



Avio S.p.A.

Registered office in Rome, via Leonida Bissolati No. 76
Administrative offices in Colferro (Rome), via Ariana Km 5.2
Share Capital Euro 90,964,212 fully paid-in
Rome (RM) Companies Registration Office No.: 09105940960

2023 HALF-YEAR FINANCIAL REPORT

CONTENTS

HIGHLIGHTS	4
LETTER TO THE SHAREHOLDERS	5
DIRECTORS' REPORT	7
<i>The Avio Group</i>	8
<i>Profile</i>	9
<i>Corporate Boards and Committees</i>	11
<i>Recent History</i>	12
<i>Business areas</i>	14
<i>Group structure and international presence</i>	14
<i>Strategy</i>	15
<i>Shareholders</i>	17
2023 HALF-YEAR	18
<i>Significant events</i>	19
<i>Market performance and operations</i>	21
<i>Group operating performance and financial and equity position</i>	23
<i>Research and Development Activities</i>	33
<i>Human Resources</i>	36
<i>Communication and social responsibility</i>	40
<i>Group principal risks and uncertainties</i>	42
<i>Subsequent events to the period-end</i>	46
<i>Outlook</i>	46
<i>Transactions with holding companies, subsidiaries, associates, joint ventures and investees</i>	47
<i>Other information</i>	47
<i>Corporate Governance</i>	47
CONDENSED CONSOLIDATED HALF-YEAR FINANCIAL STATEMENTS AT JUNE 30, 2023	50
<i>Consolidated Balance Sheet</i>	51
<i>Consolidated Income Statement</i>	53
<i>Consolidated Comprehensive Income Statement</i>	54
<i>Statement of changes in Consolidated Shareholders' Equity</i>	55
<i>Consolidated Cash Flow Statement</i>	56
<i>Notes to the Half-Year Condensed Consolidated Financial Statements at June 30, 2023</i>	57
▪ <i>General information</i>	57

▪ <i>Significant accounting policies</i>	57
▪ <i>Composition, comment and changes in the main accounts and other disclosures</i>	62
▪ <i>Disclosure by operating and regional segment</i>	104
▪ <i>Commitments and risks</i>	104
▪ <i>Financial instruments and risk management policies</i>	111
▪ <i>Related party transactions</i>	114
▪ <i>List of Group companies at June 30, 2023</i>	117
▪ <i>Information on public grants as per Article 1, paragraphs 125-129, of Law No. 124/2017</i>	118
▪ <i>Subsequent events to the period-end</i>	119
<i>Auditors' Report on the Consolidated Financial Statements</i>	
<i>Half-Year Report at June 30, 2023</i>	120
<i>Declaration of the Executive Officer for Financial Reporting and the Corporate Boards</i>	121

HIGHLIGHTS

Net revenues

Euro 157.7 million (+17.7% on H1 2022)

EBITDA

Reported: Euro 5.2 million (+63.3% on H1 2022)

Adjusted: Euro 10.5 million (+85.6% on H1 2022)

EBIT

Reported: loss of Euro 3.9 million (loss of Euro 6.2 million in H1 2022)

Adjusted: profit of Euro 1.4 million (loss of Euro 3.7 million in H1 2022)

Profit before taxes

loss of Euro 3.7 million (loss of Euro 6.5 million in H1 2022)

Net Profit

loss of Euro 3.9 million (loss of Euro 7.6 million in H1 2022)

Net cash position

Euro +102.2 million (cash of Euro +74.5 million at December 31, 2022)

Investments

Euro 12.3 million (10.4 in H1 2022)

Backlog

Euro 1,372.6 million at June 30, 2023 (Euro 1,014.0 million at December 31, 2022)

Research and development

net costs of Euro 59.6 million incurred in H1 2023, equal to 37.8% of net revenues for H1 2023 (net costs of Euro 51.8 million incurred in H1 2022, equal to 38.7% of net revenues for H1 2022)

Employees at period end

1,216 at June 30, 2023 (1,147 at December 31, 2022)

LETTER TO THE SHAREHOLDERS

Dear Shareholders

we are pleased to present the Financial Report for the first half of 2023 of the Avio Group. Company operations in the first six months featured the Vega C return-to-flight activities following the unexpected failure of the second Vega C flight in December 2022.

The Independent Inquiry Commission led by ESA and Arianespace at the beginning of March 2023 in fact presented its conclusions, identifying an unexpected erosion of the Zefiro 40 nozzle throat as the cause of the anomaly, due to a lack of raw material uniformity and making a number of recommendations to enable a prompt and safe return-to-flight of Vega and Vega C, also ensuring the long-term reliability of the launcher and announcing a dedicated support programme to cover the costs required for return-to-flight activities.

On June 28, a static ignition test of the Zefiro 40 engine (second stage of the Vega C launcher) was performed on schedule. This was required for the return to flight of Vega C after the flight anomaly suffered during the last VV22 launch in December 2022. Following the recommendations of the Independent Inquiry Commission on the VV22 mission anomaly, the test was carried out to qualify the performance of the engine with a new carbon-carbon material used for the nozzle throat insert under deliberately extremely severe conditions in terms of maximum engine operating pressure in order to demonstrate a wide performance margin to ensure maximum flight reliability.

Preliminary analysis of the test results - which are still being studied before final conclusions are reached, expected in late September - yielded the following results: The new carbon-carbon material exhibited nominal performance, which was very close to expectations. However, another anomaly was detected 40 seconds after the start of the test. This led to a reduction in the engine's overall pressure performance before the scheduled completion of the test at 97 seconds. This requires further investigation and testing by Avio and the European Space Agency to ensure optimal performance conditions.

However, it remains reasonable to assume that the Zefiro 40 engine will need to be ground-tested again before returning to flight with the Vega C launcher. For H1 2023, the provision for risks for estimated costs to be borne by Avio to carry out an additional Zefiro 40 engine static ignition test was therefore included in non-recurring costs, as was the ESA support attributable to Avio as part of the wider principle of support for the return to flight of the Vega C launcher. This was confirmed by the ESA in March 2023.

The Vega launcher is not affected by the performance of Zefiro 40, which is specific to Vega C. The next Vega launch remains scheduled for early October. Planning for Vega C's return to flight is currently being assessed, pending further analysis and investigation as indicated above.

Following the first developmental ignition test campaign (DM1) successfully completed last year (with 24 ignitions, 1300 seconds of cumulative ignition and 200 seconds as the maximum duration of a single ignition), the second developmental hot combustion test campaign (DM2) for the M10 engine started in August 2023, with 6 DM2 ignition tests already successfully executed exploring high mixing ratio and pressure conditions for the engine.

The market's confidence in the Vega C launcher is in any case reflected in the missions already contracted by Arianespace until 2027, significant institutional missions for the European Commission, the low orbit positioning missions for the Copernicus Earth observation constellation satellites and for the Italian government through the European Space Agency, missions dedicated to the deployment of the Iride constellation for more detailed monitoring of the Italian area and improved prevention of catastrophic environmental events for the environment, in addition to missions for commercial customers. Discussions are underway to enable increased production and launch frequency to promptly respond to current demands. Talks to contract additional missions to cover launch capabilities until the end of 2028 are also at an advanced stage.

On July 6, Ariane 5's last mission took place, which successfully placed the Heinrich-Hertz and Syracuse 4B satellites into orbit. Avio has contributed to the success of the Ariane 5 programme, which has secured Europe's independent access to space and setting several records, with its two P230 solid propellant boosters, which provide 90% of the rocket's thrust at lift-off, and the oxygen turbopumps in the core stage engine. Avio has been part of the Ariane 5 programme since its inception, and the P230 engines have delivered excellent performance on all 117 flights over the past 27 years, proving their consistency and stability. In the future, Avio will continue on this path by providing P120C solid-propellant boosters for the new European Ariane 6 launcher.

On April 28, 2023, the Shareholders' Meeting of Avio S.p.A., with approx. 67% of the share capital participating, appointed the Board of Directors for the three-year period 2023-2025, through the presentation of a slate by the outgoing Board of Directors, which obtained more than 86% of the votes of the share capital attending the meeting.

In order to increase the sense of belonging of its employees, the Shareholders' Meeting also approved two share-based remuneration plans, the first of which called the "Performance Shares 2023-2025" plan for the Chief Executive Officer, Senior Executives and a number of other Executives, and the second called the "Restricted Shares 2023-2025" plan for professionals not among the addressees of the previous plan. Both plans were approved with the favourable vote of more than 99% of the share capital attending the Shareholders' Meeting.

Looking to the financial results, a record order book of Euro 1,373 million is reported at the end of the first half of 2023, up 35% on 2022, thanks to the acquisition of record orders in the period of over Euro 500 million, mainly concerning contracts, the effects of the ESA's Ministerial Conference of November 2022 and the new NextGen EU projects.

Net Revenues totalled Euro 158 million, up 18% on H1 2022, to which Vega C and tactical propulsion production activities contributed, in addition to the development project activities.

EBITDA was up significantly on the first half of 2022: reported EBITDA was Euro 5.2 million (+60%), and adjusted EBITDA was Euro 10.5 million, an increase of 90%. This is due to the contribution of development projects and from the effect of lower energy costs, despite higher overheads to strengthen the organisational structure.

The Net Cash Position also improved substantially to Euro 102.2 million (compared to Euro 74.4 million at December 31, 2022) as a result of the receipts on new orders and despite the utilisation of cash for strategic procurement and industrial investments regarding various programmes.

In the half year, once again we had to face extraordinary and unforeseeable events as the Russian-Ukrainian conflict continued. However, thanks to its passion, high professionalism and the tenacity of its partners, Avio has already demonstrated its strong resilience, which saw Vega return to flight after one failure with three successful missions in approximately six months.

We will continue to work with determination to achieve our main milestones, consisting of the return to flight of Vega C and the inaugural launch of Ariane 6, and to achieve the company's growth objectives in the coming years through the consolidation of record order levels, the prospects for growth in tactical propulsion, and the many development activities that are to come, particularly with the Next Gen EU contracts under the National Recovery and Resilience Plan.

Finally, on September 4, Avio reached an agreement with Technology For Propulsion and Innovation S.p.A. ("T4i"), a spin-off company of the University of Padua, which specialises in innovative propulsion systems for aerospace applications. This led to a strategic investment equal to 17% in T4i's capital. The T4i transaction is an important step in the growth of the Avio Group's space propulsion competencies, particularly in terms of green "storable" chemical propulsion systems, electric propulsion systems, and attitude control thrusters. The agreement will help improve efficacy and time-to-market when introducing new propulsion systems as part of the strategic plan, thanks to T4i's agility and expertise and synergies with Avio's infrastructure and system vision.

Giulio Ranzo
Chief Executive Officer and General Manager
Avio S.p.A.

DIRECTORS' REPORT

THE AVIO GROUP

PROFILE

The Avio Group (hereafter in this Directors' Report also "Avio" or the "Group") is an aerospace sector global leader. The experience and know-how built up over more than 50 years lies behind Avio's embodiment of excellence in terms of launch systems, solid, liquid and cryogenic propulsion and military systems propulsion.

The Group directly employs in Italy and overseas over one thousand highly-qualified personnel at the main Colleferro facilities on the outskirts of Rome and at other locations in Campania, Piedmont and Sardinia. Additional operating sites are located overseas (in France and French Guiana).

The Group is currently involved in the Launch Systems and space propulsion sector, particularly with regards to the design, development, production and integration of:

- space transport systems (Vega Launcher and future developments);
- solid and liquid propulsion systems for launchers (Ariane 5 Launcher and Ariane 6 Launcher, Vega family of launchers);
- solid propulsion systems for tactical missiles (Aspide, Aster, CAMM-ER, MARTE, TESEO);
- liquid propulsion systems for satellites;
- new environmentally-friendly liquid propulsion systems for future launchers and orbital modules;
- ground infrastructure for launcher preparation and launch.

The current **Launch Systems** with Avio components are:

- Ariane 5 for the launch of up to 10-ton satellites into Geostationary Earth Orbit (36,000 km). Since the end of the 1980's, Avio has supplied the liquid oxygen turbo-pump boosters (solid propulsion motors) for the Vulcain 2 engine;
- Ariane 6 currently under development. The launcher has two distinct configurations for feasible missions, guaranteeing greater payload flexibility. In particular, the A62, with two P120C solid propulsion boosters, and the A64, with four P120C solid propulsion boosters, will be used for both GEO (geostationary) satellite positioning, at an altitude of 36,000 km, and other kinds of mission, such as launches to LEO orbits, SSO (sun-synchronous) polar orbits, MEO (medium earth) orbits, 4.5 tonne satellites to GEO orbits, and 20 tonne satellites to LEO orbits. In this context, Avio supplies solid boosters for both Ariane 6 configurations, as well as two oxygen turbopumps for the liquid stages of the Vulcain 2 and Vinci engines;
- Vega, for the launch of up to 2-ton satellites into Low Earth Orbit (between 300 and 2,000 km above sea level). Since 2000, Avio has been developing and implementing the Vega programme for the European 2,000kg payload satellite launcher, which successfully completed its first test launch in February 2012, 5 flights in December 2015 under the VERTA contract for completion of the qualification process, and its first commercial flight in 2016. The success of this product has allowed Italy to enter the extremely exclusive group of countries capable of developing and producing its own space launcher;
- Vega C, which develops on the current Vega model, is an evolution of the Vega launcher which made its first flight on July 13, 2022, and is currently in the production start-up phase for commercial use. Vega C is designed for a greater payload than the Vega and at the same time optimises production costs thanks to the sharing of the new first stage (P120C) with Ariane 6.

Regarding **tactical missiles**, Avio participates in the major national and international programmes. These include:

- ASTER, ground-to-air weapon system;
- CAMM-ER, ground-air weapon system currently under development;
- MARTE, helicopter and ship launched anti-ship weapon.

In the field of **satellite propulsion**, Avio has developed and supplied the European Space Agency (ESA) and the Italian Space Agency (ASI) with propulsion subsystems for the launching and control of several satellites, including the latest SICRAL, Small GEO and EDRS-C satellites. Avio is currently participating in the development and qualification of the propulsion systems of the Hera satellite and of the Mars Sample Return mission, for the Orbit Insertion Module and for the Return Module.

The Group operates in the following business lines:

- **Ariane**

Ariane is a space programme for ESA-sponsored GEO missions, in which ArianeGroup ("AG") is the prime contractor and Avio operates as a subcontractor for the production of the P230 solid propulsion boosters and the liquid oxygen turbo pump (LOX) for the Vulcain 2 engine. Avio is also the subcontractor for the next-generation Ariane 6 launcher scheduled for 2023, for which Avio, through its subsidiary Europropulsion, is producing (i) the solid propellant P120C engine, (ii) the liquid oxygen turbopump for the Vulcain 2 engine and (iii) the liquid oxygen turbopump for the Vinci engine.

- **Vega**

Vega is a space programme for LEO missions, whose development has been funded by the ESA, with mainly Italian funding, and for which the Group is the prime contractor for the production and integration of components for the entire launcher and for the production of the solid propulsion engines P80, Zefiro 23 and Zefiro 9 and of the AVUM liquid propulsion module. The Group also plays the role of the ESA's prime contractor for the development of the new generation of Vega Consolidated (Vega-C) launcher, whose test launch was carried out on July 13, 2022, and the Vega Evolution (Vega-E) launcher, whose maiden flight is scheduled for late 2026. The Group is responsible for the development and production of these entire launchers, in addition to (i) the development of the solid propulsion engine P120C (first stage to replace the current P80), which is constructed in synergy with the Ariane programme 6), (ii) the Z40 solid propellant engine (second stage to replace the current Z23) and (iii) an engine that uses oxygen-methane liquid known as M10 for the upper Vega-E stage.

- **Tactical propulsion**

Avio is responsible for the design and production of the following products:

- Aster 30 - in particular, the booster engines, the Thrust Vector Control (TVC) actuation system and the aerodynamic control surfaces (fins);
- Aster 15 - in particular, the aerodynamic control surfaces (fins);
- Aspide propulsion units;
- Marte sustainer.

Regarding development programmes:

- CAMM-ER - development of the booster and single stage sustainer engine, wiring and aerodynamic control surfaces (fins);
- Aster 30 MLU - development of the new Aster 30 booster to replace the current one in production, from 2022, solving REACH and obsolescence issues.

With net revenues in the first half of 2023 of Euro 157.7 million and Reported EBITDA of Euro 5.5 million, the Group currently occupies a leading position in the Italian and European space industry, substantially supported by its high degree of competitiveness - drawing over 98% of its revenues from overseas.

The highly technological content of Avio's operations has required research and development spend - for the portion principally commissioned by the ESA, ASI and Member State ministries - accounting for 37.8% of net revenues in H1 2023. These activities were carried out both in-house and through sub-contractors and a network of laboratories and partnerships with some of the leading domestic and international universities and research centres.

CORPORATE BOARDS & COMMITTEES

Board of Directors

On April 28, 2023, the Shareholder's Meeting appointed the new Board of Directors of the parent company Avio S.p.A., which in turn, on April 28, 2023, decided upon the internal appointments and the granting of the powers required to complete company operations. On the same date, the role of Vice-Chairperson was established for the first time.

The Shareholders' Meeting confirmed the number of members at 11 and the term of office of the Board of Directors at three years, concluding with approval of the 2025 Annual Accounts.

Roberto Italia	Chairperson (c)
Giovanni Gorno Tempini	Independent Director, Vice-Chairperson
Giulio Ranzo	Chief Executive Officer
Letizia Colucci	Director (b)
Luigi Pasquali	Director
Elena Pisonero	Independent Director (c)
Donatella Sciuto	Independent Director (b)
Giovanni Soccodato	Director (a)
Raffaele Cappiello	Independent Director (b) (a)
Donatella Isaia	Independent Director (a)
Marcella Logli	Independent Director (c)

- a. Member of the Appointments and Remuneration Committee
- b. Member of the Control and Risks Committee
- c. Member of the Sustainability Committee

Board of Statutory Auditors

On April 28, 2023, the Shareholders' Meeting of the parent company Avio S.p.A. appointed its new Board of Statutory Auditors, whose term of office is three years, concluding with the approval of the 2025 Annual Accounts.

Vito Di Battista	Chairperson
Mario Matteo Busso	Statutory Auditor
Michela Zeme	Statutory Auditor
Roberto Cassader	Alternate Auditor
Sara Fornasiero	Alternate Auditor

Supervisory Board

On May 9, 2023, the Board of Directors of the parent company Avio S.p.A. appointed its new Supervisory Board, confirming its composition and term of office, which is three years, concluding with the approval of the 2025 Annual Accounts.

Alessandro De Nicola	Chairperson
Giorgio Martellino	Member
Raoul Vitulo	Member

Independent Audit Firm

Deloitte & Touche S.p.A. (2017-2025)

RECENT HISTORY

1994

The FIAT Group, operating since the early 1900's in the aviation sector, acquired in 1994 BPD Difesa e Spazio, a company founded in 1912 and growing to over 4,000 staff, focused on munitions development and production for Italian and foreign militaries.

2000

In 2000, adding to its traditional aeronautical and aerospace activities, the Group, in collaboration with the Italian Space Agency (ASI), established ELV S.p.A. (held 70%) for the complete development and design of a new launcher. In this role, under the auspices of the European Space Agency (ESA), the Group assumed the role of lead contractor for the European launcher VEGA.

2006

The Avio Group was acquired by BCV Investments, owned by the private equity fund Cinven (81%), Finmeccanica Group (14%, now Leonardo Group) and other investors (5%).

2012

In February, the European space launch system named VEGA, designed and engineered by Avio, was approved. In December, Avio announced the signing of an agreement for the sale of its aeronautical division to General Electric.

2013

In May, Avio's new VEGA launcher successfully completed its first commercial flight. On August 1, 2013, Avio sold GE Avio S.r.l., which operated its aeronautic division, to General Electric.

2014

In December, the European Space Agency Ministerial Conference of Member States decided to finance the VEGA launcher development programme until its completion, including a first rocket stage (the P120C) to be shared with the forthcoming Ariane 6 launcher, also fully financed.

2015

The outcome of the Ministerial Conference of ESA countries, held the previous December 2014, led in August 2015 to the signing of major development contracts for the Vega-C and Ariane 6 launchers. Avio's key role was recognised thanks to its participation in the development programme for Vega-C and Ariane 6's shared rocket stage, the P120C, and its lead systems engineering role in the VECEP programme for the development of the Vega-C launcher.

For the first time in the history of the Kourou Space Centre as many as 12 launches were made in one year, including 6 involving Ariane and 3 for Vega.

2016 - 2017

In the fourth quarter of 2016, the operation for the acquisition and listing of the Avio Group by Space2 S.p.A., an Italian SPAC listed on the MIV market/SIV segment of Borsa Italiana S.p.A., was initiated.

This operation was completed on March 31, 2017 with the acquisition by Space2, Leonardo S.p.A. and In Orbit S.p.A. (a company formed by a number of Avio managers) of an 85.68% holding in Avio. The remaining investment was already held by Leonardo. On the same date, CONSOB authorised publication of the listing prospectus for ordinary Space2 post-merger with Avio shares on the Italian Stock Exchange. The merger by incorporation with Space2 was thereafter effectively executed on April 10, 2017.

Also on April 10, 2017, Space2 post-merger with Avio, maintaining the name "Avio S.p.A.", was listed on the Italian Stock Exchange's STAR segment.

2018

As part of the process initiated by European Space Agency (ESA) member states for new governance of the European launchers sector, in order to transfer to the prime contractors (Ariane Group for Ariane 6 and Avio for Vega-C) the responsibility for commercial exploitation of the new products and the associated risks, and following completion of the accompanying flights for Vega launcher testing, the shareholders of ELV S.p.A. (held 70% by Avio S.p.A. and 30% by ASI) reorganised operations, with development, production and distribution of launchers carried out by the industrial shareholder Avio, while ELV S.p.A. concentrates on the research and development of new technologies and on aviation testing.

Therefore, on March 1, 2018, the subsidiary ELV S.p.A. transferred to Avio S.p.A. the launchers development, production and distribution business unit. Following this reorganisation, the subsidiary ELV S.p.A. took from May 9, 2018 the new name of Spacelab S.p.A., focusing on the research and development of new technologies and space transport product testing.

On February 7, 2018, the company Avio Guyane SAS was incorporated, fully owned by Avio S.p.A. and operating at the Kourou launch site in French Guiana. The company is involved in coordinating the launch campaigns and managing the ground infrastructure for the Vega launches, optimising the industrial processes and boosting productivity ahead of a future increase in the number of Vega launches.

2019-2021

On August 19, 2019 the company Avio France S.A.S., with registered office in Paris and wholly-owned by Avio S.p.A., was incorporated. Its corporate scope is to undertake engineering activities to study and design space transport systems and subsystems.

BUSINESS AREAS

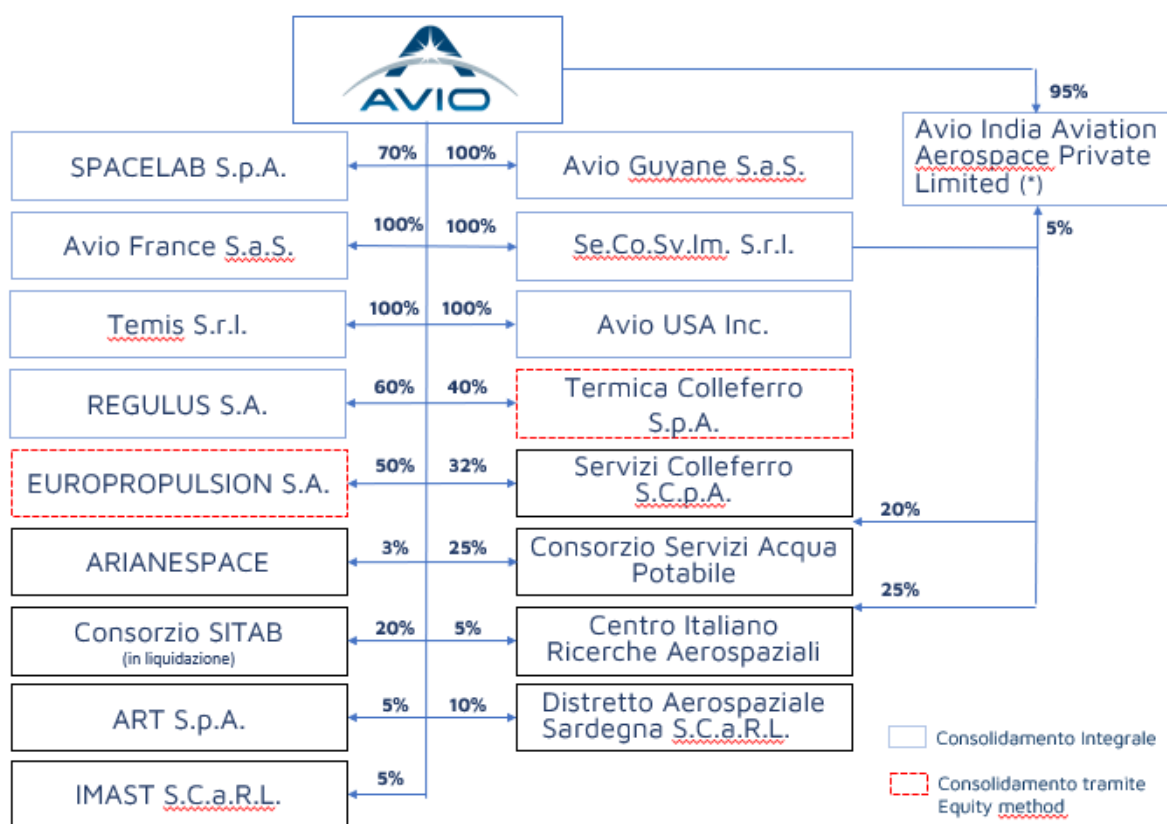
Core operations: design, development and production of solid and liquid propellant propulsion systems for space launchers; design, development and production of solid propellant propulsion systems for tactical missiles; development, integration and supply of complete light space launchers (VEGA); research and development of new low environmental impact propulsion systems and of satellite tracking control engines.

Main programmes: Ariane, VEGA, Aster, CAMM-ER

Main customers: Arianespace, ESA (European Space Agency), ArianeGroup (previously Airbus Safran Launchers), ASI (Italian Space Agency) and MBDA

GROUP STRUCTURE AND INTERNATIONAL PRESENCE

The Avio Group's ownership structure is reported below:



* indicates that the company is in voluntary liquidation. No financial significant commitments are expected for the Avio Group related to the liquidation.

The Group has production facilities in Italy, primarily in Colleferro (Rome) and Villaputzo (Cagliari), and in France, where the joint venture Europropulsion S.A. is based. There is also a research lab in Airola (Benevento), Italy. In Kourou, French Guiana, there is the European spaceport where loading and integration of the Ariane 5 solid-propellant booster segments, as well as integration of the VEGA launcher, take place. Moreover, the Group, through its subsidiary Spacelab S.p.A., has a shareholding with a nominal value of Euro 350 thousand in the E. Amaldi Foundation, whose primary objective is to promote and support scientific research aimed at technology transfer, starting from the space sector, as a fundamental tool for the economic development of the country and as a source of innovation to improve competitiveness, productivity and employment.

STRATEGY

Avio Group's strategy in the current decade is mainly orientated by the agreements:

- at national level with:
 - o the Italian Government, which, through the ASI (Italian Space Agency) and the ESA (European Space Agency) intends to implement the initiatives of the National Recovery and Resilience Plan (NRRP) regarding the Space sector,
 - o the Defence Administration and MBDA for the development, production and sale of military products,
- at European level with:
 - o the ESA for the development of new products and services in line with its activities at a national level, and
 - o Arianespace for the production, integration and batch sale of the Vega and Vega C launchers
 - o ArianeGroup for the production, integration and batch sale of the P120C engines.

These interests mean that Avio is among the very small number of companies worldwide operating in the field of Space Access.

In the area of Development Activities, in accordance with the outcomes of the 2014, 2016, 2019 and 2022 Ministerial Conferences, which confirmed the European strategy for developing its launchers (from Vega to Vega C and Ariane 5 to Ariane 6/64). In accordance with the contracts signed from 2015 onwards, Avio is therefore pursuing:

- exploitation of the **Vega C** launcher to replace the Vega launcher, enabling (i) an increase in performance of approximately 60% due to the new P120C engines (stage one) and Z40 (stage two) and lighter structures, (ii) an increase in the launch system's flexibility due to larger-capacity liquid tanks and (iii) an increase in available market share due its greater performances and larger payload fairing in order to carry satellites with greater mass and volume and lighter structures, and finally (iv) a reduction in the k€/kg launch price, in a scenario where this key parameter in the choice of a launch service is continuously declining (effect of competition). Vega C's qualification flight was carried out on July 13, 2022;
- the increase in the cadence of production of the **P120C** motor and its successor the P160, as a common element of Vega-C (stage one) and Ariane 6 (booster);
- the development of an enhanced version of the P120C engine, the **P160**, which will have a greater quantity of solid fuel, and therefore bring a delta performance to the Vega C+ launcher of approximately 200 kg in the same reference orbit. The use of the same P160 engine for the A6 launcher will enable participation in the Kuiper Constellation deployment (16 launches contracted by Arianespace)
- the development of **enabling technologies** to further increase the performance of future launchers and reduce their cost, and in particular:
 - o Liquid fuel tanks in composite material;
 - o Modular avionics 3.0;
 - o Non-explosive stage separation systems;
 - o Sub-orbital and orbital demonstrators that incorporate the aforementioned technologies and which are considered precursors of the new Micro Launch Vehicle (MLV) class of launchers;
- the LOX/CNG based **M60 motor**, the evolution of the M10 engine that will equip the Vega E, considered the building block of the post-Vega-E Vega Next launcher (time horizon beyond 2032);
- the development of a multi-purpose **motor** called the **MPGE** motor as an alternative to the Ukrainian MEA intended to equip the Vega C as a fourth stage starting from 2025, and its adaptation for **IOS** (In Orbit Servicing) missions, including a enabling technology demonstrator provided for under the National Recovery and Resilience Plan (NRRP);
- the development of an alternative source for the supply of **Carbon-Carbon**, a material used for the manufacture of nozzle throat inserts manufactured by Avio for Vega C;

- developing **Vega E**, and, in particular, its Upper Stage, with the new M10 engine with cryogenic oxygen and methane propellants. Vega-E (a three-stage launcher based on P120C, Z40 and a LOx-Methane Upper Stage), in addition to cutting the launch price in €/kg compared to the Vega C, will further improve: (i) Vega-C's performance and (ii) the range and flexibility of satellite services, enabling, among other benefits, more extensive orbital parameter changes than possible with Vega and Vega-C;
- the development of the **Space Rider**, the European return vehicle, in which Avio is the Prime Contractor of the ESA (together with TASI) for the supply of the Attitude & Vernier Upper Module Orbital Module (AOM) derived from Vega C. Space Rider is a spacecraft taken into orbit by Vega-C, capable of carrying up to 500 kg of payload for different applications, of remaining in that orbit for a period of time in the order of 2 months, in order to carry out a series of experiments or orbital services, and finally return to earth for the recovery of the payloads;
- developing Smart Payload Adapters (**PLA**), which make it possible to adapt launches to the varying needs of commercial and institutional customers who increasingly use greater numbers of satellites with reduced masses and volumes. These PLAs can, therefore, offer different types of missions, from single/double to Piggyback and Rideshare launches via SSMS (already used in Vega flight VV16).

Regarding operations, Avio:

- once the problems preventing the Company from flying Vega C are resolved, intends to stabilise the frequency of flights at 4 per year, then raise it to 5 per year, through investments in French Guiana, including a new launcher stage Storage Building and new Integration Building;
- through the subsidiary Avio Guyane, acquired control of the Zone de Lancement Vega (ZLV) launch area and the management; in particular it ensures main launcher assembly installation maintenance (e.g. Control Centre, Integration and Launch building, Propellant Loading Stations). This consolidates its ground activities role, i.e. mechanical, electrical and hydraulic management activities at the Kourou launch base, which was assumed in 2016 and extended its scope of expertise.

In the military sector, Avio is assessing the opportunity of offering technological solutions to the Italian armed forces, within the scope of national and European initiatives.

SHAREHOLDERS

At June 30, 2023, the share capital of Avio S.p.A. of Euro 90,964,212.90 comprised 26,359,346 ordinary shares, of which:

- 22,533,917 ordinary shares from the merger with Space2, which resulted in the listing of Avio S.p.A. on April 10, 2017 (the "business combination") on the STAR segment of the Italian Stock Exchange (MTA);
- 1,800,000 shares following the conversion of 400,000 special shares into 2 tranches. In particular, the first tranche of 140,000 special shares was converted into 630,000 ordinary shares at the effective merger date of April 10, 2017, while the second tranche of 260,000 special shares was converted into 1,170,000 ordinary shares on May 17, 2017;
- 2,025,429 shares following the exercise of 7,465,267 market warrants in the June 16 - August 16, 2017 period.

In addition, Space Holding S.p.A., the promoter of the business combination, holds 800,000 sponsor warrants, exercisable within 10 years from the effective merger date of April 10, 2017, on the condition that Avio S.p.A. share price reaches Euro 13.00, with a conversion ratio with Avio S.p.A. post-merger shares of 1 against the payment of an exercise price of Euro 13.00.

At the effective merger date (April 10, 2017, the first trading day of the Avio S.p.A. share on the MTA), the condition for the exercise of the Sponsor Warrants was satisfied. At June 30, 2023, no exercise requests have been received from holders.

At June 30, 2023, on the basis of the communications received as per Article 120 of the CFA and the information available to the Company, the Avio S.p.A. shareholder structure was as follows:

Shareholder	% share capital
Leonardo S.p.A.	29.63%
Cobas AM	9.20%
Servizi Cgn S.r.l.	7.37%
Space Holding S.r.l.	4.08%
In Orbit S.p.A.	4.07%
Delfin S.a.r.l.	3.79%
Treasury shares	4.14%
Remaining MTA free float	37.71%
Total	100.00%

2023 HALF-YEAR

HALF-YEAR SIGNIFICANT EVENTS

Business

Preliminary results of the Zefiro 40 engine test

On June 28, a static ignition test of the Zefiro 40 engine (second stage of the Vega C launcher) was performed on schedule. This was required for the return to flight of Vega C after the flight anomaly suffered during the last VV22 launch in December 2022.

Following the recommendations of the Independent Enquiry Commission on the VV22 mission anomaly, the test was carried out to qualify the performance of the engine with a new carbon-carbon material used for the nozzle throat insert. The test conditions were deliberately extremely severe in terms of maximum engine operating pressure, to demonstrate an extensive performance margin and ensure maximum flight reliability.

Preliminary analysis of the test results - which are still being studied before final conclusions are reached, expected in late September - yielded the following results:

The new carbon-carbon material exhibited nominal performance, which was very close to expectations. However, another anomaly was detected 40 seconds after the start of the test. This led to a reduction in the engine's overall pressure performance before the scheduled completion of the test at 97 seconds. This requires further investigation and testing by Avio and the European Space Agency to ensure optimal performance conditions.

However, it remains reasonable to assume that the Zefiro 40 engine will need to be ground-tested again before returning to flight with the Vega C launcher. For H1 2023, the provision for risks for estimated costs to be borne by Avio to carry out an additional Zefiro 40 engine static ignition test was therefore included in non-recurring costs, as was the ESA support attributable to Avio as part of the wider principle of support for the return to flight of the Vega C launcher. This was confirmed by the ESA in March 2023.

The Vega launcher is not affected by the performance of Zefiro 40, which is specific to Vega C. The next Vega launch remains scheduled for early October. Planning for Vega C's return to flight is currently being assessed, pending further analysis and investigation as indicated above.

Main agreements and contractual events in Half-Year 2023

As regards Ariane 6 production activities, specific orders were signed for the manufacture, as part of the Ariane 6 transition phase, of P120C engines and Oxygen Turbopumps (TPOs) for the Vulcain 2 and Vinci cryogenic engines; these orders are integrated in framework agreements for supplies related to the first 14 Ariane 6 launchers.

Specific compensation orders were simultaneously issued by the ESA relating to the extra costs associated with the limited production frequency, which was a consequence of the delay in the qualification of the Ariane 6 Launch System.

Regarding Vega production, a contract was signed to cover MQO (Maintenance of Qualified and Operational Conditions) costs and fixed costs in French Guiana for the initial phase of Vega C production; supplemental orders also were received for specific activities and production of specific structures dedicated to launches within the scope of batch 3.

With reference to Vega development activities, contract variants were acquired to support the initial development activities of the new Vega E launcher.

On March 13, 2023 two contracts were signed - for a total value of over Euro 285 million - as part of space-industry initiatives for implementation of the "NextGenerationEU". and the use of resources invested through the Italian government's National Recovery and Resilience Plan (NRRP). These sought to enhance the technological capabilities of Italian industry to access space.

In execution of these contracts, the Italian government delegated the role of Technical Assistance to the European Space Agency (ESA), which will act as the Contracting Authority. The objective is to leverage the expertise developed in Italy since the early 2000s through the Vega, Vega C and Vega E programmes to develop next-generation propulsion technologies and launch system architectures.

Specifically, the first programme - called STS and funded for Euro 181.6 million until completion - will be dedicated to developing, by 2026, an in-flight demonstrator of new technologies and specific designs for a two-stage liquid propellant-propelled light-load launcher using liquid-oxygen and methane engines with lower environmental impacts. Development is expected to focus mainly on the creation of composite cryogenic tanks, non-pyrotechnic separation systems, and integrated avionics systems based on hardware and software of aeronautical origin.

The second programme - called HTE and funded for Euro 103.7 million upon completion - will be dedicated to developing a new high-performance, low environmental impact liquid-oxygen and methane engine and high thrust technology. Detailed design and construction of demonstrators of increasing complexity up to ground qualification testing is scheduled by 2026.

Also in area of the National Recovery and Resilience Plan area, two additional contracts were signed by Avio with the Italian Space Agency (ASI). The first of these covers the design and development of the Multi-Purpose Green Engine, a "green" liquid propellant engine for future In-Orbit Servicing, Space Logistics and a potential alternative to the engine currently used in the propulsion system of the fourth stage of the Vega and Vega C launchers. The second relates to the design, development and qualification of a vehicle for the dedicated In-Orbit Servicing (IOS) demonstration mission in which Avio is involved, with responsibility for the Propulsion and Orbital Support Module, as part of a Temporary Grouping of Companies (RTI) with the companies Thales Alenia Space, Leonardo, Telespazio and D-ORBIT.

The NRRP projects, which are scheduled to be completed by 2026, will lead to a new generation of space transportation systems, subsequent to Vega E and based on "green" and potentially reusable liquid propulsion.

Finally, a production order worth approx. Euro 90 million for boosters for the Aster-30 defence system was signed with MBDA during H1. The contract adds weight to Avio's already solid backlog in tactical propulsion activities, confirming the strength of the sector, as business prospects more than doubled compared to original estimates in terms of volume and production rates.

Other significant events

Appointment of the Board of Directors and Board of Statutory Auditors for 2023-2025.

On April 28, 2023, the Shareholders' Meeting of Avio S.p.A. resolved, among other matters, to appoint the Board of Directors for the three-year period 2023-2025 based on the slate presented by the outgoing Board of Directors, which obtained more than 86% of the votes of the share capital attending the meeting.

The same Shareholders' Meeting appointed the Board of Statutory Auditors for the 2023-2025 three-year period.

Approval of the 2023-2025 Performance Share Plan

On April 28, the Shareholders' Meeting approved, pursuant to and in accordance with Article 114-*bis* of the CFA, the adoption of a company share-based remuneration plan called the "2023-2025 Performance Share Plan" for the Chief Executive Officer, the Senior Executives and a number of other executives, in accordance with the explanatory report and related Prospectus. The "performance shares" plan was approved with the favourable vote of more than 99% of the share capital attending the Shareholders' Meeting. The allocation of these rights was made by notice to the beneficiaries on May 13.

Approval of the Restricted Share Plan

The Shareholders' Meeting of April 28 approved, pursuant to and in accordance with Article 114-*bis* of the CFA, the adoption of a company share-based remuneration plan called the "2023-2025 Restricted Share Plan" for professional company employees not covered by the "2023-2025 Performance Share Plan", in accordance with the explanatory report and related Prospectus. The "restricted shares" plan was approved with the favourable vote of more than 99% of the share capital attending the Shareholders' Meeting. At today's date, the relevant rights have not yet been allocated.

MARKET PERFORMANCE AND OPERATIONS

General overview: historic and future outlook

In the first six months of 2023 (hereinafter H1 23), 95 orbital launches were carried out (compared with 75 in the same period of 2022), six of which reported a failure (compared a total of seven in 2022). Globally, these 95 launches put into orbit 1673 satellites (1203 in the same period of 2022), for a total transported mass of 547 tonnes (398 tonnes in the same period of 2022). These records set in the first six months of this year are due, as in 2022, to the deployment of Space X's Starlink constellation and OneWeb, both of which are dedicated to providing Internet access by satellite. Even excluding these constellations, the market expanded, with 489 satellites orbited in 2022, totalling 158 tonnes of mass, compared with 375 satellites orbited in 2022, totalling 125 tonnes of mass.

The numbers for 2023, therefore, confirm the trend of expansion in the launch sector (and space in general), due largely, as evident from 2019 onwards, to the deployment of Mega-Constellations, i.e. low orbit satellite constellations, (as noted above, Space X's Starlink in particular, but also OneWeb, O3B, and other minor constellations).

From the perspective of orbits, low Earth orbit (LEO) missions (Vega's target segment) continue to consistently increased, alongside a parallel decline in geostationary transfer orbit (GTO) and geostationary orbit (GEO) missions (Ariane's target segment). In H1 23 globally, there were 69 LEO launches (with a transported mass of 387 tonnes, excluding launches to the ISS and the CSS), against 16 GTO/GEO launches (with a transported mass of 66 tonnes). The trend set for the first time in 2020 of LEO transported mass exceeding that of GTO/GEO is therefore confirmed, with the phenomenon largely attributable to the launch of mega-constellations.

In terms of the types of satellites, it is also useful to underline that, of the 1,673 satellites put into orbit in H1 2023, 1,533 were SmallSats (i.e. with a mass <500 kg), testifying to the fact that this technology, in growth since 2013, has established itself on the applications market, in particular for Mega-Constellations broadband internet, but also for Earth observation, IoT and technology demonstrations.

Apart from the Starlink constellation (satellites manufactured, launched and operated by Space X, without the possibility of open competition), and launches of unknown origin, missions continued to be mainly institutional (27 civil government launches, 17 military launches, 21 commercial launches), proving, once again, that, for this sector, public funds continue to be of vital importance.

As for applications, these are mainly in the perimeter of telecommunications services, such as broadband internet, mobile telephony and the Internet of Things, but also in the field of earth observation and navigation.

Finally, analysis for H1 2023 of the leading countries in the sector reports 51 launches for the USA (453 tonnes), 25 for China (only 40 tonnes, indicating a very low load factor of the launchers due to the fact that the launches are exclusively governmental), 9 for Russia, and 1 for Europe. The latter figure reflects a difficult period for the European launcher sector, with Ariane 5 having ended its operational life, Soyuz no longer operated by Arianespace as a result of the Russia/Ukraine war, and Vega C 'grounded' following the failure in December 2022.

Forecasts for this decade and the next (produced by sector consulting firms such as BCG) indicate a strong growth in transported mass, with a CAGR of 10% from 2022 to 2030, and 7% from 2030 to 2040. This growth is expected to occur above all in LEO orbits (deployment and replenishment of constellations, infrastructures and space logistics), but also in escape orbits (the Moon, Mars, exploration and colonization operations), not only at institutional but also at commercial level.

Globally, it is also estimated that revenues generated by the launch segment, equal to approximately USD 12 billion in 2022, will rise to USD 19 billion in 2030 (CAGR of 5%) and USD 27 billion in 2040 (CAGR of 4%), confirming - in the face of far greater growth in mass transported to orbit - the strong pricing pressure in the launch segment.

Launchers market

H1 2023 confirmed the global trend of recent years in which few nations had a launch service offer capable of responding not only to the steadfast institutional market, but also to the growing commercial market. As already mentioned in the previous paragraph, these countries were the USA and China (together covering 75% of launches, and 90% of the mass launched), and, to a lesser extent, Russia, Europe, India, and Japan.

New launcher missions were reported in the first half of the year, all of which involved a launcher failure, confirming how almost all first spacecraft flights are failures. These launches were of:

- RS1, a US Mini Launcher by ABL Space (supported by LM)
- Terran 1, another US Mini Launcher built by Relativity
- Starship, Space X's futuristic Very Large class launcher for space exploration
- H-3, a Japanese medium-class launcher that will generally replace H-2, designed and manufactured by JAXA and MHI
- Chollima 1, North Korea for which no data is known

The most used "legacy" launchers remained the Falcon 9, with 41 launches, the CZ in its various versions, with 19 launches, and the Soyuz, with 7 launches.

Data compiled by Avio from information reported on the websites <https://space.skyrocket.de>, <https://nextspaceflight.com/> and <https://www.rocketlaunch.live/>, in addition to SpaceNews Magazine.

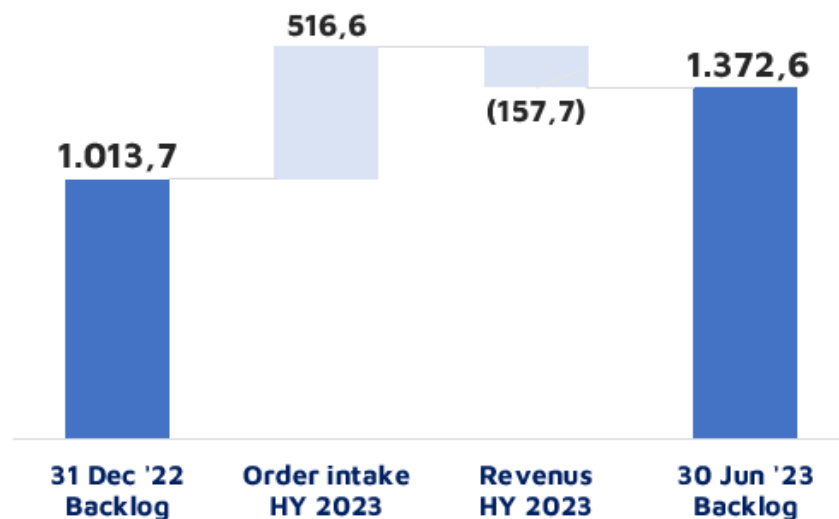
GROUP OPERATING PERFORMANCE AND FINANCIAL AND EQUITY POSITION

Backlog

The industrial sector of space programmes in which Avio operates is characterised by medium-long term projects with limited volatility, associated with an order backlog that provides solid medium-long term visibility. The Backlog at June 30, 2023 reached its highest level in the Company's history, at Euro 1,372.6 million, a net increase of Euro 358.9 million (35%) on December 31, 2022.

The order intake in H1 2023 totalled Euro 516.6 million, mainly concerning development contracts:

- contract with the ESA - as part of space industry initiatives to implement the "NextGenerationEU" - called STS, dedicated to developing an in-flight demonstrator of new technologies and specific designs for a two-stage liquid propellant-propelled light-load launcher using liquid-oxygen and methane engines with lower environmental impacts;
- contract with the ESA - as part of space industry initiatives to implement the "NextGenerationEU" - called HTE, dedicated to developing a new high-performance, low environmental impact liquid-oxygen and methane engine and high thrust technology;
- contract with ASI known as MPGE, dedicated to developing a "Multi Purpose Green Engine";
- contract with ASI known as IOS, dedicated to developing "In Orbit Services" technologies.



With regards to the backlog at June 30, 2023, which coincides with the remaining outstanding obligations totalling Euro 1,372.6 million, it is reasonably estimated that it shall give rise to the recognition of revenues of approx. 10% of the amount in H2 2023, for approx. 30% in 2024, with the remainder mainly in 2025 and 2026.

Please refer to the H1 2023 results press release dated September 8, 2023¹ and the presentation to analysts and investors regarding the H1 2023 results, communicated to investors and analysts on September 11, 2023.

An indication on the order intake or backlog in H1 2023 is also reported:

- in the March 13, 2023 press release regarding the signing of NRRP development contracts²;
- in the April 17, 2023 press release regarding the acquisition of a new order for tactical propulsion³;
- in the institutional presentations for investors and analysts on the approval of the 2022 financial statements and the Additional Quarterly Disclosures for Q1 2023 and in the relative Press Releases available on the company website in the "Investors" section;

¹ Avio's website, in the "Investors" section: <https://investors.avio.com/Investors/Financial-Announcements/>.

² Avio's website, in the "Investors" section: <https://investors.avio.com/Investors/Financial-Announcements/>;

³ Avio's website, in the "Investors" section: <https://investors.avio.com/Investors/Financial-Announcements/>;

in the other presentations for investors and analysis other than those carried out for the approval of the 2022 financial statements and the Additional Quarterly Disclosures for Q1 2023, available on the company website in the "Investors" section.

Operating results

The table below summarises the comparable performance of the Group for the first half of 2023 and the first half of 2022 (in Euro thousands):

	H1 2023	H1 2022	Change
Revenues	157,721	133,516	24,205
of which: Pass-through revenues	-	(473)	473
Revenues, net of pass-through revenues	157,721	133,989	23,732
Other operating revenues and changes in inventory of finished products, in progress and semi-finished	8,855	11,152	(2,297)
Costs for goods and services, personnel, other operating costs, net of capitalised costs & pass-through	(160,604)	(140,096)	(20,508)
Effect valuation of investments under equity method - operating income/(charges)	(817)	(1,888)	1,071
EBITDA	5,155	3,158	1,997
Amortisation, depreciation & write-downs	(9,051)	(9,375)	325
EBIT	(3,896)	(6,218)	2,322
Interest and other financial income (charges)	210	(298)	508
Net financial income/(charges)	210	(298)	508
Investment income/(charges)	-	-	-
Profit/(loss) before taxes	(3,686)	(6,516)	2,830
Current and deferred taxes	(172)	(1,115)	943
Profit/(loss) for the period	(3,858)	(7,631)	3,773

The following paragraph outlines "pass-through" revenues in the comparative period. These revenues stem from contractual agreements between the subsidiary ELV S.p.A. (now Spacelab S.p.A.) and the European Space Agency in August 2015 for the development and construction of the new "P120" thruster for future generation Vega-C and Ariane 6 launches. As a result of the implementation of these agreements, the consolidated revenues of the Avio Group in the comparative period included the following dual invoicing:

- an initial invoice from the parent company Avio S.p.A., as the sub-supplier, to the Europropulsion S.A. joint venture with revenues and margins not eliminated during the consolidation of the Avio Group as this joint venture is not fully consolidated;
- a second invoice up until February 28, 2018 from the subsidiary ELV S.p.A. (now Spacelab S.p.A.) and from March 1, 2018 (following the acquisition by the parent company Avio S.p.A. of the launcher's business unit of the subsidiary ex-ELV S.p.A.) directly by Avio S.p.A., as prime contractor, to the final customer the European Space Agency. This concerns a simple re-invoicing of costs received by Europropulsion, without margins, not eliminated in the Avio Group consolidation process as concerning third parties and defined as "pass-through" in this report.

Revenues net of "pass-through" revenues were Euro 157,721 thousand in the first half of 2023, increasing Euro 23,732 thousand (+17.7%) on the first half of 2022. This net increase is mainly attributable to increased Vega C production activities, increased tactical propulsion production activities, and increased NextGen EU development project activities, partially offset by P120 production and development activities.

The above revenues breakdown by business line as follows (Euro thousands):

	H1 2023	H1 2022	Change
Vega	88,844	77,935	10,908
NextGen EU development projects	19,794		19,794
Ariane	30,210	41,562	(11,352)
Tactical Propulsion	17,417	9,304	8,113
Satellite	1,456	5,188	(3,731)
Revenues, net of pass-through revenues	157,721	133,989	23,731

EBITDA in the first half of 2023 was Euro 5,155 thousand, increasing Euro 63.2% on H1 2022.

EBIT was a loss of Euro 3,896 thousand, improving however 37.3% on H1 2022.

The improvement in EBITDA on H1 2022 was mainly influenced by the contribution of development projects, and the effect of lower energy costs. These factors were partially offset by lower contributions from Ariane 5 phase-out and Ariane 6 ramp-up and higher general costs to strengthen the Company's organisational structure. Similar considerations apply to EBIT performance because of substantially unchanged depreciation and amortisation.

The result for H1 2023 was also shaped by the research and development tax credit of Euro 1,435 thousand (Euro 1,916 thousand in H1 2022), mainly relating to research and development activities, commissioned by the European Space Agency, recognised in the results for the period on the basis of the costs incurred for the Group's long-term research and development projects to which the grant refers, as well as to the Industry 4.0 and technological innovation investments.

For a more complete representation of the Group's earnings performance, the EBITDA and EBIT adjusted to exclude Group non-recurring and unusual components are presented below. The above adjusted amounts (in Euro thousands) and the relative margins for H1 2023 and H1 2022 are reported below:

	H1 2023	H1 2022	Change
Adjusted EBITDA	10,453	5,631	4,822
Adjusted EBITDA Margin (against revenues net of pass-through revs.)	6.6%	4.2%	
Adjusted EBIT	1,403	-3,745	5,147
Adjusted EBIT Margin (against revenues net of pass-through revs.)	0.9%	-2.8%	

The Adjusted EBITDA is considered by management as representative of the Group's operating results as, in addition to not considering the effects of amortisation and depreciation policies, the amounts and types of employed capital funding and any rate changes, already excluded from EBITDA, it also excludes non-recurring and extraordinary components of Group operations, improving the comparability of the operating results.

The H1 2023 Adjusted EBIT was Euro 10,453 thousand (6.6% of net revenues), increasing Euro 4,822 thousand on Euro 5,631 thousand for H1 2022 (4.2% of net revenues). This increase was chiefly attributable to the changes in reported EBITDA and an increase in non-recurring costs.

Adjusted EBIT, also considered by management as representative of the Group's operating results, consists of EBIT excluding non-recurring or extraordinary components, already excluded for the calculation of Adjusted EBITDA.

Adjusted EBIT for H1 2023 was Euro 1,403 thousand, increasing Euro 5,147 thousand on a loss of Euro 3,745 thousand in H1 2022. The increase in Adjusted EBIT reflects the same underlying developments as for the movement in Adjusted EBITDA.

The reconciliation between EBIT, Adjusted EBIT and Adjusted EBITDA for the first half of 2023 and the first half of 2022 is provided below (Euro thousands):

	H1 2023	H1 2022	Change
A EBIT	(3,896)	(6,218)	2,322
Non-recurring Charges/(Income) comprising:			
- settlement agreements/incentives/other personnel costs	-	71	(71)
- corporate, legal and financial consultancy	901	400	501
- COVID-19 extraordinary charges	123	533	(410)
- Other non-recurring charges/(income)	1,466	1,419	47
- extraordinary provisions for risks associated with Vega C's return to flight, net of compensation expected from the European Space Agency, and for the future execution of programs (included in provisions for risks and charges).	1,964		1,964
- exploratory activities of potential new business	769		769
- investor fees	75	50	25
B Total Non-recurring Charges/(Income)	5,299	2,473	2,826
C Adjusted EBIT	A+B	(3,745)	5,147
D Net amortisation & depreciation	9,051	9,375	(325)
E Adjusted EBITDA	C+D	5,631	4,823

The item "extraordinary provisions for risks related to Vega C's return to flight, net of compensation expected from the European Space Agency, and for the future execution of programmes" mainly refers to risks related with for the implementation of the set of recommendations provided on March 3, 2023 by the Independent Enquiry Commission (IEC) composed of ESA and Arianespace to ensure the safe return to flight in a short timeframe and the reliability of the Vega C launcher in the long run, for activities that can currently be reasonably estimated following the anomaly that emerged in the June 2023 static test of the Zefiro 40 engine, and for the execution risk of future programmes.

The net increase in non-recurring costs is also attributable to the fact that in H1 2022 there was a positive offsetting effect of Euro 1.6 million related to the cancellation of the 2020-22 and 2021-23 cycles of the 2020-24 Monetary Long-Term Incentive Plan in place at that time, whose retention and incentive purposes had ceased to exist in light of the changed circumstances following the extraordinary events of the last few years.

Financial results analysis

Net financial income in H1 2023 amounted to Euro 210 thousand, while the previous half-year saw net financial charges of Euro 298 thousand; the increased contribution of Euro 508 thousand is mainly attributable to interest income accrued on the quarterly restricted deposits made during the half year.

Balance Sheet

The Group balance sheet is broken down in the following table (in Euro thousands):

	June 30, 2023	December 31, 2022	Change
Tangible assets and investment property	144,516	141,053	3,463
Right-of-use	8,306	8,535	(228)
Goodwill	62,829	64,149	(1,320)
Intangible assets with definite life	122,553	119,814	2,739
Investments	14,788	15,605	(817)
Total fixed assets	352,992	349,156	3,837
Net working capital	(174,914)	(131,920)	(42,994)
Other non-current assets	68,105	67,470	636
Other non-current liabilities	(76,394)	(76,471)	77
Net deferred tax assets	80,878	81,471	(593)
Provisions for risks and charges	(46,379)	(53,379)	7,001
Employee benefits	(8,872)	(9,524)	653
Net capital employed	195,418	226,801	(31,383)
Non-current financial assets	2,010	2,010	-
Net capital employed & Non-current financial assets	197,428	228,811	(31,383)
Net financial position	102,214	74,450	27,764
Equity	(299,642)	(303,261)	3,619
Source of funds	(197,428)	(228,811)	31,383

Assets total Euro 352,992 thousand at June 30, 2023, a net increase of Euro 3,837 thousand on December 31, 2022 as a combined effect of the following main movements:

- a net increase of Euro 3,463 thousand in Property, plant and equipment and Investment property, primarily due to investments, totalling Euro 6,799 thousand and mainly related both to the construction of the Group's new head office in Colleferro, investments in plant and machinery and to extraordinary maintenance, net of depreciation for the period;
- a net decrease of Euro 228 thousand in Rights-of-use, mainly due to the net effect of new contracts of use and the termination of previous contracts net of depreciation for the period;
- a net decrease in Goodwill of Euro 1,320 thousand, due to the allocation of a part of the excess cost for Euro 3,145 thousand relating to the 2022 acquisition of the company Temis S.r.l. to two aerospace programmes in which this company operates, recorded under Intangible assets with definite life. The allocation of the excess cost was conducted by the Company with the external support of a leading consulting firm within a year of the acquisition. For further information, please refer to paragraph "3.5 Goodwill" of the Explanatory Notes;
- a net increase in Intangible Assets with a definite life of Euro 2,739 thousand, due to:
 - investments for Euro 5,516 thousand, mainly relating to investments in design and testing and for the construction of the new engines and avionics elements;
 - allocation of the excess cost described in the previous point for Euro 1,831 thousand, which also considers the deferred tax effect;
 - a decrease for depreciation and amortisation in the period;
- net decrease in Equity investments for Euro 817 thousand, due to the effect of the equity valuation of the investments in the jointly-controlled company Europropulsion S.A. and the associated company Termica Colleferro S.p.A.

The “Other non-current assets” and “Other non-current liabilities” in the balance sheet respectively include a receivable from the General Electric Group and a related tax payable of Euro 58,220 thousand recognised in 2016, following the receipt from the Tax Agency of the settlement notice of registration tax, mortgage tax and land tax, for a total amount of Euro 58,220 thousand, relating to the corporate transactions which in 2013 resulted in the sale of the company GE Avio S.r.l. (containing the assets of the AeroEngine division of the Avio Group) to the General Electric Group. In 2020 the Tax Agency appealed the judgment of the second instance, favourable to the Company, to the Court of Cassation. The Company acted promptly, filing its counter-appeal.

The recognition of the above-mentioned receivable from the General Electric Group is based on specific contractual clauses by which this latter is required to indemnify Avio S.p.A. with reference to any liabilities which may arise in relation to indirect taxes concerning the corporate operations which in 2013 resulted in the sale of the company GE Avio S.r.l. (containing the assets of the *AeroEngine* division of the Avio Group) to the General Electric Group.

In addition, also on the basis of specific contractual provisions, the General Electric Group is required to make available to Avio S.p.A. any amounts requested by the Tax Agency by the payment deadlines.

For further details, reference should be made to paragraphs 3.9 “Other non-current assets” and 3.24 “Other non-current liabilities”, in addition to the section “Legal and tax disputes and contingent liabilities” in the Explanatory Notes.

“Net working capital” was negative deriving from an excess of liabilities over assets of Euro 174,914 thousand, with an improvement on the previous year of Euro 42,994 thousand. The main components are outlined in the following table (in Euro thousands):

	June 30, 2023	December 31, 2022	Change
Contract work-in-progress, net of advances	(297,843)	(241,261)	(56,582)
Inventories	95,150	74,222	20,928
Advances to suppliers	119,315	128,351	(9,036)
Trade payables	(89,529)	(89,826)	297
Trade receivables	2,890	3,725	(836)
Other current assets and liabilities	(4,897)	(7,132)	2,235
Net working capital	(174,914)	(131,920)	(42,994)

The negative “Net working capital” (current trading) increased due to the cyclical nature of advances from clients and the advancement of the production and development orders.

The item "Other current assets and liabilities" in Net working capital is in line with the previous year. The main components are shown below (in Euro thousands):

	June 30, 2023	December 31, 2022	Change
VAT receivables	3,850	5,481	(1,631)
Research and development tax credits, technological innovation and industry 4.0.	6,149	5,381	768
Current tax receivables	2,660	2,148	512
Other current assets	11,141	8,358	2,783
Current income tax liabilities	(2,862)	(4,228)	1,366
Other current liabilities	(25,834)	(24,271)	(1,563)
Other current assets and liabilities	(4,897)	(7,132)	2,235

"VAT receivables" decreased Euro 1,631 thousand on the previous year, due to the collection of the Euro 598 thousand reimbursement requested and compensation for Euro 2,490 thousand, net of VAT receivables accrued in the period of Euro 1,457 thousand.

With regards to the research and development, technological innovation and Industry 4.0 tax credits, the Avio Group recognised R&D tax credits of Euro 6,149 thousand for the period under review, attributable entirely to the parent company, Avio S.p.A., and accrued in 2020, 2021, 2022 and in H1 2023.

"Other current assets" increased by Euro 2,783 thousand on December 31, 2022, mainly relating to the effect of early billing of some annual costs at the beginning of the year, chiefly software licenses and insurance premiums.

"Provisions for risks and charges" refers mainly to provisions for legal and environmental charges, as well as provisions for charges related to the return to flight of Vega C, net of the compensation expected from the European Space Agency and provisions for the future execution of programmes allocated in 2022. The net reduction in the period resulted mainly from utilisations for charges in the half-year, as well as releases due to the fact that the prerequisites for the provision for the future execution of programmes were no longer met, as explained in greater detail in the Explanatory Notes, to which reference should be made.

Analysis of the net cash position

A statement follows of the Avio Group's financial position, prepared in accordance with the ESMA Guidelines of March 4, 2021 and the subsequent attention call No. 5/21 issued by Consob in April 2021 (figures in Euro/000):

	June 30, 2023	December 31, 2022	Change
A Cash and cash equivalents	(126,607)	(131,403)	4,796
B Other liquidity	-	-	-
C Other current financial assets	-	-	-
D Liquidity (A+B+C)	(126,607)	(131,403)	4,796
E Current financial debt (including debt instruments but excluding the current portion of non-current financial debt)	1,861	29,907	(28,046)
F Current portion of non-current bank payables	10,026	10,033	(8)
G Current financial debt (E+F)	11,886	39,940	(28,054)
H Net current financial debt (G-D)	(114,721)	(91,463)	(23,258)
I Non-current financial debt (excluding current portion and debt instruments)	12,507	17,013	(4,506)
J Debt instruments	-	-	-
K Trade payables and other non-current payables	-	-	-
L Non-current financial debt (I + J + K)	12,507	17,013	(4,506)
M Total financial debt (H + L)	(102,214)	(74,450)	(27,764)

At June 30, 2023, the Avio Group reports a net cash position of Euro 102,214 thousand (Euro 74,450 thousand at December 31, 2022), with cash and cash equivalents exceeding financial liabilities.

The net cash position, reported at item "M Total financial debt (H+L)" of the table above as per the recommendations of the regulatory authorities, grew from a positive balance of Euro 74,450 thousand at December 31, 2022 to a positive balance of Euro 102,214 thousand at June 30, 2023, increasing Euro 27,764 thousand, principally due to the cyclical nature of operating cash flows, with repayment of the cash pooling debt position to the jointly controlled company Europropulsion for Euro 27,769 thousand, in addition to capital expenditures.

The current financial debt, amounting to Euro 11,886 thousand (Euro 39,940 thousand at December 31, 2022), includes:

- the financial liability related to the current portions of two EIB loans, amounting to Euro 10,026 thousand (Euro 10,033 thousand at December 31, 2022), which includes:
 - two instalments of the total loan granted of Euro 10 million (of which Euro 5 million due on October 31, 2023 and Euro 5 million due on April 30, 2024);
 - the accrued interest amounting to Euro 26 thousand.
- current financial liabilities for leased assets of Euro 1,806 thousand (Euro 1,879 thousand at December 31, 2022);
- other current financial liabilities amounting to Euro 55 thousand (Euro 28,028 thousand at December 31, 2022, which included Euro 27,769 thousand of liabilities to the jointly-controlled company Europropulsion S.A. arising from the cash pooling agreement).

The non-current financial debt, amounting to Euro 12,507 thousand (Euro 17,013 thousand at December 31, 2022), includes:

- non-current financial liabilities to the EIB of Euro 7,000 thousand (Euro 12,000 thousand at December 31, 2022);
- non-current financial liabilities, mainly for leased assets of Euro 5,456 thousand (Euro 4,937 thousand at December 31, 2022);
- other financial liabilities for Euro 51 thousand (Euro 76 thousand at December 31, 2022).

Statement of changes in Equity

Consolidated equity at June 30, 2023 amounts to Euro 299,642 thousand, decreasing Euro 3,619 thousand compared to Equity at December 31, 2022, as a result of the following main movements:

- recognition of the consolidated half-year net loss of Euro 3,858 thousand;
- positive effect from the recognition of the stock grant reserve for Euro 191 thousand;
- actuarial gains of Euro 21 thousand;
- translation gains of Euro 7 thousand.

RESEARCH AND DEVELOPMENT

Investment in research and development is a key factor in achieving and maintaining a competitive position in the space industry.

Avio, as always, devoted considerable resources to the research, development and innovation of products and processes which further its mission. Among its objectives is also the environmentally sustainable development of its activities and products, with particular attention paid to the issues of environmental protection, facility safety and the protection of its workforce.

Regarding such key issues, Avio continues to collaborate closely with national institutions such as the Italian Space Agency (ASI), the Ministry of Education, Universities and Research (MIUR) and the Economic Development Ministry (MISE), in addition to international institutions such as the European Space Agency (ESA) and the European Union.

Avio has developed a network of partnerships with Universities and research bodies in Italy and Europe, among which the Italian Aerospace Research Center (CIRA), the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), the Universities of Rome, the Polytechnic University of Milan, the 'Federico II' University of Naples, the University of Padua, the University of Forlì, the Sardinian AeroSpace District (DASS) and the Polymeric and Composite Materials and Structures Engineering cluster of Campania (the CRdC). Avio also forms part of various consortia between European research institutes and industrial partners to support research in the field of energetic materials.

The Group has maintained its participation in research projects with various national and international organizations active in aerospace research. In particular, it continues to collaborate with universities involved in researching advanced solid propellants, composite materials, solid rocket motor (SRM) propulsion systems, cryogenic propulsion, hybrid propulsion and with major global manufacturers and research institutes developing propulsion technologies and innovative modules and components that can benefit from the synergy of individual specific competencies.

Research and development costs incurred by the Avio Group in H1 2023 amounted to Euro 59.6 million (Euro 51.3 million in H1 2022), equating to 37.8% of gross consolidated revenues for H1 2023 (38.5% in H1 2022).

Self-financed and self-executed activities amounted in H1 2023 to Euro 5.1 million (Euro 4.5 million in H1 2022). Self-financed activities in H1 2023 included Euro 3.7 million relating to development costs capitalised as intangible assets with definite life (Euro 2.5 million in H1 2022) and Euro 1.3 million concerning research costs or development costs not capitalisable and directly recharged to the income statement (Euro 2.0 million in H1 2022).

The total amount of costs related to self-financed activities charged to the income statement in H1 2023 was Euro 2.9 million (Euro 4.0 million in H1 2022), comprising Euro 1.3 million of directly expensed non-capitalisable costs (Euro 2.0 million in H1 2022) and Euro 1.6 million for the amortisation of development costs capitalised (principally) in previous years (Euro 2.1 million in H1 2022).

In H1 2023, Avio continued its innovation in the main product lines, as a synthesis of basic research, applied research and pre-competitive development activities.

Solid Propulsion

In Avio's strategic vision, solid propulsion represents a mature and competitive technology that significantly reduces the cost of launch services and keeps the European space carrier market competitive on the global scene. Avio has confirmed that its vision includes the consolidation and further development of both VEGA and the forthcoming Ariane 6 launcher, set to replace Ariane 5.

Following Vega C's successful maiden flight in July 2022, and following the failure of the second flight in December 2023, in H1 2023 Avio continued work to improve the launcher's reliability in order to consolidate its market positioning.

In the area of solid fuel engines, Avio continued to carry out research on consolidating and optimising qualified product production technologies for the Ariane and VEGA launchers, in order to guarantee the performance required of the next generations of Ariane 6 and VEGA E European launch vehicles.

Specifically, research and development in materials continued to focus on the development of advanced, high performance and low toxicity solid propellants with characteristics that allow them to be used in the Ariane and Vega programmes. Additionally, the possible expansion of the Avio composite materials production chain has been carefully researched and analyzed, leading to the identification of various possible spin-offs in other sectors.

Liquid Propulsion

Avio considers cryogenic propulsion based on liquid oxygen and methane as the answer to future generations of late stages for launch vehicles, as well as for exploration spacecraft.

In H1 2023, work continued on the design and testing of the cryogenic propulsion LPM system aimed at managing the propellant needed to fuel the M10 engine. Following the ongoing development and qualification phase, this will provide the necessary performance to ensure stage 3 propulsion for the forthcoming VEGA E.

After completing the Preliminary Design Review of the motor system and successfully closing the PDR's of the main subsystems, including those on the valves, the combustion chamber and the oxygen turbo pump, the first 2 full-scale prototypes of the M10 engine's LOX/CH₄ combustion chamber were built entirely in ALM, and successfully subjected to mechanical pressure and cold fluid dynamics testing at the Avio Colleferro facility. The second prototype was then assembled with the rest of the equipment - including valves, tubing, sensors and harness - and configured for the firing test. The first fire test campaign was successfully concluded at the end of February 2020 at NASA's Marshall Space Flight Center. This was the first test campaign for a prototype for an innovative 100KN combustion chamber with cooling channel, manufactured in ALM by implementing the Avio "Single Material Single Part" patent.

The results confirmed that additive technology can indeed be used to achieve a suitable thermal exchange for a full-scale combustion chamber with a single low thermal diffusion material (100KN combustion chamber constructed with one piece and one material utilising ALM technology). This marks an important step forward for the development and qualification of the M10 LOx-CH₄ engine (for the upper stage of the Vega E), fully using ALM.

The first development model of the entire M10 engine, denominated DM1, was fully integrated during the second half of 2021, together with the turbomachinery components to support the cryogenic fuel regeneration cycle. This allowed the start and continuation, during the first half of 2022, of the fire test campaign at Avio's innovative Space Propulsion Test Facility (SPTF), inaugurated in October 2021 on the Salto di Quirra military firing range in Sardinia. The integration of the second M10 demonstrator, DM2, was finalised in H1 2023; the test campaign will begin in August 2023.

The Vega E launcher, whose first flight is scheduled for 2027, thanks to the introduction of the innovative, high-performance M10 engine, will be able to carry a payload of approximately three tons into orbit, that is, double the maximum payload mass of the current version of Vega, and significantly more than the next version of Vega C. Furthermore, thanks to the manoeuvrability features of the M10 engine, with re-ignition and active thrust control capabilities, the Vega E launcher will be able to release many satellites in different orbits during the same mission and at very competitive cost.

The development of the M10 engine and the definition and architecture of Vega E's Upper Stage (VUS) were funded for the first phase (2017-2019) under CM2016. The results obtained in the first phase made it possible to acquire new funding for the second development phase (2020-2022), as agreed at the recent European Ministerial Conference in November 2019.

As part of space activities financed by the National Recovery and Resilience Plan, in H1 2023 development continued on a new generation of large composite LOx and LCH₄ cryotanks without internal liners, which will be integrated into future versions of the Vega E's upper stage, to obtain a further increase in the maximum payload.

Space Transport Systems

In response to increasing small satellite demand, in H1 2023 research into developing the new VEGA Light launcher continued, with optimisations designed to put up to 250kg of payload into a 500x500 km sun-synchronous orbit.

Development and implementation of the Space Raider propulsion system continued for Critical Design completion in H1 2023. Space Rider is an unmanned, reusable space transportation system, development of which was commissioned by ESA from Avio and co-prime Thales Alenia. The integration of Space Rider with the Vega C modules will create an integrated family of services under the title of Vega Space Systems (VSS).

Finally, in H1 2023 the development of the Hera propulsion system continued, with the aim of passing the DRB. HERA is a planetary defence project funded by ESA, involving a consortium of European companies led by OHB System AG. The ESA's Hera mission is scheduled for launch in 2024 and will be carried out in synergy with NASA's Double Asteroid Redirect Test (DART). Hera and DART will have the goal of exploration and the altering of the trajectory of a binary system of asteroids (a pair of near-Earth asteroids known as Didymos), which will be reached by the Hera spacecraft in 2026.

Tactical Propulsion

Qualification activities for the CAMM ER missile and those relating to the thruster ageing programme continued in H1 2023. Industrialisation is ongoing.

Obsolescence solution activities also continued for Aster MLU. Specifically, the components and subcomponents for qualification testing were produced. Subcomponent qualification tests were completed, while those at the Booster level are being completed together.

Manufacturing of the Aster 30 Booster for Greece began and the contract to increase the currently forecast production rate was concluded.

The negotiation phase concluded for participation in a consortium allowing Avio to collaborate on the design and production of an anti-ballistic missile which will expand its defence offerings. At the same time, Avio is in discussions with MBDA-I regarding participation in the development programme for two more engines for short- and medium-range missiles.

As regards Italy's National Military Research Plan (or "PNRM"), in H1 2023 Avio continued to collaborate with the Polytechnic University of Milan on development of a sub-orbital target and continued its collaboration with the School of Aerospace Engineering and MBDA-I to finalise a development plan for a ramjet engine.

Work continued on the development of the axial booster of the next-generation TESEO MK2/E weapon system, a long-range, dual-role, anti-ship missile with land-attack capability. Negotiations also continued with MBDA for Project ACQUILA, a first-stage solid rocket booster for the new TWISTER endo-atmospheric interceptor for hypersonic threats.

HUMAN RESOURCES

At June 30, 2023, Avio Group employees numbered 1,216, increasing on 1,047 at June 30, 2022. The number of employees does not include those of the company Europropulsion S.A., consolidated at equity. The majority of the workforce is employed by the parent company, Avio S.p.A., which at the same date numbered 1,061 (929 at June 30, 2022).

Several organisational changes were made in H1 2023:

- Creation of a new organisational unit called Joint Ventures and Strategic Projects. Working cross-functionally with all the Departments involved, this unit manages acquisitions, joint ventures and new special projects (including beyond national borders), and supports the Chief Executive Officer in exploring new product and market opportunities;
- Given the expansion of the business scope brought about by the arrival of the new Development Programmes funded by Ministerial Decree 2022 and the National Recovery and Resilience Plan, new contracts for incremental volumes of tactical propulsion production, and to ensure more effective oversight of both production and development programmes, on June 1, 2023, Mr. Marco Biagioni was named Head of Programme Management. As part of this change, the management of Production Programmes (including Solid Propulsion Systems and Vega Production) is assigned on an interim basis to Mr. Marco Biagioni, while management of all development programmes (including Research Programmes and Government Licensing and Authorisation) to Mr. Andrea Preve;
- Full delegation and authority were conferred on the Technical Authority regarding technical decisions, in consultation with the Quality department and the CTO to ensure consistency in the distribution of responsibilities between Programmes and Engineering, and separation between production and development. Two new units are therefore created within the Engineering Department, reporting to the Director. These are:
 - CPO - Chief Product Officer (Production Technical Authority). This will be led by Mr. Andrea Catini and will have Technical Authorities responsibility for qualified launchers (including ground assets) in the production phase, with authority over the production phases, in compliance with technical requirements imposed by the FSOA and customers. The CPO is vested with autonomy and authority over all areas in production and procurement activities and makes technical decisions to maximise flightworthiness, receives guidance and input from Quality and the CTO. Its primary external counterparties are Arianespace, ESA, and - when appropriate - CNES.
 - CDO - Chief Development Officer (Technical Development Authority). This will be led by Mr. Mariano Genito, who will be responsible for overseeing the development phases. The CDO receives guidance and input from Quality and the CTO, has responsibility and autonomy in technical design activities and choices on technologies and in product development, ensuring compliance with programme and performance requirements. The CDO's main external points of reference are ESA and/or ASI;
- The Human Resources and Organisation Department is structured with the creation of the new Organisation, Compensation & benefits and HRBP units. This change seeks to make management more widespread and interconnected in key business departments through the new HR Business Partners. The Selection and Development unit also takes on new responsibilities by expanding its scope to all-around talent management, from selection to development to employer branding.
- Alongside the CISO and Security & Facility, the Legal Department is structured into two macro-units. These manage Corporate&Compliance, Legal Operations& Litigation, Risk Management & Internal Control on the one hand, and Legal Business & Regulatory, Sustainability and Risk Management on the other.
- The Operations Department saw a range of work to increase efforts in process automation and cost control, in liquid propulsion, and in the areas of Industrial Managers, whose number and areas of responsibility are growing.
- The effort to harmonise the organisation extended to Group companies; in particular, the entry of TEMIS, including at the level of Organisational Provisions, was incorporated and the provisions clarified the roles of Avio France in terms of intra-Group collaboration.

At the same time, updated organisational arrangements for SE.CO.SV.IM, SPACELAB and Avio Guiana were released.

Industrial Relations

Meetings with the RSU continued in H1 2023 in order to involve and inform trade union representatives regarding the Company's development and the initiatives it had introduced, such as the one related to corporate welfare. Minutes were signed for a meeting on the reporting of 2022 results, relating to the participation bonus paid in 2023.

With the new RSU, trade union agreements were signed on:

- management of the 2023 ROL, which provides for the introduction of an attendance bonus for seconded workers, as in 2022;
- summer closure;
- training plan for Fondimpresa funds;
- Participation bonus renewal for reporting year 2023 (payment 2024).
- Agreement for access to welfare by converting the participation bonus.
- Extension of Smart Working.
- Area 90 video surveillance agreement.

In H2, negotiations are scheduled to begin on the platform proposed by the RSU for a supplementary company contract.

Worker labour situation:

the following was undertaken during the first half of the year:

- **14** new temporary workers were hired on fixed-term contracts;
- **6** employees were hired on a fixed-term contract at Avio;
- **3** transfers from fixed-term to permanent contracts, of which one at the Perdasdefogu site.

Forecasts for the future:

- **Stabilisation or staff leasing is being assessed for 18 temporary workers** in the areas of Production, Cdq, Experimentation and Integration;

Management of protected categories

An agreement was signed with SILD to hire 19 staff and waivers were requested and obtained for 27 employees.

Talent Acquisition

In H1 2023, in line with last year's trend to continue to cope with various programmes and development of new business, the Company has set out a new hiring plan to bring in 193 white-collar staff, up approx. 17% compared to the end of 2022. Also during H1 2023, 74 new staff were hired. The new arrivals broke down as follows: 16% middle managers; 20% professionals; 64% white-collar workers, and 14 consultants and 26 internal moves to fill internal job postings, for a total of 49% of needs filled compared to the annual budget. 46% were hired for Engineering, 30% for Industrial Operations, 9% for Business, Purchasing and Quality, and 12% in staff positions. 3% were hired at Secosvim and Spacelab.

In addition, 2 people were hired either as temporary workers or on staff-leasing agreements. There are still 117 positions to be filled, due in part to departures in early 2023: 38 departures (32 resignations, 1 contract expiry and 5 retirements).

Talent Development

To support the organisation, and in line with the assignment of tasks and responsibilities in relation to the various corporate programmes, the company has again implemented a substantial Merit and Development Plan for 2023. In H1, 55 interventions were carried out: 48 promotions, of which: 5 Professional Experts (the highest Manager level), 8 to the qualification of Manager, and 8 to the company title of Professional (chemical contract levels B1 and B2), 26 new graduate pathways and other clerical transitions, 5 merit promotions and 2 one-off interventions. Two developmental assessments were also conducted to evaluate a transition from blue-collar to white-collar level.

Again this year, the Company implemented a system of variable bonuses, tied to Avio Group targets for 2023, for Executives-Managers and Professionals (roughly 490 people, or 48% of the total workforce). There was a significant change this year: there are now a minimum of 4 and a maximum of 5 assignable goals, with two specific goals and a fixed weighting. One objective - the "Programme Objective" - will be evaluated by a corporate department other than the employee's own, with a specific weighting of 30%. In terms of soft skills

assessment, alongside Avio's usual managerial model, five behavioural pillars are also included, with a specific weighting of 20%. Determination and disbursement of the bonus will be dependent on achievement of individual and organisational performance targets.

Talent Attraction (Employer Branding)

To improve recognition of the Avio brand in Italy as a desirable company to work in, in H1 2023 the HR Talent team organised and participated in a total of 10 events. These included conferences, Career Days, facility visits, and online events, providing opportunities to meet with students, experienced and inexperienced candidates, and external entities. A plan of activities is also in place for H2 2023.

Training

Avio considers training, education and learning to be essential and strategic tools for achieving the objectives of professional growth and employee satisfaction.

With regard to upskilling and reskilling training for Avio Group personnel, in H1 2023, 15,125 hours of training were provided, with 3,568 participations (from personnel, contractors and staff leasing) in refresher courses, professional development courses, individual courses and soft skills and technical skills deployment training. These were carried out in the classroom and both synchronously and asynchronously. A range of issues were of particular relevance in the first half of 2023. In particular, training focused on manufacturing processes concerning Vega and Vega-C products and on operations at the Guiana Space Centre (CSG). A training plan was provided to gain technical skills for the Industrial/Technological Operations Department and Laboratories and Engineering. In support of career growth, the company maintained a training programme related to the corporate training catalogue, and more specifically: the New Professional training; training to support the new appointment of A3-level managers; individual coaching; and "Building the Future" management training. With regard to management training, the company focused team building on practical training by implementing a tutorial aimed at helping children from a group home to move into STEM programmes. Transverse individual courses were also organised to respond to needs expressed in terms of: Training Instructors, Employer Branding, Negotiation Techniques, Lego® Serious Play®. Company management also focused on the provision of methodological courses, such Project Management and Yellow Belt and Green Belt (in the latter case participants will have to take an exam to complete certification) and began the Lean Practitioner certification process.

During the year, training activities were focused on the following main areas:

- training and updates on mandatory technical competences regarding safety issues;
- training on special and critical processes in manufacturing;
- soft skills training: development of managerial skills (participation at conventions and seminars);
- individual development plans;
- Get On Board Day: on-boarding for new hires;
- support for internationalisation with a focus on individual and group language training (French language courses, English language courses);
- Quality Management System training;
- training on Legislative Decree No. 231/01;
- methodological training;
- legal training on ITAR dual-use issues.

Distance learning training, both synchronous and asynchronous, had a positive impact on the total number of hours and participations, involving the entire company population. This allowed for the provision of courses during the Covid-19 emergency while respecting the social distancing required by company regulations. Using certified in-house trainers, safety and management training and information was provided. The e-learning platform has been enhanced, particularly in relation to the Quality area, in order to provide the course on the Quality Management System and to implement a dedicated "Digital Library" area used to share course materials. The e-learning platform was a key tool also to provide training on safety issues and Seveso quarterly reports; in the regulatory area, to provide training on Legislative Decree No. 231; waste-management training; training on the administrative protection of state secrets and other confidential information; and multimedia training for the on-boarding of new hires. Regarding training methods, the culture of agile learning continued, by which the organisation learns through the active involvement of managers in the design of training activities for both direct groups and cross-departmental groups, therefore supporting increased integration among the company population.

Organisation and management of personnel

Effective February 1, 2023, on renewal of the contract with the rental company for the company car fleet, to mitigate the economic impact of the increasing monthly fees for cars assigned for employee mixed use, the company contribution for expert staff cars, A1 managers' cars and Executive second cars was increased.

In March, the Company signed a union agreement with the RSU to extend the use of remote working to September 30, 2023. This involved the Continuous Improvement, Commercial, Programmes, Engineering and Quality Departments (excluding CDQ) and the Staff Departments (Communications and External Relations, Institutional Relations, Legal and Compliance, Human Resources and Organisation, AFC, IT, Procurement, and General Management). The use of remote work provides for a maximum of four days per month (maximum two per week), which may be raised to six days per month in the event of specific needs that are compatible with work activities, to be agreed with line managers.

The number of remote working days for "technical" directorates was increased from four to six maximum days per month, with no change for the Staff area.

Also in March, given the increase in energy costs, the Company entered into a union agreement with the RSU to provide a fuel voucher worth Euro 200 to all employees on July 31, 2022 also on February 15, 2023.

This is an exceptional measure and is valid for 2023 only. As per national regulations, the measure is exempt from tax. In collaboration with the Procurement Department, a discount of 2.7% on the face value of the vouchers was achieved, ensuring cost savings for the company.

On April 4, 2023, a supplementary agreement was signed with the RSU regarding the conversion of the Participation Bonus accrued in 2022 into welfare services. This agreement includes the following improvement measures:

- elimination of the previous fixed conversion percentages (25% - 50% - 75% - 100%);
- introduction of a pay-as-you-go ceiling and the possibility of utilising the remainder of the unused bonus to pay for welfare services of the employee's choice through special functionality of the platform;
- elimination of the 5% penalty on the premium first converted and not used for welfare services but settled on the pay slip;
- early opening of the Timeswapp welfare platform on May 15, compared to normal deadlines in the second half of June in previous years;
- introduction of the Booking service on the Timeswapp platform.

A webinar was also organised for all employees regarding the conversion of the Participation Bonus accrued in 2022 into welfare services.

The webinar was conducted by INAZ Group consultants, who explained the tax benefits of converting the bonus into welfare, how to use the Timeswapp platform, and the services available, including the introduction of Booking.com.

Employee Welfare take-up was 218 out of a total of 1024, or 21.29%, compared to 79 out of 896 last year (8.82%).

Also in April, a Cardiovascular Prevention Campaign was organised in collaboration with Mediteck Tecnologia Medica S.r.l., which targeted all employees over 50 using suitably equipped and fully autonomous Mobile Polyspecialist Units.

The initiative was paid for entirely by the Company and sought to promote employee health and well-being by ensuring greater awareness and prevention of cardiovascular disease.

In May and June, employees were provided with an online tax-filing platform with which employees could file their 730/23 substitute-tax forms for the 2022 fiscal year.

June saw the move to the new offices in building 7008. This was one of many initiatives introduced following the rapid growth in Avio's headcount, and sought to reorganise the offices as a whole (7004, 641, and 518) by programme and work team.

Also in June, a fundraiser was held for the people of Emilia-Romagna affected by May's flooding. 159 employees participated, raising a total amount of Euro 5,820.

COMMUNICATION AND SOCIAL RESPONSIBILITY

Avio promotes its image and its products through participation at major international events and a constant presence at Italian and international aerospace conferences regarding the research and development of new technologies in the specific field of space propulsion and launchers.

In addition, the Company develops its own network of scientific exchange and new product development through research collaborations with Italian and international universities and research institutes and through technical and operational collaborations with major European space agencies, in particular the Italian Space Agency (ASI), the French National Centre for Space Studies (CNES) and the European Space Agency (ESA).

Events and shows

The main events in the year include:

- January 31 - Avio wins first prize as part of the "ITS4US" Project, an initiative to bring young people closer to the world of work and professions.
- February 7 - Avio participates in the Smallsat Symposium 2023. CEO Giulio Ranzo talks about Vega C and the changes and prospects for the future with leading figures from the global aerospace industry.
- February 9 - A discussion on the "New Space Economy" at the Polytechnic University of Milan.
- February 10 - Avio and UNOOSA (United Nations Office of Space Affairs) select a consortium led by the University of Nairobi, in partnership with the University of Arizona and the non-profit organisation Space Trust, as the first winner of the "Accessing space with Vega C" programme. The selected team will launch a CubeSat at no cost on board the Vega C rocket.
- February 15 - Avio joins the ITS Mechatronics Foundation of Lazio.
- February 22 - Rai produces a documentary about the HERA project.
- March 13 - Two contracts worth over Euro 285 million are signed as part of space-industry initiatives for implementation of the "NextGenerationEU".
- March 24 - ASI awards Avio the design and development of the Multi-Purpose Green Engine, a "green" liquid propellant engine, for future In-Orbit Servicing and Space Logistics applications.
- March 28 - AVIO visits the Thales Alenia Space headquarters in L'Aquila, a centre of excellence in the production of electronic components.
- April 12 - Avio participates in presenting the Iride project, the Italian satellite constellation that will be built by 2026, with support from the ESA and ASI thanks to resources from the NRRP.
- April 14 - The first edition of the Lean Manufacturing master's programme begins, with the goal of acquiring Operational Excellence skills and knowledge for people working in business production processes.
- April 14 - The Ariane 5 rocket successfully launches the European Space Agency's (ESA) JUICE probe from the French Guiana Space Centre. The JUICE mission will study Jupiter and three of its largest moons with an array of scientific instruments.
- April 19 - First Tactical Programmes Suppliers Summit. The event sees presentations of products, facilities and production volume visibility beyond 2032.
- April 26 - Avio participates in the Ukraine reconstruction conference. CEO Giulio Ranzo expresses willingness to jointly explore further forms of industrial cooperation in the field of space propulsion systems.
- May 5 - The cardiovascular prevention campaign kicks off with the involvement of more than 200 employees over 50.
- May 5 - Avio participates in the second National Conference on Quality in Aerospace organised by the Aerospace Sector of the Italian Quality Culture Association.
- May 9 - Vega C is chosen to launch the ClearSpace-1 spacecraft for a mission to remove space debris. The launch is expected in the second half of 2026.
- May 17 - Avio participates in Space Meetings Veneto, the first international fair focused fully on the space economy.
- May 19 - Static bench testing of the qualification engines of the new Aster 30 MLU is completed successfully and on schedule.
- May 19 - Last meeting of the Educational Campaign planned by the HR Learning Team together with Adecco and ASI and sponsored by the Municipality of Colleferro, represented by Councillor Francesco Guadagno. More than 120 students from high schools in Lazio participated in the campaign.
- May 24 - The MP Walter Rizzetto visits the Colleferro Headquarters.

- May 28 - Eleventh edition of the Sapienza Rocketry Challenge. Students from the Space Propulsion Laboratory of the Department of Mechanical and Aerospace Engineering at Rome Sapienza University launched their mini rockets from the piana di Segni park.
- May 29 - Together with Leonardo, Avio becomes Corporate Partner of Takeoff Accelerator, the accelerator program for startups developing solutions and services in the aerospace and advanced hardware sectors.
- May 31 - Vega C is chosen to launch the Kompsat-6 (Korean Multi-Purpose Satellite) Earth observation satellite for the Korea Aerospace Research Institute (KARI).
- June 1 - Avio participates in "Parodi day", an event organised by the IPIA of Colleferro to promote the connection between school, local area and enterprise.
- June 6 - First Subco Vega-C Industrial Day, dedicated to meeting managers of companies involved in the development of the Vega C launcher.
- June 16 - Starting Finance, Italy's largest community of young people with a passion for economics and finance, discusses Avio in YouTube video.

GROUP PRINCIPAL RISKS AND UNCERTAINTIES

Risks relating to the war in Ukraine

As reported in the 2022 Annual Financial Report, the Russian-Ukrainian crisis is an ongoing diplomatic-military confrontation between Russia and Ukraine that began in February 2014. It centres on the status of Crimea, the Donbass region, and Ukraine's possible membership in NATO.

The information provided in this section - and more generally the information provided in these financial statements on the ongoing conflict in Ukraine - takes into account Consob's calls for attention dated March 18, 2022 and May 19, 2022. The latter fully referred to the recommendations provided by ESMA in the Public Statement "*Implications of Russia's invasion of Ukraine on half-yearly financial reports*" dated May 13, 2022.

As widely reported, on February 24, 2022, Russia began the invasion of Ukraine. Despite unanimous condemnation and international sanctions against Russia, the conflict between the two countries continues.

As previously reported in the prospectus of March 31, 2017 relating to the admission to trading on the STAR segment of the Italian Stock Exchange organised and managed by Borsa Italiana S.p.A., in undertaking transactions the Group mainly uses suppliers and sub-contractors for the supply of components, semi-finished products and raw materials. The Group's ability to fulfil its obligations to its clients also depends on the fulfilment of contractual obligations by its sub-contractors and suppliers.

Also as reported in the prospectus, certain Group suppliers and sub-contractors, considering the skills and know-how they have developed, in addition to the qualification processes that have certified their compliance with specific requirements, are difficult to replace or, in any event, their replacement may entail a lengthy period of time and significant costs.

In view of the Russian-Ukrainian crisis that had emerged even in February 2014, it was reported in the prospectus, in particular, that the then recent foreign policy events could affect the capabilities of suppliers operating in Russia and Ukraine.

The prospectus also stated that such possible non-fulfilment could concern a varying range of components (such as the propellant tanks and the fourth stage engines of the Vega launcher, the pressure regulators and valves) or raw materials (such as ammonium perchlorate and carbon fibres) and, should significant cases of non-fulfilment by the Group's suppliers or subcontractors occur or, for any reason, should such suppliers no longer be able to meet their obligations or should they need to be replaced by the Group, the latter, also on account of any delays that might ensue, could be held liable by its clients and, therefore, be subject to possible claims for damages. The occurrence of one or more of these circumstances could impact upon the Group's financial statements.

Due to the skills and know-how developed as well as the qualification processes that have certified their compliance with the specific requirements, the Group's strategic suppliers which are difficult to replace or, in any case, whose replacement could require a lengthy period of time and significant costs, still include two Ukrainian suppliers who currently supply the main engine for the fourth stage of the Vega and Vega-C launchers.

Avio had also chosen a Ukrainian supplier (ESA approved) for the production of the carbon-carbon inserts used to make the nozzles for the Z40 and Z9 engines of the Vega-C carrier, and in 2019 began an investment activity to improve its expertise in the production of carbon-carbon inserts.

As of March 2022, following the outbreak of hostilities between Russia and Ukraine, Avio had already undertaken a supply contract from a previously used European supplier and, to date, also in view of the recommendations of the Commission of Inquiry following the VV22 flight anomaly, the procurement of carbon-carbon inserts from Ukrainian suppliers has been banned by the ESA.

Currently, there is no direct procurement from Russian suppliers.

The remaining two Vega flights, however - the next of which is planned for early October 2023 - have not been impacted as they are already equipped with the carbon produced by another European supplier.

On the other hand, with regard to the main engine of the 4th stage for the Vega and Vega-C launchers, the status of supplies already in Colleferro, by virtue of advance orders placed as early as 2017, allows the continuation without discontinuity of industrial activity with respect to the VEGA and VEGA-C programmes in the short and medium term.

As a result of regular contacts with these suppliers, production of the MEA engine continues.

The situation is being monitored in order to take proactive actions to protect business continuity over the long term. In this context, the ESA recently decided to allocate specific financial resources to initiate technical and industrial actions to mitigate the long-term supply risk through the development of complementary technological solutions.

Against this backdrop, and again with the goal of strengthening business continuity in the medium to long term, negotiations are underway for the supply of additional engines with two of the aforementioned Ukrainian suppliers of the fourth stage main engine for the Vega and Vega-C launchers. Delivery is expected in the medium term.

On the basis of the information currently available, it cannot however be excluded that a worsening of the Ukrainian crisis, or the continuation of the current situation, could have possible future impacts on the Group's production activities with reference to the VEGA and VEGA-C programmes.

As these assessments gradually matured, they were promptly reported in the press releases dated February 25, 2022, March 25, 2022, and July 17, 2022, and are still accurate.

Based on the above, the risks from impacts from dependence on such Ukrainian strategic suppliers are qualified as possible.

At June 30, 2023, Avio has made advance payments to Ukrainian suppliers totalling Euro 3.0 million, including Euro 1.4 million related to the procurement of raw materials for the production of six MEA engines for Batch 4 of Vega C and Euro 1.6 million related to previous technology development agreements. The Euro 1.4 million recovery is expected with the deliveries of MEA engines by the first quarter of 2024, while the Euro 1.6 million recovery can be made only following the conclusion of the state of war in Ukraine.

In this general context, it should be noted that the Batch 3 and Batch 4 contracts with the customer Arianespace includes the possibility - where necessary - to invoke a force majeure clause for the obligations assumed by Avio. At present, the application of this clause has not been invoked because, in light of the above, Avio is currently able to ensure the continuation of production activities in the short and medium term. In any case, the situation will be constantly monitored.

The Group has already taken action - with the support of the European Space Agency - to identify possible alternative suppliers with reference to the above products, also analyzing the process and methods necessary for the certification of these solutions in the qualification dossier of the Vega and Vega-C launchers. As of today's date, Ariangroup-manufactured carbon-carbon inserts will be used whose supply timelines ensure the continuity of Vega-C production. With regard to replacement of the MEA, with the help of the Italian Space Agency, we have identified an alternate solution that is currently being tested (contract signed with the ASI in April 2023).

Risk Assessment Update

In the first half of 2023, the risk assessment activity carried out at December 31, 2022, in accordance with the company's Enterprise Risk Management (ERM) is being updated, which also included material ESG risks as well as the risk on climate change.

General economic risks

General aspects

The economic, equity and financial position of Avio is influenced by a number of macro-economic environment factors (including GDP movements, the inflationary impacts on raw materials, the unemployment rate and interest rate movements), both in the countries in which the Group operates and at a global level, as a result of impacts upon the spending capacity of the individual countries (in particular in Europe) for the development of Space activities, through the national and European agencies.

Should this situation of significant weakness and uncertainty continue for significantly longer or worsen, particularly in the Group's market, the operations, strategies and prospects of the Group may be impacted,

particularly with regards to production forecasts for future launches of Group spacecraft and for new research and development programmes, with a consequent possible impact on the Group financial statements.

In addition, as reported, the space programmes have principally been executed through the use of funding provided by the governments and the European authorities. Although the 2022 ESA Ministerial Conference had a positive response in terms of allocations for the Company together with the National Recovery and Resilience Plan (PNRR), these allocations depend on the policies adopted by governments and - in general - the economic conditions in Europe and therefore there is a risk of exposure to macroeconomic factors. The demand for launchers is therefore supported both by the public sector and the private sector.

Risks related to the ongoing inflationary situation

Should the current inflationary effects on raw materials be prolonged or worsen, the Group's business, strategies and prospects could be adversely affected, which could have a negative impact on the Group's income statement, balance sheet and financial position.

Risks related to changes in energy costs.

In H1 2023, energy costs partially recovered from the high levels of 2022. In view of the volatility risk and rising trends in energy costs that are typical as the autumn season approaches, there remains the risk of a potential increase in energy costs, as seen in H2 2022, which could have a negative impact on the Group's business, financial position, prospects and strategies.

Risks related to the COVID-19 pandemic

Following recent events and thanks to preventive and regulatory measures adopted at the international level, the macroeconomic situation currently appears less exposed to COVID-19-related risks than it was in the past; moreover, the sector in which the Company operates has always been less exposed than others to the related risks.

While the effects of the pandemic were felt intermittently in 2022 and indirectly affected Avio's internal activities, as well as at times slowing down the activities of suppliers and sub-contractors in Italy and the rest of Europe, in H1 2023 activities continued to normalise.

Should the effects of COVID-19 recur or worsen, impacts, including significant impacts, may be seen on the industrial, engineering and commercial activities of the entire aerospace sector.

In view of the above, the intrinsic risk associated with the potential effects that such an epidemic may entail is assessed as high (inherent risk high), while the control risk is assessed as medium, given that the internal control system introduced by the regulations in force is being continuously monitored and developed at an institutional level and the Crisis Committee set up by the Company is constantly monitoring the situation.

The COVID-19 Committee, specifically set up by Avio, regularly updated the risk assessment that was necessary in view of the COVID-19 outbreak globally.

Although the Group considers the space programme sector less volatile in consideration of the long-term nature of projects and the backlog developed, a contraction in economic growth, a recession or a financial crisis may reduce (even significantly) demand for the components produced by the Group, with consequent impacts on operations and on the financial statements of Avio and of the Group companies.

In addition, a weak economic environment may impact the Group's access to the capital markets or the availability of favourable conditions, with consequent impacts on operations and on the financial statements of Avio and of the Group companies.

Specific business risks

The space programmes, due to their inherent complexity, strategic important and source of funding, are generally dependent on plans and decisions undertaken at government level in Europe, both by individual countries and as part of international agreements, implemented by specific national and supranational institutions and agencies. These plans seek to guarantee independent access to space by the European nations. Although the 2022 ESA Ministerial Conference had a positive response in terms of allocations for the Company together with the National Recovery and Resilience Plan (PNRR), changes to space access policies, both at a domestic and European or international level, and unfavourable economic conditions impacting the spending allocated to these policies by national governments and supranational institutions, may impact Group operational levels with possible repercussions for operations and the Group financial statements.

Group business depends in addition on a limited number of programmes and customers. Any interruptions, temporary suspensions, delays or cancellations to one or more major programmes constitutes a risk which may impact the Group's commercial and production operations and financial statements. In H1 2023, the backlog grew 35% compared to the end of 2022. However, as a potential risk of aerospace industry groups, the backlog may be subject to unexpected adjustments and therefore may not be indicative of future revenues or operating results.

The Group operates in the space sector principally through long-term contracts, often at fixed prices or with inflation-linked price reviews. Fixed price contracts present the risk that any additional costs may not be reimbursed or are only partially reabsorbed by the customer, with possible negative impacts on the Group's operations and financial statements.

In addition, for the recognition of revenues and related margins deriving from long-term works contracts, the advancement percentage method is used, based on total cost estimates for the execution of contracts and verification of the state of advancement of operations. Both these factors are by their nature subject to management estimates, which in turn depend on the objective possibility and capacity to forecast future events. The occurrence of unforeseeable events, such as the recurrence or prolongation of the COVID-19 pandemic, and foreseeable events, to a differing degree, may result in an increase in costs incurred for the execution of long-term contracts with impacts on the Group's operations and financial statements. Against this risk the company has put in place procedures, IT and reporting systems, as well as a trusted and professional workforce, with the goal of monitoring current performance and considering risk elements in estimates.

The Group is not a Launch Service Provider with regards to Vega and Vega C launch services sales. Although the Group contributes to the definition of Arianespace's Business Plan regarding the marketing of the Vega launcher and its successors, in order to determine volumes and prices that allow, in addition to recurring launch system costs, balanced budgeting for the development of the launchers, where the Launch Service Provider does not correctly execute its role or adopts commercial practices which do not align with the Group's interest, this may have an impact on the operations and financial statements of the Group.

Group customers are responsible for declaring the compliance of products before acceptance and sale and may entirely or partially reject them where such compliance is not declared. In this case, the warranty clauses require us to replace or repair the non-compliant component, incurring the associated costs in addition to any costs necessary to understand the problem. Where the associated costs are not covered by insurance, the Group's results may be impacted. Once accepted by customers, the Group is no longer responsible for damage deriving from the malfunctioning of products, except where the pre-existence of any defects which were not evident upon acceptance is demonstrated, with the consequent further obligation to restore or repair the defective products before final use and/or launch.

In addition, for any damage, whatever the cause, and including damage deriving from defects and/or the malfunctioning of products supplied by the Group, caused during the flight of the launchers, the launch service provider shall exclusively be responsible and, where applicable, the ESA and the French government.

The Group's industrial operations require the use and the processing of explosive or chemically hazardous materials. Although these activities are conducted in accordance with applicable rules, as per a specific Safety Management System to prevent accidents, and high-quality equipment and personnel are used, accidents may occur which result in interruptions of varying lengths and thus a negative effect on the Group's results.

SUBSEQUENT EVENTS TO THE PERIOD-END

Business

Vega flight scheduled for October 4, 2023

The launch campaign for Vega's next mission - scheduled for October 4, 2023 - is underway.

The mission will take two satellites and ten auxiliary loads into sun-synchronous orbit.

The main payload is the THEOS-2 (THailand Earth Observation System 2) Earth observation satellite, which has a resolution of up to 0.5 metres.

The second payload is the FORM OSAT-7R/TRITON satellite developed by the Taiwan Space Agency (TASA) equipped with a GNSS-R, Global Navigation Satellite System-Reflectometry to study ocean winds in order to forecast the trajectories and intensities of typhoons.

On July 6th, 2023, Ariane 5 launcher completed its last mission, successfully placing into orbit the Heinrich-Hertz and Syracuse 4B satellites. Avio contributed to the success of Ariane 5 program through the two solid rocket boosters P230, which provide 90% of the rocket thrust at liftoff as well as the core stage engine Vulcain 2 oxygen turbopumps. Avio has been part of the Ariane 5 program since the beginning and the P230 motors performed well in all the 117 flights throughout the last 27 years, demonstrating a very consistent and stable performance. In the future, Avio will continue along this path, providing P120C solid rocket boosters for the new Ariane 6 European launcher.

On September 4th, 2023, ESA announced that the maiden flight of Ariane 6 is expected in the first half of 2024.

Enquiry Commission work following the Zefiro 40 engine test

The Enquiry Commission (IEC) chaired by the ESA Inspector General to analyse the test results took office on July 21, 2023, and also met to continue its work in the first and last week of August. The Commission's work is expected to conclude by the end of September 2023.

Planning for Vega C's return to flight is currently being assessed, pending the results of the Commission's work as described above.

Other significant events

As reported in the September 4, 2023 press release⁴, Avio has reached an agreement with Technology For Propulsion and Innovation S.p.A. ("T4i") a spin-off company of the University of Padua based in Monselice (PD), which specialises in innovative propulsion systems for aerospace applications, to make a strategic qualified minority investment in T4i's capital.

The investment was made through Avio's subscription to a dedicated capital increase, which led to Avio holding approximately 17% of T4i's share capital, with an investment of approximately Euro 2.5 million. Commercial and technology development agreements to develop new space technologies are also currently being signed.

OUTLOOK

In the short term, Vega-C production activities will be affected by the implementation of recommendations provided by the Independent Enquiry Commission (IEC) to ensure the safe return to flight of Vega-C. At the same time, recommendations will be implemented to ensure the long-term reliability of the Vega-C launcher as well.

⁴ See the appropriate "Investors" section of Avio's website: <https://syndication.teleborsa.it/Avio/Financial-Announcements/avio-investe-in-t4i/MXxjb211bmljYXRpLjE3NzEwMDAwMzUyMDIzMXwxFDIwMjMwOTA1>

P120C engine production activities continue.

On the other hand, in line with the intensive roadmap planned, tactical propulsion production activities will accelerate, as will the numerous and important product development activities, thanks to which the Company secured major projects under the National Recovery and Resilience Plan (NRRP) and the 2022 ESA Ministerial Conference.

As previously noted, the Independent Enquiry Commission is continuing to analyse the results of the Zefiro 40 engine static ignition test anomaly to identify possible causes and introduce mitigation measures.

Pending these results and considering the currently foreseeable implications, economic and financial forecasts for the year 2023, based on the chief production and development assumptions, remain unchanged, as reported in the September 8 press release regarding the 2023 half-year results⁵ and in the presentation of the 2023 half-year results to be reported to investors and analysts on September 11, 2023.

In relation to the ongoing Russia-Ukraine conflict no specific medium-term impacts on Vega C operational continuity are currently expected. The procurement process for the fourth-stage Vega C engine produced in Ukraine, which has been underway for several years, has provided a "strategic" stock which guarantees Avio's deliveries for launches planned in the medium term. In the long term, the ESA recently decided to dedicate financial resources to initiate technical and industrial actions aimed at mitigating the supply risk in the long term through the development of complementary technological solutions.

These assessments were promptly reported in the press releases dated February 25, 2022, March 25, 2022, and most recently July 17, 2022 and are still accurate.

TRANSACTIONS WITH HOLDING COMPANIES, SUBSIDIARIES, JOINT VENTURES, ASSOCIATES AND INVESTEEES

Transactions of the parent Avio S.p.A. with shareholders and with subsidiaries and associates of these latter, with subsidiaries, joint ventures, associates and investees, and with subsidiaries and associates of these latter, consist of industrial, commercial and financial transactions carried out as part of ordinary operations and concluded at normal market conditions. In particular, these concern the supply of goods and services, including of an administrative-accounting, IT, personnel management, assistance and funding and treasury management nature.

OTHER INFORMATION

As per Article 40 of Legislative Decree No. 127/1991, it is disclosed that, in consideration of the share buy-back programme, at June 30, 2023, the Parent Company held 1,091,207 treasury shares, representing 4.14% of the share capital.

CORPORATE GOVERNANCE

The Company adheres to the principles of the Corporate Governance Code of the Corporate Governance Committee for Listed Companies, established by Borsa Italiana and promoted by Borsa Italiana, ABI, Ania, Assogestioni, Assonime and Confindustria, last updated in January 2020, and has adjusted its governance system to the regulatory provisions indicated therein. The Corporate Governance Code is available on the Borsa Italiana S.p.A. website at <https://www.borsaitaliana.it/comitato-corporate-governance/codice/2020.pdf>.

In accordance with the regulatory obligations, the Corporate Governance and Ownership Structure Report is drawn up annually and (i) contains a general outline of the Corporate Governance System adopted by the company and (ii) information on the ownership structure and compliance with the Corporate Governance Code,

⁵ Avio's website, in the "Investors" section: <https://investors.avio.com/Investors/Financial-Announcements/>.

including the main governance practices applied and the features of the internal control and risk management system, also with regards to financial disclosure.

The Company, at June 30, 2023, had adopted:

- i. the **Internal Dealing Policy**, as approved by the Board of Directors of Space2 on September 29, 2016, amended on September 13, 2017 by the Board of Directors of Avio S.p.A., with effect from the acquisition date.
- ii. a **Related Party Transactions Policy** approved by the Board of Directors of Space2 S.p.A. on January 19, 2017, with effect from the efficacy date of the merger by incorporation and latterly amended by the Board of Directors of Avio on November 8, 2021. For a reliable analysis of information on significant transactions with related parties, see the Explanatory Notes section "7. Related party transactions";
- iii. of the **Inside Information Processing Policy**, approved by the Company's Board of Directors on September 9, 2022 and replacing the previous version adopted on March 3, 2022;
- iv. **an Organisation, Management and Control Model, as per Legislative Decree No. 231/2001, as amended**, and updated on June 20, 2023, by the Company's Board of Directors to account for all legislative changes introduced by Legislative Decree No. 231/2001;
- v. an **Avio Group Code of Ethics**, approved on June 20, 2023 and amended latterly on December 21, 2021 by the Board of Directors of the Company, containing the requirements demanded by the company's stock market listing;
- vi. the **Guidelines to the Internal Control and Risk Management System of the Company**, approved on March 29, 2004 and latterly amended on June 20, 2023 by the Board of Directors of the Company;
- vii. a **Diversity policy**, approved by the Board of Directors of the Company on March 19, 2021, in compliance with Article 123-*bis*, paragraph 2, letter d-*bis*) of the CFA, as supplemented by Article 10 of Legislative Decree No. 254/2016 and the recommendations of the Self-Governance Code. The policy was most recently updated by the Board of Directors on March 14, 2022;
- viii. of a **Shareholder Engagement Policy**, approved by the Company's Board of Directors on March 3, 2022, in accordance with Recommendation No. 3 of the Corporate Governance Code. The policy seeks to foster transparency in dealings with the financial community and the markets by building, maintaining and developing an active relationship of trust with investors;
- ix. a **Policy on qualitative and quantitative criteria for assessing the independence requirements of Directors and Statutory Auditors**, approved by the Board of Directors on March 14, 2022 and in line with Recommendation 7, first sentence, points (c) and (d), in Article 2 of the Corporate Governance Code;
- x. an **Avio Group Anti-corruption Code**, approved by the Company's Board of Directors on March 14, 2019 in compliance with Legislative Decree No. 231/2001 and international best practices.
- xi. a Whistleblowing Policy in compliance with the Whistleblowing Decree (Legislative Decree No. 24/2023). This allows reports to be sent electronically in written form and guarantees - including through encryption tools - the confidentiality of the identity of the whistleblower, the person involved and the person mentioned in the report, in addition to the content of the report and the related documentation.

For any further detailed information on corporate governance related to the Company and all corporate governance decisions made up to June 30, 2023, please refer to the "Corporate Governance" section of the Company's website.

* * *

September 8, 2023

The BOARD OF DIRECTORS
The Chief Executive Officer and General Manager
Giulio Ranzo

CONDENSED CONSOLIDATED HALF-YEAR FINANCIAL STATEMENTS AT JUNE 30, 2023

CONSOLIDATED BALANCE SHEET	<i>Note</i>	June 30, 2023	December 31, 2022
<i>(in Euro)</i>			
ASSETS			
Non-current assets			
Property, plant and equipment	<i>3.1</i>	141,058,663	137,573,354
Right-of-use	<i>3.2</i>	8,306,362	8,534,535
<i>- of which related parties</i>		<i>907,272</i>	<i>975,889</i>
Investment property	<i>3.3</i>	3,457,331	3,479,277
Intangible assets with definite life	<i>3.4</i>	122,552,565	119,813,995
Goodwill	<i>3.5</i>	62,829,038	64,149,492
Investments	<i>3.6</i>	14,788,290	15,604,979
Non-current financial assets	<i>3.7</i>	2,010,172	2,010,172
<i>- of which related parties</i>		<i>2,010,172</i>	<i>2,010,172</i>
Deferred tax assets	<i>3.8</i>	80,878,359	81,471,150
Other non-current assets	<i>3.9</i>	68,105,287	67,469,542
Total non-current assets		503,986,067	500,106,495
Current assets			
Inventories and advances to suppliers	<i>3.10</i>	214,464,826	202,573,023
<i>- of which related parties</i>		<i>41,732,841</i>	<i>49,828,384</i>
Contract work-in-progress	<i>3.11</i>	468,362,143	426,181,595
<i>- of which related parties</i>		<i>108,159,597</i>	<i>99,185,251</i>
Trade receivables	<i>3.12</i>	2,889,693	3,725,455
<i>- of which related parties</i>		<i>2,049,323</i>	<i>2,119,624</i>
Cash and cash equivalents	<i>3.13</i>	126,607,408	131,403,014
Tax receivables	<i>3.14</i>	12,658,472	13,009,300
Other current assets	<i>3.15</i>	11,140,572	8,357,546
<i>- of which related parties</i>		<i>16,552</i>	<i>2,208</i>
Total current assets		836,123,114	785,249,933
TOTAL ASSETS		1,340,109,180	1,285,356,429

CONSOLIDATED BALANCE SHEET	<i>Note</i>	June 30, 2023	December 31, 2022
<i>(in Euro)</i>			
EQUITY			
Share capital	3.16	90,964,212	90,964,212
Share premium reserve	3.17	130,686,924	130,686,924
Other reserves	3.18	14,415,294	14,196,872
Retained earnings		57,834,429	58,249,080
Group net profit		(3,679,628)	(434,767)
Total Group Equity		290,221,232	293,662,323
Equity attributable to non-controlling interests	3.19	9,421,195	9,598,904
TOTAL EQUITY		299,642,427	303,261,227
LIABILITIES			
Non-current liabilities			
Non-current financial liabilities	3.20	7,051,250	12,076,229
Non-current financial payables for leasing	3.21	5,455,722	4,937,099
- of which related parties		842,354	836,508
Employee Benefit Provisions	3.22	8,871,716	9,524,486
Provisions for risks and charges	3.23	19,467,058	29,921,216
Other non-current liabilities	3.24	76,393,694	76,471,119
Total non-current liabilities		117,239,440	132,930,149
Current liabilities			
Current financial liabilities		54,901	28,028,069
- of which related parties	3.25	-	27,768,866
Current financial liabilities for leasing	3.26	1,805,717	1,878,679
- of which related parties		83,204	152,433
Current portion of non-current financial payables	3.27	10,025,500	10,033,000
Provisions for risks and charges	3.23	26,911,629	23,458,025
Trade payables	3.28	89,528,586	89,825,718
- of which related parties		5,793,493	17,586,964
Advances from clients for contract work-in-progress	3.11	766,204,818	667,442,685
- of which related parties		154,920,722	146,219,587
Tax payables	3.29	2,862,321	4,227,922
Other current liabilities	3.30	25,833,841	24,270,954
- of which related parties		336,387	318,264
Total current liabilities		923,227,314	849,165,053
TOTAL LIABILITIES		1,040,466,753	982,095,202
TOTAL LIABILITIES AND EQUITY		1,340,109,180	1,285,356,429

CONSOLIDATED INCOME STATEMENT	Note	H1 2023	H1 2022
<i>(in Euro)</i>			
Revenues	3.31	157,720,909	133,516,251
- of which related parties		17,331,097	10,892,401
Change in inventory of finished products, in progress and semi-finished		3,439,388	4,290,754
Other operating income	3.32	5,415,221	6,861,350
- of which related parties		197,929	
Consumption of raw materials	3.33	(54,453,977)	(39,718,094)
Service costs	3.34	(61,423,069)	(60,766,834)
- of which related parties		(14,098,043)	(10,613,762)
Personnel costs	3.35	(46,931,285)	(40,663,756)
Amortisation and depreciation	3.36	(9,050,608)	(9,375,274)
Other operating costs	3.37	(2,705,875)	(1,973,403)
Effect valuation of investments under equity method - operating income/(charges)	3.38	(816,689)	(1,887,561)
Costs capitalised for internal works	3.39	4,910,211	3,499,026
EBIT		(3,895,774)	(6,217,540)
Financial income	3.40	896,714	252,955
- of which related parties		-	80,000
Financial charges	3.41	(686,816)	(551,012)
- of which related parties		(303,312)	(6,668)
NET FINANCIAL INCOME/(CHARGES)		209,898	(298,058)
Other investment income/(charges)		-	-
INVESTMENT INCOME/(CHARGES)		-	-
PROFIT/(LOSS) BEFORE TAXES		(3,685,876)	(6,515,598)
Income taxes	3.42	(171,989)	(1,115,136)
NET PROFIT/(LOSS) FOR THE PERIOD		(3,857,865)	(7,630,733)
-- of which: Owners of the parent		(3,679,628)	(9,453,889)
Non-controlling interests		(178,238)	1,823,156
Basic earnings/(losses) per share	3.43	(0.15)	(0.37)
Diluted earnings/(losses) per share	3.43	(0.14)	(0.36)

CONSOLIDATED COMPREHENSIVE INCOME STATEMENT	H1 2023	H1 2022
<i>(in Euro)</i>		
NET PROFIT/(LOSS) FOR THE PERIOD (A)	(3,857,865)	(7,630,733)
Other comprehensive income items:		
- Actuarial gains/(losses) - Actuarial gains/losses reserve	13,479	619,999
Gains/(losses) recorded directly to equity (which will be subsequently reclassified to P&L)		
- Gains/(losses) on cash flow hedge instruments recorded directly to interest rate cash flow hedge reserve	-	-
Tax effect on other gains/(losses)	7,495	(140,951)
TOTAL OTHER COMPREHENSIVE INCOME ITEMS, NET OF TAX EFFECT (B)	20,974	479,048
COMPREHENSIVE NET PROFIT/(LOSS) FOR THE PERIOD (A+B)	(3,836,891)	(7,151,685)
-- of which: Owners of the parent	(3,659,182)	(8,977,108)
Non-controlling interests	(177,709)	1,825,423

STATEMENT OF CHANGES IN CONSOLIDATED SHAREHOLDERS' EQUITY

(Euro thousands)

	Share capital	Share premium reserve	Treasury shares	Other reserves				Retained earnings	Group result	Total Group equity	Non-controlling interest equity	Total Equity	
				Unavailable reserve for treasury shares in portfolio	Legal reserve	Actuarial gains/(losses) reserve	Stock grant reserve						Translation reserve
Equity at 31/12/2021	90,964	135,175	(9,080)	9,081	18,193	(4,596)	-	-	54,263	8,480	302,480	7,847	310,327
Allocation of prior year result								3,980	(3,980)	-			-
Distribution of dividends of the parent company Avio S.p.A.									(4,500)	(4,500)			(4,500)
Use of treasury shares for the acquisition of Temis S.r.l.		1,250	1,250	(1,250)						1,250			1,250
Acquisition of treasury shares		(5,739)	(5,739)	5,739						(5,739)			(5,739)
Other changes						(4)	54	(21)	6		35	3	38
Comprehensive income													
- Net profit for the year										(435)	(435)	1,748	1,314
- Other changes													-
- Actuarial gains/(losses), net of tax effect						571					571		571
Comprehensive income	-	-	-	-	-	571	-	-	-	(435)	137	1,748	1,885
Equity at 31/12/2022	90,964	130,687	(13,569)	13,569	18,193	(4,029)	54	(21)	58,249	(435)	293,662	9,599	303,261
Allocation of prior year result								(435)	435	-			-
Other changes							191	7	20		218		218
Comprehensive income/(expense)													
- Net Profit/(loss) for the period										(3,680)	(3,680)	(178)	(3,858)
- Other changes													-
- Actuarial gains/(losses), net of tax effect						21					21		21
Comprehensive income/(expense)	-	-	-	-	-	21	-	-	-	(3,680)	(3,659)	(178)	(3,837)
Equity at 30/06/2023	90,964	130,687	(13,569)	13,569	18,193	(4,008)	245	(14)	57,834	(3,680)	290,222	9,421	299,643

CONSOLIDATED CASH FLOW STATEMENT

(Euro thousands)

	H1 2023	H1 2022
OPERATING ACTIVITIES		
Net Profit/(loss) for the period	(3,858)	(7,631)
Adjustments for:		-
- Income taxes	172	1,115
- (Income)/expenses from measurement at equity	817	1,888
- Amortisation & Depreciation	9,051	9,375
Net change provisions for risks and charges	(7,001)	(3,990)
Net change employee provisions	(632)	(547)
Changes in:		
- Inventories and Advances to suppliers	(11,892)	(26,948)
- <i>of which related parties</i>	8,096	(15,293)
- Contract work-in-progress & advances from clients	56,582	43,444
- <i>of which related parties</i>	(273)	27,956
- Trade receivables	836	1,359
- <i>of which related parties</i>	70	(3,132)
- Trade payables	(297)	(18,801)
- <i>of which related parties</i>	(11,793)	(1,066)
- Other current & non-current assets	(2,475)	5,017
- <i>of which related parties</i>	(14)	(14)
- Other current & non-current liabilities	(340)	(939)
- <i>of which related parties</i>	18	3,149
Income taxes paid	-	-
Interest paid	(66)	(96)
Net liquidity generated/(employed) in operating activities	(A) 40,896	3,247
INVESTING ACTIVITIES		
Investments in:		
- Tangible assets and investment property	(6,799)	(6,147)
- Intangible assets with definite life	(5,516)	(4,247)
Disposal price of tangible, intangible & financial assets	-	-
Liquidity generated (employed) in investing activities	(B) (12,315)	(10,394)
FINANCING ACTIVITIES		
EIB loan	(5,000)	(5,000)
Centralised treasury effect with Europropulsion S.A. joint control company	(27,769)	(5,000)
- <i>of which related parties</i>	(27,769)	(5,000)
Dividends paid by the parent Avio S.p.A.	-	(4,493)
Acquisition of treasury shares	-	(4,592)
Other changes to financial assets and liabilities	(608)	(1,298)
- <i>of which related parties</i>	5	(59)
Liquidity generated (employed) in financing activities	(C) (33,377)	(20,383)
INCREASE/(DECREASE) IN NET CASH AND CASH EQUIVALENTS	(A)+(B)+(C) (4,796)	(27,529)
NET CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	131,403	104,614
NET CASH AND CASH EQUIVALENTS AT END OF PERIOD	126,607	77,085

EXPLANATORY NOTES TO THE CONDENSED CONSOLIDATED HALF-YEAR FINANCIAL STATEMENTS AT JUNE 30, 2023

1. GENERAL INFORMATION

Avio S.p.A. (the "Company" or the "Parent Company") is a limited liability company incorporated in Italy and registered at the Rome Companies Registration Office, with Registered Office at Rome, Via Leonida Bissolati, No. 76.

The Company was incorporated on May 28, 2015 under the name Space2 S.p.A., an Italian-registered Special Purpose Acquisition Company ("SPAC"), as an SIV (Special Investment Company) in accordance with the Borsa Italiana regulation, whose shares were listed on July 28, 2015 on the Professional Segment of the Investment Vehicles Market (MIV) organised and managed by Borsa Italiana S.p.A..

On March 31, 2017, Space2 S.p.A. acquired the company Avio S.p.A., parent company of the Avio Group and, on April 10, 2017 Avio S.p.A. was merged by incorporation. Space2 S.p.A. also changed its name to "Avio S.p.A." following the above-mentioned operation.

At June 30, 2023, Avio S.p.A. held, directly or indirectly, investments in seven subsidiary companies (Spacelab S.p.A., Regulus S.A., Se.Co.Sv.Im. S.r.l., Avio Guyane S.A.S., Avio France S.A.S., Avio USA Inc. and Avio India Aviation Aerospace Private Ltd. in liquidation) and in a jointly controlled company (Europropulsion S.A.) included in the consolidation scope of these financial statements (collectively the "Group" or the "Avio Group").

The consolidation scope changed in H1 2023 as a result of the reverse merger of AS Propulsion International B.V. into Se.Co.Sv.Im. S.r.l.; the former constituted a direct wholly owned subsidiary of the parent company Avio S.p.A. and held 100% of the shares of the latter.

These Group consolidated financial statements are presented in Euro which is the Company's principal functional currency. The Consolidated Balance Sheet, the Consolidated Income Statement and the Consolidated Comprehensive Income Statement are reported in units of Euro; the Statement of Changes in Consolidated Equity and the Consolidated Cash Flow Statement, as well as these Explanatory Notes, are reported in thousands of Euro where not otherwise indicated. The foreign subsidiaries are included in the consolidated financial statements in accordance with the accounting policies described in the notes below.

2. SIGNIFICANT ACCOUNTING POLICIES

2.1. Accounting Standards for the preparation of the condensed financial statements

These condensed half-year financial statements at June 30, 2023 were prepared in accordance with International Accounting Standards (hereafter also "IFRS") issued by the International Accounting Standards Board ("IASB") and approved by the European Union. IFRS refers to the International Financial Reporting Standards, the revised international accounting standards ("IAS") and all of the interpretations of the International Financial Reporting Interpretations Committee ("IFRIC") - previously known as the Standing Interpretations Committee ("SIC").

In the preparation of these Condensed half-year financial statements, drawn up in accordance with IAS 34 – *Interim Financial Reporting*, the same accounting standards were adopted as for the preparation of the consolidated financial statements of the Avio Group at December 31, 2022, except for that outlined in paragraph "2.8. New accounting standards" below. Therefore, these financial statements must be read together with the consolidated financial statements of the Avio Group at December 31, 2022.

The preparation of condensed financial statements in application of IFRS requires estimates and assumptions on the values of the assets and liabilities, on the disclosures relating to assets and contingent liabilities at the reporting date and on the revenues and costs in the period. If in the future these estimates and assumptions, which are based on the best current valuations made by management, should differ from actual circumstances, they will be modified appropriately in the period in which the circumstances change.

Some valuation processes, in particular the most complex such as the determination of any loss in value of non-current assets or the valuation of contingent liabilities, are generally made on a complete basis on the

preparation of the annual accounts, when all the necessary information is available, except where there are specific indications of impairment which require an immediate valuation of any loss in value or an accrual is required to the provision for risks and charges.

2.2. Financial Statements

The Condensed half-year financial statements at June 30, 2023 consist of the Consolidated Balance Sheet, the Consolidated Income Statement, the Consolidated Comprehensive Income Statement, the Statement of changes in Consolidated Equity, the Consolidated Cash Flow Statement and the Explanatory Notes.

The financial statements of the Group are presented as follows:

- for the Consolidated Balance Sheet, the separate presentation of non-current and current assets and of non-current and current liabilities, generally adopted by industrial and commercial groups;
- for the Consolidated Income Statement, the classification of costs based on their nature, with separate indication of the results from discontinued operations, where applicable;
- for the Consolidated Comprehensive Income Statement, the adoption of the separate presentation ("two-statement approach") with indication of other gains/losses net of the relative tax effect;
- for the Consolidated Cash Flow Statement, the adoption of the indirect method.

2.3. Comparative information

In accordance with IAS 34, these condensed half-year financial statements at June 30, 2023 present the 2022 comparative figures for the Balance Sheet items (Consolidated Balance Sheet and Statement of Changes in Consolidated Equity) and the first half year 2022 for the Income Statement items (Consolidated Income Statement, Consolidated Comprehensive Income Statement and Consolidated Cash Flow Statement).

2.4. Consolidation Principles

The consolidation principles adopted are in line with those utilised for the preparation of the consolidated financial statements at December 31, 2022 of the Avio Group, to which reference should be made for further information.

2.5. Translation of foreign entity financial statements

The financial statements of each company consolidated are prepared in the primary currency where they operate. For the condensed half-year financial statements, the financial statements of each foreign entity which utilises a currency other than the Euro is translated into this latter, as the Group's functional currency and the consolidated financial statement presentation currency. The transactions in currencies other than the Euro are translated into the functional currency at the exchange rate at the date of the transaction and the exchange gains and losses from the subsequent closure of these transactions are recorded in the income statement. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rates at the reporting date. The positive and/or negative differences between the values adjusted to the closing exchange rate and those recorded in the period are also recognised in the income statement. Non-monetary assets valued at historical cost in currencies other than the functional currency are not translated at the current exchange rate at the reporting date.

2.6. Consolidation scope

The Condensed half-year financial statements at June 30, 2023 include the financial statements of the parent company, of the Italian and overseas companies in which it holds directly or indirectly at the same date more than 50% of the share capital, consolidated under the line-by-line method, and the financial statements of the company Europropulsion S.A., held 50% jointly with another shareholder, consolidated under the equity method.

The consolidation scope at June 30, 2023 was as follows:

Companies included in the consolidation scope at June 30, 2023			Holding
Parent			
<i>Company Name</i>	<i>Registered office</i>	<i>Share capital</i>	<i>% Held</i>
Avio S.p.A.	via Leonida Bissolati, 76 - Rome	Euro 90,964,212.90	N/A
Companies consolidated by the line-by-line method			
<i>Company Name</i>	<i>Registered office</i>	<i>Share capital</i>	<i>% Held</i>
Spacelab S.p.A.	via Leonida Bissolati, 76 - Rome	Euro 3,000,000.00	70%
Regulus S.A.	Centre Spatial Guyanais - BP 0073 97372 Kourou (French Guiana - France)	Euro 640,000.00	60%
SE.CO.SV.IM. S.r.l.	Via degli Esplosivi, 1 - Colleferro (RM)	Euro 53,929,691.00	100%
Avio Guyane S.A.S.	Centre Spatial Guyanais - BP 506 97388 Kourou (French Guiana - France)	Euro 50,000.00	100%
Avio France S.A.S.	3 Rue du Colonel Moll - 75017 Paris (France)	Euro 50,000.00	100%
Temis S.r.l.	Via Gaetano Donizetti, 20 - Corbetta (Milan)	Euro 100,000.00	100%
Avio USA Inc.	Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of Newcastle, Delaware 19801 (USA)	2.00 (USD)	100%
Avio India Aviation Aerospace Private Limited (*)	Pitampura Delhi North West (India)	INR 16,060,000	100%
Jointly controlled companies, measured at equity			
Europropulsion S.A.	11, rue Salomon de Rothschild 92150 Suresnes 388 250 797 RCS Nanterre	Euro 1,200,000.00	50%
Associates, measured at equity			
Termica Colleferro S.p.A.	Via degli Agresti, 4 and 6 Bologna	Euro 6,100,000.00	40%

(*) The company is in liquidation. No financial commitments are expected for the Group related to the liquidation.

The non-controlling interest in the equity and results of the subsidiaries consolidated are recorded separately from the Group equity, in the account "Non-controlling interest equity".

2.7. Accounting standards and basis of preparation

IFRS Standards, Amendments and Interpretations applied from January 1, 2023

The following IFRS accounting standards, amendments and interpretations were applied for the first time by the Group from January 1, 2023:

- On May 18, 2017, the IASB published **IFRS 17 - Insurance Contracts** which replaces **IFRS 4 - Insurance Contracts**. This standard is effective as of January 1, 2023. The new standard ensures that an entity provides pertinent information which accurately presents the rights and obligations under insurance contracts. The IASB developed the standard in order to eliminate inconsistencies and weaknesses in the existing accounting policies, providing a single principle-based framework to take account of all types of insurance contracts, including reinsurance contracts held by an insurer. The new standard sets out in addition presentation and disclosure requirements to improve comparability between entities belonging to the same sector. It measures insurance contracts on the basis of a General Model or a simplified version of such, called the Premium Allocation Approach ("PAA"). The main features of the General Model are:
 - the estimates and assumptions of future cash flows always refer to the current portion;
 - the measurement reflects the time value of money;
 - the estimates include an extensive use of observable market information;
 - a current and clear risk measurement exists;
 - the expected profit is deferred and aggregated into groups of insurance contracts on initial recognition; and,
 - the expected profit is recognised in the period of contractual coverage, taking account of adjustments from changes in the assumptions on cash flows for each group of contracts.

The PAA approach involves the measuring of the liability for the residual coverage of a group of insurance contracts on the condition that, on initial recognition, the entity expects that this liability reasonably reflects an approximation of the General Model. Contracts with a coverage period of one year or less are automatically considered appropriate for the PAA approach. The simplifications from application of the PAA method do not apply to the valuation of liabilities for existing claims, which are measured with the General Model. However, it is necessary to discount these cash flows where it is expected that the balance will be paid or received within one year from the date on which the claim occurred.

The entity should apply the new standard to insurance contracts issued, including reinsurance contracts issued, reinsurance contracts held and also investment contracts with a discretionary participation feature (DPF).

Furthermore, on December 9, 2021, the IASB published an amendment called "**Amendments to IFRS 17 Insurance contracts: Initial Application of IFRS 17 and IFRS 9 – Comparative Information**". The amendment is a transition option related to comparative information on financial assets presented at the date of initial application of IFRS 17. The amendment was effective as of January 1, 2023, along with the application of IFRS 17, to avoid temporary accounting mismatches between financial assets and insurance contract liabilities, and thus improve the usefulness of comparative information for financial statement readers.

The adoption of this principle and the related amendment did not have any effects on the Group consolidated financial statements.

- On May 7, 2021, the IASB published an amendment called "**Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction**". The document clarifies how deferred taxes should be accounted for on certain transactions that can generate assets and liabilities of equal amounts, such as leases and decommissioning obligations. The amendments were applied from January 1, 2023. The adoption of this amendment does not have effects on the consolidated financial statements of the Group.
- On February 12, 2021, the IASB published two amendments entitled "**Disclosure of Accounting Policies—Amendments to IAS 1 and IFRS Practice Statement 2**" and "**Definition of Accounting Estimates—Amendments to IAS 8**". The changes are intended to improve disclosure on accounting policies to provide more useful information to investors and other primary users of financial statements and to help companies distinguish between changes in accounting estimates and changes in accounting policies. The amendments

were applied from January 1, 2023. The adoptions of these amendments do not have any effects on the Group consolidated financial statements.

IFRS Standards, Amendments and Interpretations not yet approved by the European Union

At the reporting date, the relevant bodies of the European Union had not yet concluded the process necessary for the implementation of the amendments and standards described below.

- On January 23, 2020, the IASB published an amendment entitled "**Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current**" and on October 31, 2022 published an amendment entitled "**Amendments to IAS 1 Presentation of Financial Statements: Non-Current Liabilities with Covenants**". The purpose of the documents is to clarify how to classify payables and other short or long-term liabilities. These amendments shall enter into force on January 1, 2024 and early application is permitted. The Directors do not expect this amendment to have a significant impact on the Group consolidated financial statements.
- On September 22, 2022, the IASB published an amendment entitled "**Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback**". The document requires the seller-lessee to measure the lease liability arising from a sale & leaseback transaction so as not to recognise income or losses relating to the retained right of use. The amendments will be applicable from January 1, 2024, although advance application is permitted. The Directors do not expect this amendment to have a significant impact on the Group consolidated financial statements.
- On May 23, 2023, the IASB published an amendment called "**Amendments to IAS 12 Income Taxes: International Tax Reform – Pillar Two Model Rules**". This introduces a temporary exception to the recognition and disclosure requirements for deferred tax assets and liabilities related to the Pillar Two Model Rules and sets out specific disclosure requirements for entities affected by the related International Tax Reform.
It provides for the immediate application of the temporary exception, while the disclosure requirements will apply only to financial statements for years beginning on or after January 1, 2023, but not to interim financial statements with a closing date before December 31, 2023. The Directors do not expect this amendment to have a significant impact on the Group consolidated financial statements.
- On January 25, 2023, the IASB published an amendment entitled "**Amendments to IAS 7 Statement of Cash Flows and IFRS 7 Financial Instruments: Disclosures: Supplier Finance Arrangements**". This requires an entity to provide additional information on reverse factoring arrangements to enable users of financial statement to assess how financial arrangements with suppliers may affect the entity's liabilities and cash flows and to understand the effect of such arrangements on the entity's exposure to liquidity risk. The amendments will be applicable from January 1, 2024, although advance application is permitted. The Directors do not expect this amendment to have a significant impact on the Group consolidated financial statements.
- On January 30, 2014 the IASB published **IFRS 14 Regulatory Deferral Accounts** which permits only those adopting IFRS for the first time to continue to recognise amounts concerning Rate Regulation Activities according to the previous accounting standards adopted. As the Company/Group is a first-time adopter, this standard is not applicable.

3. COMPOSITION, COMMENTS AND CHANGES IN THE PRINCIPAL BALANCE SHEET ACCOUNTS AND OTHER DISCLOSURES

NON-CURRENT ASSETS

3.1. PROPERTY, PLANT & EQUIPMENT

The values of Property, plant and equipment at June 30, 2023 are shown net of the accumulated depreciation provisions, as illustrated in the table below (Euro thousands).

The table illustrates the comparison between the balances in Property, plant and equipment of the Avio Group at June 30, 2023 and December 31, 2022.

	30/06/2023			31/12/2022		
	Values value	Accumulated depreciation	Net book value	Gross value	Accumulated depreciation	Net book value
Land	14,651	-	14,651	14,651	-	14,651
Buildings	64,929	(24,164)	40,765	64,786	(23,194)	41,592
Plant and machinery	87,009	(68,531)	18,478	84,685	(67,012)	17,673
Industrial & commercial equipment	19,197	(18,010)	1,186	18,989	(17,835)	1,154
Other assets	14,538	(10,782)	3,756	13,837	(10,166)	3,671
Assets in progress and advances	62,223	-	62,223	58,832	-	58,832
Total	262,546	(121,488)	141,058	255,780	(118,207)	137,573

The changes between December 31, 2022 and June 30, 2023 in the gross values of property, plant and equipment are illustrated in the table below (Euro thousands):

Gross values	31/12/2022	Increases	Decreases for disposals	Reclassifications and other changes	30/06/2023
Land	14,651	-	-	-	14,651
Buildings	64,786	143	-	-	64,929
Plant and machinery	84,685	2,324	-	-	87,009
Industrial & commercial equipment	18,989	218	(10)	-	19,197
Other assets	13,837	703	(2)	-	14,538
Assets in progress and advances	58,832	3,391	-	-	62,223
Total	255,780	6,778	(12)	-	262,546

The increases in the period of Euro 6,778 thousand concern:

- assets in progress and advances for Euro 3,391 thousand. These investments particularly concern the works on the production buildings for the P120C motor for Euro 1,446 thousand, the construction of the new Group administrative site in Colleferro for Euro 1,079 thousand and costs for maintenance and other activities for Euro 865 thousand;
- plant and production machinery amounting to Euro 2,324 thousand, mainly to achieve increased flight cadence;
- Other assets amounting to Euro 703 thousand, mainly relating to IT equipment and furnishings related to the Group's new administrative site;
- equipment amounting to Euro 218 thousand, mainly relating to production control instruments;
- buildings amounting to Euro 143 thousand, mainly relating to extraordinary maintenance and restructuring.

Between December 31, 2022 and June 30, 2023, the changes to accumulated depreciation were as follows (in Euro thousands):

Gross values	31/12/2022	Increases	Decreases for disposals	Reclassifications and other changes	30/06/2023
Buildings	(23,194)	(970)	-	-	(24,164)
Plant and machinery	(67,012)	(1,519)	-	-	(68,531)
Industrial & commercial equipment	(17,835)	(180)	5	-	(18,010)
Other assets	(10,166)	(618)	2	-	(10,782)
Total	(118,207)	(3,288)	7	-	(121,488)

The depreciation was calculated in relation to the estimated useful life and the obsolescence incurred by these assets.

3.2. RIGHT-OF-USE

The values of Right-of-use at June 30, 2023 are shown net of the accumulated depreciation provisions, as illustrated in the table below (Euro thousands).

	30/06/2023			31/12/2022		
	Values value	Accumulated depreciation	Net book value	Gross value	Accumulated depreciation	Net book value
Land right-of-use	2,570	(500)	2,070	2,570	(428)	2,142
Buildings right-of-use	6,450	(2,651)	3,799	6,207	(2,321)	3,886
Plant and machinery right-of-use	1,632	(706)	926	1,632	(620)	1,012
Other assets right-of-use	3,527	(2,016)	1,511	3,379	(1,884)	1,495
Total	14,179	(5,872)	8,307	13,788	(5,253)	8,535

The gross values of these rights at June 30, 2023 (in Euro thousands) are reported below:

Gross values	31/12/2022	Increases	Decreases for contract conclusion	Reclassifications and other changes	30/06/2023
Land right-of-use	2,570	-	-	-	2,570
Buildings right-of-use	6,207	417	(174)	-	6,450
Plant and machinery right-of-use	1,632	-	-	-	1,632
Other assets right-of-use	3,379	520	(372)	-	3,527
Total	13,788	937	(546)	-	14,179

The Right-of-use assets recognised in applying IFRS 16 mainly relate to the present values of the future payments under the following contracts:

- concession of an area located within the Salto di Quirra Inter-force Experimental Facility;
- lease of the electro-duct and relative electrical infrastructure at the combined cycle co-generation thermo-electrical station owned by the associate Termica Colleferro S.p.A.;
- leasing of office and industrial use land and buildings at Corbetta (Lombardy), Airola (Campania) and Villaputzu (Sardinia); leasing of apartments for employees in French Guiana; hiring of company cars.

The increases in the year of Euro 937 thousand mainly concern the new company use vehicle lease contracts and the new apartment lease contracts/renewals for the employees in Guiana, where the spaceport is located.

The decreases of Euro 546 thousand concerned the accounts outlined above and were due to the conclusion of the lease contracts.

The accumulated depreciation of these rights in the first half of 2023 is reported below (in Euro thousands):

Gross values	31/12/2022	Increases	Decreases for contract conclusion	Reclassifications and other changes	30/06/2023
Land right-of-use	(428)	(71)	-	-	(500)
Buildings right-of-use	(2,321)	(468)	138	-	(2,651)
Plant and machinery right-of-use	(620)	(86)	-	-	(706)
Other assets right-of-use	(1,884)	(485)	354	-	(2,016)
Total	(5,253)	(1,111)	492	-	(5,872)

3.3. INVESTMENT PROPERTY

The values of Investment property at June 30, 2023 are shown net of the accumulated depreciation provisions, as illustrated in the table below (Euro thousands).

	30/06/2023			31/12/2022		
	Values value	Accumulated depreciation	Net book value	Gross value	Accumulated depreciation	Net book value
Land	1,834	-	1,834	1,834	-	1,834
Buildings & facilities	2,893	(1,269)	1,623	2,872	(1,226)	1,645
Total	4,727	(1,269)	3,458	4,706	(1,226)	3,480

Investment property refers to part of the land, buildings and facilities within the Colleferro industrial complex (Rome) owned by the subsidiary Se.co.sv.im. S.r.l., leased to third parties. This latter undertakes property management activities.

The changes between December 31, 2022 and June 30, 2023 in the gross values of investment property of the Avio Group are illustrated in the table below (Euro thousands):

Gross values	31/12/2022	Increases	Decreases	Reclassifications and other changes	30/06/2023
Land	1,834	-	-	-	1,834
Buildings & facilities	2,872	21	-	-	2,893
Total	4,706	21	-	-	4,727

In H1 2023, the changes to accumulated amortisation were as follows (in Euro thousands):

Accumulated depreciation	31/12/2022	Depreciation	Utilisations	Reclassifications and other changes	30/06/2023
Land	-	-	-	-	-
Buildings & facilities	(1,226)	(43)	-	-	(1,269)
Total	(1,226)	(43)	-	-	(1,269)

The depreciation in the period was calculated in relation to the estimated useful life and the obsolescence incurred by these assets.

3.4. INTANGIBLE ASSETS WITH DEFINITE LIFE

The values of Intangible assets with definite life at June 30, 2023 are shown net of the accumulated amortisation provisions, as illustrated in the table below (Euro thousands).

	30/06/2023			31/12/2022		
	Gross values	Accumulated amortisation	Net book value	Gross values	Accumulated amortisation	Net book value
Development costs - amortisable	71,685	(14,195)	57,490	68,229	(12,557)	55,672
Development costs - in progress	25,672	-	25,672	25,396	-	25,396
Total development costs	97,357	(14,195)	83,162	93,624	(12,557)	81,068
Assets from PPA 2017 - Programmes	44,785	(18,660)	26,125	44,785	(17,168)	27,617
Assets from PPA Temis	1,831	0	1,831			
Concessions, licenses, trademarks and similar rights	15,896	(12,372)	3,524	15,599	(11,307)	4,292
Other	11,011	(4,309)	6,702	8,768	(3,897)	4,872
Assets in progress and advances	1,210	-	1,210	1,966	-	1,966
Total	172,089	(49,537)	122,553	164,742	(44,928)	119,814

The development costs being amortised primarily refer to design and testing costs relating to the Z40 and P120C engines. Most development costs under completion refer to projects relating to the new liquid oxygen and methane engines.

The amortisation of these costs begins from the commencement of the commercial production of each individual programme, on a straight-line basis over their useful life, initially estimated based on the duration of the programmes to which they refer.

With reference to development costs in course of completion, which are not subject to amortisation as referring to programmes which have not yet commenced commercial production, recognition under intangible assets with definite useful lives (with prior verification of the absence of impairment) is supported by the profitability forecasts of the programmes.

Following the purchase price allocation process of the Avio Group by Space2 in March 2017, two intangible assets were identified relating to the Ariane and Vega aerospace programmes for a total of Euro 44,785 thousand.

The assets deriving from this allocation were measured at fair value based on the present value of the expected future benefits of the above aerospace programmes and amortised over a period of 15 years on the basis of the average useful life of the programmes.

Concessions, licenses, trademarks, patents and similar rights mainly include costs for the acquisition of software licenses and land rights costs.

The changes in H1 2023 in the gross values of Intangible assets with definite life of the Avio Group are illustrated in the table below (Euro thousands):

Gross values	31/12/2022	Increases	Decreases	Reclassifications and other changes	30/06/2023
Development costs - amortisable	68,229	-	-	3,456	71,685
Development costs - in progress	25,396	3,733	-	(3,456)	25,672
Total development costs	93,624	3,733	-	-	97,357
Assets from PPA 2017 - Programmes	44,785	-	-	-	44,785
Assets from PPA Temis	-	-	-	1,831	1,831
Concessions, licenses, trademarks and similar rights	15,599	297	-	-	15,896
Other	8,768	281	-	1,961	11,011
Assets in progress and advances	1,966	1,205	-	(1,961)	1,210
Total	164,742	5,516	-	1,831	172,089

The increases in H1 2023 totalled Euro 5,516 thousand, which principally refer to:

- Euro 3,733 thousand, mainly for design and testing costs for the construction of the new engines and avionics elements;
- Euro 1,205 thousand, mainly concerning the review of the procedures to streamline production;
- Euro 297 thousand concerning software licenses and introduction projects;
- Euro 281 thousand mainly relating to the preparation of business plans.

“Reclassifications and other changes” includes the amount resulting from the allocation of the difference, for Euro 1,831 thousand, between the purchase price of 100% of Temis S.r.l. and the shareholders’ equity acquired. This difference, as per IFRS 3 “Business combinations”, was allocated within one year of the acquisition date, which was September 8, 2022. The valuation of the assets and liabilities of the acquired company to which the premium was to be allocated was carried out with the support of a special independent expert and resulted in the identification of two significant aerospace programmes in which Temis operates, whose current value was estimated at Euro 1,831 thousand. Goodwill was recognised for the remaining premium. For further clarity, the results of the allocation are reported below:

Temis Purchase Price Allocation	
Equity investment purchase price	3,355
% acquired	100%
Pro-quota Shareholders’ Equity	210
Excess Cost	3,144
<i>Aerospace programs</i>	
Avionica 3.0	1,721
Space Rider	110
	1,831
Deferred tax liabilities	(511)
Goodwill	1,824

In H1 2023, the changes to accumulated amortisation were as follows (in Euro thousands):

Accumulated amortisation	31/12/2022	Increases	Decreases	Reclassifications and other changes	30/06/2023
Development costs - amortisable	(12,557)	(1,639)	-	-	(14,195)
Development costs - in progress	-	-	-	-	-
Total development costs	(12,557)	(1,639)	-	-	(14,195)
Assets from PPA 2017 - Programmes	(17,168)	(1,493)	-	-	(18,660)
Assets from PPA Temis	-	-	-	-	-
Concessions, licenses, trademarks and similar rights	(11,307)	(1,065)	-	-	(12,372)
Other	(3,897)	(412)	-	-	(4,309)
Total	(44,928)	(4,608)	-	-	(49,537)

3.5. GOODWILL

Goodwill was recognised at June 30, 2023 of Euro 62,829 thousand, of which:

- Euro 61,005 thousand concerning the residual portion of the price paid by Space2 S.p.A. in 2017, after the purchase price allocation and allocated to the sole Group CGU corresponding to the Space sector;
- Euro 1,824 thousand Euro relating to the 2022 acquisition of Temis S.r.l. As reported in paragraph "3.4. Intangible assets with definite life" above, this amount constitutes the residual amount recognised to Goodwill following the conclusion of the process to allocate the difference between the purchase price of 100% of this company and the acquired equity. This goodwill is also allocated to the Group's only Space sector CGU.

As indicated in Note "2.7. Accounting standards and basis of preparation" of the financial statements at December 31, 2022, goodwill is not amortised but written down for impairments. The Group assesses the recoverability of goodwill at least annually, or more frequently where specific events and circumstances arise which may result in value reductions, through impairment tests on each of the Cash Generating Units (CGU's). The CGU identified by the Group for the monitoring of goodwill coincides with the level of aggregation required by IFRS 8 - *Operating segments*, which for the Group is identified by the *Space business* alone.

Goodwill allocated to the Space CGU was subject to an impairment test on December 31 2022, on the basis of cash flows from the Space CGU estimated based on forecasts from the 2023-2027 long-term plan approved by the Board of Directors on March 13, 2023. The outcome of the test did not indicate the need for a write-down of the carrying amount of goodwill at December 31, 2022.

At the end of the first half of 2023, an anomaly occurred in the Zefiro 40 engine static ignition test as part of the Vega C return to flight activities described in the "H1 significant events" section, to which reference should be made for more exhaustive information also of a technical nature.

In this regard, we firstly note that the Vega launcher is not affected by the performance of Zefiro 40, which is specific to Vega C. As such, the next Vega launch remains scheduled for early October 2023.

Based on the information available at present, this anomaly is not expected to have implications on the assumptions of production and development activities that would have significant effects on the expected results of the 2023-2027 long-term plan.

However, as previously reported in the "H1 significant events" section, it remains reasonable to assume that the Zefiro 40 engine will need to be ground-tested again before returning to flight with the Vega C launcher. For H1 2023, the provision for risks for estimated costs to be borne by Avio to carry out an additional Zefiro 40 engine static ignition test was therefore included in non-recurring costs, as was the ESA support attributable to Avio as part of the wider principle of support for the return to flight of the Vega C launcher. This was confirmed by the ESA in March 2023.

In view of the fact that the conclusions of the work of the Independent Enquiry Commission in charge of analysing the possible causes and defining the recommendations to be implemented for the return to flight of Vega C are expected by the end of September, and therefore of the possible risks involved, the possible presence of indicators of impairment from both internal and external information sources was assessed.

The internal information sources mainly included assessment of:

- the results for the half-year.

In H1 2023 the operating results improved significantly on H1 2022. This was mainly attributable to contributions from development projects and the effect of falling energy prices, despite a backdrop that was still conditioned by the activities to return Vega C to flight and by the effects of the ongoing conflict between Russia and Ukraine.

- the order backlog.

Internal information sources first assessed the assumptions underlying the projections of future cash flows of the Space CGU of the 2023-2027 long-range plan which include, first of all, the order backlog. At June 30, 2023 the backlog reached its highest level in the Company's history, at Euro 1,372.6 million, a net increase of Euro 358.9 million (35%) on December 31, 2022 and an increase of Euro 524.2 (61.8%) on June 30, 2022. This was mainly due to the acquisitions under the National Recovery and Resilience Plan for over half a billion Euro in H1 2023, which will drive revenues and results in the coming years.

- growth of contributions from tactical propulsion.

The contribution of the tactical propulsion business increased, as reported in the presentation to analysts and investors regarding the H1 2023 results, which will be communicated to analysts and investors on September 11, 2023.

New orders continued to be acquired in the first half of the year, as reported in the April 17, 2023 press release⁶ regarding the signature of a new Euro 90 million contract with MBDA, strengthening the already strong order book related to tactical propulsion.

- cash generation.

Financial management at June 30, 2023 reports an extremely solid cash position of Euro 102.2 million, despite the seasonality effect, up Euro 27.8 million (nearly 40%) on December 31, 2022 and Euro 61.3 million (150%) on June 30, 2022;

External information sources mainly included assessment of:

- changes in energy costs.

Energy costs were lower than in H1 2022, and the current forecast for H2 also suggests lower expected energy costs than in the previous year, despite the fact that prices generally rise in the autumn;

- market capitalisation.

at the approval date of the half-year financial report, market capitalisation is lower than the book value of consolidated net equity. In this regard, we note a lower level of stock liquidity than the Italian stock market average, meaning that a comparison between the two figures is not particularly representative.

- the changes, since the date of the impairment test, in the interest rates considered when estimating the weighted average cost of capital (WACC) used for in the impairment test conducted to December 31, 2022.

The impairment test performed to December 31, 2022 reported a substantial positive margin between the recoverable value of the Space CGU and the book value of the net capital employed recorded in the financial statements, which was also confirmed following sensitivity analyses and stress tests conducted on the weighted average cost of invested capital. Specifically, considering a WACC of 9.1%, the break-even WACC that renders the recoverable value of the Space CGU equal to the book value of the net capital employed recorded in the balance sheet as of December 31, 2022 was 10.6%.

In addition, H1 2023 saw interest rates mainly remain stable (the rate on 10-year government bonds at December 31, 2022 was 4.6%, compared to 4.1% at June 30, 2023, with a +0.3% moving average over the six months).

⁶ Avio's website, in the "Investors" section: <https://investors.avio.com/Investors/Financial-Announcements/>.

- The continuation of the conflict in Ukraine.

These assessments have led to the conclusion that no specific medium-term impacts on Vega and Vega C operational continuity are currently expected. The procurement process for the fourth-stage Vega and Vega C engine produced in Ukraine, which has been underway for several years, has provided a "strategic" stock which guarantees Avio's deliveries for launches planned in the medium term. In the long term, the ESA recently decided to dedicate financial resources to initiate technical and industrial actions aimed at mitigating the supply risk in the long term through the development of complementary technological solutions.

These assessments were reported in the press releases dated February 25, 2022, March 25, 2022, and most recently July 17, 2022 and are still accurate.

In addition to what has been stated above with reference to the order backlog, the cash flow projections of the 2023-2027 multi-year plan are based on the following additional main assumptions, updated to June 30, 2023, corroborated by separate external sources by type of revenue, i.e. on the one hand launcher production activities and on the other research and development activities.

- Globally, we are seeing the value of the space industry grow from the current \$350 billion to about \$650 billion in 2030 (at a CAGR of 6%), according to a Morgan Stanley report⁷. The space launch business segment is expected to grow, again according to the same Morgan Stanley report from the current USD 7.8 billion to USD 12.1 billion in 2030, with a CAGR of 5%.
- The growth forecast for total mass demand to be launched into space, based on the study by the company Euroconsult⁸, for the period 2021-2029 is 3,999 tonnes compared to 2,448 tonnes actually launched in the period 2012-2020, with an overall CAGR of +6%.
- A recent Euroconsult Report⁹ comparison of the two decades 2012-21 (past) and 2022-31 (future) shows that the number of Satellites put into orbit increases (on average) from around 500/year to 2500/year (growth rate: 5x), while the corresponding mass increases from approx. 300 tonnes/year to 900 tonnes/year (growth rate: 3x).
- Market demand as an average between the estimates of the Morgan Stanley and Euroconsult reports (made in both quantity and value) can therefore be reasonably estimated at between 5% and 6% CAGR on a ten-year basis.
- These expectations are also reflected in the financial flows being invested in the sector by private players such as Venture Capital Funds, Private Equity Funds, business angels and corporate venture capital. According to Space Capital reports, these figures have increased from USD 18.1 billion annually in 2015 to USD 45.3 billion in 2021, with a CAGR of approx. 16%¹⁰.
- There has also been a significant increase in overall resources allocated to space programmes at the government level: according to a recent Euroconsult report¹¹, government funding for space economy activities totalled more than \$92 billion in 2021, up 8% from 2020. Also according to the same source, these budgets are forecast to grow to USD 115 billion in 2030, with a CAGR of 2.5% over 9 years.
- As regards the above, with respect to the 2023-2027 plan's R&D revenue projections, the demand for publicly funded new product and technology development activities is based primarily on (i) expectations for government spending on space activities. In Europe, the budgets of the national space agencies and the European Space Agency (hereinafter also "ESA") have grown by an average of more than 5% per year in the last five years, as can be deduced from the data published by the agencies themselves¹² and (ii) on the funds made available by the Italian state under the National Recovery and Resilience Plan - hereafter also NRRP - following the COVID-19 pandemic.

⁷ "Investment Implications of the Final Frontier," Morgan Stanley Research, published October 12, 2017;

⁸ "Satellites to be built & launched by 2029," 2020 23rd edition, Euroconsult Report, published December 2020;

⁹ Satellites to be Built & Launched, December 2022 Release

¹⁰ Space Capital investment dashboard <https://www.spacecapital.com/quarterly>;

¹¹ "Government Space Programs, 21st edition" report, Euroconsult, cited in <https://www.satellitetoday.com/government-military/2022/01/07/euroconsult-reports-record-government-space-investment-in-2021/>;

¹² ESA 2015 budget of Euro 4.4 billion available at: https://www.esa.int/Newsroom/Highlights/ESA_budget_2015; ESA 2021 budget of Euro 6.5 billion available at: https://www.esa.int/Newsroom/ESA_budget_2021;

- In particular, again with regard to projections of revenues from R&D, the ESA defined - for the space launcher segment - a product roadmap up to 2025 including, among other things, future evolutions of the current Vega launcher, of which Avio is prime contractor, consisting of Vega C and Vega E, the new Ariane 6 launcher, of which Avio will produce the P120 first-stage engines, and the reusable Space Rider spacecraft, of which Avio is co-prime. Against this development roadmap, Italy signed up for ESA public funding of over Euro 700 million at the 2022 Ministerial Conference. These subscriptions, by virtue of the geographic return principle applied in ESA, are transforming into new contracts for Avio (the only operator in the sector in Italy and recognised as prime contractor for launcher activities in ESA), which are regularly announced to the market¹³.
- The ESA Council in August 2021 approved the resolution on the deployment ("exploitation") of Ariane 6 and Vega-C launchers. ESA member states agreed on the conditions for Europe's imminent deployment of Ariane 6 and Vega-C and asked ESA to propose a roadmap for new and innovative space transportation solutions for the next decade and a framework for associated short-cycle demonstrations. The resolution, agreed to by ESA member states in August 2021, sets the stage for the first three years of stabilised deployment of the new European launch vehicles, Ariane 6 and Vega-C, and is based on a European institutional launch service demand of four Ariane 6 and two Vega-C per year on average starting in 2025 for two cycles 2025-2027 and 2028-2030. States have also established a basis for maintaining strategic industrial capabilities through options to serve additional institutional launches or increased commercial demand. Corresponding financial allocations from member states are expected at the ESA Ministerial Conference in November 2022.
- National Recovery and Resilience Plan (NRRP) - The Italian government has launched a number of projects for the NRRP, some of which specifically address the evolution of space propulsion technologies and products related to launchers. The execution of these projects has been entrusted to ESA and concerns in particular the realization of a high-thrust methane engine and an in-flight demonstrator of a small liquid propulsion launcher. These projects represent an opportunity for the Company to extend its product portfolio and technological expertise, capitalising on its ongoing experience with Vega E and the M10 liquid oxygen-methane engine. In parallel, the NRRP has initiated the creation of an Italian satellite constellation for Earth observation, with execution also entrusted to ESA, whose missions will be carried out with Vega launchers.

As reported in the presentations to the market¹⁴, the NRRP and the complementary funds for 2022-2026 amount to a total of Euro 2.3 billion, of which an amount exceeding Euro 1.0 billion earmarked for the development and launch with Vega of an Earth Observation Satellite Constellation, and approx. Euro 300 million for the development of new technologies in the areas of liquid propulsion (construction and testing of a high-thrust methane engine, a technology already being developed by the Company), structures, avionics and pyrotechnics, as well as two in-flight demonstrators of a small liquid propulsion launcher. Finally, Avio is part of a consortium of Italian companies that won the tender (and related funding of approx. Euro 300 million) for the development of an In Orbit Servicing (IOS) technology demonstrator.

On June 29, 2022, Avio announced¹⁵ that it had been awarded the first two contracts under the space industry initiatives to implement the "Next Gen EU" programme, through a significant investment by the Italian government. This seeks to enhance the space access technological capabilities of the Italian industrial sector, with the European Space Agency (ESA) as the Contracting Authority and the supervision of the Prime Minister's Office, the Italian Space Agency (ASI) and the Minister of Technological Innovation and Digital Transition.

On March 13, 2023, Avio announced¹⁶ that it had signed the above contracts at the headquarters of

¹³ Examples of ESA contracts or budget allocations that were announced by Avio to the market
https://avio-data.teleborsa.it/2022%2f20221125-Avio-Market-Update-2022_vDEF_20221202_103612.pdf

¹⁴ See the following "Investors" section of Avio's website: http://avio-data.teleborsa.it/2022%2f20220215-Avio-FY-2021-results_vDEF_1_20220315_100105.pdf;

¹⁵ See the press release of June 29, 2022 at the link: <https://syndication.teleborsa.it/Avio/Financial-Announcements/firmati-contratti-next-gen-eu-finanziati-con-340-milioni-di-euro-al-completamento-per-nuove-tecnologie-di-lancio/MXxb211bmljYXRpLjE3NzEwMDAwNDMyMDIyMXwxIDlwMjIwODAx>

¹⁶ See the press release of March 13, 2023 at: <https://syndication.teleborsa.it/Avio/Financial-Announcements/firma-dei-contratti-di-sviluppo-per-il-pnr/MXxb211bmljYXRpLjE3NzEwMDAwMDkyMDIzMXwxIDlwMjIwODE2>

the Ministry of Enterprise and Made in Italy, with the Minister Adolfo Urso and the ESA's Director of Space Transportation in attendance. The first contract - called STS and funded for Euro 181.6 million until completion - will be dedicated to developing, by 2026, an in-flight demonstrator of new technologies and specific designs for a two-stage liquid propellant-propelled light-load launcher using liquid-oxygen and methane engines with lower environmental impacts. The second - called HTE and funded for Euro 103.7 million upon completion - will be dedicated to developing a new high-performance, low environmental impact liquid-oxygen and methane engine and high thrust technology. Detailed design and construction of demonstrators of increasing complexity up to ground qualification testing is scheduled by 2026.

- On December 2, 2022, Avio announced¹⁷ the allocation of new funding for Avio's development programmes at the next ESA Ministerial Conference in 2022. In terms of subscriptions and therefore subsequent contracts, these have grown since the previous Ministerial Conference in 2019¹⁸, also based on the aforementioned resolution approved by the ESA Council in August 2021.
- The forecast for growth in production volumes of tactical propulsion systems as well as the development of new evolutions was estimated based on new production and development contracts signed in recent years and announced to the market¹⁹, as well as expected.

Based on the main assessments carried out as above, there were no impairment indicators ("triggering events") at June 30, 2023. As such, the value recorded in the financial statements was not subjected to further verification of recoverability.

¹⁷ See https://avio-data.teleborsa.it/2022%2f20221125-Avio-Market-Update-2022_vDEF_20221202_103612.pdf

¹⁸ See http://avio-data.teleborsa.it/2019%2fAvio-Financial-update-December-2019_20191206_094015.pdf;

¹⁹ See examples of contract posting for Aster 30 referenced in the following links:

- April 2023: <http://syndication.teleborsa.it/Avio/Financial-Announcements/nuovo-ordine-per-la-propulsione-tattica-e-integrazione-dellodg-dellassemblea-degli-azionisti/MXxjb211bmljYXRpLjE3NzEwMDAwMjMyMDIzMXwxflwMjMwODE2>
- August 2022: <https://syndication.teleborsa.it/Avio/Financial-Announcements/firma-di-nuovi-ordini-per-la-propulsione-tattica/MXxjb211bmljYXRpLjE3NzEwMDAwNDcyMDIyMXwxflwMjIwODAx>
- July 2021: http://avio-data.teleborsa.it/2021%2fCS-Avio-contratto-Aster-2021-def_v1_20210707_023145.pdf
- May 2020: http://avio-data.teleborsa.it/2020%2fCS-Avio-contratto-Aster_vdef_20200526_055413.pdf

3.6. INVESTMENTS

The investments held by the Avio Group at June 30, 2023 and December 31, 2022 follows (in Euro thousands).

	30/06/2023		31/12/2022		Change
	Group share	Total	Group share	Total	
<i>Subsidiaries</i>					
- Servizi Colleferro – Consortium	52.00%	63	52.00%	63	0
Total non-consolidated subsidiaries		63		63	0
<i>Companies under joint control</i>					
- Europropulsion S.A.	50.00%	7,160	50.00%	8,021	(860)
Total companies under joint control		7,160		8,021	(860)
<i>Associates</i>					
- Termica Colleferro S.p.A.	40.00%	5,316	40.00%	5,272	44
- Other consortiums		5		5	0
Total associates		5,322		5,277	44
<i>Other companies</i>					
- Other companies		2,244		2,244	0
Total other companies		2,244		2,244	0
Total		14,789		15,605	(816)

The changes between December 31, 2022 and June 30, 2023 in the investments are shown below (Euro thousands):

	31/12/2022	Valuation at equity	Increases	Decreases	Other movements	30/06/2023
Non-consolidated subsidiaries	63	-	-	-	-	63
Companies under joint control	8,021	(860)	-	-	-	7,160
Associates	5,277	44	-	-	-	5,321
Other companies	2,244	-	-	-	-	2,244
Total	15,605	(817)	-	-	-	14,788

"Jointly controlled companies" includes only the investment in Europropulsion S.A.. The movement in the year is due to its measurement at equity, resulting in a net decrease of Euro 860 thousand (due to the increase for the 50% share of the profit for H1 2023, amounting to Euro 2,140 thousand, net of the decrease of Euro 3,000 thousand following the reduction in company's equity due to the dividends paid to Avio S.p.A. in the period).

"Associated companies" includes the investment in Termica Colleferro S.p.A., totalling Euro 5,316 thousand and in a number of consortiums, for Euro 5 thousand.

The movements for the half-year all relate to the investment in Termica Colleferro, which is valued at equity. The remaining investments in other associates (consortiums) are valued at acquisition or subscription cost, as these companies are not considered significant in relation to the Group financial position and also as non-operating companies. In addition, the valuation as per the equity method would not result in a significant effect compared to valuation at cost.

"Other companies" include the following minor interests in Arianespace, C.I.R.A. - Centro Italiano Ricerche Aerospaziali S.c.p.A., Imast S.c.a.r.l., Distretto Aerospaziale Sardegna S.c.a.r.l. and ART S.p.A..

The interest in the latter company, amounting to 5% of its shares, was acquired in fiscal year 2022 at a value of Euro 1,720 thousand. ART is a leading Italian infotainment systems for performance and luxury cars enterprise and an industrial partner, in addition to the former parent of Temis S.p.A., of which Avio also acquired control in 2022.

As part of the acquisition of the stake in ART, an agreement was signed between Avio and GEF S.r.l., owner of the remaining 95% of the company, whereby Avio granted the other shareholder a pre-emption right to purchase the 5% stake in ART. This option may be exercised at the earlier of the following dates: (i) the conclusion of the fifth year from the date of completion of Avio's purchase of the investment; and (ii) in the case of a proposed change of control of the company, 60 days prior to the change of control. The option price is calculated by applying a multiplier to the aforementioned 5% acquisition price of the company, determined on the basis of the year following the date of completion of the transaction, starting from the fifth year.

The investments in other companies are valued at cost.

3.7. NON-CURRENT FINANCIAL ASSETS

The table below illustrates the non-current financial assets of the Avio Group at June 30, 2023 and at December 31, 2022 (in Euro thousands).

	30/06/2023	31/12/2022	Change
Shareholder loan to Termica Colleferro S.p.A.	2,010	2,010	-
	2,010	2,010	-

This shareholder loan, to the associate Termica Colleferro, is interest-free and is subordinated to the full repayment by that company of the loan previously granted by the lending banks, which matures on February 24, 2027.

For additional information regarding Termica Colleferro S.p.A., see the specific paragraph "Other commitments" of section 5. " Commitments and risks".

3.8. DEFERRED TAX ASSETS

The Avio Group's recognised deferred tax assets amount to Euro 80,878 thousand (Euro 81,471 thousand at December 31, 2022).

The amount recorded in the accounts represents the net balance of the deferred tax assets and liabilities calculated on the temporary differences between the value of assets and liabilities assumed for the purposes of the preparation of the financial statements and the respective values for fiscal purposes and the tax losses carried forward.

Deferred taxes are determined applying the tax rates which are expected to be applied in the period when the temporary differences will be reversed, or the benefits related to the tax losses will be utilised.

The summary of the temporary differences (deductible and assessable) and of the tax losses which resulted in the recognition of deferred tax assets and liabilities is illustrated in the table below with reference to the reporting date (Euro thousands):

	30/06/2023
Gross deferred tax assets on temporary differences	
<i>Temporary differences deriving from previous corporate operations</i>	
Fiscal amortisation on previous goodwill whose tax benefits remain in the Company.	1,373
Financial charges exceeding 30% of EBITDA	33,527
<i>Temporary differences deriving from current corporate operations</i>	
Provision for staff charges	2,444
Other deductible temporary differences	11,565
Provisions for risks and charges	9
Tax liabilities	18
Provisions for risks and legal charges	4,941
Doubtful debt provision - trade and other receivables	96
Total gross deferred tax assets	53,973
Deferred tax liability on temporary differences	
<i>Temporary differences deriving from previous corporate operations</i>	
Amortisation intangible assets from PPA 2017 - Customer accreditation	(7,559)
Tax effect R&D expenses First-Time Adoption	(211)
<i>Temporary differences deriving from current corporate operations</i>	
Other temporary assessable differences	(1,155)
Deferred tax liabilities from Temis premium allocation	(511)
Total gross deferred tax liabilities	(9,436)
Net deferred tax assets/(liabilities)	44,537
Deferred tax assets on tax losses	65,098
Total deferred tax assets	109,635
Deferred tax assets not recorded	(28,757)
Net deferred tax assets (liabilities) recorded	80,878

Deferred tax assets on temporary differences and on tax losses were recorded in the accounts for the amounts whose future recovery was considered probable, on the basis of forecast assessable income, as well as based on a projection of these forecasts over a subsequent time horizon considered representative of the life cycle of the business equal to 15 years.

This time period considered representative of the life cycle of the business was estimated also taking into account the meeting with the Ministers of the Member Countries of ESA held in December 2014, which resulted in the signing in August 2015 of agreements with ESA relating to the development of the new Ariane 6 launcher and the evolution of the VEGA launcher within the VEGA C programme which provides for the development and construction of the new "P120C" thruster, and the meeting of the Ministers of the Member Countries of ESA held on December 1, 2016 and on December 2, 2016 which confirmed the above-mentioned development programmes and gave the go ahead for the long-term development programme of the engine and of the Upper Stage of the Vega E, or rather the next step in the evolution of the Vega launcher.

Deferred tax assets recognised to the financial statements mainly concern the future tax deductibility of the goodwill amortisation relating to the "Aviation" business unit (sold in 2013), the financial charges exceeding 30% of gross operating profit and the intangible assets for client accreditation redefined as part of the purchase price allocation of 2017, as commented upon previously, in addition to prior tax losses.

3.9. OTHER NON-CURRENT ASSETS

The table below illustrates other non-current assets at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Other non-current assets	68,105	67,470	636
	68,105	67,470	636

The breakdown of the account at the reporting date was as follows (Euro thousands):

	30/06/2023	31/12/2022	Change
Receivables from the General Electric Group	58,220	58,220	-
Receivables from FCA Partecipazioni	4,880	5,083	(204)
Receivables from the Economic Development Ministry for disbursements pursuant to Law 808/85 - non-current portion	3,191	3,191	-
Guarantee deposits	1,381	586	796
Other non-current receivables	433	390	44
Total	68,105	67,470	636

"Receivables from the General Electric Group", amounting to Euro 58,220 thousand, refers to the recharge to the General Electric Group of the charges arising from the settlement notice relating to registration, mortgage and cadastral taxes notified to the Company in July 2016 by the Tax Agency, in connection with the corporate transactions that led to the transfer of the AeroEngine business by the Avio Group to the General Electric Group in 2013. This receivable is recognised against an amount payable to the Treasury of like amount among non-current liabilities.

The recognition of the above-mentioned receivable from the General Electric Group is based on specific contractual provisions, according to which the latter is required to indemnify the Avio Group from any liability arising in connection with the AeroEngine business pertaining to the General Electric Group, including liabilities related to indirect taxes referable to the above-mentioned extraordinary transactions of 2013.

We note that the aforementioned tax settlement notice is the subject of a dispute with the tax authorities, which in 2020 appealed to the Supreme Court of Cassation against the sentence with which, at the end of 2018, the Piedmont Regional Tax Commission fully accepted the appeal lodged by the Company. The Company appeared promptly in the proceedings with its own counter-appeal and simultaneous cross-appeal, reaffirming the soundness of its arguments. At the date of this report, the Court of Cassation has not yet set a date for the hearing.

With regard to the litigation in question, and in particular the subject-matter of the dispute, relating to the anti-avoidance provision of Article 20, headed "Interpretation of acts", of Presidential Decree No. 131/1986

("Consolidated Registration Tax Act"), mention should be made of some circumstances post-dating the service of the payment notice. Specifically, these technologies include:

- the 2018 Budget Law (see Article 1, paragraph 87, letter a), of Law 205 of December 27, 2017) amended, with effect from January 1, 2018, Article 20 of the Consolidated Registration Tax Act, limiting the ability of the revenue authorities to reclassify acts subject to registration;
- the 2019 Budget Law (see Article 1, paragraph 1084, of Law 145 of December 30, 2018) attributed retroactive effect to the provision introduced by the 2018 Budget Law, which therefore should apply to payment notices – including that served on the Company – served in years prior to 2017;
- on July 21, 2020 Italy's Constitutional Court (see judgment no. 158) ruled that there was no basis for the challenges of the constitutionality of Article 20 of the Consolidated Registration Tax Act, holding that the statute is intended to reaffirm the "transaction tax" nature of registration tax, and clarifying the object of taxation in accordance with the structure of a levy on the legal effects of the legal transaction presented for registration, without the revenue authorities being able to attach relevance to extratextual elements and linked legal transactions devoid of any textual connection with the transaction in question;
- on September 17, 2020 the Central Directorate of the Tax Agency published official clarification (see reply no. 371) in which, acknowledging the above ruling by the Constitutional Court, it clarified that "*the sale of company quotas preceded by the contribution of a business line cannot be taxed on a par with the sale of a company as a whole on the basis of the provisions of Article 20 of the Consolidated Income Tax Act.*"

For further information, reference should be made to Note "3.24. Other non-current liabilities" and to the section "Legal and tax disputes and potential liabilities" in the Explanatory Notes.

The account "Receivables from FCA Partecipazioni" refers to the settlement dated August 2, 2019 between the Avio Group and FCA Partecipazioni S.p.A. regarding environmental charges. Based on this agreement FCA Partecipazioni committed to recognise to the Avio Group a total amount of Euro 19.9 million, of which Euro 11.3 million for reclamation activities and environmental restoration to be paid in the 2019-2023 period and Euro 8.6 million for post-operative management and maintenance to be paid in the 2019-2048 period, against the lapsing of the contractual guarantees which the company provided in the past to the Avio Group.

This agreement therefore entailed the recognition, on the transaction date (2019), of a discounted receivable from FCA Partecipazioni of Euro 16.5 million, divided into within and beyond 12 months according to the due dates of the expected collections, and a corresponding charges provision of Euro 16.9 million.

"Receivables from the Economic Development Ministry for disbursements pursuant to Law 808/85 - non-current portion", amounting to Euro 3,191 thousand, refer to the discounted value of the non-current portion of the concessions granted by the Ministry for Economic Development under the rules of Law 808/85.

These receivables are recorded in the accounts at the value resulting from the application of the amortised cost method, calculated utilising the effective interest rate, and are increased due to the effect of the accumulated amortisation of the difference between the initial value and the actual cash amounts and booked in the accounts under "Financial income".

The amounts to be received within 12 months are classified under "Other current assets" (Note 3.15).

Regarding the item "Guarantee deposits," the increase of Euro 796 thousand mainly relates to the signing of a security deposit following new agreements for energy supply by the associate Termica Colleferro.

CURRENT ASSETS

3.10. INVENTORIES AND ADVANCES TO SUPPLIERS

The table below illustrates inventories and advances to suppliers at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Inventories	214,465	202,573	11,892
	214,465	202,573	11,892

The movements in the year are shown below (in Euro thousands):

	31/12/2022	Change	30/06/2023
Raw materials, ancillaries and consumables	71,672	18,585	90,257
Raw material, ancillary and consumables obsolescence provision	(5,214)	(373)	(5,586)
Raw material, ancillary and consumables - net value	66,458	18,212	84,671
Products in work-in-progress	6,644	2,716	9,360
Provision for the write-down of work in progress	-	-	-
Products in work-in-progress - net value	6,644	2,716	9,360
Finished products and other inventories	3,104	-	3,104
Finished products and other inventories obsolescence provision	(1,985)	-	(1,985)
Finished products and other inventories - net value	1,119	-	1,119
Inventories and advances to suppliers	128,351	(9,036)	119,315
	202,573	11,892	214,465

The increase in inventories relates to provisioning needed in order to support expected future production levels.

Advances to suppliers refers to payments to subcontractors made on the basis of interim progress reports. This item also includes advances paid on the signing of contracts. The change during the period reflects ordinary business cycle dynamics.

3.11. CONTRACT WORK-IN-PROGRESS

Production and research and development on orders are presented in the financial statements in two separate accounts: "Contract work-in-progress" and "Advances for contract work in progress".

"Contract work-in-progress", recognised to the assets section of the Balance Sheet, includes the net balance of production orders and research and development for which, on the basis of analysis carried out by individual order, the gross value of contract work-in-progress is higher at the reporting date than the amount of advances received from customers.

"Advances for contract work in progress", recognised to the liabilities section of the Balance Sheet, includes the net balance of production orders and research and development for which, on the basis of analysis carried out by individual order, the value of the advances received from clients is higher at the reporting date than the gross value of contract work-in-progress.

Contract work-in-progress is measured on the advancement of the production orders and research and development in accordance with the percentage of completion method based on the ratio between the costs incurred and the total estimated costs for the entire project.

The gross value of contract work-in-progress and advances received from customers is as follows (in Euro thousands):

	30/06/2023	31/12/2022	Change
Contract work-in-progress	468,362	426,181	42,181
Advances for contract work-in-progress	(766,205)	(667,442)	(98,763)
Net total	(297,843)	(241,261)	(56,582)

The table below summarises the contract work-in-progress relating to the projects where the gross value is higher than the advances collected; these works are therefore recorded for the net value under assets in the Consolidated Balance Sheet (Euro thousands):

	30/06/2023	31/12/2022	Change
Contract work-in-progress (gross)	870,917	782,947	87,970
Advances for contract work-in-progress (gross)	(402,555)	(356,766)	(45,789)
Contract work-in-progress (net)	468,362	426,181	42,181

The table below summarises the contract work-in-progress relating to the projects where the gross value is lower than the advances collected; these works are therefore recorded for the net value under liabilities in the Consolidated Balance Sheet (Euro thousands):

	30/06/2023	31/12/2022	Change
Contract work-in-progress (gross)	1,272,050	1,204,584	67,466
Advances for contract work-in-progress (gross)	(2,038,255)	(1,872,026)	(166,229)
Advances for contract work-in-progress (net)	(766,205)	(667,442)	(98,763)

The Avio Group is entitled to the research and development tax credits provided for in Decree-Law No. 145 of December 23, 2013, converted, with modifications, by Law No. 9 of February 21, 2014, as amended by Law No. 232 of December 11, 2016 (the "2017 Finance Act") and by the 2019 Finance Act (Article 1, paragraphs 70-72, of Law No. 145 of December 30, 2018), on the basis of research and development services commissioned by the European Space Agency. These benefits are recognised to the income statement based on the advancement of the research and development on long-term orders which are part of the contract work-in-progress.

The multi-year projects mainly concern those relating to the Vega C and Vega E future generation launchers and the recognition of the economic benefits shall be made over the duration of the orders and from the effective advancement of the orders, calculated on the basis of the relative costs incurred.

3.12. TRADE RECEIVABLES

The table below illustrates trade receivables at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Trade receivables	2,890	3,725	(836)
	2,890	3,725	(836)

The breakdown of trade receivables at the reporting date is shown below (Euro thousands):

	30/06/2023	31/12/2022	Change
Receivables from third parties	1,680	2,445	(765)
Receivables from associates and jointly controlled companies	711	752	(41)
	2,391	3,197	(807)
Receivables from associates and jointly controlled companies beyond one year	499	528	(29)
	499	528	(29)
Total	2,890	3,725	(836)

The nominal value of receivables from third parties was adjusted by a doubtful debt provision of Euro 483 thousand in order to reflect their fair value.

Receivables from third parties

The breakdown of the account is shown below (Euro thousands):

	30/06/2023	31/12/2022	Change
Gross value	2,163	2,928	(765)
less: doubtful debt provision	(483)	(483)	0
Total	1,680	2,445	(765)

The principal receivables are due from ArianeGroup and the European Space Agency (ESA).

Receivables from associates, jointly controlled companies and non-consolidated subsidiaries

The breakdown of the account is shown below (Euro thousands):

	30/06/2023	31/12/2022	Change
Europropulsion S.A.	137	323	(186)
Servizi Colleferro S.C.p.A.	85	1	85
Consorzio Servizi Acqua Potabile	120	124	(4)
Termica Colleferro S.p.A. due within one year	369	304	65
	711	752	(41)
Termica Colleferro S.p.A. due beyond one year	499	528	(29)
	499	528	(29)
Total	1,210	1,280	(70)

3.13. CASH AND CASH EQUIVALENTS

The table below illustrates cash and cash equivalents at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Cash and cash equivalents	126,607	131,403	(4,796)
Total	126,607	131,403	(4,796)

Cash and cash equivalents mainly concern balances on bank current accounts, in addition to some short-term restricted deposits.

Reference should be made to the Cash flow statement with regards to the movements in the period.

3.14. CURRENT TAX RECEIVABLES

The table below illustrates tax receivables at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Tax receivables	12,659	13,010	(351)
Total	12,659	13,010	(351)

The following table shows the net changes by type of tax credit and tax (amounts in thousands of euro):

	30/06/2023	31/12/2022	Change
VAT	3,850	5,481	(1,631)
Research and development tax credits	2,516	2,311	205
Tax credits for simple and 4.0 technological innovation	1,727	1,430	297
Tax credits for the purchase of simple new capital goods and 4.0	1,906	1,640	266
Receivables from tax authorities	2,315	1,444	871
Tax credit on energy	98	463	(364)
EU VAT receivables	246	241	5
Total	12,659	13,010	(351)

This item is substantially in line with the balance at December 31, 2022. There are deviations in the specific categories of tax and tax credits, however, as described below.

VAT receivables

VAT receivables of Euro 3,850 thousand (Euro 5,481 thousand at December 31, 2022), include:

- Euro 1,983 thousand, relating to VAT reimbursement requests to the Tax Authorities (Euro 1,238 thousand at December 31, 2022);
- Euro 1,866 thousand, relating to VAT reimbursements to date not requested for repayment (Euro 4,243 thousand at December 31, 2022).

VAT receivables in H1 reported a net decrease of Euro 1,631 thousand - the net effect of:

- decreases for receipts of Euro 598 thousand concerning the 2021 annual VAT of Avio S.p.A.;
- decreases for offsets of Euro 2,490 thousand;
- increases for new VAT receivables of Euro 1,457 thousand;

The increases for new VAT receivables relate to the fact that the parent company's Avio's main clients are non-resident, such as the European Space Agency (ESA) for the development of launchers and Ariane Group for their production/distribution, in addition to the jointly-controlled company Europropulsion for both of these phases. In particular, for the transactions carried out with these parties, Avio S.p.A. acts as a habitual exporter for VAT purposes, as the VAT exempt system for exports and the exemption for transactions treated as exports and the intra-EU supplies of goods are applicable to these transactions. This circumstance entails the quasi-absence of VAT payables on the sales transactions undertaken by the Company. On the other hand, the Company however has Italian suppliers whose supplies - further to the amounts for which declarations of intent are issued due to the fact that Avio S.p.A. is a habitual exporter - result in the recognition of VAT receivables.

Research and development and technological innovation tax credit

These tax credits totalled Euro 6,149 thousand (Euro 5,381 thousand at December 31, 2022).

Regulatory framework

The 2020 Budget Law (see Law No. 160 of December 27, 2019), as amended by the 2021 Budget Law (see Law No. 178 of December 30, 2020) and the 2022 Budget Law (see Law No. 234 of December 30, 2021), establishes:

- a) a tax credit for fundamental research, industrial research and experimental development in scientific or technological fields, as defined in the "Frascati Manual". This tax credit is granted for 20% of the costs incurred in 2022, with a maximum of Euro 4 million;
- b) a tax credit for technological innovation activities, other than those set out in point a), for the development of new or substantially improved products or production processes. This tax credit is granted - separately from that set out in paragraph a), and thus cumulatively - for 10% of the costs incurred in 2022 for such activities, with a maximum of Euro 2 million. The relief is increased (15% of the costs incurred in 2022 for such activities, up to a maximum of Euro 2 million), where the technological innovation activity is intended to achieve an environmental transition or digital innovation 4.0 objective;

- c) a tax credit for the design and styling activities carried out by companies active in textiles, fashion, footwear, eyewear, jewellery, furniture and furnishings and ceramics to create and implement new products and samples.

In addition, a tax credit was arranged for the purchase of new capital goods and other property, plant, equipment and intangible assets, both generic and functional for the Industry 4.0 project, as confirmed by the 2021 Budget Law.

In contrast to the previous R&D tax credit, for the new relief introduced by the 2020 Budget Law:

1. the system for calculating eligible costs is not incremental, but proportional, with various rates (20%, 10% or 15%) to the costs incurred in the maturation year of the credit;
2. the receivables are used as offsets over three equal annual portions from the tax period subsequent to maturation, subject to satisfaction of the certification obligations;
3. the rule in paragraph 1-bis of Decree-Law No. 145/2013, which allowed resident companies to benefit from an R&D tax credit for activities carried out on behalf of non-resident principals, was not renewed.

Recognition in the Financial Statements

R&D tax credits accrued until 2019 under Decree-Law 145/2013

The H1 2023 Income Statement includes amounts of Euro 667 thousand relating to the effects on the income statement of the tax credits accrued in 2017, 2018 and 2019 according to the provisions of Article 3 of Decree-Law 145/2013, in effect until December 31, 2019.

The amount recorded in the comparative Income Statement for H1 2022 was Euro 1,182 thousand.

In particular, the recognition of these accruals was due to the fact that the receivables in question were initially recorded in the account "Research and development tax credit" and recognised to the Income Statement in each period on an accruals basis, according to the differing types of costs supported, and on the basis of the percentage of completion of the contract work-in-progress giving rise to the costs against which the due receivable was calculated in the Income Statement accounts "Service costs" and "Change in contract work-in-progress".

The cited long-term orders are those concerning research and development projects which principally include the future generation Vega C and Vega E launchers, which are part of the wider Vega launchers family.

This benefit, as matured against such research and development, was recognised to the Income Statement on the basis of the advancement of these activities, proportionate to the advancement of the costs incurred for the long-term orders to which the benefit refers.

R&D tax credits accrued in 2020, 2021, 2022 and H1 2023 pursuant to the 2020 Budget Law as amended

The Avio Group recognised R&D tax credits of Euro 6,149 thousand for the period under review, attributable entirely to the parent company, Avio S.p.A., and accrued in 2020, 2021 and 2022 (for Euro 5,381 thousand) and in H1 2023 (for Euro 768 thousand).

The receivables under review refer mainly to internal research and development projects and to some technological innovation projects, both simple and 4.0 projects. As these subsidies are intended to cover operating costs and are not dependent on the creation of a specific fixed asset, and as they accrue in the financial year in which the eligible costs are incurred, regardless of the way in which these costs are accounted for, the subsidies in question have been treated as operating grants and, for this reason, the related economic benefit has been recorded in full in the same financial year in which the eligible costs from which the subsidies in question accrue were accounted for.

Tax receivables

Tax receivables of Euro 2,315 thousand (Euro 1,444 thousand at December 31, 2022), principally concerned:

- receivables relating to the expedited VAT settlement of the subsidiary company Se.Co.Sv.Im. S.r.l. for Euro 415 thousand, for which the subsidiary was challenged for the failure to apply VAT on the restoration costs recharged to Avio S.p.A. in 2010, 2011 and 2012.

In 2019, Se.Co.Sv.Im. complied with the expedited settlement of this tax dispute, according to Article 6 of Legislative Decree No. 119 of October 23, 2018, converted, with amendments, by Law No. 136 of December 17, 2018. This settlement entailed payment to the Tax Agency of only the tax to be settled, by Se.Co.Sv.Im., in 20 quarterly instalments; the first was paid on May 31, 2019, while the last shall be settled by February 28, 2024.

On the basis of the applicable VAT rules, the VAT paid by Se.Co.Sv.Im. is recharged to Avio S.p.A. as the above-mentioned instalments are paid. Avio S.p.A. presents the entire expedited settlement amount as tax receivables, which shall gradually become deductible VAT, according to the payment of the instalments of the above-mentioned expedited settlement by Se.Co.Sv.Im.;
- other tax credits of Euro 1,900 thousand, including in particular the tax credits of the Guiana subsidiary Regulus S.A..

Tax credit on energy

The Group at June 30, 2023 has a tax credit for electricity expenses of Euro 98 thousand; this receivable constitutes the remaining balance, after utilisations in the period, of the original receivable recognised in 2022.

In order to offset the rising electricity and gas costs for businesses caused by the ongoing international crises in Ukraine, the Italian Government recognised in 2022 an extraordinary contribution, in the form of a tax credit, in favour of businesses to purchase electricity. Initially, the subsidy was granted only to “energy-intensive enterprises” according to the parameters established by Ministerial Decree of December 21, 2017. It was subsequently also granted, to a reduced degree, to enterprises (“non-energy-intensive enterprises”) with electricity meters with an available power of 16.5 kW or more. In both cases, the relief is granted provided that the expenditure incurred in 2022 exceeded 30% of the corresponding average price for the same period in the year 2019. The measures adopted for 2022 were as follows.

BENEFICIARY RELIEF	2022					
	Q1	Q2		Q3	Q4	
	Decree Supports-ter	Decree Ukraine	Decree Supports	Decree Aid-bis	Decree Aid-ter	Decree Aid-quater
	DL 4/2022	DL 17/2022	DL 50/2022	DL 115/2022	DL 144/2022	DL 176/2022
Energy-intensive enterprises	20%	25%		25%	40%	
Non-energy intensive enterprises	-	15%		15%	30%	

As not being within the consumption parameters to be considered an “energy-intensive enterprise”, in 2022 Avio S.p.A. accrued a tax credit recognised to “non-energy-intensive enterprises” for a total amount of Euro 1,148 thousand, as detailed below.

ENERGY EXPENSE TAX CREDIT	Euro/000
Energy expenses Q2 2022	225
Energy expenses Q3 2022	461
Energy expenses October and November 2022	270
Energy expenses December 2022	193
Total	1,148

This credit was used:

- for Euro 686 thousand by December 31, 2022, and
- for Euro 364 thousand in H1 2023.

Therefore, as of the date of these financial statements, this credit amounted to Euro 98 thousand.

EU VAT receivables

The EU VAT receivables relate to inter-EU transactions and amount to Euro 246 thousand (Euro 241 thousand at December 31, 2022).

3.15. OTHER CURRENT ASSETS

The table below illustrates other current assets at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Other current assets	11,140	8,358	2,783
Total	11,140	8,358	2,783

The breakdown of the account is shown in the table below (Euro thousands):

	30/06/2023	31/12/2022	Change
Economic Development Ministry for disbursements pursuant to Law 808/85 - current portion	2,924	2,924	-
Receivables from FCA Partecipazioni	2,453	2,168	285
Employee receivables	1,414	1,248	166
Grants/subsidies receivable	1,423	951	472
Prepayments and accrued income	2,117	689	1,428
Other debtors	339	357	(18)
Social security institutions	453	18	435
Receivables from associated company Consorzio Servizi Acqua Potabile	17	2	14
Total	11,140	8,358	2,783

“Receivables from the Economic Development Ministry for disbursements pursuant to Law 808/85 - current portion”, amounting to Euro 2,924 thousand, refer to the discounted value of the non-current portion of the concessions granted by the Ministry for Economic Development under the rules of Law 808/85, whose collection is expected within 12 months.

The portion which will be received beyond 12 months is classified in the account “Other non-current assets” (Note 3.9).

Regarding the “Receivables from FCA Shares” of Euro 2,453 thousand, this concerns the portion due within twelve months of these half-year financial statements. More information on these receivables can be found in paragraph “3.9. Other non-current assets” of these notes.

“Prepayments and accrued income” of Euro 2,117 thousand increased on December 31, 2022 in view of the normal deferral of costs paid in one settlement at the beginning of 2023, but also accruing to the second half of 2023.

Receivables for grants and subsidies of Euro 1,423 thousand concerning various subsidised research projects. Reference should also be made to section "9. Disclosure on public grants as per article 1, paragraphs 125-129, of Law No. 124/2017.

Employee receivables of Euro 1,414 thousand concern the Group cash advances for the coverage of mission and travel expenses.

Other receivables of Euro 339 thousand mainly concern certain recharges, including of a tax nature, to a number of counterparties.

EQUITY

3.16. SHARE CAPITAL

The share capital of the parent company Avio S.p.A. amounts to Euro 90,964,212 at June 30, 2023; the share capital is entirely subscribed and paid-in.

This share capital derives from the aggregation:

- of Euro 15,422,500, equal to the share capital of the SPAC (Special Purpose Acquisition Company) Space2 S.p.A., following the partial proportional spin-off effective as of April 5, 2017, with the beneficiary being the new SPAC Space3 S.p.A. (this latter company therefore not part of the Avio Group). The company Space2, following the acquisition of the Avio Group on March 31, 2017, then merged by incorporation the parent Avio S.p.A., effective as of April 10, 2017, and was newly renamed "Avio S.p.A.";
- of Euro 75,339,170, equal to the share capital increase to service the share swap of the above-mentioned merger, following which shares were assigned of the incorporating company Space2 to Leonardo S.p.A. and In Orbit S.p.A.
- of which Euro 202,542 thousand as the increase due to the exercise, in the second half of 2017, of market warrants (see the "Shareholders" paragraph of the Directors' Report).

The share capital at June 30, 2023 comprised 26,359,346 ordinary shares.

3.17. SHARE PREMIUM RESERVE

The share premium reserve, originally totalling Euro 144,256 thousand, is restricted for the value of the treasury shares acquired. At June 30, 2023, the available value of the share premium reserve was Euro 130,687 thousand, with treasury shares recognised to the financial statements amounting to Euro 13,569 thousand.

3.18. OTHER RESERVES

The breakdown of other reserves is as follows (Euro thousands):

	30/06/2023	31/12/2022	Change
Legal reserve	18,193	18,193	-
Treasury shares acquired	(13,569)	(13,569)	-
Unavailable treasury shares purchase reserve	13,569	13,569	-
Actuarial gains/(losses) reserve	(4,008)	(4,029)	20
Stock grant reserve	245	54	191
Translation reserve	(14)	(21)	7
Total	14,415	14,197	218

The stock grant reserve represents the cost for H1 2023 of both the 2022-2024 and 2023-2025 plans to grant treasury shares to top management.

The translation reserve, negative for Euro 14 thousand, relates to the effects of the full consolidation of the financial statements in USD of the subsidiary Avio USA Inc.

3.19. NON-CONTROLLING INTERESTS

Non-controlling interests relate to the share of the equity in Spacelab S.p.A and Regulus S.A consolidated under the line-by-line method, as illustrated below (in Euro thousands):

30/06/2023				
Consolidated companies	% Non-controlling interests	Capital and Reserves	Profit/(loss)	Equity non-controlling Interests
Spacelab S.p.A.	30.00%	1,383	102	1,486
Regulus S.A.	40.00%	8,216	(280)	7,935
		9,599	(178)	9,421

NON-CURRENT LIABILITIES

3.20. NON-CURRENT FINANCIAL LIABILITIES

The movement in the account between December 31, 2022 and June 30, 2023 is reported below (in Euro thousands):

	30/06/2023	31/12/2022	Change
Non-current financial liabilities to EIB	7,000	12,000	(5,000)
Other non-current financial liabilities	51	76	(25)
Total	7,051	12,076	(5,025)

The account essentially concerns two loans agreed with the European Investment Bank (EIB):

- loan of an original Euro 10,000 thousand subscribed in January 2019: this loan has a fixed interest rate and is of 7-years duration, of which 2 constituting a grace period and repayment in ten equal half-yearly instalments of Euro 1,000 thousand from the third to the seventh years, of which the first maturing on April 30, 2021 and the final maturing on October 31, 2025;
- loan of Euro 40,000 thousand subscribed in October 2017: this loan has a fixed interest rate and is of 7-years duration, of which 2 constituting a grace period and repayment in ten equal half-yearly instalments of Euro 4,000 thousand from the third to the seventh years, of which the first payment on April 30, 2020 and the final maturing on October 31, 2024.

The two loans will support the planned development of new technologies in the field of space propulsion systems in view of the offering of the new products for the Ariane 6 and Vega-C programmes and the expansion of industrial capacity at the Colleferro facility required to meet the Company's production volume targets for the coming years.

The decrease of Euro 5,000 thousand relates to the short-term reclassification:

- of the instalment of Euro 4,000 thousand, relating to the loan of Euro 40,000 thousand, falling due on April 30, 2024;
- of the instalment of Euro 1,000 thousand, relating to the loan of Euro 10,000 thousand, also falling due on April 30, 2024.

The short-term portion of the loan, totalling Euro 10,000 thousand (including over Euro 26 thousand for interest accrued in the period), is therefore recognised under item "3.28. Current portion of non-current financial payables".

These two loans are not supported by guarantees and stipulate the application of covenants (Gross Financial Debt/EBITDA, Gross Financial Debt/Equity, EBITDA/net financial charges), among other covenants. These covenants have been complied with to date.

Hedging derivatives have not been agreed on these loans.

3.21. NON-CURRENT FINANCIAL LIABILITIES FOR LEASING

Following the application of IFRS 16, the breakdown of the related non-current financial liabilities is shown below (in Euro thousands):

	30/06/2023	31/12/2022	Change
Non-current financial payables for leasing	5,456	4,937	519
Total	5,456	4,937	519

The breakdown of these financial liabilities is as follows (Euro thousands):

	30/06/2023	31/12/2022	Change
Non-current financial liabilities to the associate Termica Colleferro S.p.A. as per IFRS 16	842	837	6
Non-current financial liabilities to third parties as per IFRS 16	4,613	4,101	513
Total	5,456	4,937	519

The financial liabilities to the associate Termica Colleferro S.p.A. relate to the lease of the electro-duct and relative electrical infrastructure at the combined cycle co-generation thermo-electrical station owned by the said associate.

With regards to the financial liabilities to third parties, these essentially concern:

- the concession of a specific area within the Salto di Quirra Inter-force Experimental Facility, where there are plans for a Space Propulsion Test Facility project for the construction of a Liquid Rocket Engine test bench and the production of carbon-carbon components;
- the leasing of office and industrial use land and buildings at Airola (Campania) and Villaputzu (Sardinia);
- the lease of apartments for employees in Guiana;
- the lease of company cars.

3.22. EMPLOYEE BENEFIT PROVISIONS

The account relates to post-employment benefits and other long-term benefits.

The means for accruing these benefits varies according to the legal, fiscal and economic conditions of each State in which the Group operates. These benefits are generally based on remuneration and years of employee service. The obligations refer to employees in service.

Post-employment benefits

Group companies guarantee post-employment benefits for employees both through contributions to external funds and through defined benefit plans.

Defined contribution plans

In the case of defined contribution plans, the Group pays the contributions to public or private insurance institutions based on legal or contractual obligations. With the payment of contributions the companies fulfil their obligations. The payables for contributions to be paid at the reporting date are included in the account "Other current liabilities" and the cost for the period matures based on the service period of the employee and recorded in the income statement account "Personnel expenses".

Defined benefit plans

Defined benefit plans are represented by unfunded plans, principally provided by third party funds, present in the Italian companies of the Group, of the leaving indemnity provision and of the special loyalty bonus indemnity, payable on departure to the employees which have matured the required number of years' service. The value of the liabilities recorded in the accounts for these institutions is calculated on an actuarial basis, utilising the projected unit credit method.

The leaving indemnity provision relates to the obligation for the amount to be paid to employees on the termination of employment, pursuant to the provisions of Article 2120 of the Civil Code. The regulations of this provision were modified by the 2007 Finance Act and subsequent Decrees and Regulations. Specifically, for the companies with an average number of employees not lower than fifty, the portion of leaving indemnity matured subsequent to January 1, 2007 is, on the choice of the employee, either transferred to a complementary pension fund or to the INPS treasury fund. Consequently, for the companies of the Group with a number of employees not below fifty, the portion of the employee leaving indemnity matured subsequent to this date is treated as a defined contribution plan, as the obligation of the Group is represented exclusively by the payment to the complimentary pension fund or to INPS, while the liability existing at December 31, 2006 continues to be treated as a defined benefit plan to be valued in accordance with actuarial methods. For the companies of the Group with a number of employees below fifty, the portion matured in the year continues to be accrued to the company leaving indemnity provision, unless specific choices are made voluntary by the individual employees.

Other long-term employee benefits

The Group also recognises to employees other long-term benefits issued on the reaching of a fixed number of years of service. In this instance, the value of the obligation recognised to the financial statements reflects the probability that the payment will be issued and the duration for which payment will be made. The value of these liabilities recorded in the accounts are calculated on an actuarial basis, utilising the "projected unit credit" method.

The Group mainly has "unfunded" defined benefit plans, principally comprising the leaving indemnity provision of the Italian companies.

The provisions are broken down as follows (in Euro thousands):

	30/06/2023	31/12/2022	Change
- Defined benefit plans:			
Post-employment benefits	3,534	3,578	(44)
Other defined benefit plans	2,331	2,418	(86)
	5,865	5,996	(130)
- Other long-term benefits	3,006	3,529	(522)
Total employee benefit provisions	8,872	9,524	(653)
<i>of which:</i>			
- Italy	7,730	8,132	(402)
- Other Countries	1,142	1,393	(251)
	8,872	9,524	(653)

The following table presents the principal changes in the employee benefit provisions during the period (in Euro thousands):

	Defined benefit plans	Other long-term employee benefits	Total employee benefit provisions
At 31/12/2022	5,996	3,529	9,524
Financial charges/(income)	80	26	105
Extraordinary charges/(income) from actuarial adjustment	-	-	-
Actuarial (gains)/losses in income statement	-	(312)	(312)
Actuarial (gains)/losses in comprehensive income statement	(13)	-	(13)
Pension cost current employees	83	58	141
Other movements	-	(229)	(229)
Benefits paid	(280)	(65)	(345)
At 30/06/2023	5,865	3,006	8,872

The table below provides the main assumptions used for the actuarial calculation and a comparison with both FY 2022 and H1 2022:

	30/06/2023	31/12/2022	30/06/2022
Discount rate	3.63%	3.48%	0.15%
Expected salary increases	2.16%	2.16%	2.15%
Inflation rate	European Zero-Coupon Inflation-Indexed Swap curve at 31.05.2023	European zero-coupon inflation-indexed curve Swap at 30.12.2022	European zero-coupon inflation-indexed curve Swap at 30.06.2022
Average employee turnover rate	4.66%	4.64%	4.75%

Securities issued by corporate issuers with "AA" ratings were utilised for the calculation of the present value, with the presumption that this class identifies a high rating level within a range of "Investment Grade" securities and therefore excluding more risky securities. The market curve utilised was a "Composite" curve which reflects the market conditions at the valuation date for securities issued by companies belonging to various sectors (including Utility, Telephone, Financial, Bank and Industrial). In relation to the geographical area, reference was made to the Eurozone.

3.23. PROVISIONS FOR RISKS AND CHARGES

The table below illustrates provisions for risks and charges at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Provisions for risks and charges	46,379	53,379	(7,001)
Total	46,379	53,379	(7,001)

The breakdown of the provisions for risks and charges at June 30, 2023 is presented below (Euro thousands):

	30/06/2023		
	Current portion	Non-current portion	Total
Provision for variable remuneration	2,428	1,912	4,340
Provision for legal and environmental risks and charges	1,507	15,685	17,192
Other provisions for risks and charges	22,976	1,870	24,847
Total	26,912	19,467	46,379

These provisions include:

- provisions for variable remuneration for Euro 4,340 thousand, mainly comprising employee remuneration on the achievement of individual and corporate objectives;
- provisions for legal and environmental risks and charges, against litigation and trade union disputes in course, amount to Euro 17,192 thousand;
- other provisions for risks and charges of Euro 24,847 thousand (Euro 29,561 thousand at December 31, 2022), mainly referring to extraordinary provisions, for risks related to the return-to-flight activities of Vega C, net of compensation expected from the European Space Agency, the reasonably estimated activities following the anomaly of June 2023 of the static test of the Zefiro 40 engine, and for future programme execution amounting to Euro 22,632 thousand (Euro 25,361 thousand at December 31, 2022); these provisions include, among others, charges for the restoration of leased areas and royalties provided for by Law 808/85.

The movements in current and non-current provisions in H1 2023 are shown below (amounts in Euro thousands):

	31/12/2022	Provisions	Other changes	Utilisations	Releases	30/06/2023
Provision for variable remuneration	6,305	1,865	-	(3,830)	-	4,340
Provision for legal and environmental risks and charges	17,514	-	54	(376)	-	17,192
Other provisions for risks and charges	29,561	7,637	-	(4,693)	(7,658)	24,847
Total	53,379	9,502	54	(8,899)	(7,658)	46,379

The main changes in the first half of the year were:

- the provisions for variable remuneration were utilised for Euro 3,830 thousand, in consideration of the bonuses paid to employees in April 2023 for the achievement of individual and company objectives relating to 2022.
The provision of Euro 1,865 thousand mainly relates to variable remuneration which will be paid in the first half of 2024, on the basis of the achievement of individual and company objectives for the year 2023.
- the risks and legal and environmental charge provisions were utilised for Euro 376 thousand to pay environmental charges;
- other provisions for risks and charges: provisions refer to the anomaly in the static test of the Zefiro 40 engine as previously reported in the section "H1 significant events" and the future execution of programmes for charges that occurred in the half year; utilisations refer to charges occurring in the half year that were already forecast and provided for in the provisions; the releases refer mainly to events in the half year that zeroed the charges set aside for the future execution of projects.

3.24. OTHER NON-CURRENT LIABILITIES

The table below illustrates the account at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Non-current liabilities	76,394	76,471	(77)
Total	76,394	76,471	(77)

In detail, the changes in the item were as follows:

	30/06/2023	31/12/2022	Change
Tax liabilities			
<i>Payables to the Tax Authorities for registration, mortgage and land tax relating to the corporate transaction which in 2013 resulted in the sale of the company GE Avio S.r.l. (containing the assets of the AeroEngine sector of the Avio Group) to the General Electric Group.</i>			
	58,220	58,220	-
Liabilities relating to Law 808/85			
Deferred income on disbursements pursuant to Law 808/85 - beyond one year			
	15,568	15,568	-
Payables to MiSE for disbursements pursuant to Law 808/85 (as per MiSE Decree 3/07/2015) - portion beyond one year			
	1,320	1,320	-
Deferred income on disbursements pursuant to Law 808/85 (as per MiSE Decree 3/07/2015) - portion beyond one year			
	483	483	-
Other liabilities			
Payables due to MiSE for other subsidies			
	438	511	(73)
Deferred income			
	365	369	(4)
Total	76,394	76,471	(77)

Tax liabilities

Payables to the Tax Authorities for registration, mortgage and land tax relating to the corporate transaction which in 2013 resulted in the sale of the company GE Avio S.r.l. (containing the assets of the AeroEngine sector of the Avio Group) to the General Electric Group.

The account, amounting to Euro 58,220 thousand, refers to the settlement notice received in July 2016 from the Tax Agency relating to registration, mortgage and land tax for the above-mentioned amount, relating to the corporate operations which in 2013 resulted in the sale of the company GE Avio S.r.l. (containing the assets of the AeroEngine sector of the Avio Group) to the General Electric Group. Simultaneously a receivable was recorded from the General Electric Group for a similar amount.

The recognition of the above-mentioned receivable from the General Electric Group is based on specific contractual clauses in which this latter must indemnify Avio with reference to any liabilities which should arise in relation to indirect taxes concerning the above-mentioned operations, providing Avio the sums requested by the Tax Office within the time period for the payments.

It should be noted that the afore-mentioned tax settlement notice is the subject of a dispute with the tax authorities, which in 2020 appealed to the Supreme Court of Cassation against the sentence with which, at the end of 2018, the Piedmont Regional Tax Commission fully accepted the appeal lodged by the Company. The Company appeared promptly in the proceedings with its own counter-appeal and simultaneous cross-appeal, reaffirming the soundness of its arguments. At the date of this report, the Court of Cassation has not yet set a date for the hearing.

For further information, reference should be made to Note “3.9. Other non-current liabilities” and to the section “Legal and tax disputes and contingent liabilities” in the Explanatory Notes.

Liabilities relating to Law 808/85

Deferred income on disbursements pursuant to Law 808/85 - beyond one year

The account, amounting to Euro 15,568 thousand, represents the initial counter-entry of the receivable from the Ministry for Economic Development against the grants pursuant to Law 808/85, relating to the projects qualifying as functional to national security or projects with common European interest, for the amount to be allocated to the income statement in future years, beyond one year, in correlation to the allocation of the costs against which the disbursements were granted.

Payables to Economic Development Ministry for disbursements pursuant to Law 808/85 (rules as per MiSE Decree 3/07/2015) - portion beyond one year

Disclosure upon the payable to MiSE for disbursements as per Law 808/85 according to the ex MiSE Decree of 3/07/2015 of Euro 1,320 thousand is presented below.

With Economic Development Ministry Decree of July 3, 2015, the criteria and means for funding to promote and support aerospace research and development projects to consolidate and grow Italian technology and the sector’s competitiveness were defined.

The measures under the Decree concern zero-rate subsidised loans granted within the limits established by EU rules upon research, development and innovation.

The loans are repaid for 90% of the settlement amount through annual equal instalments over the issue duration and however for a period of not less than ten years, beginning from the year subsequent to the final disbursement. The remaining 10% is an outright grant.

On February 19, 2018, the parent Avio was recognised the Settlement Decree by the Economic Development Ministry with regards to expenses incurred as part of a research and development project which falls within the scope of the above-mentioned July 3, 2015 Decree.

The final disbursement under the plan reported in the Decree of February 19, 2018 is in 2029, with repayment therefore from the subsequent year (2030) until 2045.

Both the grants receivable from the Ministry for Economic Development and the subsequent reimbursements payable to the Ministry have been accounted for at amortised cost.

The difference between the nominal and present values of the amount receivable and payable is recognised over the course of the benefit.

Deferred income on disbursements pursuant to Law 808/85 (rules as per MiSE Decree 3/07/2015) - portion beyond one year

See above for an account of the rules for grants pursuant to Law 808/85 set out in the Decree of the Ministry for Economic Development of July 3, 2015.

The caption, which amounted to Euro 483 thousand, represents the difference between the nominal values and present values of the amount receivable and payable in respect of the aforementioned liquidation decree dated February 19, 2018.

Payables due to MiSE for other subsidies

This item, amounting to Euro 438 thousand, consists of payables due beyond one year to the Ministry for Economic Development relating to the disbursements provided for in Article 6 of the Decree of June 1, 2016, in accordance with Axis 1, action 1.1.3. of the National Operational Programme "Enterprise and Competitiveness" 2014-2020 ERDF, received for the undertaking of the joint research and development projects concerning the projects:

- "Additive Manufacturing by Mixing Elemental Powders", and
- "Innovative composite materials for space, aeronautics and automotive I.S.A.C."

The payables are recorded at their discounted value.

CURRENT LIABILITIES

3.25. CURRENT FINANCIAL LIABILITIES

The table below illustrates current financial liabilities at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Current financial liabilities to Europropulsion	-	27,769	(27,769)
Other current financial liabilities	55	259	(204)
Total	55	28,028	(27,973)

The remaining item relates to financial liabilities of the subsidiary Temis S.r.l.

Payables to the jointly-controlled company Europropulsion S.A. relate to the mechanism of distributing to its shareholders the financial resources available to the joint venture, in accordance with a specific treasury management contract. This contract provides for application of the 3-month Euribor as the reference rate, with an additional lending rate of -0.05% and a borrowing rate of 0.20%. At June 30, these financial liabilities had been settled in full.

3.26. CURRENT FINANCIAL LIABILITIES FOR LEASING

Following the application of IFRS 16, the breakdown of the related non-current financial liabilities is shown below (in Euro thousands):

	30/06/2023	31/12/2022	Change
Current financial liabilities for leasing	1,806	1,879	(73)
Total	1,806	1,879	(73)

The breakdown of these financial liabilities is as follows (Euro thousands):

	30/06/2023	31/12/2022	Change
Current financial liabilities to the associate Termica Colleferro S.p.A. as per IFRS 16	83	152	(69)
Current financial liabilities to third parties as per IFRS 16	1,723	1,726	(4)
Total	1,806	1,879	(73)

The financial liabilities to the associate Termica Colleferro S.p.A. relate to the lease of the electro-duct and relative electrical infrastructure at the combined cycle co-generation thermo-electrical station owned by the said associate.

With regards to the financial liabilities to third parties, these essentially concern:

- the concession of a specific area within the Salto di Quirra Inter-force Experimental Facility, where there are plans for a Space Propulsion Test Facility project for the construction of a Liquid Rocket Engine test bench and the production of carbon-carbon components;
- the leasing of office and industrial use land and buildings at Airola (Campania) and Villaputzu (Sardinia);
- the lease of apartments for employees in Guiana;
- the lease of company cars.

3.27. CURRENT PORTION OF NON-CURRENT FINANCIAL PAYABLES

The table below illustrates this account at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Current portion of non-current financial payables	10,026	10,033	(8)
Total	10,026	10,033	(8)

The account, which amounted to Euro 10,026 thousand, consists of:

- the two instalments of the initial EIB loan of Euro 40 million, amounting to Euro 8 million (of which Euro 4 million due on October 31, 2023 and Euro 4 million due on April 30, 2024);
- two instalments of the EIB loan of Euro 10 million, amounting to Euro 2 million (of which Euro 1 million due on October 31, 2023 and Euro 1 million due on April 30, 2024);
- the accrued interest at June 30, 2023 amounting to Euro 26 thousand.

3.28. TRADE PAYABLES

The table below illustrates trade payables at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Trade payables	89,529	89,826	(297)
Total	89,529	89,826	(297)

Trade payables of the Avio Group at June 30, 2023 amount to Euro 89,529 thousand; this amount includes, for Euro 3,495 thousand, trade payables to associated companies, jointly controlled companies and non-consolidated subsidiaries as follows (Euro thousands):

	30/06/2023	31/12/2022	Change
Europropulsion S.A.	1,623	10,361	(8,738)
Termica Colleferro S.p.A.	1,328	3,517	(2,189)
Consorzio Servizi Acqua Potabile	134	(24)	158
Servizi Colleferro S.C.p.A.	409	200	209
Total	3,495	14,054	(10,559)

3.29. CURRENT TAX PAYABLES

The table below illustrates current tax payables at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Tax payables	2,862	4,228	(1,366)
Total	2,862	4,228	(1,366)

The breakdown of current income taxes is shown below (in Euro thousands):

	30/06/2023	31/12/2022	Change
IRES payables	454	454	-
IRAP payables	94	54	41
Payables for withholding taxes	1,608	1,605	3
Other tax payables	570	606	(36)
Foreign income taxes	136	1,509	(1,373)
Total	2,862	4,228	(1,366)

IRES payables from tax consolidation amount to Euro 454 thousand, while IRAP payables total Euro 94 thousand.

Payables for withholding taxes, amounting to Euro 1,608 thousand, refer to employee and consultant withholding taxes. The increase on the previous year is due to the higher number of Group employees.

Other tax payables, amounting to Euro 570 thousand, mainly relate to the short-term portion of the Tax payable of the subsidiary Se.Co.Sv.Im. S.r.l. concerning the expedited settlement, following the application presented by May 31, 2019, regarding the tax dispute relating to the alleged failure to apply the tax on the reclamation costs subject to recharge to the consolidating company Avio S.p.A. for the years 2010, 2011 and 2012. This settlement stipulates the payment in 20 quarterly installments of the taxes only, without penalties and interest;

Payables for foreign taxes totalling Euro 136 thousand relate to the tax liabilities of the subsidiaries Regulus S.A., Avio Guyane S.A.S and Avio France S.A.S., operating in Kourou in French Guiana, a French overseas region and department in South America.

3.30. OTHER CURRENT LIABILITIES

The table below illustrates other current liabilities at June 30, 2023 and December 31, 2022 (Euro thousands).

	30/06/2023	31/12/2022	Change
Other current liabilities	25,834	24,271	1,563
Total	25,834	24,271	1,563

The breakdown of the account at June 30, 2023 is shown in the table below (Euro thousands):

	30/06/2023	31/12/2022	Change
Other accrued liabilities and deferred income	6,175	7,758	(1,583)
Employee payables	12,233	8,827	3,406
Other payables to third parties	1,956	2,009	(53)
Payables due to social security institutions	4,810	4,357	453
Deferred income on disbursements pursuant to Law 808/85 - current portion	660	1,320	(660)
Total	25,834	24,271	1,563

Accrued expenses and deferred income

This account, amounting to Euro 6,175 thousand (Euro 7,758 thousand at December 31, 2022), mainly refers to the deferment of commercial costs and grants to the following period.

Employee payables

Employee payables amount to Euro 12,233 thousand and include remuneration to be settled, in addition to vacations and other rights matured and not utilised. The increase of Euro 3,406 thousand is also due to the increase (+69) in headcount during the half year (from 1,147 at December 31, 2022 to 1,216 at the end of the half year).

Other payables to third parties

This account totals Euro 1,956 thousand and relates to liabilities for urban development charges due to the municipalities in which the Group operates for Euro 465 thousand and other liabilities to third-parties for Euro 1,491 thousand.

Amounts due to social security institutions

The account concerns amounts to be paid, amounting to Euro 4,810 thousand (Euro 4,357 thousand at December 31, 2022), relating to company and employee contributions, in accordance with regulations in force.

Deferred income on disbursements pursuant to Law 808/85 - current portion

The account, amounting to Euro 660 thousand (Euro 1,320 thousand at December 31, 2022), concerns the accrual of the contribution, with regards to the portion expected to be recognised as income to the income statement within the next 12 months.

INCOME STATEMENT

3.31. REVENUE

Total revenues, comprising the change in contract work-in-progress and revenues from product sales and the provision of services, amounted to Euro 157,721 thousand. They amounted to Euro 133,516 thousand in the first half of 2022.

The following table compares the two periods (in Euro thousands):

	H1 2023	H1 2022	Change
Revenues from sales	141	28	113
Revenues from services	1,883	1,997	(114)
	2,025	2,025	(0)
Changes in contract work in progress	155,696	131,492	24,204
Total	157,721	133,516	24,204

For information on revenues as compared to the previous period, reference should be made to the "Group operating performance and financial and equity position" paragraph of the Directors' Report.

The revenues from advancement include the effect from the recognition of research and development credits for the years 2017, 2018 and 2019 under Article 3 of Legislative Decree No. 145/2013 and subsequent amendments in force until December 2019. This income amounted to Euro 667 thousand, while in the first half of 2022 it totalled Euro 1,182 thousand. These credits, recognised to the extent they are considered recoverable and usable, are initially recorded in the account "Current tax receivables", with counter-entry to the income statement under "Service costs", and rediscounted to reflect their recognition to the Income Statement in each period on an accruals basis, according to the differing types of costs supported, in relation to the percentage of completion of the contract work-in-progress giving rise to the costs against which the credit was calculated. The accrual has been recognised on the balance sheet under "Contract work in progress" and its release has been recognised on the income statement as "Changes in contract work in progress".

In H1, the Group recognised variable fees pursuant to IFRS 15 that had an impact of approx. 4.6% of revenues, mainly relating to ESA contributions for the P120 ramp-up and for activities related to Vega C.

3.32. OTHER OPERATING REVENUES

"Other operating revenues" for the two periods are compared below (in Euro thousands):

	H1 2023	H1 2022	Change
Dividends from the jointly-controlled company Europropulsion S.A.	3,000	2,400	600
Other income	946	865	81
Income for the portion recognised to the income statement of the disbursements as per Law 808/85	660	1,073	(413)
Income from the release of provisions	251	1,977	(1,726)
Operating grants	541	449	92
Other prior year income	17	98	(81)
Total	5,415	6,861	(1,447)

In the first half of 2023, the account comprised:

- dividends collected from the jointly-controlled company Europropulsion for Euro 3,000 thousand (Euro 2,400 in H1 2022);
- other income from recharges of Euro 946 thousand (Euro 865 thousand in H1 2022);

- income for the portion recognised to the income statement of the disbursements as per Law 808/85 for Euro 660 thousand (Euro 1,073 thousand in H1 2022);
- income from the release of provisions of Euro 251 thousand (Euro 1,977 thousand in H1 2022). The decrease on the comparative six-month period is due to an extraordinary profit of Euro 1,643 thousand recognised in 2022 following the cancellation of the 2020-22 and 2021-23 cycles of the 2020-24 Monetary Long Term Incentive Plan;
- operating grants for Euro 541 thousand (Euro 449 thousand in H1 2022);
- prior year income of Euro 17 thousand (Euro 98 thousand in H1 2022);

3.33. CONSUMPTION OF RAW MATERIALS

The breakdown of the account is as follows (Euro thousands):

	H1 2023	H1 2022	Change
Purchase of raw materials	72,710	47,599	25,111
Change in inventories of raw materials	(18,256)	(7,881)	(10,375)
Total	54,454	39,718	14,736

3.34. SERVICE COSTS

The breakdown of the account is as follows (in Euro thousands):

	H1 2023	H1 2022	Change
Service costs	60,112	60,522	(410)
Use of third party assets	1,311	245	1,066
Total	61,423	60,767	656

Service costs, amounting to Euro 61,423 thousand, in particular, include costs for activities carried out by co-producers, for consultancy and technical and professional services, for outsourcing, for maintenance and for temporary personnel.

The item also includes the amount of the emoluments due to the Avio Group's corporate boards, relating to:

- Directors' fees of Euro 366 thousand (Euro 290 thousand in H1 2022) and specific committee fees of Euro 91 thousand (Euro 90 thousand in H1 2022);
- Supervisory Board fees of Euro 85 thousand (Euro 87 thousand in H1 2022);
- Board of Statutory Auditors' fees of Euro 114 thousand (Euro 84 thousand in H1 2022);
- Auditing Firm fees of Euro 188 thousand (Euro 88 thousand in H1 2022).

3.35. PERSONNEL EXPENSES

The breakdown of the account is as follows (in Euro thousands):

	H1 2023	H1 2022	Change
Wages and salaries	34,071	29,976	4,095
Social security expenses	8,147	6,984	1,163
Provision for variable remuneration	2,983	1,947	1,036
Other long-term benefits - current employees	21	53	(32)
Actuarial (gains)/losses recorded in P&L relating to other long-term benefits	(312)		(312)
Provision for "Other defined benefit plans"	2,021	1,704	317
Total	46,931	40,664	6,267

The increase of Euro 6,267 thousand compared to the previous period is mainly due to the increase in number of employees of the Group.

The table below illustrates, at Group level and divided by category, the average number of employees of the companies included in the consolidation scope:

	H1 2023	H1 2022	Change
Blue-collar	381	384	(3)
White-collar	735	627	108
Executives	29	27	2
Total	1,146	1,038	108

3.36. AMORTISATION & DEPRECIATION

The breakdown of the account is as follows (in Euro thousands):

	H1 2023	H1 2022	Change
Intangible assets with definite life	4,608	4,620	(12)
Property, plant and equipment	3,289	3,470	(181)
Right-of-use	1,111	1,247	(136)
Investment property	43	38	5
Total	9,051	9,375	(324)

Amortization of Intangible assets with a definite life primarily includes:

- amortisation of capitalised development costs of Euro 1,639 thousand (Euro 2,068 thousand in H1 2022);
- Euro 1,493 thousand for the amortisation of development costs capitalised and for the amortisation of intangible assets regarding the Ariane and Vega programmes, identified following the purchase price allocation process regarding the Group by Space2 in 2017 (same amount in H1 2022).

3.37. OTHER OPERATING COSTS

This account amounts to Euro 2,706 thousand (Euro 1,973 thousand in H1 2022) and mainly comprises the following items:

- indirect taxes and duties amounting to Euro 1,101 thousand (Euro 807 thousand in the first half of 2022);

- other operating costs of Euro 1,552 thousand (Euro 1,096 thousand in H1 2022) related to association dues, entertainment expenses, and sundry losses;
- prior-year charges of Euro 53 thousand (Euro 70 thousand in H1 2022).

3.38. EFFECT VALUATION OF INVESTMENTS UNDER EQUITY METHOD - OPERATING INCOME/(CHARGES)

The account, resulting in a net charge of Euro 817 thousand (Euro 1,888 thousand in H1 2022), includes the effects from the application of the equity method to measure the investments:

- in the jointly-controlled company Europropulsion S.A.; in this regard, a charge of Euro 860 thousand was recognised, corresponding to Avio's share of the change in the company's equity at June 30, 2023; the equivalent figure for H1 2022 was a charge of Euro 1,888 thousand;
- in the associate Termica Colleferro S.p.A., amounting to income of Euro 44 thousand.

These effects are recorded, in accordance with the option permitted by IFRS 11, under operating income and charges of the Group, based on the operating nature of the above equity investments in terms of the Avio Group's business.

3.39. COSTS CAPITALISED FOR INTERNAL WORKS

The account relating to costs capitalised for internally constructed assets, amounting to Euro 4,910 thousand (Euro 3,499 thousand in H1 2022), includes the costs for the internal construction of intangible assets, and to a lesser extent, tangible assets, recorded under assets in the Balance Sheet.

The account comprises the capitalisations of:

- internal development costs of Euro 3,733 thousand (Euro 2,481 thousand in H1 2022);
- costs for the internal production of tangible assets for Euro 156 thousand (Euro 158 thousand in H1 2022).
- costs for investments regarding the optimisation of operating processes to achieve production efficiency benefits in the amount of Euro 1,021 thousand (Euro 860 thousand at June 30, 2022).

3.40. FINANCIAL INCOME

The breakdown of the account is as follows (Euro thousands):

	H1 2023	H1 2022	Change
Bank interest income	587	-	587
Interest income on VAT refunds	18	71	(53)
Financial income from amortised cost	68	125	(57)
	673	196	477
Realised exchange gains	282	57	225
Unrealised exchange gains	(59)	-	(59)
	223	57	166
Total	897	253	644

Financial income, amounting to Euro 897 thousand (Euro 253 thousand in the comparative period), mainly comprised:

- interest income on short-term restricted deposits with financial institutions for Euro 587 thousand;
- interest income from the discounting of receivables for Euro 68 thousand (Euro 125 thousand in the comparative period);
- currency differences for Euro 223 thousand (Euro 57 thousand in the comparative period).

Realised exchange gains arise on the collection of receivables and settlement of payables in foreign currencies.

Unrealised exchange losses relate to the period-end translation of receivables and payables in foreign currencies.

3.41. FINANCIAL CHARGES

The breakdown of the account is as follows (Euro thousands):

	H1 2023	H1 2022	Change
Interest on EIB loans	92	137	(46)
EUP treasury interest expenses	297	-	297
Interest on other payables	12	15	(3)
Discounting on employee benefits	105	(18)	123
Financial charges from amortised cost	73	167	(94)
	579	301	278
Realised exchange losses	139	250	(111)
Unrealised exchange losses	(31)	-	(31)
	107	250	(143)
Total	687	551	136

Financial charges, amounting to Euro 687 thousand (Euro 551 thousand in the comparative period), mainly comprised:

- interest expenses on the two EIB loans of Euro 92 thousand;
- interest expense on the treasury account with the jointly-controlled company Europropulsion amounting to Euro 297 thousand;
- discounting for employee benefit updates for Euro 105 thousand;
- financial charges from amortised cost applied to liabilities for Euro 73 thousand;
- exchange losses for Euro 107 thousand.

Realised exchange losses arise on the collection of receivables and settlement of payables in foreign currencies.

Unrealised exchange losses relate to the period-end translation of receivables and payables in foreign currencies.

3.42. INCOME TAXES

The effective tax charge in the period is presented below (in Euro thousands):

	30/06/2023	30/06/2022
Italian company taxes	(41)	(41)
Taxes overseas companies	(42)	(1,474)
Net deferred tax income/charge	(89)	400
	(172)	(1,115)

This charge therefore comprises:

- IRES and IRAP income tax expense for the Italian companies of Euro 41 thousand (Euro 41 thousand in H1 2022);
- current tax charges of overseas subsidiaries for Euro 42 thousand (Euro 1,474 thousand in H1 2022);
- deferred tax charge of Euro 89 thousand (income of Euro 400 thousand in H1 2022).

The reconciliation between the theoretical and effective IRES corporate income tax is presented below (in Euro thousands):

	30/06/2023	30/06/2022
Pre-tax result	(3,686)	(6,516)
Ordinary rate applied	24.00%	24.00%
Theoretical tax charge	(885)	(1,564)
Effect of increases (decreases) to the ordinary rate:		
Permanent increases	2,887	2,590
Permanent decreases	(4,888)	(4,061)
Temporary difference increases	13,419	6,423
Temporary difference decreases	(17,722)	(7,198)
Total changes	(6,304)	(2,245)
Utilisation of fiscal losses	-	-
IRES taxable income of the Group	(9,990)	(8,761)
Effective IRES taxes	-	(14)
Effective IRAP taxes	(41)	(27)
Other direct taxation of foreign companies	(42)	(1,474)
Sub-total current income taxes	(83)	(1,515)
Deferred-tax (charge)/income	(89)	400
Sub-total deferred income taxes	(89)	400
Total tax (charge)/income	(172)	(1,115)

3.43. EARNINGS/(LOSS) PER SHARE

An explanatory statement is reported below (in Euro):

	H1 2023	H1 2022
Group Consolidated Result	(3,679,628)	(9,453,889)
Number of shares in circulation	26,359,346	26,359,346
Treasury shares	(1,091,207)	(671,233)
Number of shares entitled to profits	25,268,139	25,688,113
Basic earnings per share – in Euro	(0.15)	(0.37)
Diluted earnings per Share (in Euro) ⁽¹⁾	(0.14)	(0.36)

⁽¹⁾ Diluted earnings (or loss) per share was determined assuming the conversion of the 800,000 sponsor warrants into ordinary shares.

4. DISCLOSURE BY OPERATING AND REGIONAL SEGMENTS

Disclosure by operating segment

In the first half of 2023, the Avio Group continued operating activities in line with previous years, exclusively in the Space business. Consequently, all the assets and liabilities, costs and revenues refer exclusively to a single sector of activity, which corresponds to the consolidation scope of the Group.

The Group workforce numbered 1,216 at June 30, 2023. At December 31, 2022 and June 30, 2022, Group employees numbered 1,147 and 1,047 respectively.

Disclosure by regional segment

The regional breakdown of Group revenues (defined based on customer country location), in H1 2023 (and in line with recent years) refers completely to Italy and Europe.

Group activities, and new investments, are similarly allocated - on the basis of the same criterion as revenues (customer country location) - entirely in Italy and Europe.

5. COMMITMENTS AND RISKS

The Group's principal commitments and risks are summarised in the following table (in Euro thousands):

	30/06/2023	31/12/2022
Guarantees given:		
Unsecured guarantees:		
Sureties issued to third parties on behalf of Group	75,273	64,426
Other guarantees	3,402	3,402
Total guarantees given	78,675	67,828
Guarantees received:		
Sureties and guarantees received	1,206	1,206
	1,206	1,206

Guarantees granted

Secured guarantees include sureties issued by third parties on behalf of the Group in favour of customers for the execution of contracts and other guarantees in the form of patronage letters issued in the interest of Group companies.

Sureties and guarantees received

These principally include sureties received from suppliers against orders for supplies to be completed.

Other commitments

The associated company Termica Colleferro S.p.A. ("Termica Colleferro") is currently 40% owned by Avio and 60% owned by the controlling shareholder Cogenio S.r.l. ("Cogenio"), which took over SECI S.p.A. ("SECI") on December 22, 2021.

Termica Colleferro manages a thermoelectric power plant that produces energy and steam essential for the functioning of the Avio production site in Colleferro.

For the purpose of building the thermoelectric plant, Termica Colleferro stipulated, in February 2010, a loan agreement for a maximum principal amount of Euro 34 million, guaranteed by SECI with a first demand surety and with a pledge on Termica Colleferro shares for the portion held by the same, with an original maturity date of February 24, 2022.

The bank loan agreement requires Termica Colferro to comply with typical financial covenants consisting of the ratio of financial debt to equity and of financial debt to EBITDA.

In consideration of the deterioration of the general conditions of the electricity market, in order to ensure compliance with the bank covenants, Termica Colferro, Avio, SECI and the financing banks signed, in 2014, agreements amending the original loan agreement, according to which:

(i) the right of Termica Colferro to cure any infringement of the financial parameters was provided for through the payment by SECI and Avio shareholders of a pro-quota amount, by way of capital increase and/or shareholders loan (the "Equity Cure"), sufficient to cure the infringement (the "Cure Amount");

(ii) it was also provided that SECI and Avio, in proportion to the shares held, would undertake, without any solidarity obligation, to grant a shareholder loan up to a maximum amount of Euro 18.2 million and Euro 12.1 million, respectively, in proportion to the share capital held in Termica Colferro, and cumulatively corresponding to the residual portion of the bank loan outstanding at that date, payable in several instalments, upon request by Termica Colferro, in relation to the latter's operating requirements, and subordinated to the bank loan.

In December 2016, Termica Colferro restructured its remaining bank debt of approx. Euro 22 million, mainly by extending the duration of the repayment plan from 2022 to 2027, reducing the interest rate spread and raising the covenant thresholds.

The bank debt restructuring agreement did not modify the guarantees to which the then shareholders SECI and Avio had committed themselves towards the financing banks, except for the alignment of the same to the new maturity of the bank loan.

On May 31, 2019, some Seci Group companies, including the holding company Seci S.p.A. and companies operating in the energy sector, in the agro-industrial sector, in the building/real estate sector and the last in the factoring sector, presented a voluntary arrangement with creditors application to the Bologna Court, agreed following the Order issued by the delegated Judge. The Court originally granted a deadline for the preparation and presentation of a business plan for the maintenance of the Group as a "going concern". Therefore, the majority stake in Termica Colferro held by SECI S.p.A. has become an asset within the related procedure.

Termica Colferro was not included in the companies presenting an administration procedure.

As the presentation by the parent company SECI S.p.A. of the application for an arrangement with creditors is, under the terms of the Termica Colferro bank loan agreement, an acceleration clause for repayment of the loan, in order to define its position vis-à-vis the lending banks in April 2020, Termica Colferro requested from them a waiver of the acceleration clause in the loan agreement.

In August 2020, the banks indicated that they are not in a position to carry out an assessment of the creditworthiness of the requests made by Termica Colferro, while they shall not activate the acceleration clause.

After taking steps with SECI S.p.A. such that SECI S.p.A. could respond to requests for information from the banks, Termica Colferro continued to pay the instalments of the loan.

In the first half of 2021, in pursuit of the objective to sell the stake in Termica Colferro, SECI S.p.A. mandated an energy sector consulting firm to contact the leading industry players and issued a process letter to them calling for a formal, binding expression of interest in acquiring the 60% holding in Termica Colferro.

This action led a number of parties potentially interested in acquiring stakes in Termica Colferro to contact Avio in order to ask about potential future collaborations should they be awarded the equity interest.

In July 2021, the Court of Bologna declared SECI S.p.A. bankrupt on the basis of the judgement of inadmissibility of the application for "Full Agreement" with the filing of the plan for an arrangement with creditors on a going concern basis pursuant to Articles 160 - 161 and 186-*bis* of the Finance Law.

In consideration of the declaration of bankruptcy, although the liquidation scenario of the investment in Termica Colferro started by SECI S.p.A. remained substantially unchanged, Termica Colferro and Avio promptly contacted the receivers in order to coordinate and accelerate the disposal of the 60% of the share capital of the Company.

Following discussions with the Receivership, in which Termica Colferro and Avio, as supplier and customer, laid out their respective operational needs, the Bologna Court took immediate steps to initiate the sale of the stake held by SECI S.p.A. in Termica Colferro, authorising the Receivers to take steps in this regard by issuing an authorisation order on August 18, 2021, which was followed by publication of the related call for tender on September 1, 2021.

In the meantime, on August 24, 2021, Termica Colferro repaid the second instalment on the bank loan, completing the repayment plan scheduled for the entire 2021.

With respect to Termica Colferro's request, promptly submitted to the lending banks, for a waiver of the acceleration clause of the loan due to the composition with creditors of the controlling shareholder SECI, on the assumption of the normal continuation of Termica Colferro's operations not impacted by SECI's composition with creditors, as well as Termica Colferro's independent ability to punctually repay the instalments of the bank debt falling due, the lending banks never manifested their willingness to avail themselves of the right

granted to them by the loan agreement, and this is also reasonable in light of Termica Colleferro's ability to autonomously and punctually meet the payments due, as was the case.

On September 1, 2021, the Court of Bologna ordered the auction sale of the entire equity investment (equal to 60% of the share capital) held by SECI in Termica Colleferro, which concluded, thanks also to the search for potential buyers carried out in the first half of 2021, with the final award to Cogenio, subject to satisfaction, inter alia, of the suspensive condition, to which the sale was subject, of the prior obtaining of a waiver from the lending banks.

The waiver from Termica Colleferro's lending banks was obtained on December 10, 2021 and Cogenio's takeover was finalised on December 22, 2021. Termica Colleferro's Shareholders' Meeting, held on December 22, 2021, approved the financial statements for fiscal years 2019 and 2020, with reference to which Termica Colleferro has always considered the going concern assumption to exist, even during the period in which the bank waiver was outstanding, in light of the Company's ability to independently and punctually honour the repayment of the bank debt and, more generally, the payments, as in fact occurred.

On December 12, 2022, data on financial requirements as per Annex 8.5 - Section A to the Loan Agreement (as amended) as of December 31, 2021 were communicated. The data show that the covenants stipulated in the above-mentioned loan agreement have been met. Subsequently, on December 12, 2022, the business plan showing the divestment of the existing cogeneration plant and the new investment was submitted to the lead bank. Based on the plan, the lenders, on December 22, 2022, issued the waiver whereby they waived the right to exercise the clause in Article 12.5 (*Effects of Forfeiture, Termination and Resolution*) of the loan agreement.

In view of the associate's new project to install a new thermal and electric power plant to ensure the supply of constant, uninterrupted heat and power to the Avio Group, partially replacing the components of the company's current cogeneration plant, the associate has written down a substantial portion of its assets in the 2021 financial statements. This write-down resulted in negative shareholders' equity of Euro 3,526 thousand to the financial statements.

The company's two shareholders, Cogenio S.r.l. (60%) and Avio S.p.A. (40%), carried out the following transactions with reference to the company to December 2022:

- recapitalisation of the company by waiving a portion of the existing shareholder loans, totalling Euro 14,167 thousand, including Euro 8,500 thousand from Cogenio and Euro 5,667 thousand from Avio;
- new pro-rata funding, through non-interest-bearing shareholder loans (subordinate to the full repayment of Termica Colleferro's lending banks, whose maturity date is February 24, 2027), to support the capex for the new business plan. Cogenio and Avio have, therefore, made a total payment of Euro 3,252 thousand, including Euro 3,015 thousand from the former and Euro 237 thousand from the latter.

The residual receivable after the above transactions, for Avio S.p.A.'s shareholder loan to Termica Colleferro, amounted to Euro 2,010 thousand at June 30, 2023.

The shareholder loan commitment undertaken by Avio S.p.A. has a maximum limit equal to 40% of the outstanding bank debt of Termica Colleferro. At June 30, 2023, Termica Colleferro's outstanding bank debt amounts to Euro 6,153 thousand. The maximum limit of the commitment undertaken by Avio S.p.A. at June 30, 2023 therefore amounted to Euro 2,461 thousand.

As a consequence, due to the progressive repayment of the bank debt by Termica Colleferro, no further financial commitments existed for Avio S.p.A. towards Termica Colleferro as regards the latter's bank loan.

There are however no risks of interruptions to the supply of electricity and heat by Termica Colleferro as, following the partnership with Cogenio-Enel launched in December 2021 for the operation of a thermoelectric power plant aimed at ensuring the security of energy and steam supply at the best economic conditions, the industrial project began, as outlined above, for the reconversion of the cogeneration plant in the Colleferro industrial district, which is headed by Termica Colleferro S.p.A. (40% owned by Avio and 60% controlled by Cogenio) with financial support from the two partners, has begun .

Legal and tax cases and contingent liabilities

At the half-year reporting date, a number of Group companies were either plaintiffs or defendants to legal, civil, administrative and tax cases related to normal business operations, as outlined below.

Avio S.p.A. and the subsidiaries have established in their financial statements and, therefore, in the consolidated financial statements, appropriate provisions for risks and charges to cover foreseeable liabilities relating to disputes of differing natures with suppliers and third parties, both within the courts and extra-judicially, the relative legal expenses, in addition to administrative sanctions, penalties and customer indemnities (where applicable). In establishing provisions, account was taken of: (i) the risks related to each dispute; and (ii) the applicable accounting standards, which require the provisioning of liabilities for probable and quantifiable risks. Avio Group management consider the risks and charges provision estimates as appropriate with regards to the Group's overall amount of contingent liabilities.

In addition, with regards to disputes with a possible or remote risk of loss, or of an incalculable amount (of a limited number), in accordance with the accounting standards no risks provision has been established.

The Group in addition bases its risk of potential loss estimates on assessments/expectations with regards to the expected final judgment on the dispute, which remains however linked to the intrinsic uncertainty of each judgment, for which differing outcomes (whether favourable or unfavourable) for the Group against the *ex-ante* estimates may not be excluded.

A summary of current proceedings considered by the Group as significant on the basis of the amount or matters considered is provided below.

Legal disputes

Secosvim/Caffaro

The Colleferro industrial district includes an industrial area known as "Benzoin and derivatives" owned by Secosvim, until December 31, 2007 leased to Caffaro S.p.A., which since September 2009 was subject to an extraordinary administration proceeding. For the collection of Caffaro's debts, Secosvim submitted an application for admission to its insolvency proceedings, which was accepted.

At the same time, the Emergency Commissioners Office of Sacco Valley issued a claim for damages against Caffaro for land pollution for an estimated amount of approx. Euro 7 million, corresponding to the expected cost for the recovery of these areas. Caffaro proposed before the Lazio Regional Administrative Court (over the period between 2008 and 2012) seven separate appeals, challenging a series of administrative acts (minutes of the conferences of service, notes with which Caffaro was requested to present contaminated waste disposal plans, approval deeds of characterization activities), by which the Commissioner's Office stated that, in the event of non-compliance with the orders issued, claims would be made against Caffaro. These motions were notified also to Secosvim as owner of the Benzoin area, which was therefore summoned before the court in accordance with law.

As the company Caffaro may claim these costs from Secosvim as the owner of the buildings, Secosvim therefore has requested since October 2009 before the Velletri court a prior technical declaration ("ATP") to establish any liability upon Caffaro for the contamination of the Benzoin area, which concluded with the filing of an opinion which confirmed the direct liability of Caffaro for the above-stated contamination.

In the pending rulings by the Lazio Regional Administrative Court, the State Prosecutor requested the court to assess the judicial incompatibility of the appeal decision. On conclusion of the hearing of December 6, 2016, the Lazio Regional Administrative Court consequently adopted separate ordinances (of identical tenor), with which (for each appeal) the President of the Counsel was requested to file within 90 days documented clarifications with regards to the criminal proceeding pending before the Velletri Court No. 1831/2014. The hearing to discuss these appeals has been postponed multiple times as we await completion of the criminal proceedings. The last hearing was held on June 9, 2021.

With ruling No. 12946/2021 issued on December 15, 2021, the Lazio Regional Administrative Court, following a meeting of the court, rejected the seven separate appeals filed by Caffaro against deeds issued by the Commissioner's Office for the emergency in the area around the Sacco river in the provinces of Rome and Frosinone within the scope of managing the emergency.

This decision was appealed by Caffaro on March 15, 2022.

Secosvim duly entered an appearance, and the hearing was held on December 16, 2022.

The case pending before the Council of State, Sec. IV, under RG. No. 2645/2022 concluded with the judgment published on 14/2/2023, by which the Council of State in judicial proceedings (Section IV), definitively ruling on the appeal, after exonerating INAIL, dismissed it, with Caffaro S.r.l. being ordered to reimburse the costs of the proceedings also in favour of Se.Co.Sv.Im. S.r.l..

Group tax audits

Information is provided below on the most significant tax audits and disputes which, at the date of the present financial statements, concerned Avio S.p.A. and its subsidiaries, with details on the specific disputes and the relative amounts.

A) Avio S.p.A. tax audits and disputes

A.1.) *Settlement notice served on July 28, 2016 for indirect taxes on the transfer of the Aeroengine business unit from Avio S.p.A. to GE Avio S.r.l.*

On July 28, 2016, the Tax Agency notified Avio S.p.A. of a settlement notice for registration, mortgage and cadastral taxes totalling Euro 58,220 thousand, re-categorising the conferment of the Aeroengine business unit from Avio S.p.A. to GE Avio S.r.l., and the subsequent sale of the shares of this latter company, during 2013, as a direct transfer of the business unit and, consequently, raised the alleged non-payment of the indirect taxes applicable to the above declared transfer of the business unit.

Convinced that there were extremely valid arguments for considering the charges brought by the revenue authorities to be baseless, Avio S.p.A. - in coordination with the General Electric Group, jointly appearing with Avio S.p.A. - appealed the aforementioned settlement notice. The Piedmont Regional Tax Commission decided in the company's favour in the judgment filed on November 7, 2018, in which it granted the Company's appeal in full.

In 2020 the Italian Tax Office appealed the above judgment before the Court of Cassation. The Company appeared promptly in the proceedings with its own counter-appeal and simultaneous cross-appeal, reaffirming the soundness of its arguments.

With regards to this dispute, on the basis of specific contractual provisions, the General Electric Group is required to indemnify Avio S.p.A. for any liabilities which may arise with regards to the indirect taxes relating to the disposal of the company GE Avio S.r.l. (containing the AeroEngine segment operations of the Avio Group), in addition to the provision to Avio S.p.A. of any amounts requested by the Tax Agency by the established payment deadlines. In this regard, on August 12, 2016, following the notification from the Tax Agency to Avio S.p.A. of the settlement notice for a total of Euro 58,220 thousand, GE Italia Holding S.p.A. confirmed to Avio S.p.A. its punctual fulfilment of the above contractual stipulations. In view of that above, and particularly the notification of the above-stated settlement notice which quantifies the alleged indirect taxes as Euro 58,220 thousand, in addition to the above payments of the contractually established indemnities and confirmed subsequently to the settlement notice at issue, a tax payable was recognised to the financial statements in relation to the liabilities which may arise from the dispute regarding the settlement notice and a corresponding receivable from the General Electric Group recorded for the same amount of Euro 58,220 thousand.

With regard to the litigation in question, and in particular the subject-matter of the dispute, relating to the anti-avoidance provision of Article 20, headed "Interpretation of acts", of Presidential Decree No. 131/1986 ("Consolidated Registration Tax Act"), mention should be made of some circumstances post-dating the service of the payment notice. Specifically, these technologies include:

- the 2018 Budget Law (see Article 1, paragraph 87, letter a), of Law 205 of December 27, 2017) amended, with effect from January 1, 2018, Article 20 of the Consolidated Registration Tax Act, limiting the ability of the revenue authorities to reclassify acts subject to registration;
- the 2019 Budget Law (see Article 1, paragraph 1084, of Law 145 of December 30, 2018) attributed retroactive effect to the provision introduced by the 2018 Budget Law, which therefore should apply to payment notices - including that served on the Company - served in years prior to 2017;
- on July 21, 2020 Italy's Constitutional Court (see judgment no. 158) ruled that there was no basis for the challenges of the constitutionality of Article 20 of the Consolidated Registration Tax Act, holding that the statute is intended to reaffirm the "transaction tax" nature of registration tax, and clarifying the object of taxation in accordance with the structure of a levy on the legal effects of the legal transaction presented for registration, without the revenue authorities being able to attach relevance to extratextual elements and linked legal transactions devoid of any textual connection with the transaction in question;
- on September 17, 2020 the Central Directorate of the Tax Agency published official clarification (see reply no. 371) in which, acknowledging the above ruling by the Constitutional Court, it clarified that "*the sale of company quotas preceded by the contribution of a business line cannot be taxed on a par with the sale of a company as a whole on the basis of the provisions of Article 20 of the Consolidated Income Tax Act.*"

At the reporting date, the Court of Cassation has yet to schedule a hearing.

A.2) Questionnaire of the Piedmont DRE of June 4, 2019 concerning transfer prices between Avio S.p.A. and Regulus S.A. - 2014 Tax period

In November 2019, the Piedmont Tax Agency served two separate assessment notices on the Company, respectively for IRES and IRAP, in relation to the 2014 tax year, concerning the application of "transfer pricing" tax regulations to transactions between Avio S.p.A. and its subsidiary Regulus S.A., on the assumption that the latter is a tax resident in French Guiana.

With regard to the IRES assessment notice, it should be noted that, pending the settlement procedure, the Company has asked the Office to be able to offset the greater taxable profit assessed against unused prior tax losses. Granting the Company's request, in July 2020 the Office recalculated the greater IRES assessed for 2014 (and related interest), reducing it to zero and levying a single administrative fine of Euro 1,250.00.

With regard to the IRAP assessment notice, since the value of production adjusted by the Office is still negative, no tax was recovered and a fixed penalty of Euro 250.00 was levied. Therefore, the liability associated with this dispute amounts to a total of Euro 1,500.

In June 2020, the Company filed timely appeals of two notices of assessment of IRES and IRAP taxes, being confident of the correctness of its actions and considering that it has acted in full compliance with the law.

In a ruling filed on June 24, 2022, the Turin Provincial Tax Commission upheld both of the Company's appeals concerning IRES and IRAP, citing the calculation of comparables performed by the Turin regional office and noted that the determination of the range of transfer prices was manipulated by that office without cause and in a debatable manner, whereas the documentation provided by the Company met the criteria set by OECD guidelines for determination of "normal value" as specified under Article 9(3) of the Consolidated Income Tax Law.

In January 2023, the Piedmont Regional Directorate of the Tax Agency appealed the ruling of the Turin Provincial Tax Commission. The Company promptly took action, with the support of its consultants, to counter the Agency's appeal and request confirmation of the first instance ruling.

B) Se.Co.Sv.Im. Secosvim S.r.l. -Tax audits and disputes

The following is a brief description of the tax disputes of Se.Co.Sv.Im. S.r.l. and of the main related contingent liabilities.

B.1) Tax disputes with the Municipality of Segni relating to property tax (ICI).

2011: the dispute for the year in question concerns property tax, interest and penalties levied for a total of Euro 57 thousand.

Se.Co.Sv.Im., following an unsuccessful settlement procedure, appealed to the Rome Provincial Tax Commission, which in June 2018 rendered a judgment unfavourable to the Company.

In February 2019 Secosvim lodged a timely appeal against the unfavourable judgment rendered by the Rome Provincial Tax Commission.

In the ruling dated October 11, 2022, the Lazio Regional Tax Commission rejected the appeal brought by the Company, which decided not to appeal to the Court of Cassation.

2012 and 2013: the dispute for the years in question concerns property tax, interest and penalties levied for a total of Euro 14 thousand.

In July 2018, Secosvim lodged a complaint/appeal with the Rome Provincial Tax Commission.

The Rome Provincial Tax Commission rejected the Company's claims in a judgment filed in December 2019.

The Company promptly appealed the above judgment in September 2020 and is now awaiting the fixing of the appeal hearing by the Lazio Regional Tax Commission.

B.2) Tax dispute relating to non-application of VAT on reclamation costs recharged to Avio in the years 2010, 2011 and 2012

These disputes concern three notices of assessment for VAT related to 2010, 2011 and 2012, disputing the Company's alleged failure to apply VAT to reclamation costs billed to Avio S.p.A. in these years for a total, including interest and penalties, of Euro 3,568,202.

In 2019, the company decided to agree to the expedited settlement of the pending tax disputes as per Article 6 of Legislative Decree No. 119 of October 23, 2018, converted with amendments by Law No. 136 of December 17, 2018. This settlement resulted in the payment of the taxes alone, without any past-due interest or penalties. The total amount due for all settlements is Euro 1,659,486.05, which is to be paid in 20 quarterly instalments. The first instalment was paid on May 31, 2019, and the final payment must be made by February 28, 2024.

As at July 31, 2020, the Tax Agency had not notified the Company of any refusal of the settlement of pending litigation, as a result of the provisions of Article 6 of Decree-Law No. 119/2018, the settlement of the disputes by the Company must be considered final and legitimately carried out.

For the year 2023, the amount paid in the form of agreed settlement was Euro 171,095, of which Euro 165,949 tax and Euro 5,147 interest. The last instalment will be paid on February 28, 2024.

B.3) Correction and settlement of increased registration, mortgage and land taxes from the reclassification as the disposal of a business, with related recalculation of goodwill relating to the business unit, of the transfer of the "Energia Colleferro" business unit to Termica Colleferro S.p.A. and the subsequent transfer of the investment in this latter to the indirect parent company Avio S.p.A.

In relation to the transfer of the "Energia Colleferro" business unit to Termica Colleferro S.p.A. and the subsequent transfer of the investment in this latter to the indirect parent company Avio S.p.A., the Bologna Tax Office had served:

- a) a settlement notice for greater registration, mortgage and property registry taxes arising from the re-characterisation of the transaction as the sale of a company, for a total of Euro 142 thousand;
- b) an adjustment notice relating to the redetermination of the value of the goodwill attributable to the business unit subject to the purported company sale, for a total of Euro 16 thousand.

The dispute concerning the document referred to in *point a)* was resolved in the Company's favour in both the first and second instances. Accordingly, on December 2, 2019 the Italian Tax Office filed an appeal against the judgment of the Emilia Romagna Regional Tax Commission before the Court of Cassation.

On January 24, 2020 the Company appeared promptly in the proceedings, filing its own counter-appeal.

The Court of Cassation has yet to schedule a hearing.

The dispute concerning the document referred to in *point b)* was resolved in the Company's favour in the first instance, whereas in the second instance in December 2018 the Emilia Romagna Regional Tax Commission suspended the trial pending the resolution of the dispute indicated in *point a)* above.

C) Spacelab S.p.A. (ex ELV S.p.A.) - Tax audits and disputes.

It should be noted that this company had not been and is not involved in any tax audits or disputes at the reporting date.

D) Europropulsion S.A. – Tax audits and disputes.

Europropulsion was subject to a Tax Assessment by the French Tax Authorities with regards to the “*taxe professionnelle*” (an indirect tax adopted in France similar to the Italian IRAP) on ESA assets provided for use by the Company initially for tax years 2009, 2010 and 2011 and subsequently for 2012 and 2013.

The amounts contested are:

- for the years from 2009 and 2011, initially amounting to Euro 1.6 million, paid by the company in 2014. This amount was thereafter reduced to Euro 0.9 million following the recognition of partial relief of Euro 684 thousand by the French tax authorities;
- for the years 2012 and 2013 amounting to approx. Euro 250 thousand.

For the years 2009-2011, Europropulsion presented a first level appeal at the competent Tax Court, which judged against the company; the Company appealed this decision on September 9, 2016.

With judgment of November 11, 2017, the competent French tax authorities cancelled the challenge concerning financial year 2010.

In the course of the legal procedure, it bears mentioning that in 2020 the judicial authority, known as the “*Conseil d’Etat*”, declared the use of ESA assets subject to taxation according to an interpretation of the spirit of the tax law, referring the judgment to the next level, in accordance with the French legal system.

The last instance judgment was issued by the “*Cour Administrative d’Appel de Paris*” and was unfavourable for the Company. In view of the judgment rendered in 2020 and 2021 and the opinion of its legal counsel, in its 2020 and 2021 financial statements the Company decided to recognise the total amount of the tax liability associated with the matter for the years 2009 to 2020, which was recalculated and estimated at approx. Euro 4 million. Therefore, the financial statements of these joint ventures at June 30, 2023, still reflect this allocation.

6. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT POLICIES

Fair value of financial assets and liabilities and calculation models utilised

In relation to any financial instruments recorded in the balance sheet at fair value, IFRS 7 requires that these values are classified based on the hierarchy levels which reflects the significance of the input utilised in the determination of fair value. The following levels are used:

- level 1 - assets or liabilities subject to valuation listed on an active market;
- level 2 - input based on prices listed at the previous point, which are directly observable (prices) or indirectly (derivatives from the prices) on the market;
- level 3 - input which is not based on observable market data.

The company and the Avio Group did not have derivative financial instruments in place at June 30, 2023.

Types of financial risks and related hedging

The Avio Group through its operating activities is exposed to financial risks, in particular:

- credit risks, related to commercial transactions with customers and funding operations;
- liquidity risk, related to the availability of financial resources and access to the credit market;
- market risks;
- interest rate risk

These financial risks are continually monitored, undertaking initiatives to offset and contain potential impacts through appropriate policies and, where in general considered necessary, also through specific hedging instruments (currently not necessary as the loan interest rate with the EIB is fixed and competitive compared to the market).

Credit Risk

Credit risk represents the exposure of the Company and of the Group to potential losses due to the non-compliance with obligations by commercial and financial counterparties.

The exposure to credit risk is essentially related to receivables recognised to the financial statements, particularly trade receivables and guarantees provided in favour of third parties.

The maximum theoretical exposure to the credit risk for the Group at June 30, 2023 essentially concerned the overall carrying amount of trade receivables, whose value at this date amounted to Euro 2,890 thousand.

This amount was recognised to the Assets section of the Balance Sheet, as the net balance between the nominal value of trade receivables and, as counter-entry, advances to be received.

Regarding the reasons for the exposure to credit risk represented by receivables net of “advances to be repaid”, in accounting terms, the issuing of invoices involves as a counter-entry, against the recognition of an asset from the customers, the recognition of a liability concerning the advances to be received. These are both recognised to the balance sheet. The ageing analysis therefore is made net of the above-stated advances.

The main Group customers are government bodies and public sector clients, which by their nature do not present significant risk concentrations (ESA - European Space Agency, Arianespace, ArianeGroup).

In addition, operating on an order basis, the Avio Group plans the management of advances so as to attain the funding before and during the incursion of order costs, on the basis of the various contractual milestones and mitigating therefore the risk regarding the payment of receivables against the initiated production activities.

Based on an analysis of overdue trade receivables at June 30, 2023, trade receivables net of a doubtful debt provision were recorded of Euro 482 thousand. The overdue amounts were therefore not significant and mainly relate to timing factors.

Liquidity risk

The Company and Group’s liquidity risk concerns any difficulties in obtaining at appropriate conditions the funding necessary to support operations. The principal factors which influence liquidity are, on the one hand, the resources generated and absorbed by the operating and investment activities and on the other the conditions concerning the maturity of the payable or the liquidity of the financial commitments.

Cash flows, funding requirements and liquidity are centrally monitored and managed, also through centralised treasury systems involving the main Group Italian and overseas companies, in order to ensure the timely and efficient sourcing of funding or the appropriate investment of liquidity, optimising the management of liquidity and cash flows. The Group periodically monitors forecast and effective cash flows and updates future cash flow projections in order to optimise liquidity management and calculate any funding requirements.

The currently available funds, in addition to those that will be generated from operating and financial activities, are considered sufficient to permit the Group to satisfy its requirements for investment activities, working capital management and the repayment of debt on maturity.

Market risk

With regards to the current financial structure of the Company and of the Group and the fact that the operating currency is almost exclusively the Euro, the company is not considered to currently be subject to significant market risks from fluctuations in exchange rates or interest rates on financial receivables and payables.

The Company and the Group, considering that stated with regards to the insignificant market risk related to exchange rate and interest rate movements, at June 30, 2023 had not undertaken specific cash flow hedges in relation to these types of risks.

Interest rate risk

The company has two loans with the European Investment Bank (EIB) for an original total of Euro 50 million (Euro 27 million remaining), at a competitive interest rate compared to the market.

Therefore, this risk is not considered applicable to the Company and, therefore, to the Avio Group.

7. RELATED PARTY TRANSACTIONS

Avio regularly undertakes commercial and financial transactions with its subsidiaries and jointly-controlled companies, consisting of transactions relating to ordinary operations and undertaken at normal market conditions. In particular, these concern the supply and purchase of goods and services, including of an administrative-accounting, tax, IT, personnel management and assistance and consultancy nature, and the relative receivables and payables at period-end and funding and centralised treasury management transactions and the relative charges and income. These transactions are eliminated in the consolidation and consequently are not outlined in this section.

The related parties of the Avio Group are identified on the basis of IAS 24 - *Related Party Disclosures*, applicable from January 1, 2011, and are the parent companies, companies with a connection with the Avio Group and its subsidiaries as defined by the applicable rules, companies controlled but not consolidated within the Avio Group, associates and jointly-controlled companies of the Avio Group and other investee companies.

Until the effective acquisition date by Space2, Leonardo and In Orbit (on March 31, 2017), Leonardo - on the basis of rights arising under the Cinven shareholder agreement - had a connection with the Avio Group, although formally holding an investment in the Incorporated company under the threshold established by the IAS and Article 2359 of the Civil Code, final paragraph. Following the listing, although the shareholder agreement with Cinven had lapsed, Leonardo S.p.A. maintained this connection with the Avio Group on the basis of the increase of its investment in the Incorporated company over the threshold established by the above-stated rules.

The following tables present the quantification of transactions with related parties not falling within the Group consolidation on the Balance Sheet and on the Group Income Statement at June 30, 2023 and December 31, 2022 (in Euro thousands):

Counterparty	June 30, 2023										
	Right-of-use assets	Other non-current assets	Inventories and Advances to suppliers	Trade receivables	Other current assets	Work in progress to order	Non-current financial assets	Trade payables	Other current liabilities	Advances from clients for contract work-in-progress	Financial liabilities
Leonardo S.p.A.	-	-	1,140	-	-	-	-	1,753	336	-	-
MBDA Italia S.p.A.	-	-	-	-	-	3,209	-	-	-	8,680	-
MBDA France S.A.	-	-	-	839	-	8,460	-	-	-	37,557	-
Thales Alenia Space Italia S.p.A.	-	-	-	-	-	3	-	350	-	120	-
Vitrociset S.p.A.	-	-	-	-	-	-	-	196	-	-	-
Companies with a connecting relationship and relative investee companies	-	-	1,140	839	-	11,672	-	2,299	336	46,356	-
Termica Colleferro S.p.A.	907	-	39	868	-	-	2,010	1,328	-	-	926
Europropulsion S.A.	-	-	40,554	137	-	96,487	-	1,623	-	108,565	-
Consorzio Servizi Acqua Potabile	-	-	-	120	17	-	-	134	-	-	-
Servizi Colleferro - Consortium Limited Liability Company	-	-	-	85	-	-	-	409	-	-	-
Associates and jointly controlled companies	907	-	40,593	1,210	17	96,487	2,010	3,495	-	108,565	926
Total related parties	907	-	41,733	2,049	17	108,160	2,010	5,793	336	154,921	926
Total book value	8,306	68,105	214,465	2,890	11,141	468,699	2,010	89,529	25,834	766,542	24,393
% on total account items	10.92%	0.00%	19.46%	70.92%	0.15%	23.08%	100.00%	6.47%	1.30%	20.21%	3.79%

December 31, 2022											
Counterparty	Right-of-use assets	Other non-current assets	Inventories and Advances to suppliers	Trade receivables	Other current assets	Work in progress to order	Non-current financial assets	Trade payables	Other current liabilities	Advances from clients for contract work-in-progress	Financial liabilities
Leonardo S.p.A.	-	-	1,140	-	-	-	-	2,988	318	-	-
MBDA Italia S.p.A.	-	-	-	-	-	3,161	-	-	-	3,161	-
MBDA France S.A.	-	-	-	839	-	8,558	-	-	-	48,746	-
Thales Alenia Space Italia S.p.A.	-	-	-	-	-	-	-	350	-	-	-
Vitrociset S.p.A.	-	-	-	-	-	-	-	196	-	-	-
Companies with a connecting relationship and relative investee companies	-	-	1,140	839	-	11,719	-	3,534	318	51,908	-
Termica Colleferro S.p.A.	976	-	1,000	832	-	-	2,010	3,517	-	-	989
Europropulsion S.A.	-	-	47,688	323	-	87,467	-	10,361	-	94,312	27,769
Consorzio Servizi Acqua Potabile	-	-	-	124	2	-	-	(24)	-	-	-
Servizi Colleferro - Consortium Limited Liability Company	-	-	-	1	-	-	-	200	-	-	-
Associates and jointly controlled companies	976	-	48,688	1,280	2	87,467	2,010	14,053	-	94,312	28,758
Total related parties	976	-	49,828	2,120	2	99,185	2,010	17,587	318	146,220	28,758
Total book value	8,535	67,470	202,573	3,725	8,358	426,182	2,010	89,826	24,271	667,443	56,953
% on total account items	11.43%	0.00%	24.60%	56.90%	0.03%	23.27%	100.00%	19.58%	1.31%	21.91%	50.49%

In H1 2023 and H1 2022, the main income statement transactions by the Group with related parties were as follows (in Euro thousands):

H1 2023					
Counterparty	Operating Revenues and changes in contract work-in-progress	Other operating income	Operating Costs ⁽¹⁾	Financial income	Financial Charges
Leonardo S.p.A.	-	-	913	-	-
MBDA Italia S.p.A.	1,267	-	-	-	-
MBDA France S.A.	15,803	-	-	-	-
Thales Alenia Space Italia S.p.A.	38	-	-	-	-
Vitrociset S.p.A.	-	-	-	-	-
Companies with a connecting relationship and relative investee companies	17,108	-	913	-	-
Termica Colleferro S.p.A.	2	38	3,271	-	6
Europropulsion S.A.	80	133	8,987	-	297
Consorzio Servizi Acqua Potabile	24	14	259	-	-
Servizi Colleferro - Consortium Limited Liability Company	118	13	668	-	-
Associates and jointly controlled companies	223	198	13,185	-	303
Total related parties	17,331	198	14,098	-	303
Total book value	157,721	5,415	162,808	897	687
% on total account items	10.99%	3.66%	8.66%	0.00%	44.16%

⁽¹⁾ The account includes raw material consumables, service costs and personnel expenses.

Counterparty	June 30, 2023			
	Operating Revenues and changes in contract work-in-progress	Operating Costs ⁽¹⁾	Financial income	Financial Charges
Leonardo S.p.A.	-	18	-	-
MBDA Italia S.p.A.	283	-	-	-
MBDA France S.A.	8,800	-	-	-
Thales Alenia Space Italia S.p.A.	-	500	-	-
Vitrociset S.p.A.	-	-	-	-
Companies with a connecting relationship and relative investee companies	9,083	518	-	-
Italian Space Agency (ASI)	780	-	-	-
Italian government body with a connecting relationship	780	-	-	0
Termica Colleferro S.p.A.	46	9,383	80	7
Europropulsion S.A.	411	407	-	-
Consorzio Servizi Acqua Potabile	37	177	-	-
Servizi Colleferro - Consortium Limited Liability Company	536	130	-	-
Associates and jointly controlled companies	1,029	10,096	80	7
Total related parties	10,892	10,614	80	7
Total book value	133,516	141,149	253	551
% on total account items	8.16%	7.52%	31.63%	1.21%

⁽¹⁾ The account includes raw material consumables, service costs and personnel expenses.

Transactions with companies with a connecting relationship and relative investee companies

Transactions with Leonardo S.p.A. and its investee companies are of a commercial nature. With regards to the customer MBDA Italia S.p.A., the guarantees issued by leading credit institutions cover prompt compliance with the contractual obligations undertaken by Avio, mainly for the Camm-er orders. Their release is based on completion of the relative contractual milestones.

Transactions with associates, jointly-controlled companies and non-consolidated subsidiaries

Company transactions with associates and jointly-controlled companies may be summarised as follows:

- trade receivables, relating to revenues from the sale of company core business products, as part of ordinary operations and concluded at normal market conditions. In particular, with regard to the company Europropulsion S.A., revenues are included from the sale of company core business products, as part of ordinary operations and concluded at normal market conditions.
- financial receivables, relating to short and long-term financial receivables from Termica Colleferro S.p.A.;
- trade payables, relating to costs incurred as part of ordinary operations and relating to transactions concluded at normal market conditions; in addition, with reference to the company Europropulsion S.A., costs incurred as a result of transactions within ordinary operations and concluded at normal market conditions are included;
- financial payables, relating to the short-term inter-company financial payables of Avio S.p.A. to Europropulsion S.A.;
- revenues, relating to the transactions described previously with regards to trade receivables;
- operating costs, relating to the transactions described previously with regards to trade payables;
- financial income, related to interest on the financial receivables previously stated.

Relations with the non-consolidated subsidiaries concern Servizi Colleferro S.C.p.A, mainly related to the service provided by this company for the collection and purification of the waste water of the companies operating at the Colleferro facilities.

Transactions with other related parties

Group transactions with other related parties concern the following operations:

- trade receivables, relating to revenues from the sale of Group core business products, as part of ordinary operations and concluded at normal market conditions.
- revenues, relating to the transactions described previously with regards to trade receivables.

8. LIST OF GROUP COMPANIES AT JUNE 30, 2023

The following table presents the key details of Avio Group investees at June 30, 2023:

Companies included in the consolidation scope at June 30, 2023			Holding
Parent			
Company Name	Registered office	Share capital	% Held
Avio S.p.A.	via Leonida Bissolati, 76 - Rome	Euro 90,964,212.90	N/A
Companies consolidated by the line-by-line method			
Company Name	Registered office	Share capital	% Held
Spacelab S.p.A.	via Leonida Bissolati, 76 - Rome	Euro 3,000,000.00	70%
Regulus S.A.	Centre Spatial Guyanais - BP 0073 97372 Kourou (French Guiana - France)	Euro 640,000.00	60%
SE.CO.SV.IM. S.r.l.	Via degli Esplosivi, 1 - Colleferro (RM)	Euro 53,929,691.00	100%
Avio Guyane S.A.S.	Centre Spatial Guyanais - BP 506 97388 Kourou (French Guiana - France)	Euro 50,000.00	100%
Avio France S.A.S.	3 Rue du Colonel Moll - 75017 Paris (France)	Euro 50,000.00	100%
Temis S.r.l.	Via Gaetano Donizetti, 20 - Corbetta (Milan)	Euro 100,000.00	100%
Avio USA Inc.	Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of Newcastle, Delaware 19801 (USA)	2.00 (USD)	100%
Avio India Aviation Aerospace Private Limited (*)	Pitampura Delhi North West (India)	INR 16,060,000	100%
Jointly controlled companies, measured at equity			
Europropulsion S.A.	11, rue Salomon de Rothschild 92150 Suresnes 388 250 797 RCS Nanterre	Euro 1,200,000.00	50%
Associates, measured at equity			
Termica Colleferro S.p.A.	Via degli Agresti, 4 and 6 Bologna	Euro 6,100,000.00	40%

(*) The company is in liquidation. No financial commitments are expected for the Group related to the liquidation.

9. INFORMATION ON PUBLIC GRANTS PURSUANT TO ARTICLE AS PER ARTICLE 1, PARAGRAPHS 125-129, OF LAW NO. 124/2017250

The following information is provided in accordance with the public disclosure requirements imposed by public grant legislation: This disclosure concerns, as required by the regulation, disbursements accruing in H1 2023:

Avio S.p.A.

The parent company Avio S.p.A. benefited from the following grants during the year:

- NEMOS project: receipt of Euro 104,080.63 on 9/06/2023. This is a project that uses direct European Community funds;
- SPACE CARBON project: receipt of Euro 88,910.50 on 18/04/2023 and Euro 88,910.51 on the same date; This project comes under the initiatives of the European Commission, Research Executive Agency (REA), Horizon 2020;
- DISCO project: receipt of Euro 427,312.50 on 23/03/2023. This project uses direct European Union funds as part of Horizon 2020.

Other Italian companies in the Avio Group

The Avio Group's other Italian companies did not receive any public disbursements in this fiscal year.

As reported in the explanatory notes in relation to current assets for tax receivables, the Avio Group benefits from facilities such as tax credits for research and development, tax credits for generic technological innovation, and tax credits for the acquisition of generic and Industry 4.0 capital goods.

10. SUBSEQUENT EVENTS TO THE PERIOD-END

Business

Vega flight scheduled for October 4, 2023

The launch campaign for Vega's next mission - scheduled for October 4, 2023 - is underway.

The mission will take two satellites and ten auxiliary loads into sun-synchronous orbit.

The main payload is the THEOS-2 (THailand Earth Observation System 2) Earth observation satellite, which has a resolution of up to 0.5 metres.

The second payload is the FORM OSAT-7R/TRITON satellite developed by the Taiwan Space Agency (TASA) equipped with a GNSS-R, Global Navigation Satellite System-Reflectometry to study ocean winds in order to forecast the trajectories and intensities of typhoons.

On July 6th, 2023, Ariane 5 launcher completed its last mission, successfully placing into orbit the Heinrich-Hertz and Syracuse 4B satellites. Avio contributed to the success of Ariane 5 program through the two solid rocket boosters P230, which provide 90% of the rocket thrust at liftoff as well as the core stage engine Vulcain 2 oxygen turbopumps. Avio has been part of the Ariane 5 program since the beginning and the P230 motors performed well in all the 117 flights throughout the last 27 years, demonstrating a very consistent and stable performance. In the future, Avio will continue along this path, providing P120C solid rocket boosters for the new Ariane 6 European launcher.

On September 4th, 2023, ESA announced that the maiden flight of Ariane 6 is expected in the first half of 2024.

Enquiry Commission work following the Zefiro 40 engine test

The Enquiry Commission (IEC) chaired by the ESA Inspector General to analyse the test results took office on July 21, 2023, and also met to continue its work in the first and last week of August. The Commission's work is expected to conclude by the end of September 2023.

Planning for Vega C's return to flight is currently being assessed, pending the results of the Commission's work as described above.

Other significant events

As reported in the September 4, 2023²⁰ press release, Avio has reached an agreement with Technology For Propulsion and Innovation S.p.A. ("T4i") a spin-off company of the University of Padua based in Monselice (PD), which specialises in innovative propulsion systems for aerospace applications, to make a strategic qualified minority investment in T4i's capital.

The investment was made through Avio's subscription to a dedicated capital increase, which led to Avio holding approximately 17% of T4i's share capital, with an investment of approximately Euro 2.5 million. Commercial and technology development agreements to develop new space technologies are also currently being signed.

* * *

September 8, 2023

The BOARD OF DIRECTORS
The Chief Executive Officer and General Manager
Giulio Ranzo

²⁰ Reference should be made to the "Investors" section of Avio's website: <https://syndication.teleborsa.it/Avio/Financial-Announcements/avio-investe-in-t4i/MXxjb211bmljYXRpLjE3NzEwMDAwMzUyMDIzMXwxfDIwMjMwOTA1>

REPORT ON REVIEW OF THE HALF-YEARLY CONSOLIDATED FINANCIAL STATEMENTS

**To the Shareholders of
Avio S.p.A.**

Introduction

We have reviewed the accompanying half-yearly consolidated financial statements of Avio S.p.A. and subsidiaries (the "Avio Group"), which comprise the statement of financial position as of June 30, 2023 and the income statement, statement of comprehensive income, statement of changes in equity and cash flow statement for the six month period then ended, and a summary of significant accounting policies and other explanatory notes. The Directors are responsible for the preparation of the half-yearly consolidated financial statements in accordance with the International Accounting Standard applicable to the interim financial reporting (IAS 34) as adopted by the European Union. Our responsibility is to express a conclusion on the half-yearly consolidated financial statements based on our review.

Scope of Review

We conducted our review in accordance with the criteria recommended by the Italian Regulatory Commission for Companies and the Stock Exchange ("Consob") for the review of the half-yearly financial statements under Resolution n° 10867 of July 31, 1997. A review of half-yearly consolidated financial statements consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (ISA Italia) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying half-yearly consolidated financial statements of the Avio Group as at June 30, 2023 are not prepared, in all material respects, in accordance with the International Accounting Standard applicable to the interim financial reporting (IAS 34) as adopted by the European Union.

DELOITTE & TOUCHE S.p.A.

Signed by
Francesco Legrottaglie
Partner

Rome, Italy
September 08, 2023

This report has been translated into the English language solely for the convenience of international readers.

Ancona Bari Bergamo Bologna Brescia Cagliari Firenze Genova Milano Napoli Padova Parma Roma Torino Treviso Udine Verona

Sede Legale: Via Tortona, 25 - 20144 Milano | Capitale Sociale: Euro 10.328.220.00 i.v.

Codice Fiscale/Registro delle Imprese di Milano Monza Brianza Lodi n. 03049560166 - R.E.A. Milano n. 172039 | Partita IVA IT 03049560166

Il nome Deloitte si riferisce a una o più delle seguenti entità: Deloitte Touche Tohmatsu Limited, una società inglese a responsabilità limitata ("DTTL"), le member firm aderenti al suo network e le entità a esse correlate. DTTL e ciascuna delle sue member firm sono entità giuridicamente separate e indipendenti tra loro. DTTL (denominata anche "Deloitte Global") non fornisce servizi ai clienti. Si invita a leggere l'informativa completa relativa alla descrizione della struttura legale di Deloitte Touche Tohmatsu Limited e delle sue member firm all'indirizzo www.deloitte.com/about.

© Deloitte & Touche S.p.A.

Declaration of the Condensed Consolidated Financial Statements as per Article 81-ter of Consob Regulation No. 11971 of May 14, 1999 and subsequent amendments and supplements

1. The undersigned Giulio Ranzo and Alessandro Agosti, respectively CEO and Executive Officer for Financial Reporting of Avio S.p.A. declare, also in consideration of Article 154-bis, paragraphs 3 and 4, of Legislative Decree No. 58 of February 24, 1998:
 - the conformity in relation to the characteristics of the company and
 - the effective application of the administrative and accounting procedures for the drawing up of the condensed consolidated half-year financial statements in the period between January 1 and June 30, 2023.
2. In this regard, we note that:
 - the adequacy of the administrative and accounting procedures to prepare the condensed consolidated financial statements for the six months ending June 30, 2023 was verified by evaluating the Internal Accounting Control System on financial disclosure
 - this assessment utilised the criteria established in the “Internal Controls - Integrated Framework” model issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”);
 - no significant issues were identified in the assessment of the internal control system.
3. We also declare that:
 - 3.1 The condensed interim consolidated financial statements:
 - a) were prepared in accordance with international accounting standards, recognised in the European Union pursuant to Regulation (EC) No. 1606/2002 of the European Parliament and Council of July 19, 2002;
 - b) correspond to the underlying accounting documents and records;
 - c) provide a true and fair view of the equity, economic and financial position of the issuer and of the other companies in the consolidation scope.
 - 3.2 The Directors’ Report includes a reliable analysis of the significant events in the first six months of the year and their impact on the condensed consolidated half-year financial statements, with a description of the principal risks and uncertainties to which the Group is exposed, in addition to the subsequent events and outlook. It also contains a reliable analysis of the significant transactions with related parties.

Date: September 8, 2023

Avio S.p.A.

Giulio Ranzo
Chief Executive Officer
(Signed)

Alessandro Agosti
Executive Officer for Financial Reporting
(Signed)