositing or withdrawing Shares or any party surrendering ADSs and/or to whom ADSs are issued are also subject to additional charges, as set forth in the Deposit Agreement. The Company will pay all other charges and expenses of the Depositary and any agent of the Depositary (except the Custodian) pursuant to agreements from time to time between the Company and the Depositary, except (i) stock transfer or other taxes and other governmental charges (which are payable by Holders or persons depositing Shares), (ii) SWIFT, cable, telex and facsimile transmission and delivery charges incurred at the request of persons depositing, or Holders delivering Shares, ADRs or Deposited Securities (which are payable by such persons or Holders), and (iii) transfer or registration fees for the registration or transfer of Deposited Securities on any applicable register in connection with the deposit or withdrawal of Deposited Securities (which are payable by persons depositing Shares or Holders withdrawing Deposited Securities). Subject to certain terms and fees, to facilitate the administration of various depositary receipt transactions, including disbursement of dividends or other cash distributions and other corporate actions, the Depositary may engage the foreign exchange desk within JPMorgan Chase Bank, N.A. (the "Bank") and/or its affiliates in order to enter into spot foreign exchange transactions to convert foreign currency into U.S. dollars ("FX Transactions"). Further details relating to the applicable foreign exchange rate, the applicable spread and the execution of FX Transactions will be provided by the Depositary on ADR.com.

(8) Available Information. The Deposit Agreement, the provisions of or governing Deposited Securities and any written communications from the Company, which are both received by the Custodian or its nominee as a holder of Deposited Securities and made generally available to the holders of Deposited Securities, are available for inspection by Holders at the offices of the Depositary and the Custodian and at the Transfer Office. The Depositary will distribute copies of such communications (or English translations or summaries thereof) to Holders when furnished by the Company. The Company is subject to the periodic reporting requirements of the Securities Exchange Act of 1934 and accordingly files certain reports with the United States Securities and Exchange Commission (the "Commission"). Such reports and other information may be inspected and copied through the Commission's EDGAR system or at public reference facilities maintained by the Commission located at the date hereof at 100 F Street, NE, Washington, DC 20549.

(9) Execution. This ADR shall not be valid for any purpose unless executed by the Depositary by the manual or facsimile signature of a duly authorized officer of the Depositary. The Depositary's office is located at 383 Madison Avenue, Floor 11, New York, New York.



(10) Distributions on Deposited Securities. Subject to paragraphs (4) and (5), and any restrictions imposed by Brazilian law, regulation or applicable permit, to the extent practicable, the Depositary will distribute to each Holder entitled thereto on the record date set by the Depositary therefor at such Holder's address shown on the ADR Register, in proportion to the number of Deposited Securities (on which the following distributions on Deposited Securities are received by the Custodian) represented by ADSs evidenced by such Holder's ADRs: (a) Cash. Any U.S. dollars available to the Depositary resulting from a cash dividend or other cash distribution or the net proceeds of sales of any other distribution or portion thereof authorized in this paragraph (10) ("Cash"), on an averaged or other practicable basis, subject to (i) appropriate adjustments for taxes withheld, (ii) such distribution being impermissible or impracticable with respect to certain Holders, and (iii) deduction of the Depositary's and/or its agents' fees and expenses in (1) converting any foreign currency to U.S. dollars by sale or in such other manner as the Depositary may determine to the extent that it determines that such conversion may be made on a reasonable basis, (2) transferring foreign currency or U.S. dollars to the United States by such means as the Depositary may determine to the extent that it determines that such transfer may be made on a reasonable basis, (3) obtaining any approval or license of any governmental authority required for such conversion or transfer, which is obtainable at a reasonable cost and within a reasonable time and (4) making any sale by public or private means in any commercially reasonable manner. If the Company shall have advised the Depositary pursuant to the provisions of the Deposit Agreement that any such conversion, transfer or distribution can be effected only with the approval or license of the Brazilian government or any agency thereof or the Depositary shall become aware of any other governmental approval or license required therefor, the Depositary may, in its discretion, apply for such approval or license, if any, as the Company or its Brazilian counsel may reasonably instruct in writing or as the Depositary may deem desirable including, without limitation, Central Bank registration. (b) Shares. (i) Additional ADRs evidencing whole ADSs representing any Shares available to the Depositary resulting from a dividend or free distribution on Deposited Securities consisting of Shares (a "Share Distribution") and (ii) U.S. dollars available to it resulting from the net proceeds of sales of Shares received in a Share Distribution, which Shares would give rise to fractional ADSs if additional ADRs were issued therefor, as in the case of Cash. (c) Rights. (i) Warrants or other instruments in the discretion of the Depositary representing rights to acquire additional ADRs in respect of any rights to subscribe for additional Shares or rights of any nature available to the Depositary as a result of a distribution on Deposited Securities ("Rights"), to the extent that the Company timely furnishes to the Depositary evidence satisfactory to the Depositary that the Depositary may lawfully distribute the same (the Company has no obligation to so furnish such evidence), or (ii) to the extent the Company does not so furnish such evidence and sales of Rights are practicable, any U.S. dollars available to the Depositary from the net proceeds of sales of Rights as in the case of Cash, or (iii) to the extent the Company does not so furnish such evidence and such sales cannot practicably be accomplished by reason of the nontransferability of the Rights, limited markets therefor, their short duration or otherwise, nothing (and any Rights may lapse). (d) Other Distributions. (i) Securities or property available to the Depositary resulting from any distribution on Deposited Securities other than Cash, Share Distributions and Rights ("Other Distributions"), by any means that the Depositary, after consultation with the Company if practicable, may deem equitable and practicable, or (ii) to the extent the Depositary deems distribution of such securities or property not to be equitable and practicable, any U.S. dollars available to the Depositary from the net proceeds of sales of Other Distributions as in the case of Cash. The Depositary reserves the right to utilize a division, branch or affiliate of JPMorgan Chase Bank, N.A. to direct, manage and/or execute any public and/or private sale of securities hereunder. Such division, branch and/or affiliate may charge the Depositary a fee in connection with such sales, which fee is considered an expense of the Depositary contemplated above and/or under paragraph (7) hereof. Any U.S. dollars available will be distributed by checks drawn on a bank in the United States for whole dollars and cents. Fractional cents will be withheld without liability and dealt with by the Depositary in accordance with its then current practices. All purchases and sales of securities will be handled by the Depositary in accordance with its then current policies, which are currently set forth in the "Depositary Receipt Sale and Purchase of Security" section of <https://www.adr.com/Investors/FindOutAboutDRs>, the location and contents of which the Depositary shall be solely responsible for.

(11) Conversion of Foreign Currency. Whenever the Depositary or the Custodian shall receive foreign currency, as a Cash dividend or Other Distribution or as the net proceeds from the sale of securities, property or rights, which, in the judgment of the Depositary can then be converted on a reasonable basis into U.S. dollars which can, at the time of receipt thereof, be transferred to the United States, the Depositary shall, as promptly as practicable, convert or cause to be converted, by sale or in any other manner that it may determine, such foreign currency into U.S. dollars and shall transfer the resulting U.S. dollars (net of its charges and expenses in effecting such conversion) to the United States. Such U.S. dollars shall be distributed as promptly as practicable to the Holders entitled thereto or, if the Depositary shall have distributed any warrants or other instruments that entitle the holders thereof to such U.S. dollars,

then to the holders of such warrants or instruments, as applicable, upon surrender thereof for cancellation. Such distribution may be made upon an averaged or other practicable basis without regard to any distinctions among Holders on account of exchange restrictions or otherwise. If such conversion or distribution can be effected only with the approval or license of any government or agency thereof, including without limitation, Central Bank registration, the Depositary shall, at the written request of the Company, unless prohibited pursuant to applicable law or otherwise impracticable in the reasonable opinion of the Depositary, file such application for approval or license, if any, as it shall deem practicable; provided, however that the Depositary shall be entitled to rely upon Brazilian local counsel in such matters, which counsel shall be instructed to act as promptly as possible. The Company shall not be obliged to make any such filing on behalf of the Depositary. If at any time the Depositary shall determine that in its reasonable judgment any foreign currency received by the Depositary is not convertible on a reasonable basis into U.S. dollars transferable to the United States, or if any approval or license of any governmental authority or agency thereof that is required for such conversion is denied or in the opinion of the Depositary is not obtainable at a reasonable cost or within a reasonable period, the Depositary may, subject to applicable laws and regulations, and after consultation with the Company, either distribute the foreign currency (or an appropriate document evidencing the right to receive such foreign currency) to, or hold such foreign currency (without liability for interest thereon) for the respective accounts of, the Holders entitled to receive the same; provided, however, that if requested in writing by a Holder entitled thereto, the Depositary may, in its discretion, distribute the foreign currency, as promptly as practicable. If any such conversion of foreign currency, in whole or in part, can be effected for distribution to some but not all of the Holders entitled thereto, the Depositary shall make such conversion and distribution in U.S. dollars to the extent permissible to the Holders entitled thereto and may either so distribute or hold such balance (without liability for interest thereon) for the respective accounts of, the Holders entitled thereto for whom such conversion and distribution is not practicable; provided, however, that if requested in writing by a Holder entitled thereto and permitted by applicable law, the Depositary may, in its discretion, distribute the foreign currency, as promptly as practicable.

(12) Record Dates. The Depositary may, after consultation with the Company if practicable, fix a record date (which, to the extent applicable, shall be as near as practicable to any corresponding record date set by the Company) for the determination of the Holders who shall be responsible for the fee assessed by the Depositary for administration of the ADR program and for any expenses provided for in paragraph (7) hereof as well as for the determination of the Holders who shall be entitled to receive any distribution on or in respect of Deposited Securities, to give instructions for the exercise of any voting rights, to receive any notice or to act in respect of other matters and only such Holders shall be so entitled or obligated.

(13) Voting of Deposited Securities. . As soon as practicable after receipt from the Company of notice of any meeting or solicitation of consents or proxies of holders of Shares or other Deposited Securities, the Depositary, upon the written request of the Company, shall mail to Holders a notice stating (a) such information as is contained in such notice and any solicitation materials, (b) that each Holder on the record date set by the Depositary therefor will be entitled, subject to any applicable provisions of Brazilian law, the Company's Articles of Incorporation and the provisions hereof to instruct the Depositary as to the exercise of the voting rights, if any, pertaining to the Deposited Securities represented by the ADSs evidenced by such Holder's ADRs and (c) the manner in which such instructions may be given. There is no guarantee that Holders and beneficial owners of interests in ADSs generally or any Holder or beneficial owners of interests in ADSs in particular will receive the Voting Notice with sufficient time to enable such Holder or beneficial owner of interests in ADSs to return any voting instructions to the Depositary in a timely manner. Upon receipt of instructions of a Holder on such record date in the manner and on or before the date established by the Depositary for such purpose, the Depositary shall endeavor insofar as practicable and permitted under the provisions of or governing Deposited Securities to vote or cause to be voted the Deposited Securities represented by the ADSs evidenced by such Holder's ADRs in accordance with such instructions. The Depositary will not itself exercise any voting discretion in respect of any Deposited Security.

(14) Changes Affecting Deposited Securities. Subject to paragraphs (4) and (5), the Depositary may, in its discretion, amend this ADR or distribute additional or amended ADRs (with or without calling this ADR for exchange) or cash, securities or property on the record date set by the Depositary therefor to reflect any change in par value, split-up, consolidation, cancellation or other reclassification of Deposited Securities, any Share Distribution or Other Distribution not distributed to Holders or any cash, securities or property available to the Depositary in respect of Deposited Securities from (and the Depositary is hereby authorized to surrender any Deposited Securities to any person and, irrespective of whether such Deposited Securities are surrendered or otherwise cancelled by operation of

law, rule, regulation or otherwise, to sell by public or private sale any property received in connection with) any recapitalization, reorganization, merger, consolidation, liquidation, receivership, bankruptcy or sale of all or substantially all the assets of the Company. To the extent the Depositary does not so amend this ADR or make a distribution to Holders to reflect any of the foregoing, or the net proceeds thereof, whatever cash, securities or property results from any of the foregoing shall constitute Deposited Securities and each ADS evidenced by this ADR shall automatically represent its pro rata interest in the Deposited Securities as then constituted.

(15) Exoneration. The Depositary, the Company, their agents and each of them shall: (a) incur no liability (i) if law, rule or regulation of the United States, Brazil or any other country or jurisdiction or of any other governmental or regulatory authority or stock exchange or the Company's charter, act of God, war or other circumstance beyond its control shall prevent, delay or subject to any civil or criminal penalty any act which the Deposit Agreement or the ADR provides shall be done or performed by it, or (ii) by reason of any exercise or failure to exercise any discretion given it in the Deposit Agreement or the ADR; (b) assume no liability except to perform its obligations (other than those directly related to the handling of Deposited Securities and Cash) to the extent they are specifically set forth in the ADR and the Deposit Agreement without gross negligence or willful misconduct; (c) in the case of the Depositary and its agents, be under no obligation to appear in, prosecute or defend any action, suit or other proceeding in respect of any Deposited Securities, ADSs or this ADR; (d) in the case of the Company and its agents hereunder (other than the Depositary) be under no obligation to appear in, prosecute or defend any action, suit or other proceeding in respect of any Deposited Securities or the ADR, which in its opinion may involve it in expense or liability, unless indemnity satisfactory to it against all expense (including fees and disbursements of counsel) and liability be furnished as often as may be required; and (e) not be liable for any action or inaction by it in reliance upon the advice of or information from legal counsel, accountants, any person presenting Shares for deposit, any Holder, or any other person believed by it in good faith to be competent to give such advice or information.

(16) Resignation and Removal of Depositary; the Custodian. The Depositary may resign as Depositary by written notice of its election to do so delivered to the Company, or be removed as Depositary by the Company by written notice of such removal delivered to the Depositary; such resignation or removal shall take effect upon the appointment of and acceptance by a successor depositary. The Depositary may, after consultation with the Company, appoint substitute or additional Custodians and the term "Custodian" refers to each Custodian or all Custodians as the context requires.

(17) Amendment. Subject to the last sentence of paragraph (2), the ADRs and the Deposit Agreement may be amended by the Company and the Depositary, provided that any amendment that imposes or increases any fees or charges (other than stock transfer or other taxes and other governmental charges, transfer or registration fees, SWIFT, cable, telex or facsimile transmission costs, delivery costs or other such expenses), or that shall otherwise prejudice any substantial existing right of Holders, shall become effective 30 days after notice of such amendment shall have been given to the Holders. Every Holder of an ADR and beneficial owner of ADSs at the time any amendment to the Deposit Agreement so becomes effective shall be deemed, by continuing to hold such ADR, to consent and agree to such amendment and to be bound by the Deposit Agreement as amended thereby. In no event shall any amendment impair the right of the Holder of any ADR to surrender such ADR and receive the Deposited Securities represented thereby, except in order to comply with mandatory provisions of applicable law.

(18) Termination. The Depositary may, and shall at the written direction of the Company, terminate the Deposit Agreement and the ADR by mailing notice of such termination to the Holders at least 30 days prior to the date fixed in such notice for such termination, subject to certain conditions. After the date so fixed for termination, the Depositary and its agents will perform no further acts under the Deposit Agreement and the ADR, except to advise Holders of such termination, receive and hold (or sell) distributions on Deposited Securities and deliver Deposited Securities being withdrawn. As soon as practicable after the date so fixed for termination, the Depositary shall use its reasonable efforts to sell the Deposited Securities and shall thereafter (as long as it may lawfully do so) hold in an account (which may be a segregated or unsegregated account) the net proceeds of such sales, together with any other cash then held by it under the Deposit Agreement, without liability for interest, in trust for the pro rata benefit of the Holders of ADRs not theretofore surrendered. After making such sale, the Depositary shall be discharged from all obligations in respect of the Deposit Agreement and this ADR, except to account for such net proceeds and other cash. After the date so fixed for termination, the Company shall be discharged from all obligations under the Deposit Agreement except for its obligations to the Depositary and its agents.

List of Subsidiaries of Embraer S.A.\*

<u>Name</u>	<u>Jurisdiction of Incorporation</u>
Embraer Aircraft Holding, Inc.	Delaware, U.S.A.
Embraer Aircraft Maintenance Services, LLC	Delaware, U.S.A.
Embraer Executive Jet Services, LLC	Delaware, U.S.A.
Embraer Executive Aircraft, Inc.	Delaware, U.S.A.
Embraer CAE Training Services, LLC	Delaware, U.S.A.
Embraer Engineering & Technology Center USA, Inc.	Delaware, U.S.A.
Embraer Defense and Security, Inc.	Delaware, U.S.A.
Embraer Business Innovation Center, Inc.	Delaware, U.S.A.
Beacon Works Technologies, Inc.	Delaware, U.S.A.
Embraer Aircraft Customer Services, LLC.	Florida, U.S.A.
EVE Holding, Inc	Delaware, U.S.A.
EVE UAM, LLC	Delaware, U.S.A.
ELEB Equipamentos Ltda.	Brazil
Embraer GPX Ltda.	Brazil
Embraer Defesa e Segurança Participações S.A.	Brazil
Atech—Negócios em Tecnologias S.A.	Brazil
Visiona Tecnologia Espacial S.A.	Brazil
Yaborã Indústria Aeronáutica S.A.	Brazil
Fundo de Investimento em Participações Embraer Ventures	Brazil
Tempest Serviços de Informática S.A.	Brazil
ID IT Tecnologia da Informação Ltda.	Brazil
EZS Informática S.A.	Brazil
Eve Soluções de Mobilidade Aérea Urbana Ltda.	Brazil
Embraer Aviation Europe – EAE	France
Embraer Aviation International – EAI	France
Embraer Europe SARL	France
Embraer (China) Aircraft Technical Services Co., Ltd.	China
Embraer Spain Holding Co., SL	Spain
ECC Investment Switzerland AG	Switzerland
ECC Insurance & Financial Company Limited.	Cayman Islands, BWI
Embraer Finance Ltd.	Cayman Islands, BWI
Embraer Overseas Ltd.	Cayman Islands, BWI
Embraer Portugal, S.A.	Portugal
Airholding S.A.	Portugal
OGMA – Indústria Aeronáutica de Portugal S.A.	Portugal
Embraer Asia Pacific PTE. Ltd.	Singapore
Tempest Security Intelligence Ltd	UK
Visiona International B.V.	Netherlands
Embraer Netherlands Finance B.V.	Netherlands
Embraer Netherlands B.V.	Netherlands
EZ Air Interior Limited	Ireland

\* This list reflects out list of subsidiaries as of December 31, 2022. None of the subsidiaries listed is a significant subsidiary for purposes of Regulation S-X under the Securities Exchange Act of 1934, as amended, see item 4D of the Annual Report on Form 20-F to which this Exhibit 8.1 is an exhibit. The list does not include (i) certain joint venture (see item 4B of the Annual Report on Form 20-F to which this Exhibit 8.1 is an exhibit for more information on such joint venture and entities established in our strategic alliances) and (ii) certain non-material special purpose vehicles.



**JOINT MESSAGE FROM THE CHAIRMAN OF THE BOARD AND THE CHIEF EXECUTIVE OFFICER OF EMBRAER**

The Embraer Code of Ethics and Conduct reflects our commitment to meeting our business objectives ethically and transparently, developing internal and external relationships based on integrity, preserving the environment and contributing to the well-being of the communities where we operate.

The Code is based on the Embraer Corporate Values, on the United Nations Global Compact principals and on best practices in corporate and accounting governance, with its fundamental aim being full compliance with laws and regulations applicable to the Company's operations, and must be observed by all its employees.

Embraer's good reputation and credibility are built by all its people, through their acts and attitudes day after day. We thank everyone for their dedication and commitment to fully appreciating and observing this Code, and to protecting the integrity of the Company.

Approved on Board of Directors meeting as of November 07, 2019



**EMBRAER VALUES**

Our values unite us, influence our behavior, leverage our results and ensure the perpetuity of our company.

**Ethics and integrity are at the core of everything we do**

From the simplest activity to greatest achievements. We follow rules and question them when necessary, always seeking for what is right and best for society, for the company and for all.

**Our people are what make us fly**

Our people are happy, competent, valued, fulfilled, and committed to what they do. Their teamwork demonstrates integrity, coherence, respect, and mutual trust.

**We are here to serve our customers**

Customer loyalty is earned by ensuring total satisfaction and by building strong and enduring relationships. Partnerships are based on real commitment and flexibility.

**We strive for company excellence**

Company actions are oriented towards simplicity, agility, flexibility, and safety, with ongoing pursuit of continuous improvement and excellence. An entrepreneurial outlook based on integrated planning, responsible delegation and disciplined execution.

**Boldness and innovation are our hallmarks**

State-of-the-art technology, an innovative and learning organization capable of transforming from within and being influential in our markets. Strategic vision and ability to overcome challenges creatively and courageously.

**Global presence is our frontier**

Global presence and mindset, acting locally to leverage competitiveness, using the best of each location. A vision of a world without borders, one that values diversity.

**We build a sustainable future**

Constantly striving to build the foundation for the company’s longevity, considering stockholders profitability, respect for quality of life, environment and society.

Approved on Board of Directors meeting as of November 07, 2019



#### **EECP - EMBRAER ETHICS COMPLIANCE PROGRAM**

Embraer seeks to guarantee the highest level of ethics and integrity in its activities. To this end, it has established an Ethics and *Compliance* Program in order to promote and support all actions aimed at adhering to laws and regulations applicable to the business and internal policies of the Company.

Embraer's Ethics and *Compliance* Program is based on fundamental elements, such as the maintenance of a responsible organization and structure through its leadership, constant risk management, the establishment of adequate policies and internal control standards, training and communication with the public, as well as the processes of monitoring, auditing and reporting channels for the evaluation and assessment of potential deviance from established conduct or procedures, promoting a culture of ethics and integrity within the Company.

The Program is coordinated by the Embraer *Compliance* Office, which reports to the Audit and Risk Committee Board.

Approved on Board of Directors meeting as of November 07, 2019



**COMMITMENT TO THE UN GLOBAL COMPACT**

In 2008, Embraer joined the UN Global Compact, systematically integrating its ten principals into the Company’s processes:

**HUMAN RIGHTS**, derived from the Universal Declaration of Human Rights:

- 1. The Company must respect and support the protection of internationally proclaimed human rights;*
- 2. The Company must ensure that it is not complicit in human right abuses;*

**LABOR**, derived from the Declaration of the ILO—International Labor Organization—on Fundamental Principles and Rights at Work:

- 3. The Company must uphold the freedom of association and the effective recognition of the right to collective bargaining;*
- 4. The Company must support the elimination of all forms of forced and compulsory labor;*
- 5. The Company must support the effective abolition of child labor;*
- 6. The Company must support the elimination of discrimination in respect of employment and occupation;*

**ENVIRONMENT**, derived from the Rio Declaration on Environment and Development:

- 7. The Company must support a precautionary approach to environmental challenges;*
- 8. The Company must undertake initiatives to promote greater environmental responsibility;*
- 9. The Company must encourage the development and diffusion of environmentally friendly technologies;*

**ANTI-CORRUPTION**, derived from the UN Convention against Corruption:

- 10. The Company must work against corruption in all its forms, including extortion and bribery.*

Approved on Board of Directors meeting as of November 07, 2019





**RESPONSIBILITIES WITH THE CODE**

**Adhering to the Code**

All officers, leaders and employees of Embraer, of its units and subsidiaries, as well as third parties that represent the Company, must adhere to the principles outlined in this Code. Companies in which Embraer has majority control must adopt the principles of this Code and those in which Embraer has minority control must be encouraged to do so as well.

**Responsibility of Employees**

- To meet and ensure adherence to all principles in this code, as well as to observe the policies and internal procedures of the Company;
- To understand and be conscious of all laws and regulations associated with Company activities;
- To seek, whenever necessary, support and guidance from immediate leaders, as well as from the corporate areas of Embraer, such as legal, *compliance* and human resources, to find solutions to queries and to understand the laws that must be adhered to;
- To report any concerns in relation to potential violation of the law, of this Code, or of the internal policies of the Company.

**Responsibility of Leaders**

- To meet and ensure adherence to all principles in this code, as well as to observe the policies and internal procedures of Embraer;
- To promote a working environment that values an ethical attitude and the highest level of integrity in all activities;
- To have an in-depth knowledge of this Code, of internal policies and of the regulatory environment under their authority;
- To understand and introduce, when applicable, the requirements of laws and regulations, via the policies and internal procedures of Embraer, in all daily activities;
- To supervise internal processes under their responsibility, including support with internal auditing, when necessary, in order to ensure compliance with the policies and requirements of the law;
- To act immediately when violations of this Code are identified, and to adopt preventive measures for the detection and solution of any failure or deviance in conduct;
- To seek, whenever necessary, corporate support and guidance from Embraer, such as the legal, *compliance* and human resources departments, to find solutions to queries and to understand the laws that must be adhered to;
- To report any concerns in relation to potential violations of the law, of this Code, or of the internal policies of Embraer.

**WORKING ENVIRONMENT**

All laws and regulations that guarantee freedom of association, privacy, collective agreements, immigration rights, working hours and remuneration are respected. Embraer does not tolerate any form of forced, compulsory or child labor, nor discrimination, harassment, protectionism, conflict of interests or a hostile working environment.

All are treated with respect, dignity and opportunities for professional growth. Learning and satisfaction are promoted. Embraer promotes a safe and healthy working environment and adopts systems and measures, via its policies and procedures, to prevent its employees from risks at work. At Embraer, it is expected that all employees report any concern in relation to safety rules and report violations of such rules or incidents.

Approved on Board of Directors meeting as of November 07, 2019



**COMPANY ASSETS, RESOURCES AND INFORMATION**

Embraer’s assets, resources and information must be protected and used for the negotiations and benefit of the Company, and never for personal interests or gains. It is forbidden to disclose information of any kind openly within the Company and to third parties, including customers and suppliers, which is not classified as public.

**Intellectual Property**

Intellectual property consists of patents, trademarks, copyrights, trade secrets, domain names, industrial designs, logos, market data and customer lists, and all information classified as confidential. Embraer’s intellectual property must be protected from misuse, deviance or use for personal gain. The same care and respect must be practiced in relation to the intellectual property of third parties.

**Internet, E-mail and Social Media**

Internet and email are provided by Embraer for working communications. It is not permitted to use electronic systems, Internet, email or social media to transmit, receive or download content that may impair the performance of Embraer’s work activities or interests. Social media, at work or in any other place, must not be used to expose the Company’s private or confidential information. It is also forbidden to upload content that exposes the image of the Company, its products or its employees. Computers and servers, including emails sent or received, are the property of Embraer and shall not be considered private content, except when required by specific legislation. The Company may hold internal events in which social media is used as an official communication tool, although its use is subject to express and official authorization, duly announced to all employees.

**Accounting Ledgers and Records**

Embraer seeks to adhere to all laws and accounting standards applicable to its ledgers, accounting records and financial statements, undertaking to record all financial transactions with accuracy and reliability.

**Disclosure of Information to the Public**

Embraer, its officers and employees shall comply with the principles of transparency and truthfulness in order to ensure that shareholders, investors, governmental agencies and the general public have access to, in a timely, efficient and reasonable manner, the information necessary for their investment decisions, as determined by applicable legislation. All disclosure of information to the public must be made by the directors or employees specifically authorized for this purpose, and must be made in accordance with the laws, regulations and internal policies of the Company.

For further information, please consult Embraer’s Policy on Relevant Information Disclosure and Confidentiality Preservation.

**Securities Trading and Insider Information**

Embraer’s officers, employees and service providers should observe the rules and procedures for the trading of securities issued by the Company, refraining from trading such securities in the periods of restriction or from the possession of material information undisclosed to the market under the regulations.

For further information, please consult Embraer’s Policy on Securities Trading.

Approved on Board of Directors meeting as of November 07, 2019



**RELATIONSHIP WITH BUSINESS PARTNERS AND THIRD PARTIES**

**Customers - Suppliers - Government - Competitors - Shareholders and Investors**

**Conflict of Interests**

A conflict of interest occurs when an individual’s interest in personal gain or advantage interferes in Embraer’s business decisions. Situations that may create, or appear to create, a conflict between personal interests and those of the Company shall be avoided. Examples of potential conflicts of interest are, among others:

- Deciding upon deals with suppliers, customers, competitors, business partners or third parties in general, when these deals involve companies or any other entity owned or managed or which belong to or are operated by relatives or close friends;
- Requesting presents, gifts, favors or any other benefit, whether professional or personal, for oneself, ones relatives, close friends or any third parties;
- Performing services or works other than those set out by the Company, whether internal or external, paid or unpaid, that may result in competition or conflict with the activities and negotiations of Embraer;
- Using Embraer’s resources, working hours, equipment or materials to perform services that impair the performance of Embraer’s work activities or interests;
- Using one’s position or influence at Embraer to provide unfair advantage in hiring people, supervising or unduly benefiting family members, relatives or acquaintances, or even using one’s position to improperly benefit external activities not related to the Company.

When faced with a situation that poses or may pose a potential conflict of interest, you must inform your immediate leader or the Company’s *compliance* department, as necessary.

**Gifts and Hospitality (Entertainment, Travel Expenses, Accommodation and Other Benefits)**

The offering and receiving of gifts, presents and hospitality such as entertainment, travel expenses, accommodations or other advantages or benefits that create the impression of impropriety, or which allow you or anyone else to act to obtain an undue advantage, must be avoided. Any negotiation, relationship, offer or promise to public or private authorities must be in strict compliance with the laws and internal policies of Embraer.

Gifts and hospitality must be modest and reasonable in value, not extravagant. Gifts should only be offered or accepted in connection with the promotion, demonstration or explanation of Embraer products and services. Gifts and entertainment must never be offered or accepted (a) in money, (b) if there is any intention to obtain an undue advantage or (c) when prohibited by law or regulations applicable to the parties involved.

In case of doubt, consult the internal policies and procedures, such as Embraer’s Policy on Anti-Corruption, or contact the *compliance* department for clarification.

Approved on Board of Directors meeting as of November 07, 2019



#### Donations and Sponsorship

As part of its corporate responsibility, Embraer may donate goods or funds in order to support scientific research activities, arts and culture, social and educational projects. As a principle, all donations must meet the requirements of transparency, with clear aims and objectives, without expectation of return or exchange, and must be substantiated by appropriate documentation, with appropriate accounting records and in accordance with relevant laws and regulations.

Sponsorships are allowed and used in brand promotion, advertising, or opportunities for Embraer to demonstrate or promote its products and services, or in the exercise of its corporate responsibility. Sponsorships must never be used to gain undue advantages, directly or indirectly, whether for the Company or for individuals.

#### Political Contributions

Embraer does not participate in political campaigns, nor does it make contributions to political parties or candidates for political office. For this reason, the Company prohibits this nature of donations or contributions made by members of the Board of Directors or the Executive.

#### Illegal or Improper Payments

Embraer prohibits its advisers, directors, employees, suppliers, business partners or other third parties that represent the Company from authorizing or effecting, directly or indirectly, any improper or illegal payments to obtain business advantages. Improper payments such as money, assets, resources, private benefits, favors, gifts, entertainment and hospitality, among others, may be characterized as anything of value to obtain business or improper advantage.

When it is necessary to hire third parties or other providers to act on behalf of Embraer, such as consultants or suppliers, it is compulsory to observe the internal policies and procedures of the Company in the selection, choice and monitoring of the activities thereof, including risk analysis, due diligence and internal approvals.

#### Anti-Corruption

Embraer has a firm commitment to fight corruption in all its forms, including extortion and bribery. To this end, the Company complies with the anti-corruption laws and regulations in all places where it operates.

Embraer shall not tolerate any form of active or passive corruption, such as extortion or bribery, in the attempt to influence negotiations, or to obtain any undue advantage.

For further information, please consult the Anti-Corruption Policy and its associated procedures.

#### Prevention of Money Laundering and Financing of Terrorism

Embraer complies with all requirements of laws preventing money laundering and financing of terrorism and provides procedures to this end. The Company aims to conduct business exclusively with clients and partners involved in legitimate and lawful business.

Any suspicious activities must be reported in a timely fashion to the *compliance* or legal department.

For further information, please consult Embraer's Procedure for Prevention of Money Laundering and Financing of Terrorism.

Approved on Board of Directors meeting as of November 07, 2019



## International Trade - Complying with Import and Export Control Laws

Embraer is subject to the laws of trade and meets all regulations relating to the import and export of products, services, technology, information and financial operations.

Consistent with applicable laws, Embraer observes all import and export restrictions when dealing with countries, organizations and individuals, such as economic sanctions and trade embargoes imposed by countries and nations where the Company operates. Accordingly, the Company considers the requirements for import and export control when obtaining licenses, permits, product classification, or when obtaining special permits, and implements the necessary controls for this purpose.

In case of doubt in relation to import and export controls, the *compliance* or legal departments of the Company must be consulted. For further information, please consult the Embraer Policy on Export Control and its associated procedures.

## Privacy

When dealing with employees, suppliers, customers and other business partners, the Company may receive, send and manage private information. In this context, the Company observes its contractual obligations and the laws and regulations in the countries where it operates in relation to the protection and confidentiality of such information, which it uses, collects, stores and manages solely for legitimate purposes in the conduct of its business. Only authorized employees may maintain and control such data and information, applying appropriate mechanisms for the safety and protection of access from non-authorized persons.

## Antitrust and Competition Laws

Embraer complies with competition laws and regulations in all countries where it trades, respecting competitors and customers, always competing based on the quality and differentiation of its products and services, and for the purpose of providing the best and most attractive options for the market.

Embraer does not practice or condone negotiations or agreements, formal or informal, with competitors in the discussion of pricing, territories, bids, costs, profit margins, splitting or slicing of markets ("market share"), allocation of customers, presentation of proposals in bids, or any other matter related to the conditions of sale.

All information on competitors must be obtained by legitimately acceptable sources, also respecting the highest standard of ethical conduct in the pursuit of market intelligence.

## Integrity in Proceedings of Purchase and Sale

At Embraer, purchase and supply processes are based on integrity and competitive equality to ensure the best quality and cost-benefit ratio in the supply of materials and services. It is expected that suppliers are committed to the policies and procedures of the Company in competitive processes, and that they respect this Code of Ethics and Conduct, acting in accordance with legal requirements for health, safety and working environment, respect for privacy, the treatment of confidential information, competition law, anti-corruption, import and export control and the prevention of money laundering.

Similarly, in sales processes, Embraer must comply with all laws, rules and procedures, operating with the highest level of integrity, ethics and transparency. In the case of sales to governmental agencies, employees of Embraer must know and observe the laws and the specific, applicable procedures, with guidance from the legal and *compliance* departments, as appropriate.

The Company is intolerant to any form of corruption in the buying and selling process. For further information, please consult the Anti-Corruption Policy and its associated procedures.

Approved on Board of Directors meeting as of November 07, 2019



#### Relationship with the Community and the Environment

As part of the sustainability process, Embraer seeks to have positive impact on the communities where it operates, through educational, social, cultural and environmental projects.

Embraer is conscious of the environmental challenges in its industry and is committed to adopting continuous improvement processes and investing in new technologies that reduce potential impacts on the environment, while requiring the same commitment from its suppliers, providers and business partners.

Approved on Board of Directors meeting as of November 07, 2019



## SUPERVISION OF THE CODE

The Board of Directors, through its Audit and Risk Committee, oversees the Executive Board in implementing the Code, the responsibility for dissemination and execution of which lies with Embraer's *Compliance* Office.

### Reporting Violations

All Embraer stakeholders, including but not limited to employees, suppliers, customers, shareholders and business partners, among others, must report any concern in relation to the potential violation of the principles and values of this Code.

Embraer provides various channels for reporting concerns or violations of this Code. Any person may report a concern or violation through the following channels:

- The Board of Directors and its Audit and Risk Committee;
- The leader or manager, in the case of employees;
- The *compliance* department or designated *compliance* representative in the various departments of the Company;
- Internal auditing;
- The Human Resource
- The legal department; or
- The *Helpline*

The *Helpline* is a confidential channel for employees and stakeholders to report or seek support for ethical conduct concerns related to the potential violations of Embraer policies, of this Code, or of any law or regulation.

Embraer does not tolerate any retaliation, veiled or otherwise, against any person who reports a concern in good faith through the channels made available by the Company. Additionally, all reported issues, concerns, complaints or violations directed to the *Helpline* will be treated with confidentiality and respect for anonymity.

N.B.: The laws of some countries do not allow anonymous reporting, in which case the Company will inform the complainant of this condition.

How do I submit a complaint or concern?

By telephone: 800-721-5968

Via the website: [www.embraerhelpline.com](http://www.embraerhelpline.com)

This channel must be used exclusively for reporting concerns in relation to ethical conduct and compliance with laws, regulations and the internal procedures of the Company.

Should you require further information, please contact Embraer's *compliance* department at: [compliance@embraer.com.br](mailto:compliance@embraer.com.br).

### Penalties for Violations

Officers, leaders, employees and all individuals or legal entities that carry out activities for or on behalf of Embraer are subject to administrative or legal disciplinary measures in the event of violation of the principles and values established by this Code, including termination of employment or the contractual business relationship, as appropriate.

Approved on Board of Directors meeting as of November 07, 2019

**CERTIFICATION**

I, Francisco Gomes Neto, certify that:

1. I have reviewed this annual report on Form 20-F of Embraer S.A.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and to the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: March 30, 2023

By: /s/ Francisco Gomes Neto  
Name: Francisco Gomes Neto  
Title: President and Chief Executive Officer



**CERTIFICATION**

I, Antonio Carlos Garcia, certify that:

1. I have reviewed this annual report on Form 20-F of Embraer S.A.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and to the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: March 30, 2023

**By:** /s/ Antonio Carlos Garcia  
**Name:** Antonio Carlos Garcia  
**Title:** Executive Vice President and Chief Financial and  
Investor Relations Officer

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE U.S. SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Embraer S.A. (the “Company”) on Form 20-F for the fiscal year ended December 31, 2022, as filed with the U.S. Securities and Exchange Commission on the date hereof (the “Report”), I, Francisco Gomes Neto, President and Chief Executive Officer, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the U.S. Sarbanes Oxley Act of 2002, that to the best of my knowledge:

- (i) the Report fully complies with the requirements of section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2023

**By:**     /s/ Francisco Gomes Neto \_\_\_\_\_  
**Name:** Francisco Gomes Neto  
**Title:**   President and Chief Executive Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the company and will be retained by the company and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE U.S. SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Embraer S.A. (the “Company”) on Form 20-F for the fiscal year ended December 31, 2022, as filed with the U.S. Securities and Exchange Commission on the date hereof (the “Report”), I, Antonio Carlos Garcia, Executive Vice-President and Chief Financial and Investor Relations Officer, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the U.S. Sarbanes Oxley Act of 2002, that to the best of my knowledge:

- (i) the Report fully complies with the requirements of section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2023

By: /s/ Antonio Carlos Garcia  
Name: Antonio Carlos Garcia  
Title: Executive Vice President and Chief Financial and  
Investor Relations Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the company and will be retained by the company and furnished to the Securities and Exchange Commission or its staff upon request.