



Avio S.p.A.

Registered office in Rome, via Leonida Bissolati No. 76
Share Capital Euro 90,964,212 fully paid-in
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2020 HALF-YEAR REPORT

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HIGHLIGHTS

Net revenues ⁽¹⁾

Euro 167.9 million (-11.2% on H1 2019)

EBITDA

Reported: Euro 16.9 million (+5.1% on H1 2019)

EBIT

Reported: Euro 8.5 million (+5.7% on H1 2019)

Profit before taxes

Euro 8.2 million (+3.7% on H1 2019)

Net Profit

Euro 8.4 million (+Euro 1.4 million on H1 2019)

Net Financial Position

cash position of Euro 26.9 million (cash of Euro 57.9 million at December 31, 2019)

Investments

Euro 11.3 million (9.0 in H1 2019)

Backlog ⁽¹⁾

Euro 632.6 million at June 30, 2020 (Euro 668.6 million at December 31, 2019)

Research and development

costs of Euro 58.0 million, net of pass-through costs ⁽¹⁾ incurred in H1 2020, equal to 34.5% of revenues net of pass-through revenues ⁽²⁾ for H1 2020 (costs of Euro 76.9 million net of pass-through costs incurred in H1 2019, equal to 40.7% of revenues net of pass-through revenues for H1 2019)

Employees at period end

950 at June 30, 2020 (935 at December 31, 2019)

¹ For the definition of "pass-through" revenues and costs, reference should be made to the "Group results and equity and financial position" section.

LETTER TO THE SHAREHOLDERS

Dear Shareholders,

The first half of 2020 was characterized by the effects of two exceptional phenomena consisting of the spread of the COVID-19 virus epidemic and the Vega return flight activities.

The virus that originated in China at the end of 2019 spread rapidly all over the world and continues to threaten the lives of millions of citizens and the global economy.

In Italy, this pandemic first mainly affected the areas of Northern Italy, with a subsequent gradual spread, although less virulent, in the rest of the country. The Italian Government issued several Laws, which introduced in the most critical months of March and April measures increasingly restrictive of economic activities and social aggregation, in order to contain the risk of contagion throughout the Italian territory (so-called "lock-down").

In this context, however, on March 24, 2020 Avio obtained the prefectural authorization to continue its industrial activities, which therefore continued, albeit not in normal conditions due to the stoppage or slowdown of activities in the production chain of Italian and foreign suppliers and sub-contractors. This has led Avio to concentrate on its internal activities during the first half of the year, with a slowdown in development activities involving third party suppliers and sub-contractors.

In particular, Avio acted promptly to ensure the maximum protection of the health of its employees, suppliers and customers, adopting the highest safety standards such as environmental sanitation measures, the expansion of work station areas, staff rostering, all aimed at limiting the contagion as much as possible and mitigating the potential risks associated with the safe continuation of production activities.

Agreements have also been reached with trade union representatives, in compliance with the provisions of the Protocols shared at national level by the social parties which provide for, among other things, the maximum levels of safety at work, and where compatible with the activities carried out, also the recourse to remote-working.

In this complex and unusual context, the activities to return to the Vega flight continued, not without difficulties, after the failure of the VV15 mission in July 2019.

In fact, in the second half of 2019 and in the first months of 2020, Avio implemented the corrective actions within the timeframe indicated by the Inquiry Commission after the failure of the VV15 mission and met all the requirements for the return to flight with the VV16 mission, planned by the end of March 2020. However, on March 16, 2020, in implementation of the French Government communications aimed at countering the COVID-19, the "Centre Spatial Guyanais" temporarily suspended the launch preparation activities from the Kourou base.

The launch campaign for the VV16 mission was therefore interrupted, with the launcher placed in storage configuration until the resumption of activities at the Kourou launch base at the end of May. In order to resume the launch campaign, Avio organized a special mission to allow a team of 70 professionals, made up of employees, supply chain's representatives and medical personnel, to reach the Kourou space base with a dedicated charter flight with high health safety conditions. The organization of this mission was made possible also thanks to the collaboration of the Italian Government, where the Interministerial Committee for Space Policy has been active since 2018, and the Ministry of Defence.

The preparation activities for the return to flight mission, following the consequences of the COVID-19 epidemic, were therefore resumed on May 24 with the launch planned for June 27. However, the mission was aborted again due to exceptionally strong high altitude winds, which did not allow for a safe flight. After a second attempt on June 29th, the launcher was put back into storage configuration, pending an improvement in weather conditions expected in early September.

Finally, on September 3, 2020, after the March postponement due to the COVID-19 pandemic and the June postponement caused by adverse weather conditions, the success of Vega's return to flight was the result of the hard work of all Avio's staff and its partners, who continue to demonstrate great professionalism, competence and resilience.

The mission represented a truly significant result as it allowed for the first time in Europe to bring 53 satellites into orbit in a single flight thanks to the innovative payload adapter developed by Avio "Small Spacecraft Mission Service" (SSMS).

Two launches of Ariane 5 were made in the first half of 2020: the first, on January 16, correctly placed the European consortium's Eutelsat Konnect satellite in geostationary orbit and the Indian satellite GSAT-30, which provides internet access and broadcast TV services for Eutelsat and the Indian space agency, respectively; the second, on February 18, correctly placed into geostationary orbit the Japanese Commercial Satellite JCSAT-17 and the GEO-KOMPSAT-2B satellite that will provide internet access and TV broadcast services for Japan and ocean communication and monitoring for South Korea, respectively.

In addition, on August 15, the two hundred and fifty-third mission of Ariane 5 was also carried out, correctly positioning into geostationary orbit the telecommunications satellites serving the Japanese B-SAT and the U.S. operators Intelsat and Northrop Grumman's SpaceLogistics LLC. Also part of the payload was the "Mission Extension Vehicle" (MEV-2), a highly innovative satellite maintenance spacecraft designed to dock the satellites in orbit and provide life extension services.

With regard to development activities, in January the SPTF "Space Propulsion Test Facility" project was presented at the Salto di Quirra Interforce Test Range in Sardinia, starting the construction of a liquid rocket engine test bench (LRE) and a plant for the production of carbon-carbon components. In January, the second qualification test of the propulsion system of the P120C solid propellant engine took place successfully at the launch base in Kourou.

In February the static firing test of the Zefiro 23 engine, instrumental to the return to flight of Vega with the VV16 launch for the SSMS mission, was successfully completed.

In March, the combustion chamber tests of the innovative liquid engine M10 with LOX-Methane technology that will equip the Vega E, replacing the third and fourth stage of the Vega C launcher, were successfully completed. The tests were held at the NASA facilities in the Marshall Space Flight Center in Huntsville, Alabama. The first launch of the Vega E launcher is expected in 2025.

During the semester, new orders were acquired for about 130 million Euros for industrial and maintenance activities for the Vega, Vega C and Ariane 6 programs, as well as for the production of boosters for the Aster-30 program that will cover the next 3-4 years of production.

In addition, the negotiation activity continues, which will lead in the coming months to the start of the contractualisation of the financing of the development programs defined with the European Space Agency at the end of 2019 for a total of about 400 million Euros.

Despite the critical aspects of the non-recurring events mentioned above, the continuity of industrial operations concentrated on internal activities and the structural elements of resilience of Avio's business allowed to close the first half of 2020 with financial results in line with the first half of the previous year. Net revenues amounted to Euro 167.9 million (compared to 189 in the first half of 2019) and the economic result (Reported EBITDA) was Euro 16.9 million (compared to 16.1 in the first half of 2019), despite approximately Euro 3 million in non-recurring costs (compared to Euro 0.7 million in the first half of 2019).

On the 30th of June Avio reports a positive net cash position of 26.9 million Euro (compared to Euro 57.9 million in December 2019 and Euro 20.4 million in the first half of 2019), due to the ordinary seasonality of working capital.

As of the 14th of September 2020, following the purchases made so far, Avio S.p.A. holds 452,394 treasury shares, equal to 1.72% of the total share capital.

Finally, the financial forecasts for the year 2020 have been prepared also in consideration of the estimated impact of the COVID-19 pandemic. Moreover, taking into account these prospects and the elements of short-term uncertainty in the global economic context related to the COVID-19 epidemic, the Board of Directors of Avio S.p.A. confirmed the full allocation of the 2019 net income to retained earnings as resolved by the Shareholders' Meeting of the 6th of May 2020, which approved the 2019 financial statements, also after having already resolved in July 2020 to complete the treasury share purchase program in execution of the resolution passed by the aforesaid Shareholders' Meeting up to a maximum of € 9 million by the end of October 2020 in the context of further strengthening the Company's capital position.

In this semester we had to face extraordinary events, but once again Avio, thanks to the high professionalism, dedication and tenacity of its employees, has shown a strong resilience, and we will continue to work with determination to achieve the company's growth objectives in the coming years by acting on the consolidation of production orders and on the many development activities that await us.

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 approx. 1,000 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 Guyana).

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);
- solid propulsion systems for tactical missiles (Aspide, Aster, CAMM-ER, MARTE);
- liquid propulsion systems for satellites;
- new low environmental impact propulsion systems;
- 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 oxygen turbo-pump boosters (solid propulsion motors) for the Vulcain 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 ton satellites to GEO orbits, and 20 ton 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 program for the European 2,000kg payload satellite launcher, which successfully completed its first qualifying flight 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, the latest evolution of Vega, is a launcher under development as part of the European Space Agency's space program. Vega C is designed for a greater payload than the Vega and at the same time optimizes 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 programs. 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 ESA (European Space Agency) and ASI (Italian Space Agency) with propulsion subsystems for the launching and control of several satellites, including the latest SICRAL, Small GEO and EDRS-C satellites.

The Group operates in the following business lines:

- **Ariane**

Ariane is a space program 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 2020, for which Avio, through its subsidiary Europropulsion, 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 program 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) and Vega Evolution (Vega-E) launchers. The Group is responsible for the development and production of these entire launchers, in addition to (i) the development of the solid propulsion engine P120 C (first stage to replace the current P80), which is constructed in synergy with the Ariane program 6), (ii) the Z40 solid propellant engine (second stage to replace the current Z23) and (iii) an oxygen-methane liquid engine for the upper Vega-E stage.

- **Tactical Propulsion**

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

- Aster 30 - the booster and sustainer motors, actuation system (TVC) and aerodynamic control surfaces (fins);
- Aster 15 - the sustainer motor and aerodynamic control surfaces (fins);
- Aspide propulsion units;
- Marte sustainer.

Regarding development programs:

- CAMM-ER - development of the booster and single stage sustainer motor, wiring and aerodynamic control surfaces (fins);
- Aster 30 MLU - development of the new Aster 30 booster to replace the current one in production, from 2021, solving REACH and obsolescence issues.
- E TVC (Electromechanical Trust Vector Control), a drive control system through the electromechanical system which will replace the current hydraulics to lengthen the maintenance times and operating life of the Aster missile.

With net revenues in the first half of 2020 of Euro 167.9 million and Reported EBITDA of Euro 16.9 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 34.5% of net revenues in H1 2020. 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 AND COMMITTEES

Board of Directors

On May 6, 2020, the Shareholder's Meeting appointed the new Board of Directors of the parent company Avio S.p.A., which in turn, on May 7, 2020, decided upon the internal appointments and the granting of the powers required to complete company operations.

The term of office of the new Board of Directors is three years, concluding with approval of the 2022 Annual Accounts.

Monica Auteri	Independent Director (a)
Raffaele Cappiello	Independent Director (b)
Letizia Colucci	Director (b)
Giovanni Gorno Tempini	Independent Director (a)
Donatella Isaia	Independent Director (a)
Roberto Italia	Chairman (c)
Stefano Pareglio	Independent Director (c)
Luigi Pasquali	Director
Elena Pisonero	Independent Director (c)
Giulio Ranzo	Chief Executive Officer
Donatella Sciuto	Independent Director (b)

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

In addition, the Planning and Scenarios Committee was set up with effect from the approval of the Board of Directors on September 14, 2020.

Board of Statutory Auditors

On May 6, 2020, 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 2022 Annual Accounts.

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

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 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 program until its completion, including a first rocket stage (the P120 C) 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 recognized thanks to its participation in the development program for Vega-C and Ariane 6's shared rocket stage, the P120, and its lead systems engineering role in the VECEP program 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.

2019

On August 19, 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.

The ESA Ministerial Conference was held in November 2019 in Seville and was attended by senior government space personnel from the member states of the European Space Agency. Italy contributed a substantial increase in the budget to be allocated to space research programmes, and to the launchers sector in particular. The Vega-C, Space Rider, Vega-E and Vega-C Light programmes saw substantial increases in the number of countries involved and budgets, which will allow these programmes of fundamental importance to Avio to be completed. In the coming years, these projects will enable Avio to formalise research projects with a value of nearly half a billion euro.

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 motors.

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

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

Production sites: Colleferro (Rome), Kourou (French Guyana)

INTERNATIONAL PRESENCE

ITALY

- (I) (III) (IV) Colleferro (Rome), space propulsion
- (III) Villaputzu (Cagliari), space propulsion
- (IV) Airola (Benevento)

EUROPE

- (II) (IV) Paris – France, Avio France S.A.
- (V) Suresnes – France, Europropulsion S.A.
- (V) Evry-Courcouronnes – Francia, Arianespace Participation S.A.

REST OF THE WORLD

- (II) (III) Kourou - French Guyana, Avio Guyane S.A.S.
- (II) (III) Kourou - French Guyana, Regulus S.A. - loading of Ariane 5 solid propellant booster segments and their integration, integration of the VEGA launcher

Key

- (I) Headquarters
- (II) Subsidiaries
- (III) Production offices or location
- (IV) Research laboratory
- (V) Joint ventures and investees

STRATEGY

In accordance with the outcomes of the December 2014 and December 2016 Ministerial Conferences, which confirmed the European strategy for developing its launchers, and pursuant to contracts entered into in 2015 and 2017, Avio is working on:

- developing the P120 engine as a common element of Vega-C (stage one) and Ariane 6 (booster);
- developing the Vega-C launcher to replace Vega, which will permit (i) an increase in performance of approximately 60% due to the new P120 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 therefore larger payload fairing in order to carry satellites with greater mass and volume and lighter structures;
- the development of the Upper Stage of the Vega-E with the new cryogenic Oxygen and Methane propellant M10 motor stems from the contract obtained through the ESA, with Avio and Italy together at the forefront with many other European countries. Vega-E (a three-stage launcher based on P120, Z40 and a LOx-methane upper stage), in addition to cutting the launch price, will further improve (i) Vega-C's performance and (ii) the range and flexibility of satellite services, which enables, among other benefits, more extensive orbital parameter changes than possible with Vega and Vega-C.

Furthermore, the November 2019 Ministerial Conference in Seville confirmed all the programmes approved in the previous Ministerial Conferences. New ESA member states, including Ireland and Romania, also decided to join the Vega programme with substantial contributions, guaranteeing the necessary support to continue development right up to the next Ministerial Conference scheduled for 2022. Contract formalization and order backlog integration of these development projects is now expected in 2020 and 2021.

In addition to the aforementioned programmes, the Ministerial Conference gave the go-ahead for the development of an improved version of the Vega-C launcher, Vega-C++, which will introduce further economies of scale and thus a further market price reduction before the arrival of Vega-E.

In addition, the strategy of expanding the market accessible to Vega and, above all, the greater flexibility in terms of services offered to end clients, were further consolidated through participation in the following ESA programs:

- **SSMS**, which aims to provide a dedicated service for so-called Small-Sats, single or constellations of satellites with a mass range of 1-400 kg, which are increasingly in demand. Some launchers of the same class as Vega, such as Dnepr and PSLV, are already equipped with SSMS-like dispensers that offer the multi-launching of small satellites in this mass range. The development of an ad-hoc dispenser, along with the qualities of flexibility and versatility of the Vega upper stage, will give the launcher a significant competitive advantage;
- **Space Rider** (in partnership with Thales Alenia Space Italia), a Vega-C launched spacecraft capable of carrying up to 800kg of payload in orbit for 2 months for a variety of applications such as orbital experiments or services, and ultimately earth re-entry for the recovery of Payloads.

In parallel, Avio began development of a Vega derivative and of the Vega-C (called **Vega-C Light**), to carry satellites of under 300 KG, to be utilised on the small satellites market, for dedicated customer services, or (i) the replacement of a satellite in orbit, (ii) a particular orbital service, or (iii) fast deployment to a well-defined orbit at a specific moment. Avio to date (i) has finalised the configuration of 3 stages (Z40, Z9 and a new small solid propellant stage to be developed), (ii) is signing an agreement with the current supply chain of Vega / Vega-C for "simplified" structures and avionics, (iii) is assessing options in Europe for a possible launch base (among these, Portugal and Norway seem the most promising candidates).

The Space Rider and Vega-C Light programmes also received substantial funding approval to continue development at ESA's last Ministerial Conference, in Seville, in November 2019.

The company recently consolidated its ground activities role i.e. mechanical, electrical and fluid activities at the launch base, begun in 2016 and which in fact extends its scope of expertise. This was part of an agreement reached with Arianespace to redefine Launch System responsibilities at the French Guyana Space Centre, with Avio taking over new activities in the second launch campaign of 2017.

The incorporated company AVIO Guyane S.A.S. acquired control of the Zone de Lancement Vega (ZLV) launch area and the management, in particular, of (i) launcher integration coordination and (ii) main assembly installation maintenance (e.g. Control Centre, Integration and Launch building, Propellant Loading Stations).

Since 2017, the company implemented its new model of governance in the European space industry, which it proposed through an agreement with partner companies of ArianeGroup (Prime Contractor for the Ariane 5 launcher and its successor Ariane 6), Arianespace (Launch Service Provider) and ESA as Observer. This model will allow Avio to have control of Arianespace's Business Plan regarding the marketing of the Vega launcher and its successors, in order to determine volumes and prices that allow, according to recurring launch system costs, balanced budgeting for the launcher's development. The company targets an increase in the number of annual Vega launches from the current 2-3 to a set 4-5 launches per year.

SHAREHOLDERS

At June 30, 2020, 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, 2020, no exercise requests have been received from holders.

At June 30, 2020, 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%
Space Holding S.p.A.	4.84%
In Orbit S.p.A.	3.97%
Remaining MTA free float	61.56%
Total	100%

H1 2020

H1 SIGNIFICANT EVENTS

Business

Space Propulsion Test Facility (SPTF) project

On January 29, 2020, the Space Propulsion Test Facility project for the start of construction of a Liquid Rocket Engine test bench and the production of carbon-carbon components was presented at the Salto di Quirra Inter-force Experimental Facility in Sardinia.

Zefiro 23 bench testing

On February 27, the Zefiro 23 engine was successfully bench tested, allowing an optimistic resumption of Vega flight operations with the VV16 launch for the SSMS mission.

Testing of the combustion chamber of the M10 engine for the Vega-E

Testing of the combustion chamber of the innovative liquid M10 engine with LOX-methane technology that will be installed in the Vega-E, replacing the third and fourth stages of the Vega-C launcher, was completed on March 3, 2020. The tests were conducted at NASA facilities, at the Marshall Space Flight Center in Huntsville, Alabama. The first launch of the Vega-E launcher is scheduled for 2025.

Vega return to flight

In the second half of 2019 and in the initial months of 2020, Avio introduced corrective measures according to the timeframe of the Investigatory Commission following the VV15 failure, satisfying all requirements for a return to flight with the VV16, as scheduled, by March 2020. However, on March 16, 2020 the Guyanais Space Centre (CSG) and Arianespace announced that, in implementation of the communications from the French government to combat COVID-19, the Centre had temporarily suspended preparations for upcoming launches at the Kourou base.

The VV16 launch campaign was therefore suspended and the launcher was placed into storage until the resumption of activities at the Kourou base at the end of May.

In order to resume the launch campaign, Avio organized a special mission of 70 professionals, including 60 Avio employees and 10 other representatives of Italian space sector companies, to the Kourou base, via a dedicated flight chartered by Avio and under a special health and safety protocol. Collaborating in the organization of the mission were also the Italian Presidency of the Council of Ministers, via the Inter-ministerial Committee for Space Policies, active since 2018, and the Italian Ministry of Defence.

The special health and safety protocol for resumption of the VV16 launch campaign provided for the presence of a dedicated Avio medical consultant for the entire period of the Guyana mission.

Preparation activities for the return to flight, following adaptation to the COVID-19 pandemic, therefore resumed on May 24 with the launch rescheduled for June 27.

However, the mission was once again suspended due to exceptionally strong winds at high altitudes inhibiting safe flight authorization. A second attempt was scheduled for June 29th, but with the same result. At this point, the launcher was placed once again into storage pending an improvement in weather conditions expected for early September.

As reported in the following section, "Subsequent Events", the VV16 launch was then successfully carried out on September 3.

Over these first few months, despite the additional COVID-19 constraints, operational continuity of subsequent Vega flights was guaranteed, including the success of the Delta-Qualification Key-Point for VV17, aimed at qualifying the VEGA Batch 3 configuration, focusing on first application changes

in relation to the adequacy, consistency and completeness of design and production documentation updated to account for changes requested in response to the VV15 anomaly. Stage integration and French Guiana transport activities for flight VV17 were also completed, and stage integration activities for flight VV18 were begun.

Vega-C development activities

During the half-year, despite the COVID-19 pandemic, a substantial advancement was made in the qualification of the VEGA-C launcher, whose "General Qualification Review" is expected by the end of the year.

At the same time, manufacturing and testing activities of the first flight units were also carried out.

Finally, the Zefiro 40 igniter was delivered for environmental qualification testing and activities are currently underway.

As the latest version of the Vega launcher, Vega-C will allow a 60% increase in performance, increasing market access for this launcher of Low Earth Orbit (LEO) satellites, a substantial part of which can be launched in multiple payloads.

P120C motor second bench test success (Vega C first stage)

In January 2019, the second qualification test of the P120C solid-fuel motor propulsion system for the Vega-C launcher was successfully held at the Guiana Space Centre in Kourou, following on from the development test also carried out successfully in 2018.

A second test, scheduled for October 2020, is dedicated to qualification for the Ariane 6 launcher. The P120C is, indeed, the new motor common to both Vega-C and Ariane 6 launchers. Avio plays a central role in the development of the P120C, the largest monolithic, carbon-fibre construction, solid propellant engine in the world, built at Avio's facilities in Colleferro. The engine was loaded with solid propellant produced by Regulus, a subsidiary of Avio, and forms part of the Europropulsion joint venture between Avio and ArianeGroup.

Ariane

In 2020, 3 Ariane 5 launches were successfully completed. In January, VA251 took two telecommunications services satellites into orbit, EUTELSAT KONNECT and GSAT-30. In February, VA252 took into orbit the telecommunications services satellites CSAT17, for the Japanese operator SKY Perfect JSAT Corporation, and GEOKOMPSAT-2B, for the Korean Aerospace Research Institute (KARI). In August, VA253 took into orbit the video communication services satellites Galaxy 30 and BSAT-4b and the Mission Extension Vehicle-2 (MEV-2) spacecraft.

Regarding the P120C SRM programme for Ariane 6, the following activities are underway:

- Completion of the manufacturing of the casing of the motors that will equip the first Ariane 6 flight;
- Initiation of manufacture of the casings for subsequent Ariane 6 commercial flights;
- completion of integration and delivery of the motor for the QM2 static test.

The P120C QM2 bench test, initially planned in the first half of 2020, was delayed due to the COVID-19 emergency and is now planned for late September / early October 2020. The results of this static test will be taken into account in a complementary qualification review that will enable the P120C motor to qualify for use on the Ariane 6 launcher between the end of 2020 and the beginning of 2021.

The propellant casting of the two motors for the first Ariane 6 flight is scheduled for October 2020.

Tactical propulsion

The production and delivery continued to export customers in the period of Aster 30 Boosters and of Marte Sustainers. Work has also begun to prepare for the bench testing of an Aster 30 Booster with E-TVC, planned during the year as a demonstrator for Booster development.

During H1 2020, CAMM-ER motor development activities continued as planned. In particular, the qualification programme and accelerated ageing, to verify mid and end-of-life performance, are now underway. Activities are also underway for the industrialisation of the winding and line control portion.

Main agreements and contractual events in H1 2020

Regarding Ariane 5 and P120 production activities:

- A new MCO contract tranche was signed to cover the maintenance needs of Ariane 5 manufacturing equipment until the end of the programme at both Colleferro plant and the Regulus plant in Guyana;
- The Authorization To Proceed (ATP) extension was signed for the P120C production contract, ahead of its finalization scheduled for the end of September 2020;
- The Authorization To Proceed (ATP) extension was signed for the V2 and Vinci turbopump production contract, ahead of its expected finalization in October 2020.

Regarding the P120C SRM programme, signing of the production contract for the transition phase (i.e. the production ramp-up phase, from low to full cadence production) is scheduled for the end of September 2020. The authorization to proceed has been extended to ensure production continuity while awaiting the signing of the contract.

With regards to Vega production, Avio S.p.A. signed:

- with the client Arianespace:
 - The first batch 3 rider contract, defining Avio and Arianespace's roles and responsibilities in conformity with the principles defined by protocol II.B - Vega C of the LEA arrangement;
 - An order for additional production batch 2 activities for the GSM part;
 - An order for additional production batch 3 activities for the preparation of the launch campaign;
- with the client ESA:
 - A contract for production support activities for the period 2017-2019 requested by Avio's subcontractors.

Regarding Vega development activities, the following were established:

- New return-to-flight orders for the analysis of the impact of the anomaly on Vega C;
- A contractual variant for the mission activities of the Vega C qualification flight.

Tenders were also issued for unfinished activities in relation to the projects: Space Rider (phases D and E1), SSMS-C (phases D and E1) and VNE (phases C, D and E1). Negotiations for SSMS-C were successfully concluded, and a first round of clarifications were established with the client ESA regarding the Space Rider.

In the same period, Avio began preparing tender bids for a first batch of activities for:

- Vega Competitiveness Improvement Programme (CIP)
- Vega E Preparation Programme

in response to ESA's Request for Proposals.

Finally, regarding the tactical sector, the first tranche of an Aster Booster production contract was acquired, covering more than five years of production.

Other significant events

COVID-19

As indicated in the "Group principal risks and uncertainties" paragraph, to which reference should be made, with the recent and rapid development of the COVID-19 pandemic, many countries have imposed restrictions on travel and certain commercial activities, as well as restrictive quarantine measures. The interruptions were initially more immediate and more significant in certain sectors, such as tourism, hospitality, transport, retail and entertainment, while having an indirect effect on sectors such as manufacturing.

Immediate effects have been seen on financial markets. Avio's shares posted a decline in value essentially in line with the STAR segment index in general.

COVID-19 began to spread around the time of December 31, 2019, with the situation continuing to evolve thereafter. It was late 2019 when certain clinical cases in Wuhan, the capital of the Chinese province of Hubei, were reported as showing symptoms of a novel "pneumonia of unknown cause". China then notified the World Health Organization (WHO) of the new virus on December 31, 2019. On January 30, 2020, the WHO International Health Regulations Emergency Committee declared the emerging epidemic "a public health emergency of international concern". Since then, many more cases have been diagnosed in many other countries. The emergency measures and policies implemented in China have also been taken up by other countries.

In Italy, this pandemic initially mainly affected Northern Italy, and then gradually expanded, albeit less aggressively, to the rest of the country. The Italian government has issued various decrees signed by the Prime Minister, which, during the most critical months of March and April, introduced increasingly restrictive measures affecting business and social gatherings to limit the risk of transmission throughout Italy (the so-called "lockdown").

Nonetheless, on March 24, 2020, Avio was authorised by the local government office to continue its industrial operations as its business is of strategic importance to the Italian national economy and currently therefore remains operational. Operations thus continued, albeit not under normal conditions, due to the shutdown or slowdown of activities in the production chain formed by Italian and international suppliers and sub-contractors. As a result, Avio focused on its own internal activities, whereas typically development-oriented activities involving third-party suppliers and sub-contractors slowed.

The epidemic and restrictions imposed by the French government and responsible authorities entailed the temporary suspension, with effect from March 16, 2020, of preparations for the launches at Kourou base in French Guyana.

Within this scenario, Avio has established an ad hoc Internal COVID-19 Committee, which has issued a series of increasingly stringent directives to combat and contain the spread of the virus in accordance with the Memorandum signed by the government and social partners on March 14, 2020. These include using and facilitating telecommuting and flexible working hours for tasks that may be performed remotely, restrictions on movement and access to facilities extended to suppliers and consultants, organisation of meetings in accordance with the law and internal communication techniques for the prompt circulation of COVID-19 communications to all employees via the IT platform.

In addition, initiatives have been launched in support of all employees, such as supplementary health insurance that provides economic benefits for workers infected by COVID-19 and a free online mental health support desk for all workers to provide helpful assistance with the COVID-19 emergency.

In reference to the ESMA recommendations of March 11, 2020 on "Market Disclosure" and "Financial Reporting", in addition to having represented the effects of the half year in these financial statements, as stated in the press release dated September 14, 2020, the Company estimated the impact of the epidemic during the year in quantitative terms and updated its 2020 Guidance.

During the half-year, while the Company's production activities continued, as a result of the containment and restriction measures as a direct consequence of COVID-19 adopted by the various governmental authorities in Europe and the rest of the world (relating not only to the temporary closure of the Kourou launch base, but also to the shutdown or slowdown of activities in the production chain of Italian and international suppliers and sub-contractors), Avio focused its attention on its own internal activities, while slowing activities involving the chain of third-party suppliers and sub-contractors and recorded lower industrial costs than in the previous half year for utilities and internal monitoring, thus containing the effect on margins.

The estimated impact of the epidemic on the year, based on currently available information, reflects the short-term adverse effect of the slowdown in the performance of activities owing to both the containment and restriction measures directly attributable to COVID-19 adopted by the various governmental authorities in Europe and the rest of the world (in particular, the temporary suspension of activities at the Kourou launch base), and also to the indirect consequences of such measures, including the subsequent delay in the resumption of flights due to adverse weather conditions following the rescheduling of the launch date due to COVID-19, in addition to delays or slowdowns of the activities of the chain of suppliers and sub-contractors that typically affect development activities. This estimate also takes account of the non-recurring costs associated with the epidemic and the steps and measures of a financial and operational nature that the Company is already adopting to mitigate the impact of this scenario in the near and medium term.

If these effects were to continue, with gradual re-intensification of the government's initiatives to limit transmission, this would presumably result in medium/long-term effects on industrial, engineering and commercial activities in the aerospace sector that cannot be quantified at this time.

In view of these short-term prospects, shaped by the financial effects directly and indirectly associated with the spread of COVID-19, the Board of Directors of Avio S.p.A. decided to confirm the full allocation of the 2019 profit to the retained earnings reserve as resolved by the Shareholders' Meeting on April 29, 2020, which approved the 2019 financial statements. In addition, in July 2020 it had already approved the completion of the share buy-back programme in execution of the resolution passed by the above Shareholders' Meeting, up to a maximum of Euro 9 million by the end of October 2020, within the framework of a further reinforcement of the Company's capital solidity.

MARKET PERFORMANCE AND OPERATIONS

General overview: historic and future outlook

In the first half of 2020, 45 orbital launches were undertaken, 4 of which registered a failure that did not allow the satellites on board to reach the pre-determined orbit. A total of 560 satellites were put into orbit during the period from January 1 - 30, 2020. It is important to note that 7 of the 45 launches were for Starlink, a constellation of satellites currently under construction by the private American aerospace manufacturer SpaceX for satellite internet access. These launches put into orbit 418 of the 560 satellites launched in the period, bringing the total number of satellites in orbit for the constellation to 538, including 2 launches in 2019. The total satellites put into orbit in the period was therefore 142 (excluding Starlink), with 34 successful launches. 36 successful launches were however carried out in the same period of 2019 (excluding a Starlink flight and 4 failures). The situation therefore remains stable, without an increase in the number of launches and satellites, as occurred in previous years. This is certainly due to the effects of COVID-19 and the closure or suspension of operations at various production sites, both in terms of satellites and launchers, in addition to a slowdown at launch bases across the world. The global situation dictated by the pandemic means that forecasts are not reliable, although the Space sector - despite an undeniable slowdown in operations - remains among the lesser-hit sectors by the virus and particularly, net of delays and slowdowns, did not see a significant degree of cancellations of scheduled launches or of production plans for new satellites.

The 2019 figures are presented below for a quick comparison.

In 2019, 103 orbital launches were carried out, bringing a total of 498 satellites into orbit (up from 467 in 2018):

- 262 main satellites (185 in 2018), the majority of which for LEO orbits, and constant numbers for GEO, MEO and the ISS. These satellites are mainly "commercial", differing from 2018 in which the satellites were mainly "governmental" or, more generally, "institutional";
- 236 secondary satellites, almost exclusively in LEO orbit, confirming the decline since 2018, during whose calendar year 282 secondary satellites were sent into orbit, against 315 in 2017. The secondary satellites are generally small-mass satellites ridesharing on primary satellite launches. These satellites are almost equally distributed between "commercial" and "institutional".

The 2019 figures are in line with satellite market forecasts for the 2019-2028 ten-year period. The trend for the number of satellites requiring a launch service indicates:

- substantial stability for GEO satellites (almost exclusively commercial and dedicated to broadcasting telecommunication services);
- the LEO satellite market continues to expand for both institutional and commercial applications, especially in the fields of earth observation, navigation and telecommunications services, such as broadband internet, mobile telephony and Internet of Things. Regarding these services, there is good reason to believe that a greater prominence will be seen of so-called small satellite constellations, typically in the order of 5-250 kg with unit numbers ranging from a few dozen to thousands (this trend was particularly evident from 2013 onwards and was confirmed in 2018 and 2019). Consequently, it is expected that most of the increase in launches will be taken up by high frequency launchers with multi-load mission characteristics, for which Avio is developing the Vega-C SSMS service.

Launchers market

Although reporting some interesting new developments, H1 2020 confirmed the global trend of recent years, in which:

- few nations have launch services capable of responding to the consistently strong institutional market: the USA, Russia and China and, to a lesser extent, Europe, India and Japan; New Zealand has to date carried out 12 launches of the Mini Electron Launcher, developed and operated by Rocket Lab;
- the distribution of satellites launched into orbit in the first half of 2020 (in tonnes) is presented below, with the respective number of launches:
 - USA, with the Falcon 9 launcher distributed by Space X. In the first half of 2020, Falcon 9 put into orbit a mass of 142 tonnes of satellites with 14 launches. Of these, 7 launches put into orbit 418 satellites of the Starlink constellation for a total of approx. 95 tonnes;
 - China ranks second in terms of the number of launches and also by mass launched: 36 tonnes, 13 launches;
 - Europe places third in terms of mass launched, despite the closure of the European launch base in French Guyana from the beginning of March until mid-June as a result of the COVID-19 pandemic: 26 tonnes, 4 launches;
 - Russia follows with 5 launches and 19 tonnes and then Japan with 2 launches and 17 tons;
 - the Indian space sector was in lockdown for the entire first half of 2020, with zero launches during the period. The only operations concerned the launch of the GSAT-30 communication satellite, put into orbit by the European Ariane5 launcher in January 2020;
 - New Zealand also should be noted, (2 launches) and Iran (1 launch), launching small satellites for a total of 200Kg
- there were 4 failures in the first half of 2020: the Iranian Simorgh launcher, the Chinese CZ-7A (Maiden Flight) and CZ-3B/G2 (First Failure) launches and the new Virgin Orbit LauncherOne (Maiden Flight).

COVID-19: how the pandemic has impacted global Space investment

The first Coronavirus case was reported at the end of 2019 and by January 2020 the city of Wuhan was put under total lockdown. That same month, the WHO declared a state of emergency and in February the financial markets saw their biggest drop in a single week since the financial crisis of 2008. According to Space Capital's "Space Investment Quarterly Q2 2020" analysis, the United States and China collectively accounted for 74% of total space economy investment since 2004. In the second quarter, infrastructure investment dropped 85% on Q1 2020. This is partly due to US government agency actions to step up lending during the crisis. Investments in Chinese infrastructure enterprises, which stalled in the first quarter, saw signs of recovery during Q2.

Further to the slowing infrastructural investment, in the second quarter a growing interest in Space Business applications emerged, with many venture capital companies in fact investing in satellite services, including (for example) those using GPS for the food industry. USD 5.3 billion was invested in space applications during Q2, of which USD 4.5 billion in US companies. At the end of Q1, many sector experts forecast that lending from venture capitalists would reduce. Despite these predictions, VC funding however rose 4% on 2019.

The advance of the New Space Economy continues unabated in spite of the pandemic. In the latter part of the period, we saw the historic launch of NASA astronauts by SpaceX Crew. As the global economy moves towards remote operations, the most innovative enterprises are relying on a range of space technologies such as GPS, Geospatial Intelligence and Telecommunications to gain a competitive advantage. It is expected that the space economy will play an increasingly central role in the post-COVID world.

Primo Space was recently launched, the first Italian technological venture capital fund (and second in the world) specialising in space investment. The new fund, promoted by Primomiglio SGR, focuses on the Italian space industry, which is witnessing major growth and is globally worth approx. USD 400 billion and is forecast to grow to more than USD 2.7 trillion within 25 years.

GROUP OPERATING PERFORMANCE AND FINANCIAL AND EQUITY POSITION

Operating results

The table below summarises the comparable performance of the Group for the first half of 2020 and the first half of 2019 (in Euro thousands):

	H1 2020	H1 2019	Change
Revenue	175,311	190,997	(15,686)
of which: Pass-through revenues	7,440	1,950	5,490
Revenues, net of pass-through revenues	167,871	189,047	(21,176)
Other operating revenues and changes in inventory of finished products, in progress and semi-finished	5,179	2,847	2,331
Costs for goods and services, personnel, other operating costs, net of capitalised costs & pass-through	(156,270)	(176,780)	20,511
Effect valuation of investments under equity method - operating income/(charges)	143	981	(838)
EBITDA	16,923	16,095	828
Amortization, depreciation & write-downs	(8,389)	(8,019)	(370)
EBIT	8,534	8,076	458
Interest and other financial income (charges)	(343)	(176)	(167)
Net financial charges	(343)	(176)	(167)
Investment income/(charges)	-	-	-
Profit before taxes	8,191	7,900	291
Current and deferred taxes	227	(838)	1,065
Group & minority interest net profit	8,418	7,062	1,356

The “pass-through revenues” derive from agreements reached with the European Space Agency in August 2015 for the development and construction of the new “P120” motor for future generation Vega-C and Ariane 6 launches. As a result of the implementation of these agreements, the Avio Group consolidated revenues include 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 client 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 167,871 thousand in the first half of 2020, down Euro 21,176 thousand (11.2%) on the first half of 2019. This net decrease was mainly attributable to the Ariane programme, owing to the planned phase-out of Ariane 5, partially offset by the future Ariane 6 programme, and to Vega-C development, due to various delays in the sub-contractors chain, in addition to the modifications to be introduced on the basis of the results of the activities for the resumption of VV16 flight and liquid propulsion production.

The above revenues breakdown by business line as follows:

	H1 2020	H1 2019	Change
Ariane	54,502	69,180	(14,678)
Vega	99,875	101,747	(1,872)
Tactical Propulsion	9,314	9,461	(147)
Liquid Propulsion	3,667	7,929	(4,262)
Other revenues	514	730	(216)
Revenues, net of pass-through revenues	167,871	189,047	(21,176)

EBITDA in the first half of 2020 was Euro 16,923 thousand, increasing Euro 828 thousand on H1 2019.

EBIT of Euro 8,534 thousand was up Euro 458 thousand on H1 2019.

EBITDA and EBIT performance compared to the first half of 2019, despite the reduction in net revenues and the incidence of non-recurring costs, was mainly due to the different mix of activities performed, with a greater incidence of own activities, following the governmental authorisation received by the Company to continue, including during the lockdown phase due to the COVID-19 epidemic, production activities considered of strategic importance to the Italian national economy, and the lesser incidence of the activities performed by several third-party sub-contractors, which suspended or slowed their activities, also in view of the COVID-19 lockdown period, as well as lower industrial and general and utilities costs and internal monitoring activities.

In the first half of 2020, results benefitted from the research and development tax credit for Euro 1.4 million (Euro 0.9 million in H1 2019). The Group has benefitted since 2017 from the research and development tax credit for operations commissioned by the European Space Agency. This contribution, of Euro 1.4 million for the first half of 2020, comprised the benefits matured between 2017 and 2019, recognised to the income statement in the first half of 2020 on the basis of the advancement of the costs incurred in the period with regards to long-term orders for the research and development operations to which the benefit refers.

Currently, this benefit maturing between 2017 and 2019, on the basis of the state of advancement of long-term orders which have incurred costs against which the tax credit may be applied, is expected to benefit the medium-term period with an effect on the results of each year and period depending on the effective level of advancement of the qualifying orders.

Similarly to the first half of 2019, in the first half of 2020, no portion of the additional potential benefits from the tax credits maturing in 2020 was recognised.

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 2020 and H1 2019 are reported below:

	H1 2020	H1 2019	Change
Adjusted EBITDA	19,878	16,869	3,009
Adjusted EBITDA Margin (against revenues net of pass-through revs.)	11.8%	8.9%	
Adjusted EBIT	11,489	8,850	2,639
Adjusted EBIT Margin (against revenues net of pass-through revs.)	6.8%	4.7%	

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.

Adjusted EBITDA in the first half of 2020 was Euro 19,878 thousand (11.8% of net revenues), up by Euro 3,009 thousand in absolute terms from Euro 16,869 thousand in the first half of 2019 (8.9% of net revenues), primarily due to the aforementioned effect of the different mix of activities performed, with a greater incidence of own activities, following the governmental authorisation received by the Company to continue, including during the lockdown phase due to the COVID-19 epidemic, production activities considered of strategic importance to the Italian national economy, and the lesser incidence of the activities performed by several third-party sub-contractors, which suspended or slowed their activities, also in view of the COVID-19 lockdown period, as well as lower industrial and general and utilities costs and internal monitoring activities.

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.

The "pro-forma" H1 2020 Adjusted EBIT was Euro 11,489 thousand (6.8% of net revenues), up Euro 2,639 thousand on Euro 8,850 thousand for H1 2019 (4.7% of net revenues). Net of the effect of the depreciation and amortisation in line with the previous period, the increase in adjusted EBIT reflects the same rationale underlying adjusted EBITDA performance.

The reconciliation between EBIT, Adjusted EBIT and Adjusted EBITDA for the first half of 2020 and the first half of 2019 is provided below (Euro thousands):

	H1 2020	H1 2019	Change
A EBIT	8,534	8,076	458
Non-recurring Charges/(Income) comprising:			
- Additional issues / incentives	67	3	64
- Corporate, legal and tax consultancy	521	192	329
- Indemnities ⁽¹⁾		(286)	286
- Other non-recurring charges/(income)	2,292	392	1,900
- Settlements ⁽²⁾		398	(398)
B Total Non-recurring Charges/(Income)	2,880	699	2,181
A Investor Fees	75	75	-
D Adjusted EBIT	11,489	8,850	2,639
E Net amortisation & depreciation	8,389	8,019	370
Adjusted EBITDA	19,878	16,869	3,009

Note:

⁽¹⁾ indemnities received in H1 2019 from the previous owner in relation to tax settlements concluded in the period, although relating to disputes existing before the corporate transaction of March 2017 leading to the company's stock market listing;

⁽²⁾ the account refers to the settlement with FCA Partecipazioni S.p.A. in H1 2019 regarding environmental charges.

The item "Other non-recurring charges/(income)" of Euro 2,880 thousand relates to costs incurred as a result of the COVID-19 epidemic and primarily includes:

- Euro 250 thousand for a donation to the Colleferro Civil Protection Services for the purchase of hospital equipment to respond to the COVID-19 emergency;
- Euro 250 thousand for a donation to the Kourou Central Hospital for the purchase of hospital equipment to respond to the COVID-19 emergency;
- approximately Euro 485 thousand for the purchase of factory safety equipment;
- Around Euro 121,000 to purchase safety devices for administrative offices in order to allow them to comply the employee safety requirements, as well as initiatives in support of all employees, such as supplementary health insurance that provides economic benefits for workers infected by COVID-19 and a free online mental health support desk for all workers to provide helpful assistance with the COVID-19 emergency;
- approximately Euro 1,150 thousand of costs relating to the repeated activities associated with the VV16 launch campaign. In fact, while the VV16 launch campaign began in early 2020, on March 16, 2020, when the launcher had already been integrated into the launch ramp, the Guyanais Space Centre (CSG) and Arianespace announced, in implementation of the communications from the French government to combat COVID-19, their decision to temporarily suspend activities at the Kourou launch base. This meant that the launch campaign, initially planned for June 2020, had to be reorganised after the launch base was reopened and then a further postponement until September 3 – the date of the flight – had to be managed as a result of the exceptionally adverse atmospheric conditions in French Guyana.

Financial results analysis

Net financial charges in the first half of 2020 amounted to Euro 343 thousand. The increase of Euro 167 thousand from Euro 176 thousand in the first half of 2019 was primarily due to financial charges associated with tax settlements.

Balance Sheet

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

	June 30, 2020	December 31, 2019	Change
Tangible assets and investment property	104,820	101,091	3,729
Right-of-use	9,603	9,444	159
Goodwill	61,005	61,005	-
Intangible assets with definite life	122,284	122,273	11
Investments	7,908	7,765	143
Total fixed assets	305,620	301,579	4,041
Net working capital	(9,345)	(40,559)	31,215
Other non-current assets	74,396	78,295	(3,899)
Other non-current liabilities	(130,334)	(134,185)	3,851
Net deferred tax assets	77,538	77,784	(246)
Provisions for risks and charges	(29,189)	(31,892)	2,703
Employee benefits	(11,023)	(11,189)	166
Net capital employed	277,664	239,834	37,830
Non-current financial assets	6,183	6,106	77
Net capital employed & Non-current financial assets	283,847	245,940	37,907
Net Financial Position	26,943	57,943	(31,000)
Equity	(310,790)	(303,883)	(6,907)
Source of funds	(283,847)	(245,940)	(37,907)

"Total fixed assets" amounted to Euro 305,620 thousand at June 30, 2020, a net increase of Euro 4,041 thousand on December 31, 2019 as a combined effect of the following main movements:

- the net increase of Property, plant and equipment of Euro 3,729 thousand, principally due to investments in progress, amounting to Euro 7,240 thousand for buildings required to execute the new P120 engine project, which will equip the Vega C and Ariane 6, in addition to the increase in production capacity at the Colleferro site, and for the "Space Propulsion Test Facility" (SPTF) project in Sardinia for the construction of a liquid motors test bench and a plant to build carbon-carbon components, totalling Euro 16,100 thousand, net of depreciation in the year;
- net increase in Rights-of-use for Euro 159 thousand, mainly due to new contracts of use for Euro 1,112 thousand - relating to new buildings for office and apartment use - net of depreciation for the period.
The "Right-of-use" item is due to the application of IFRS 16, which provides for the recognition under assets of the value of assets to which a right-of-use is held and under liabilities of the present value of payables for fees relating to the same rights-of-use. These financial liabilities amounted to approx. Euro 7.5 million at June 30, 2020;

- the essentially unchanged amount of Intangible assets with definite life due to increases for development costs capitalised for Euro 4,109 thousand, mainly concerning capitalised development costs relating to mini launchers and the liquid oxygen and methane engine, net of amortisation in the period;
- the essentially unchanged amount of Investments due to the slight change in the period relating to the investment in the jointly-controlled company Europropulsion S.A., which is measured at equity, increasing due to the 50% share of profits matured in the period January 1 to June 30, 2020 of Euro 143 thousand, without any decrease during the period for dividends, following the resolution by the joint venture's shareholders' meeting not to distribute dividends in 2020 on 2019 profits in view of the consequences of the COVID-19 pandemic.

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 the first half of 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 Italian Tax Office challenged the judgment of the second instance favourable to the Company, against which the Company has filed an appeal before the Court of Cassation.

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" reports a net decrease of Euro 31,215 thousand, resulting in an excess of liabilities over assets of Euro -9,345 thousand. The main components are outlined in the following table (in Euro thousands):

	June 30, 2020	December 31, 2019	Change
Contract work-in-progress, net of advances	(88,151)	(104,904)	16,754
Inventories	52,482	41,448	11,034
Advances to suppliers	96,702	104,071	(7,369)
Trade payables	(83,917)	(100,335)	16,418
Trade receivables	2,592	6,215	(3,623)
Other current assets and liabilities	10,947	12,946	(1,999)
Net working capital	(9,345)	(40,559)	31,215

The increase in current trading is substantially due to the cyclical nature of the receipt of advances from clients and works on orders.

“Other current assets and liabilities” of net working capital reported a net decrease of Euro 1,999 thousand to Euro 10,947 thousand. The main components of this account are outlined in the following table (in Euro thousands):

	June 30, 2020	December 31, 2019	Change
VAT receivables	22,927	20,961	1,966
Research and development tax credits	6,291	6,291	-
Current tax receivables	5,696	5,910	(214)
Other current assets	12,832	9,142	3,690
Current income tax liabilities	(8,576)	(6,124)	(2,452)
Other current liabilities	(28,223)	(23,234)	(4,989)
Other current assets and liabilities	10,947	12,946	(1,999)

The “VAT receivables” account did not increase significantly - as has been the case in the past - despite the fact that the Group, whose sales are almost entirely from non-resident entities, potentially matures a VAT receivable from Italian supplier purchases exceeding the VAT payable deriving from these sales. In particular, the reduction of the emergence of new VAT receivables is due to the fact that, since the regular exporter regime can also be applied to transactions in which the ESA is the client, the Company is availing itself of the “Declaration of intent” mechanism, thus benefiting from exemption from VAT on invoices from Italian suppliers, up to the available ceiling². Refund procedures have been initiated for existing VAT receivables of a total of Euro 19.1 million.

Turning to research and development tax credits, during the half-year there were no significant legal changes and the balance did not change since the offsetting of the portion of the credit matured in 2019 is expected to begin in September 2020 following the release of the relative “certification” from the appointed auditor, as required by the applicable legislation. Similarly to the first half of 2019, in the first half of 2020, no portion of the additional potential benefits from the tax credits maturing in 2020 was recognised.

² VAT regime for regular exporters, which permits the requesting of suppliers to not apply VAT on assessable transactions made within the State, for an amount equal to the export sales and similar transactions carried out in the previous year.

Analysis of the net cash position

The table below illustrates the net financial position (in Euro thousands):

	June 30, 2020	December 31, 2019	Change
Cash and cash equivalents	98,311	144,303	(45,992)
(A) Liquidity	98,311	144,303	(45,992)
(B) Current financial assets	-	-	-
(C) Total current financial assets (A+B)	98,311	144,303	(45,992)
Current financial payables to companies under joint control	(17,749)	(28,749)	11,000
(D) Current financial liabilities	(17,749)	(28,749)	11,000
Current portion of non-current bank payables	(9,069)	(8,075)	(994)
(E) Current portion of non-current financial payables	(9,069)	(8,075)	(994)
(F) Current financial debt (D+E)	(26,818)	(36,824)	10,006
(G) Net current cash position (C+F)	71,493	107,479	(35,986)
Non-current portion of bank payables	(37,000)	(42,000)	5,000
(H) Non-current financial liabilities	(37,000)	(42,000)	5,000
(I) Net cash position before lease liabilities (G-H)	34,493	65,479	(30,986)
Current lease liabilities	(1,618)	(2,647)	1,028
Non-current lease liabilities	(5,932)	(4,889)	(1,042)
(J) Total lease liabilities	(7,550)	(7,536)	(13)
(K) Net cash position after lease liabilities (I-J)	26,943	57,943	(31,000)

The net cash position reduced from a positive balance of Euro 57,943 thousand at December 31, 2019 to Euro 26,943 thousand at June 30, 2020, decreasing Euro 31,000 thousand, principally due to the cyclical nature of operating cash flows, in line with expectations, in addition to capital expenditures in the period (Euro 11.3 million) and the purchase in the period of treasury shares (Euro 1.4 million).

Statement of changes in Equity

Consolidated equity at June 30, 2020 amounts to Euro 310,790 thousand, increasing Euro 6,907 thousand compared to December 31, 2019, as a result of the following main movements:

- recognition of the consolidated net profit of Euro 8,418 thousand;
- reduction of equity due to the purchase of treasury shares during the half year for Euro 1,407 thousand;
- negative effect of actuarial losses of Euro 110 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 (IMAST). 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 2020 amounted to Euro 65.4 million (Euro 78.8 million in H1 2019), equating to 37.3% of gross consolidated revenues for H1 2020 (41.3% in H1 2019).

Net of pass-through costs, research and development by the Group in H1 2020 incurred costs of Euro 58.0 million, 34.5% of revenues net of pass-through revenues (Euro 76.9 million in H1 2019, equal to 40.7% of revenues net of pass-through revenues).

Self-financed and executed activities amounted in H1 2020 to Euro 4.4 million (Euro 6.6 million in H1 2019).

Self-financed activities in H1 2020 included Euro 3.4 million relating to development costs capitalised as Intangible assets with definite life (Euro 5.2 million in H1 2019) and Euro 1.0 million concerning research costs or development costs not capitalisable and directly recharged to the income statement (Euro 1.4 million in H1 2019).

The total amount of costs related to self-financed activities charged to the income statement in H1 2020 was Euro 2.8 million (Euro 3.5 million in H1 2019), comprising Euro 1.0 million of directly expensed non-capitalisable costs (Euro 1.4 million in H1 2019) and Euro 1.8 million for the amortisation of development costs capitalised (principally) in previous years (Euro 2.1 million in H1 2019).

In the first half of 2020, Avio continued its innovation upon the main product lines, harmonising basic research, applied research and pre-competitive development activities.

Solid Propulsion

In Avio's strategic vision, solid propulsion represents a mature but competitive technology that significantly reduces the cost of launch services and keeps the European space carrier market competitive on the global scene. Avio has made clear that its vision includes the consolidation and further development of both VEGA and the forthcoming Ariane 6 launcher, set to replace Ariane 5. After having successfully carried out in January 2019 the P120 bench qualification test for Vega C application, in the second half of 2020 the relative firing bench test for Ariane 6 qualification will also be carried out.

In addition to the development programs for the new propulsion shared between VEGA and Ariane (the P120C), Avio has consolidated its VEGA C market position through the configuration capable of competing in the large SAR satellite segment for earth observation.

Regarding the solid propulsion engine segment, Avio has carried out various research activities to consolidate and optimize production technologies for qualified products concerning the Ariane 5 and VEGA launchers, and to prepare for the development of the forthcoming generations of European launch vehicles, Ariane 6, VEGA C and VEGA E.

Also in terms of solid propulsion, in February 2020 the campaign in Sardinia concluded with the firing of the Z23 s/n25, which met all requirements for a return to flight of the VEGA launcher.

Research and development in materials have focused mainly on the development of advanced, high performance and low toxicity solid propellants for implementation in the Ariane and Vega programs. Additionally, the possible expansion of the Avio composite materials production chain has been carefully researched and analysed, 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.

During the first half of 2020, development of the M10 motor continued for the provision of propulsion for the third stage of the future 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 motor'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. After these acceptance tests, the second model was then assembled with the rest of the equipment - including valves, tubing, sensors and harness - and configured for the firing test. The first 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.

These 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 (100 KN 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 motor (for the upper stage of the Vega E), fully using ALM.

the Vega E, whose first flight is scheduled for 2025, thanks to the introduction of the innovative and highly-performing M10 motor, will be capable of launching approximately three tons into orbit, i.e. twice the current Vega version.

In addition, one of its main features, thanks to its M10 cryogenic engine, will be the release of numerous satellites in various orbits on the same mission and at competitive cost.

The development of the M10 motor 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.

Avio has continued to self-fund the launch and the development of LOx and LCH4 cryogenic resins for a new generation of large liner-free composite tanks to be included in the future version of the Vega E Upper Stage.

In particular, in the first half of 2020, tests continued at Colleferro on the permeability and mechanical and thermal properties of composite structures in contact with the cryogenic and oxidizing environment created by liquid oxygen, and tests were successfully carried out on the first small-scale technological model of tanks produced in filament winding with fibres impregnated using Avio formulation resin.

Space Transport Systems

During the first half of 2020, Avio continued the VEGA C launcher's development, finalising the necessary documentation for the Qualification Review under the ESA VECEP contract. The new Vega C launcher is based on a first stage with 50% greater total thrust than the current Vega and a fourth stage with 15% greater total thrust. The goal, among others, is to improve the launcher's capabilities by increasing its reference payload by over 50%.

In response to increasing small satellite demand, in H1 2020 research into developing the new VEGA Light launcher continued. The performance of this new launcher will be optimised to put into circular orbit (500X500 Km SSO) a payload of approx. 250 KG.

During 2019, the study on the optimal configuration of the Vega Light launcher was completed and the initial development phases began. The first milestone shall be the passing of the Preliminary Design Review expected in H2 2020.

Studies continued on the Space Rider system, unmanned and reusable space transport, which, thanks to its integration with the Vega modules, will create an integrated family of services under the title of Vega Space Systems (VSS).

Within this scope, development of the new SSMS (Small Spacecraft Mission Service) was finalised, a dispenser adaptor for the release of numerous satellites within the same mission, usable also for orbit test or orbit demonstration activities.

Tactical Propulsion

During H1 2020, CAMM-ER missile motor development activities continued as planned. In particular, the qualification programme and accelerated ageing, to verify mid and end-of-life performance, are now underway. Activities are underway for the industrialisation of the winding and line control portion. In addition, AVIO supported MBDA in environmental and in-flight testing with the delivery of the first 2 additional active motors.

The production and delivery continued to export customers of Aster 30 Boosters and of Marte Sustainers.

Obsolescence solution activities also continued. Activities of particular note included: the use of fibre developed and produced by Avio for the construction of cases, the development of a new propellant with the same ballistic performance that maintains its mechanical characteristics at low temperatures and extension of the useful life, and the replacement of materials subject to non-European government authorisations, avoiding restrictions such as those imposed by the USA.

An initial tranche of a production contract for the remotorisation of the Astrer Booster for the Armed Forces of the Italian, French and UK MoD was acquired. The contract will cover over five years of production.

During the first half of 2020, preparations began also on the bench testing of an Aster 30 Booster with E-TVC, planned during the second half of the year as a demonstrator for Booster evolutions. Avio has also begun negotiations for new development programmes to expand its Italian Armed Forces defence offering. In particular, negotiations are underway for the development of a suborbital target with PNRM (National Military Research Plan) funding and two boosters for anti-ship systems with MBDA.

HUMAN RESOURCES

At June 30, 2020, Avio Group employees numbered 950, increasing on 906 at June 30, 2019. The number of employees of the Group does not include the company Europropulsion S.A. (80), consolidated at equity. The majority of the workforce is employed by the parent company Avio S.p.A., which at the same date numbers 822 (up on 793 at June 30, 2019).

Organisation

In January 2020, the new corporate structure was changed.

With regards to the strategic importance of Space business institutional relations and to sharpen the impact of its operations in this area, the Institutional Relations function was separated from the External Relations and Communications Department, becoming the Institutional Relations Department and directly reporting to the CEO.

Other organisational changes were made at the Industrial Operations Department, with the most significant concerning the response to the expanded scope in terms of the integration area of the Vega launcher. The Technologies organisational area was therefore broken down into two sections, one dedicated to building technologies and the other to integration technologies.

Industrial Relations

The following matters were considered with the Workers' Representative Body:

- **Management of workplace attendance and operations during the COVID-19 emergency:**

During the first half of the year, as a result of the COVID-19 pandemic emergency, the company involved the Workers' Representative Body in reorganising some production activities.

5 trade union agreements were signed, introducing new forms of work, while re-modelling them and ensuring full compliance with all relative safety procedures.

Specifically, remote working was introduced for over 80% of white-collar/manager personnel in areas where such is possible.

For those for whom remote working was not possible, containment measures such as the following were introduced:

- 1) distancing of work stations;
- 2) doubling of company shuttle buses to maintain social distancing on-board buses;
- 3) increased frequency of cleaning and sanitising of offices, units, bathrooms and changing rooms;
- 4) distribution of masks and closure of the company canteen with alternative meal distribution methods.

A hygiene and safety protocol, currently under validation, has been drawn up in conjunction with the HSE Department.

Additional bonuses to those under the Prime Ministerial Decree for personnel undertaking industrial production activities on-site were introduced (attendance bonus for production white and blue-collar staff).

No extraordinary recourse was made to the social security schemes.

The company in addition signed two insurance policies: a) for intensive recovery from COVID; b) in case of death (not only for COVID).

In addition, as agreed with the Workers' Representative Body, an entirely free psychological support service was introduced for employees.

- **Other activities:**

Simultaneously, agreements were signed regarding the following issues:

- Summer closure (middle week of August);
- Introduction of various video-surveillance systems;
- Renewal of the Attendance Bonus agreement for an additional three-year period.

In September 2020, subject to compliance with the safety procedures to contain COVID-19, the regular meeting is scheduled between company management (CEO, HR Manager and Industrial Operations Manager) and the Regional Chemical Sector Trade Union Representatives of the Cgil, Cisl, Uil and UGL on the production volume performance.

Development and Training

In H1 2020, in line with the business support and development needs set out in the company Budget, the following personnel were hired: 1 executive, 1 senior manager, 5 professionals, 10 white-collar employees (total of 17), of which 94% graduates possessing various degrees of experience and specific skills in various professional areas.

In addition, 7 permanent staff leasing contracts were initiated.

Overall, 65% of new hires were in the Engineering area. During the period, targeting was also undertaken for the hiring of an additional 6 personnel in the Engineering area between July 1 and September 1.

The COVID emergency however resulted in a slowing of targeting and hires in the industrial area, with however 16 blue-collar staff undertaken, of which 13 on long-term contracts and 3 for the SPTF project.

Promotions were generally contained due to the COVID emergency. In H1 2020, 6 White-collar and Professional employees were involved in professional mobility procedures, both in terms of department and office location, in order to optimise organisational and business development. In addition to the organisational benefits, these mobility courses for the personnel involved are opportunities for professional growth. Mobility in one case followed an internal Job Posting published towards the end of the previous year.

Between January-June 2020, the internal Job Posting tool was used in 2 cases, with both such candidates selected to change their role in the second half of the year.

In terms of blue-collar staff internal mobility, 25 transfers took place, mainly due to the change of production on the Ariane and Vega programmes.

Regarding Personnel Development in H1 2020, one senior manager was promoted to executive management, while 5 blue-collar workers transferred to white-collar positions.

Ahead of the Merit and Development Policy, 23 development/promotion measures were applied to 4.8% of the corporate population, including 6 promotions to the qualification of Professional Expert (the highest Manager classification), 2 promotions to the qualification of Manager, and 1 promotion to the qualification of Professional.

In order to support Avio Group training, in the first half of 2020, 4,154.6 hours of training were provided, with 2,773 participations of company personnel on update courses, professional development courses (in the first two months of the year) and soft skill support training activities. A particular focus in these initial months was placed on webinars, seminars, conventions and information sessions targeting all employees regarding the management of the COVID-19 emergency.

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);
- information on health, safety, environment and data protection, particularly in terms of COVID-19
- support for internationalisation with a focus on individual and group language training (French language courses);

FAD (distance learning), provided both in synchronous and asynchronous mode, was included in the total amount of hours and involved the provision of courses to personnel remotely during the emergency period and those involved in the flight campaign. Using certified in-house trainers, safety and management training and information was provided. The following types of e-learning platforms were developed in particular: to support the HSE Area, to provide training on the Seveso quarterlies; in the regulatory area (Legislative Decree 231 and Trade Secret training) and in the on-boarding phase for the newly-hired personnel through a dedicated multi-media course.

In the first half of 2020, a Pilot project was launched for the Performance assessment of blue-collar and white-collar personnel, involving approx. 100 staff. The project, which involves the mapping of roles and the creation/updating of the specific job descriptions of a production unit of Avio, involved the training of the department head and the production unit managers.

Regarding training methods, the structured learning organisation model was used, as it has been in previous years. This allows the organisation to learn 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

In the first half of the year, the main activities focused on handling the COVID 2019 emergency, with the setting up of the emergency committee to monitor the developing situation and to establish on an ongoing basis new measures and/or amend those already adopted, through continuous meetings at periodic updates. Suspected or declared cases were managed through the publication of internal Avio procedures for the measuring of body temperatures before entering the facility, through the cleaning and sanitising of work environments etc. and through the adoption of a risk assessment document (DVR) setting the rules to be followed to prevent the spreading of the virus in the workplace environment. These rules were applied not only to the entire workforce but also to entering suppliers.

During this period, remote working was used for the entire white-collar population in order to protect the health of everyone and ensure operational continuity, creating an INAZ portal specifically to monitor the working days of employees (COVID-19 remote working reason, with 8-hour fixed blocks).

On April 30, a trade union agreement was signed in order to govern the gradual return to the company of personnel during Phase 2 of the COVID-19 emergency and providing the possibility for remote working until July 31 for employees who are parents of children aged under 14, as per Legislative Decree 34/2000 (Relaunch Decree) and for employees with certain conditions (e.g. immuno-depressant conditions).

In 2020, the new flow of healthcare reimbursement for executives was refined through the new IWS (Industria Welfare Salute) service.

In addition, it was decided to create a "HR travel and expenses desk" that will be operational from July, through which individual appointments for clarifications on travel regulations and expenses can be made and any reports and suggestions in order to improve the service provided.

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 of H1 2020 include:

- January 21-22, Brussels - 12th edition of the European Space Conference entitled "New Decade, Global Ambitions: Growth, Climate, Security & Defence". Giulio Ranzo attended a panel entitled "Towards a Space Partnership between Europe and Africa" on behalf of Avio;
- January 29, Cagliari - Presentation of the SPTF "Space Propulsion Test Facility" project for the construction of a test bench for liquid motors and a plant for the production of carbon-carbon components in Perdasdefogu;
- January - the intranet was improved with a new addition, the Space Spotlight, a **strategic bulletin** presenting the latest news on space and on our competitors;
- February, Colleferro - Cyberchampion: conclusion of the video campaign to inform employees on Cybersecurity;
- February, Huntsville - At NASA's Marshall Space Flight Center at Huntsville, tests were undertaken on the first prototype of the full-scale combustion chamber of the M10 motor for the future LOX-CH4 third stage of the VEGA E. Production of videos and photos and social media and Intranet coverage;
- February 3-6, Silicon Valley - Avio participates with a booth at the Smallsat Symposium 2020, the world's largest conference on small satellites;
- February 6-8, Singapore - Avio attends with a booth at the GSTC, Global Space and Technology Convention;
- February 18 - Launch of the new Avio website and the new brandbook to refresh Avio's image in a coordinated manner across all internal and external communication tools;
- February 26, Rome - Avio becomes an Official Partner of AS LUISS and the Main Sponsor of the Rugby Section;
- February 27, Colleferro - Memorandum of understanding signed between Avio and the Municipality of Colleferro for "Colleferro European Space Capital 2021";
- February 27, Sardinia - Firing campaign of the Z23 s/n25, video and photography, media and social media coverage;
- March 2, Colleferro - Avio signs a letter of intent with the Luxembourg enterprise Made in Space Europe S.à.R.L., the Luxembourg branch of the US Made in Space Inc., for the development of advanced technological solutions for Orbit Servicing, including the De-Orbiting of space debris. The CEO Giulio Ranzo and the Luxembourg Economic Minister Ben Fayot - returning from the institutional meeting held in Rome with the Sub-secretary to the President of the Council with responsibility for Space, Riccardo Fraccaro - were at the signing at Avio's Colleferro plant;

- March 3, Colleferro – Global Italy event at the Music Auditorium entitled “FertilizzAzione delle opportunità del territorio” (Fertilising the region’s potential) sponsored by the municipality, with the support of a number of regional enterprises and with the collaboration of Avio;
- March 7, Rome - On RAI 3, on the "Officina Italia" programme, a report entirely dedicated to Avio, with interviews with Adriano Rotondo, Erica Anna Squeo and Fabrizio Spaziani;
- March - Agreement signed with Rainbow Magicland for Avio’s attendance at the soon to be opened Cosmo Academy theme park, with a room dedicated to the Vega, complete with Vega C model;
- March - June: Extensive internal and external media coverage with regard to COVID-19 communication;
- May 7, Rome - Extensive media coverage for the renewal of Avio’s Board of Directors;
- March - June: Extensive internal and external media coverage with regard to Vega flight resumption.

GROUP PRINCIPAL RISKS AND UNCERTAINTIES

General economic risks

The general economic environment is still being significantly impacted by the COVID-19 epidemic, although the sector in which the company operates is less exposed than others to the related risks.

The epidemic and restrictions imposed by the French government and responsible authorities entailed the temporary suspension, with effect from March 16, 2020, of preparations for the launches at Kourou base in French Guyana. In Italy, on March 23, 2020 a decree by the Italian government suspended all non-essential businesses until April 3, 2020. Nonetheless, Avio is allowed to operate since, within the aerospace industry, its business is among those of strategic importance of the Italian national economy, and therefore it remained operational.

In addition, the space programmes have principally been executed through the use of funding provided by the governments and the European authorities. In view of the budget demands of countries to deal with the COVID-19 pandemic, there is a risk, currently assessed as remote, that the funds allocated to the space sector may be reduced.

Therefore, should the effects return, near or after the end of the year, to the levels at the beginning of the pandemic, with a new tightening of government intervention measures to counteract the contagion, effects may emerge, even of a significant degree, 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 considering that the Crisis Committee, set up by the Company, is operating in a situation in which certain aspects are greatly unknown.

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.

At present, however, considering the high degree of uncertainty and ongoing development of the situation, it is not currently possible to quantify the future medium-to-long term economic and financial ramifications of the pandemic.

Excluding the possible macro-economic effects of COVID-19, the economic, equity and financial position of Avio is influenced by a number of macro-economic environment factors (including GDP movements, the cost of 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.

Over recent years, the financial markets have featured particularly significant volatility with major repercussions on banks and financial institutions and, more generally, on the entire economy, therefore impacting the public accounts. The significant and widespread deterioration of market conditions was exacerbated by a serious and general difficulty in accessing credit, both for consumers and businesses, resulting in a lack of liquidity which affected industrial development and employment, therefore impacting the budgeting strategies of European states and consequently the spending capacity of the Space Agencies.

Although the governments and the monetary authorities have responded to this situation with extensive initiatives, including the cutting of interest rates to historic lows and the funding and bolstering of intermediaries, and although taking into consideration the signs indicating the exiting of recession for the leading economies, it currently is however not possible to predict whether and when the economy will return to pre-crisis levels, also in light of the above-mentioned COVID-19 epidemic, the situation related to the international geo-political environment and the slowing of Chinese economic growth, in addition to renewed volatility on the financial markets and tensions surrounding the financial situation and credit capacity of various countries.

Where this situation of significant weakness and uncertainty were to continue for significantly longer or worsen, particularly on the Group's market, the operations, strategies and prospects of the Group may be impacted, particularly with regards to production forecasts for future flights/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. These provisions depend on government policies and in general economic conditions in Europe. The demand for launchers is therefore supported both by the public sector and the private sector.

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.

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 therefore clients. Any interruptions, temporary suspensions, delays or cancellations to one or more major programmes constitutes a risk which may impact the Group's operations and financial statements. The backlog may therefore be subject to unexpected adjustments and may not therefore 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 or are only partially reabsorbed by the client, with impacts on the Group's operations and financial statements.

In addition, for the recognition of revenues and the relative margins deriving from long-term works contracts, the percentage of advancement method is utilised, based on total cost estimates for the execution of contracts and the verification of the state of advancement of operations. Both these factors are by their nature significantly subject to management estimates, which in turn depend on the objective possibility and capacity to forecast future events. The occurrence of unpredictable events, such as the above-mentioned COVID-19 epidemic, or forecast 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. To manage this risk, the Company has put into place procedures, systems and professionals that have been consolidated over time.

The Group is not a Launch Service Provider with regards to Vega launch services sales. Although the Group has control of Arianespace's Business Plan regarding the marketing of the Vega launcher and its successors, in order to determine volumes and prices that allow, according to recurring launch system costs, balanced budgeting for the launcher's development, 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 clients 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 clients, 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

Business

Vega return to flight

Vega successfully resumed flight operations with the VV16 mission on September 3, 2020.

The VV16 flight was the first successful mission for the SSMS (Small Spacecraft Mission Service) load adapter, which made it possible to release 53 micro- and nano-satellites into sun-synchronous orbit. In particular, the VV16 mission was perfectly successful in placing in orbit seven micro-satellites with weights of 15 to 150 kg, along with 46 smaller CubeSats in a single flight, due to the innovative SSMS (Small Spacecraft Mission Service) load adapter. The satellites have various applications, including Earth observation, telecommunications, science, technology and education.

The successful resumption of Vega flight operations with a mission that made it possible, for the first time in Europe, to place 53 satellites in orbit with a single flight, represents fundamental confirmation of the reliability and leading-edge nature of the European carrier designed, developed and built by Avio.

Despite the rescheduling in March due to the COVID-19 epidemic and in June due to the exceptional adverse weather conditions, the tenacity and professionalism of the entire Avio staff, as part of a team with all their partners, were what made the successful resumption of flights possible.

Other significant events

Completion of the share buy-back programme

On July 28, 2020 the Board of Directors of Avio S.p.A. resolved to complete the share buy-back programme, in accordance with the resolution passed by the Shareholders' Meeting on April 29, 2019, entrusting the execution of the programme to an independent intermediary. The programme was approved by the Shareholders' Meeting in April 2019 for a maximum total amount of approx. Euro 9 million, to be completed within a maximum period of 18 months (April 2019 – October 2020). The programme was launched by the Board of Directors on August 2, 2019 through purchases carried out by an authorised intermediary acting in a fully independent manner.

On December 31, 2019, following the purchases made, Avio S.p.A. held 214,500 treasury shares with a total value of approx. Euro 2.7 million, representing 0.81% of the shares comprising the share capital.

On June 30, 2020, following the purchases made, Avio S.p.A. held 315,300 treasury shares with a total value of approx. Euro 4.1 million, representing 1.196% of the number of shares comprising the share capital.

At the approval date of these half-year financial statements, following the purchases made, Avio S.p.A. holds 452,394 treasury shares with a total value of approx. Euro 6.1 million, representing 1.72% of the number of shares comprising the share capital.

OUTLOOK

The Company has made forecasts for the year 2020 also taking into account the estimated impact of the COVID-19 epidemic.

This estimate reflects the short-term effect of the slowdown in the performance of activities owing to both the containment and restriction measures directly attributable to COVID-19 adopted by the various governmental authorities in Europe and the rest of the world (in particular, the temporary suspension of activities at the Kourou launch base, which entailed an initial delay in the resumption of flight operations), and also to the indirect consequences of such measures, including the subsequent delay in the resumption of flights due to adverse meteorological conditions following the rescheduling of the launch date due to COVID-19, in addition to delays or slowdowns of the activities of the chain of suppliers and sub-contractors. This estimate also takes account of the non-recurring

costs associated with the epidemic and the steps and measures of a financial and operational nature that the Company is already adopting to mitigate the impact of this scenario in the near and medium term.

In view of this, a net order backlog of between Euro 650 and 680 million, net revenues of between Euro 325 and 345 million, Reported EBITDA of between Euro 34 and 36 million (including non-recurring costs of approx. Euro 7 million) and a net profit of between Euro 16 and 19 million are expected for the year 2020.

In view of these short-term prospects and the short-term uncertainty of the global economic environment caused by COVID-19, the Board of Directors of Avio S.p.A. confirmed the full allocation of the 2019 profit to the "retained earnings" reserve as resolved by the Shareholders' Meeting on April 29, 2020, which approved the 2019 financial statements. In addition, in July 2020 it had already approved the completion of the share buy-back programme in execution of the resolution passed by the above Shareholders' Meeting, up to a maximum of approx. Euro 9 million by the end of October 2020, within the framework of a further reinforcement of the Company's capital solidity.

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, as a result of the treasury share purchase programme, as at June 30, 2020, the Parent Company held 315,300 treasury shares, representing 1.196% of its share capital.

CORPORATE GOVERNANCE

The company complies with the principles of the Self-Governance Code, prepared by the Corporate Governance Committee for listed companies, set up by Borsa Italiana and promoted by Borsa Italiana, ABI, Ania, Assogestioni, Assonime and Confindustria, latterly updated in July 2018, adjusting its Governance system to the indicated regulatory provisions. The Self-Governance Code is available on the website of Borsa Italiana S.p.A. at <https://www.borsaitaliana.it/comitato-corporate-governance/codice/2018clean.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 upon the ownership structure and compliance with the Self-Governance Code, 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, 2020, 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 September 13, 2017. For a reliable analysis of

- information regarding significant transactions with related parties, see the section of the Notes "7. Related party transactions";
- iii. the **Inside Information processing policy**, approved on December 21, 2017 by the Company Board of Directors and amended on January 24, 2019 to incorporate regulatory changes, introduced by Legislative Decree No. 107 of August 10, 2018, concerning "*Domestic law adjustment provisions in view of regulation (EC) No. 596/2014, concerning market abuse and cancellation of Directive 2003/6/EC and Directives 2003/124/EC, 2003/125/EC and 2004/72/EC*";
 - iv. an **Organisation, Management and Control Model as per Legislative Decree 231/2001 and subsequent**), as latterly amended on May 13, 2019 by the Board of Directors of the Company, including all of the new legislative issues concerning Legislative Decree 231/2001, in addition to the amendments necessary as a result of the listing of the company and the Supervisory Board's transition from a single-member body to the current multi-member body;
 - v. an **Avio Group Conduct Code**, approved on March 29, 2004 and amended latterly on June 28, 2017 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 28, 2017 by the Board of Directors of the Company;
 - vii. a **Diversity Policy**, approved by the Board of Directors of the Company on March 14, 2019, in compliance with Article 123-*bis*, paragraph 2, letter d-*bis*) of the CFA, as supplemented by Article 10 of Legislative Decree 254/2016, in addition to the recommendations of the Self-Governance Code.
 - viii. an **Avio Group Anti-corruption Code**, approved by the Company's Board of Directors on March 14, 2019 in compliance with Legislative Decree 231/2001 and international best practices.

For all additional details in relation to the corporate governance of the company and all corporate governance decisions undertaken until March 25, 2020, reference should be made to the "Corporate Governance and Ownership Structure Report", published in the "Corporate Governance" section of the website, approved by the Board of Directors of Avio on March 25, 2020, prepared in compliance with Article 123-*bis* of the CFA and Article 89-*bis* of Consob Regulation 11971/1999 and in view of the recommendations of the Self-Governance Code, while also taking account of the reference documents prepared by Borsa Italiana S.p.A..

* * *

September 14, 2020

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

CONDENSED CONSOLIDATED HALF-YEAR FINANCIAL STATEMENTS AT JUNE 30, 2020

CONSOLIDATED BALANCE SHEET	Note	June 30, 2020	of which related parties	December 31, 2019	of which related parties
(In Euro thousands)					
ASSETS					
Non-current assets					
Property, plant & equipment	3.1	101,781		98,035	
Right-of-use	3.2	9,603		9,444	
Investment property	3.3	3,039		3,057	
Goodwill	3.4	61,005		61,005	
Intangible assets with definite life	3.5	122,284		122,273	
Investments	3.6	7,908		7,766	
Non-current financial assets	3.7	6,183	6,183	6,106	6,106
Deferred tax assets	3.8	77,538		77,784	
Other non-current assets	3.9	74,396		78,295	
Total non-current assets		463,737		463,765	
Current assets					
Inventories and Advances to suppliers	3.10	149,184	40,678	145,519	42,502
Contract work-in-progress	3.11	272,726	55,738	214,599	44,150
Trade receivables	3.12	2,592	1,598	6,215	1,778
Cash and cash equivalents	3.13	98,311		144,303	
Tax receivables	3.14	34,914		33,162	
Other current assets	3.15	12,832	313	9,142	494
Total current assets		570,559		552,940	
TOTAL ASSETS		1,034,296		1,016,705	

CONSOLIDATED BALANCE SHEET	Note	June 30, 2020	<i>of which related parties</i>	December 31, 2019	<i>of which related parties</i>
<i>(In Euro thousands)</i>					
EQUITY					
Share capital	3.16	90,964		90,964	
Share premium reserve	3.17	140,181		141,588	
Other reserves	3.18	14,089		14,200	
Retained earnings		49,380		23,176	
Group net profit for the period		8,309		26,198	
Total Group Equity		302,924		296,126	
Equity attributable to non-controlling interests	3.19	7,866		7,757	
TOTAL EQUITY		310,790		303,883	
LIABILITIES					
Non-current liabilities					
Non-current financial liabilities	3.20	37,000		42,000	
Non-current financial payables for leasing	3.21	5,932	1,251	4,889	1,246
Employee benefit provisions	3.22	11,023		11,189	
Provisions for risks and charges	3.23	24,772		20,367	
Other non-current liabilities	3.24	130,334		134,185	
Total non-current liabilities		209,061		212,630	
Current liabilities					
Current financial liabilities	3.25	17,749	17,749	28,749	28,749
Current financial liabilities for leasing	3.26	1,618	99	2,647	149
Current portion of non-current financial payables	3.27	9,069		8,075	
Provisions for risks and charges	3.23	4,417		11,526	
Trade payables	3.28	83,917	5,792	100,334	2,280
Advances from clients for contract work-in-progress	3.11	360,877	49,612	319,503	62,581
Tax payables	3.29	8,576		6,124	
Other current liabilities	3.30	28,223	230	23,234	189
Total current liabilities		514,446		500,192	
TOTAL LIABILITIES		723,506		712,822	
TOTAL LIABILITIES AND EQUITY		1,034,296		1,016,705	

CONSOLIDATED INCOME STATEMENT	Note	H1 2020	of which related parties	H1 2019	of which related parties
(In Euro thousands)					
Revenues	3.31	175,311	54,004	190,997	75,818
Change in inventory of finished products, in progress and semi-finished		2,865		247	
Other operating income	3.32	2,315		2,601	
Consumption of raw materials	3.33	(40,552)		(60,233)	
Service costs	3.34	(85,378)	(14,383)	(84,207)	(17,326)
Personnel expenses	3.35	(38,614)		(36,234)	
Amortisation & depreciation	3.36	(8,389)		(8,019)	
Other operating costs	3.37	(3,128)		(3,267)	
Effect valuation of investments under equity method - operating income/(charges)	3.38	143		981	
Costs capitalised for internal works	3.39	3,961		5,210	
EBIT		8,534		8,076	
Financial income	3.40	347	77	292	220
Financial charges	3.41	(690)	(5)	(468)	(10)
NET FINANCIAL INCOME/(CHARGES)		(343)		(176)	
Effect valuation of investments under equity method - financial income/(charges)					
Other investment income/(charges)					
INVESTMENT INCOME/(CHARGES)		-		-	
PROFIT BEFORE TAXES		8,191		7,900	
Income taxes	3.42	227		(838)	
NET PROFIT FOR THE PERIOD		8,418		7,062	
-- of which: Owners of the parent		8,309		6,787	
Non-controlling interests		109		275	

CONSOLIDATED COMPREHENSIVE INCOME STATEMENT	H1 2020	H1 2019
<i>(In Euro thousands)</i>		
NET PROFIT (A)	8,418	7,062
Other comprehensive income items:		
- Actuarial gains/(losses) - Actuarial gains/losses reserve	(112)	(505)
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)	2	75
TOTAL OTHER COMPREHENSIVE INCOME ITEMS, NET OF TAX EFFECT (B)	(110)	(430)
COMPREHENSIVE INCOME FOR THE PERIOD (A+B)	8,308	6,632
-- of which: Owners of the parent	8,199	6,356
Non-controlling interests	109	275

STATEMENT OF CHANGES IN CONSOLIDATED 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					
Equity at 31/12/2018	90,964	144,256			18,193	(3,612)	10,443	24,338	284,581	11,405	295,986
Allocation of prior year result							12,740	(12,740)			-
Distribution of dividends of the parent company Avio S.p.A.								(11,598)	(11,598)		(11,598)
Distribution of dividends of the subsidiary Regulus S.A. (minority share)										(1,440)	(1,440)
Distribution of dividends of the subsidiary Spacelab S.p.A. (minority share)										(3,000)	(3,000)
Allocation to reserves											
Acquisition of treasury shares		(2,668)	(2,668)	2,668					(2,668)		(2,668)
Other changes							(7)		(7)	2	(5)
Comprehensive income											
- Net profit for the period								26,198	26,198	790	26,987
- Other changes											
- Actuarial gains/(losses), net of tax effect						(381)			(381)	(0)	(381)
Comprehensive income/(loss)	-	-	-	-	-	(381)	-	26,198	25,817	790	26,606
Equity at 31/12/2019	90,964	141,588	(2,668)	2,668	18,193	(3,993)	23,176	26,198	296,126	7,757	303,883
Allocation of prior year result							26,198	(26,198)			-
Allocation to reserves											
Acquisition of treasury shares		(1,407)	(1,407)	1,407					(1,407)		(1,407)
Other changes							7		7		7
Comprehensive income											
- Net profit for the period								8,309	8,309	109	8,418
- Other changes											
- Actuarial gains/(losses), net of tax effect						(110)			(110)		(110)
Comprehensive income/(loss)	-	-	-	-	-	(110)	-	8,309	8,199	109	8,307
Equity at 30/06/2020	90,964	140,181	(4,075)	4,075	18,193	(4,103)	49,380	8,309	302,924	7,866	310,790

CONSOLIDATED CASH FLOW STATEMENT

(Euro thousands)

		H1 2020	<i>of which related parties</i>	H1 2019	<i>of which related parties</i>
OPERATING ACTIVITIES					
Net profit for the period		8,418		7,062	
Adjustments for:					
- Income taxes		(227)		838	
- (Income)/charges from measurement at equity of investment in Europropulsion S.A.		(143)		(981)	
- Financial (Income)/Charges		343		176	
- Amortisation & Depreciation		8,389		8,019	
- (Gains)/losses on sale of property, plant & equipment & other (income)/charges					
Dividends received				3,240	
Net change provisions for risks and charges		(2,703)		13,892	
Net change employee provisions		(276)		16	
Changes in:					
- Inventories and Advances to suppliers		(3,664)	1,824	(19,985)	
- Contract work-in-progress & advances from clients		(16,754)	(24,557)	13,902	(16,564)
- Trade receivables		3,623	180	3,522	(317)
- Trade payables		(16,418)	3,512	(11,287)	(16,169)
- Other current & non-current assets		(934)	181	(19,559)	(240)
- Other current & non-current liabilities		3,622	41	2,449	-
Income taxes paid		(35)		(304)	
Interest paid		(150)		(143)	
Net liquidity generated/(employed) in operating activities	(A)	(16,910)		857	
INVESTING ACTIVITIES					
Investments in:					
- Tangible assets and investment property		(7,240)		(3,660)	
- Intangible assets with definite life		(4,109)		(5,380)	
- Equity Investments					
Disposal price of tangible, intangible & financial assets					
Liquidity generated (employed) in investing activities	(B)	(11,349)		(9,040)	
FINANCING ACTIVITIES					
BEI loan		(4,000)		10,000	
Centralised treasury effect with Europropulsion S.A. joint control company		(11,000)	(11,000)	(2,500)	(2,500)
Dividends paid by the parent Avio S.p.A.				(11,598)	
Dividends attributable to minorities of subsidiaries				(1,440)	
Acquisition of treasury shares		(1,407)			
Other changes to financial assets and liabilities		(1,326)	(46)	(881)	1,395
Liquidity generated (employed) in financing activities	(C)	(17,733)		(6,419)	
INCREASE/(DECREASE) IN NET CASH AND CASH EQUIVALENTS	(A)+(B)+(C)	(45,993)		(14,602)	
NET CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		144,303		108,435	
NET CASH AND CASH EQUIVALENTS AT END OF PERIOD		98,311		93,833	

EXPLANATORY NOTES TO THE CONDENSED CONSOLIDATED HALF-YEAR FINANCIAL STATEMENTS AT JUNE 30, 2020

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, 2020, 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 Guyana S.A.S., Avio France S.A.S., AS Propulsion International B.V. 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 was unchanged in the first half of 2020.

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, 2020 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, 2019, except for that outlined in the Explanatory Notes - "Accounting standards, amendments and interpretations applied from January 1, 2020" paragraph. Therefore, these financial statements must be read together with the consolidated financial statements of the Avio Group at December 31, 2019.

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, 2020 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, 2020 present the 2019 comparative figures for the Balance Sheet items (Consolidated Balance Sheet) and the first half year 2019 for the Income Statement items (Consolidated Income Statement, Consolidated Comprehensive Income Statement, Statement of changes in Consolidated Equity 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, 2019 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, 2020 include the financial statements of the parent company, of the Italian and overseas companies in which it holds directly or indirectly at June 30, 2020 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, 2020 was as follows:

Companies included in the consolidation scope at June 30, 2020	Holding
Parent	
Avio S.p.A.	-
Companies consolidated by the line-by-line method	
Spacelab S.p.A.	70%
Regulus S.A.	60%
SE.CO.SV.IM. S.r.l.	100% (*)
Avio Guyane S.A.S.	100%
Avio France S.A.S.	100%
ASPropulsion International B.V.	100%
Avio India Aviation Aerospace Private Limited (**)	100% (***)
Jointly controlled companies, measured at equity	
Europropulsion S.A.	50%
Associates, measured at equity	
Termica Colferro S.p.A.	40%

(*) Holding through ASPropulsion International B.V.

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

(***) Investment held in part directly by Avio S.p.A. (95%) and in part through ASPropulsion International B.V. (5%).

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 policies

The accounting policies adopted are in line with the recognition and measurement criteria utilised in the preparation of the consolidated financial statements at December 31, 2019 of the Avio Group, to which reference should be made for further information, with the exception of that outlined in the following paragraph.

2.8. New accounting standards

IFRS accounting standards, amendments and interpretations applicable from January 1, 2020

The following IFRS accounting standards, amendments and interpretations were applied for the first time by the Group from January 1, 2020:

- on October 31, 2018, the IASB published the document **"Definition of Material (Amendments to IAS 1 and IAS 8)"**. The document modified the definition of "material" in IAS 1 – *Presentation of Financial Statements* and IAS 8 – *Accounting Policies, Changes in Accounting Estimates and Errors*. The amendment aims to provide a more specific definition of "material" and introduce the concept of "obscured information" alongside the concepts of omitted or misstated information previously included in the two amended Standards. The amendment clarifies that information is "obscured" when it is described in

such a way as to produce for primary users of financial statements an effect similar to that which would be produced if the information had been omitted or erroneous.

The adoption of this amendment does not have effects on the consolidated financial statements of the Group.;

- on March 29, 2018, the IASB published an amendment to the **"References to the Conceptual Framework in IFRS Standards"**. The amendment is effective from periods beginning on or after January 1, 2020, although early application is permitted. The Conceptual Framework defines the fundamental concepts for financial reporting and guides the Board in developing the IFRS standards. The document helps to ensure that the Standards are conceptually consistent and that similar transactions are treated in the same way, thus providing useful information to investors, lenders and other creditors. The Conceptual Framework supports companies in developing accounting standards when no IFRS standard is applicable to a particular transaction and, more generally, helps stakeholders to understand and interpret the Standards.
- the IASB, on September 26, 2019, published the amendment entitled **"Amendments to IFRS 9, IAS 39 and IFRS 7: Interest Rate Benchmark Reform"**. The same amendment to IFRS 9 - *Financial Instruments* and IAS 39 - *Financial Instruments: Recognition and Measurement* in addition to IFRS 7 - *Financial Instruments: Disclosures*. In particular, the amendment changes some of the requirements for the application of hedge accounting, establishing temporary derogations in order to mitigate the impact from the uncertainty of the IBOR reform (still in progress) on future cash flows in the period prior to its completion. The amendment also requires companies to provide additional information in their financial statements on their coverage ratios which are directly impacted by the uncertainties generated by the reform and to which the above derogations apply.
The adoption of this amendment does not have effects on the consolidated financial statements of the Group.;
- on October 22, 2018, the IASB published the document **"Definition of a Business (Amendments to IFRS 3)"**. The document provides clarification regarding the definition of business for the purposes of the proper application of IFRS 3. In particular, the amendment clarifies that while a business normally yields an output, the existence of an output is not strictly necessary to identify a business when there is an integrated set of activities and assets. However, in order to satisfy the definition of a business, an integrated set of activities/processes and assets shall include, at the very least, an input and a substantive process which, together, make a significant contribution towards the ability to create outputs. For this purpose, the IASB has replaced the term "capacity to create output" with "capacity to contribute to the creation of output" to clarify that a business may exist even without all the inputs and processes necessary to create an output. The amendment also introduced an optional test ("*concentration test*"), which allows for the exclusion of the presence of a business if the price paid is substantially attributable to a single asset or group of assets. The amendments apply to all business combinations and asset acquisitions after January 1, 2020 but early application is permitted.
The adoption of this amendment does not have effects on the consolidated financial statements of the Group.

IFRS and IFRIC accounting standards, amendments and interpretations approved by the EU, not yet mandatory and not adopted in advance by the Group at June 30, 2020

No accounting standards, amendments and interpretations of IFRS and IFRIC endorsed by the European Union but not yet mandatory at June 30, 2020 were issued.

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 May 18, 2017, the IASB published **IFRS 17 - Insurance Contracts** which replaces IFRS 4 - Insurance Contracts.

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 PPA 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 PPA approach. The simplifications from application of the PPA 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).

The standard is effective from January 1, 2023, although advance application is permitted, only for entities applying IFRS 9 - Financial Instruments and IFRS 15 - Revenue from Contracts with Customers. The Directors do not expect this standard to have a significant impact on the Group consolidated financial statements.

- 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**". The purpose of the document is to clarify how to classify payables and other short or long-term liabilities. The amendments enter into force on January 1, 2022, although the IASB has issued an exposure draft to postpone their entry into force until January 1, 2023; however, early application is permitted. The directors do not expect this amendment to have a significant impact on the Group consolidated financial statements.
- on May 14, 2020, the IASB published the following amendments:
 - Amendments to IFRS 3 Business Combinations: the purpose of the amendments is to update the reference in IFRS 3 to the revised version of the Conceptual Framework, without changing the provisions of IFRS 3;
 - Amendments to IAS 16 Property, Plant and Equipment: the purpose of the amendments is not to allow the amount received from the sale of goods produced during the testing phase of the asset to be deducted from the cost of the asset. These sales revenues and related costs will therefore be recognised to the income statement;

- Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets: the amendment clarifies that in estimating the possible onerousness of a contract, all costs directly attributable to the contract must be considered. Accordingly, the assessment of whether a contract is onerous includes not only incremental costs (such as the cost of direct material used in processing), but also all costs that the enterprise cannot avoid because it has entered into the contract (such as, for example, the share of personnel expenses and depreciation of machinery used to perform the contract);
- Annual Improvements 2018-2020: the amendments were made to IFRS 1 First-time Adoption of International Financial Reporting Standards, IFRS 9 Financial Instruments, IAS 41 Agriculture and the Illustrative Examples of IFRS 16 Leases.

All the amendments will enter into force from January 1, 2022. The Directors do not expect these amendments to have a significant impact on the Group consolidated financial statements;

- on May 28, 2020, the IASB published an amendment called "**COVID-19 Related Rent Concessions (Amendment to IFRS 16)**". The document establishes for lessees the option to account for the reductions in rents connected with COVID-19 without having to assess, through the analysis of contracts, whether the definition of lease modification of IFRS 16 has been complied with. Therefore, lessees applying this option will be able to account for the effects of rent reductions directly in the income statement on the effective date of the reduction. Although this amendment is applicable to financial statements beginning on June 1, 2020, except for the possibility of early application by a company to financial statements beginning on January 1, 2020, it has not yet been endorsed by the European Union, and therefore has not been applied by the Group at June 30, 2020. The directors do not expect this amendment to have a significant impact on the Group consolidated financial statements.
- on May 28, 2020, the IASB published an amendment called "Extension of the Temporary Exemption from Applying IFRS 9 (Amendments to IFRS 4)". The amendments allow the temporary exemption from the application of IFRS 9 to be extended until January 1, 2023. The amendments will enter into force from January 1, 2021. 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 the standard - **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 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, 2020 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, 2020 and December 31, 2019.

	30/06/2020			31/12/2019		
	Gross value	Accumulated depreciation	Net book value	Gross value	Accumulated depreciation	Net book value
Land	14,669	-	14,669	14,669	-	14,669
Buildings	36,072	(18,277)	17,795	35,868	(17,638)	18,230
Plant and machinery	79,278	(58,151)	21,127	77,951	(56,277)	21,673
Industrial and commercial equipment	18,148	(16,624)	1,524	18,136	(16,312)	1,824
Other assets	10,825	(7,535)	3,290	10,599	(7,031)	3,568
Assets in progress and advances	43,376	-	43,376	38,071	-	38,071
Total	202,368	(100,587)	101,781	195,293	(97,258)	98,035

The changes between December 31, 2019 and June 30, 2020 in the gross values of property, plant and equipment are illustrated in the table below (Euro thousands):

Gross value	31/12/2019	Increases	Decreases for disposals	Reclassifications and other changes	30/06/2020
Land	14,669	-	-	-	14,669
Buildings	35,868	269	(65)	-	36,072
Plant and machinery	77,951	1,286	-	41	79,278
Industrial and commercial equipment	18,136	97	(84)	-	18,148
Other assets	10,599	226	-	-	10,825
Assets in progress and advances	38,071	5,346	-	(41)	43,376
Total	195,293	7,224	(149)	-	202,368

The increases in the period of Euro 7,224 thousand mainly concerns:

- assets in progress and advances for Euro 5,346 thousand. These investments particularly included:
 - works for the construction of industrial buildings for the SPTF "Space Propulsion Test Facility" project for the building of a Liquid Rocket Engine (LRE) test bench and of a plant for the production of carbon-carbon components in Perdasdefogu, at the Salto di Quirra experimental inter-force training range;
 - works on the production buildings for the P120 motor;
- production machinery for Euro 1,286 thousand.

Between December 31, 2019 and June 30, 2020, the changes to accumulated depreciation were as follows (in Euro thousands):

Gross value	31/12/2019	Increases	Decreases for disposals	Reclass. and other changes	30/06/2020
Land	-	-	-	-	-
Buildings	(17,638)	(639)	-	-	(18,277)
Plant and machinery	(56,277)	(1,874)	-	-	(58,151)
Industrial and commercial equipment	(16,312)	(335)	23	-	(16,624)
Other assets	(7,031)	(504)	-	-	(7,535)
Total	(97,258)	(3,352)	23	-	(100,587)

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

3.2. RIGHT-OF-USE

The Group applied, for the preparation of these half-year financial statements, IFRS 16 - Leases, published by the IASB on January 13, 2016 and obligatory from January 1, 2019.

The Group adopted the option provided for in IFRS 16:C3, which permits reference to be made to the conclusions reached in the past regarding the contracts previously identified as leases in application of IAS 17 and IFRIC 4. This option was applied to all contracts, as provided for in IFRS 16:C4.

This standard was applied utilising the modified retrospective approach. In particular, with regard to lease contracts previously classified as operating leases, the Group recognised the following:

- financial assets at the present value of the residual future payments at the transition date, discounted according to the incremental borrowing rate applicable to each contract at the transition date;
- a right of use equal to the value of the financial liability at the transition date, net of any prepayments and accruals associated with the lease carried in the balance sheet at the reporting date of these financial statements.

The values of Rights of use at June 30, 2020 are shown net of the accumulated depreciation provisions, as illustrated in the table below (Euro thousands).

	30/06/2020			31/12/2019		
	Gross value	Accumulated depreciation	Net book value	Gross value	Accumulated depreciation	Net book value
Land right-of-use	2,570	(71)	2,499	2,570	-	2,570
Buildings right-of-use	5,289	(1,332)	3,957	4,350	(905)	3,444
Plant and machinery right-of-use	1,525	(206)	1,319	1,525	(137)	1,388
Other assets right-of-use	2,783	(954)	1,828	2,656	(614)	2,042
Total	12,166	(2,563)	9,603	11,101	(1,657)	9,444

The gross values of these rights at June 30, 2020 (in Euro thousands) are reported below:

Gross value	31/12/2019	Increases	Decreases for contract conclusion	Reclassifications and other changes	30/06/2020
Land right-of-use	2,570	-	-	-	2,570
Buildings right-of-use	4,350	985	(46)	-	5,289
Plant and machinery right-of-use	1,525	-	-	-	1,525
Other assets right-of-use	2,656	126	-	-	2,782
Total	11,101	1,112	(46)	-	12,166

The increases in the period mainly concerned new office buildings and apartments for employees in French Guyana.

The accumulated depreciation of these rights in the first half of 2020 is reported below (in Euro thousands):

Gross value	31/12/2019	Increases	Decreases for contract conclusion	Reclassifications and other changes	30/06/2020
Land right-of-use	-	-	-	(71)	(71)
Buildings right-of-use	(905)	(498)	-	71	(1,332)
Plant and machinery right-of-use	(137)	(69)	-	-	(206)
Other assets right-of-use	(614)	(340)	-	-	(954)
Total	(1,657)	(906)	-	-	(2,563)

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 Airola (Campania) and Villaputzu (Sardinia); leasing of apartments for employees in French Guyana; hiring of company cars.

3.3. INVESTMENT PROPERTY

The values of Investment property at June 30, 2020 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 Investment property of the Avio Group at June 30, 2020 with December 31, 2019.

	30/06/2020			31/12/2019		
	Gross value	Accumulated depreciation	Net book value	Gross value	Accumulated depreciation	Net book value
Land	1,834	-	1,834	1,834	-	1,834
Buildings & facilities	2,244	(1,039)	1,205	2,227	(1,005)	1,222
Total	4,078	(1,039)	3,039	4,062	(1,005)	3,057

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 company undertakes property management activities.

The changes between December 31, 2019 and June 30, 2020 in the gross values of investment property of the Avio Group are illustrated in the table below (Euro thousands):

Gross value	31/12/2019	Increases	Decreases	Reclassifications and other changes	30/06/2020
Land	1,834	-	-	-	1,834
Buildings & facilities	2,227	17	-	-	2,244
Total	4,062	17	-	-	4,078

Between December 31, 2019 and June 30, 2020, the changes to accumulated depreciation were as follows (in Euro thousands):

Accumulated depreciation	31/12/2019	Amortisation & depreciation	Utilisations	Reclassifications and other changes	30/06/2020
Land	-	-	-	-	-
Buildings & facilities	(1,005)	(33)	-	-	(1,039)
Total	(1,005)	(33)	-	-	(1,039)

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

3.4. GOODWILL

The goodwill recognised at June 30, 2020 for an amount of Euro 61,005 thousand relates to the Purchase Price Allocation at March 31, 2017 commented upon in the Directors' Report.

As indicated in Note 2.7. Accounting policies", 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 long-term 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 at December 31, 2019, which indicated a recoverable value significantly in excess of the carrying amount of the net capital employed recognised to the financial statements at that date.

At June 30, 2020, the presence of impairment indicators was assessed, also in consideration of the order backlog at June 30, 2020 and the outcome of the Ministerial Conference held in Seville in November 2019 commented upon in the Directors' Report, and in their absence, the value written to the financial statements was not submitted to additional recoverability checks.

3.5. INTANGIBLE ASSETS WITH DEFINITE LIFE

The values of Intangible assets with definite life at June 30, 2020 are shown net of the accumulated amortisation provisions, as illustrated in the table below (Euro thousands).

The table illustrates the comparison between the balances in Intangible assets with definite life of the Avio Group at June 30, 2020 with December 31, 2019.

	30/06/2020			31/12/2019		
	Gross value	Accumulated amortisation	Net book value	Gross values	Accumulated amortisation	Net book value
Development costs - amortisable	71,188	(54,457)	16,731	71,188	(52,628)	18,560
Development costs - in progress	67,756	-	67,756	64,421	-	64,421
Total development costs	138,944	(54,457)	84,487	135,609	(52,628)	82,981
Assets from PPA 2017 - Programmes	44,785	(9,703)	35,082	44,785	(8,211)	36,574
Concessions, licenses, trademarks & similar rights	8,743	(6,919)	1,824	8,040	(6,455)	1,585
Other	3,485	(2,676)	809	3,485	(2,363)	1,122
Assets in progress and advances	82	-	82	11	-	11
Total	196,039	(73,755)	122,284	191,930	(69,657)	122,273

The amortisable development costs mainly refer to design and testing costs relating to the P80 motor, while the largest part of the development costs in progress relate to the projects for the new Z40, P120 and 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 between December 31, 2019 and June 30, 2020 in the gross values of Intangible assets with definite life of the Avio Group are illustrated in the table below (Euro thousands):

Gross value	31/12/2019	Increases	Decreases	Reclassifications and other changes	30/06/2020
Development costs - amortisable	71,188	-	-	-	71,188
Development costs - in progress	64,421	3,335	-	-	67,756
Total development costs	135,609	3,335	-	-	138,944
Assets from PPA 2017 - Programmes	44,785	-	-	-	44,785
Concessions, licenses, trademarks & similar rights	8,040	703	-	-	8,743
Other	3,485	-	-	-	3,485
Assets in progress and advances	11	71	-	-	82
Total	191,930	4,109	-	-	196,039

The increases in H1 2020 with reference to the development costs mainly relate to design and testing costs for the construction of the new Z40, P120 and liquid oxygen and methane engines within the VEGA C and Ariane 6 launcher programmes.

Between December 31, 2019 and June 30, 2020, the changes to accumulated depreciation were as follows (in Euro thousands):

Accumulated amortisation	31/12/2019	Increases	Decreases	Reclassifications and other changes	30/06/2020
Development costs - amortisable	(52,628)	(1,829)	-	-	(54,457)
Development costs - in progress	-	-	-	-	-
Total development costs	(52,628)	(1,829)	-	-	(54,457)
Assets from PPA 2017 - Programmes	(8,211)	(1,493)	-	-	(9,704)
Concessions, licenses, trademarks & similar rights	(6,455)	(464)	-	-	(6,919)
Other	(2,363)	(312)	-	-	(2,675)
Total	(69,657)	(4,098)	-	-	(73,755)

3.6. INVESTMENTS

The investments held by the Avio Group at June 30, 2020 and December 31, 2019 follows (in Euro thousands).

	30/06/2020		31/12/2019		Change
	Group share	Total	Group share	Total	
<u>Subsidiaries</u>					
- Servizi Colleferro – Consortium	52.00%	63	52.00%	63	-
Total non-consolidated subsidiaries		63		63	-
<u>Companies under joint control</u>					
- Europropulsion S.A.	50.00%	3,681	50.00%	3,539	143
Total companies under joint control		3,681		3,539	143
<u>Associates</u>					
- Termica Colleferro S.p.A.	40.00%	3,635	40.00%	3,635	-
- Other consortiums		5		5	-
Total associates		3,640		3,640	-
<u>Other companies</u>					
- Other companies		524		524	-
Total other companies		524		524	-
Total		7,908		7,766	143

The changes between December 31, 2019 and June 30, 2020 in the investments are shown below (Euro thousands):

	31/12/2019	Increases	Decreases	Other changes	30/06/2020
Subsidiaries	63	-	-	-	63
Companies under joint control	3,538	143	-	-	3,681
Associated companies	3,640	-	-	-	3,640
Other companies	524	-	-	-	524
Total	7,765	143	-	-	7,908

The interest in Europropulsion S.A. has been classified among "Companies under joint control". The change in the year relating to this interest was due to measurement at equity, which resulted in an increase of Euro 143 thousand (due to the 50% share of profits accrued in H1 2020, amounting to Euro 286 thousand).

The investments in other associated companies (mainly 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.

There are no significant restrictions in the capacity of the associated companies to transfer funds to the owners of the company, through payment of dividends, loans or advance repayments.

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, 2020 and at December 31, 2019 (in Euro thousands).

	30/06/2020	31/12/2019	Change
Shareholder loan to Termica Colleferro S.p.A.	6,183	6,106	77
	6,183	6,106	77

The account, amounting to Euro 6,183 thousand (Euro 7,440 thousand at nominal values), comprises the shareholder loan granted to the associated company Termica Colleferro S.p.A. together with the other shareholder SECI S.p.A., paid in order to ensure the long-term operational viability of this company in proportion to the share capital held; a similar contribution was made by the above-mentioned majority shareholder. This loan is non-interest bearing and repayment is subordinate to the total settlement of the bank loans of the associate, maturing in 2027.

The increase in the period is due to measurement at amortised cost.

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 deferred tax assets of the Avio Group recorded in the accounts amount to Euro 77,537 thousand. 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):

	<u>30/06/2020</u>
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 Group.	11,733
Financial charges exceeding 30% of EBITDA	39,506
<i>Temporary differences deriving from current corporate operations</i>	
Provision for personnel charges, former employees and similar	2,242
Other deductible temporary differences	9,209
Total gross deferred tax assets	<u>62,691</u>
Deferred tax liability on temporary differences	
<i>Temporary differences deriving from previous corporate operations</i>	
Amortisation intangible assets from PPA 2017 - Customer accreditation	(10,140)
Tax effect R&D expenses First-Time Adoption	(2,717)
<i>Temporary differences deriving from current corporate operations</i>	
Other temporary assessable differences	(1,179)
Total gross deferred tax liabilities	<u>(14,036)</u>
Net deferred tax assets/(liabilities)	<u>48,655</u>
Deferred tax assets on tax losses	73,637
Deferred tax assets not recorded	(44,754)
Net deferred tax assets (liabilities) recorded	<u>77,537</u>

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 "P120" motor, 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 motor 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, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Other non-current assets	74,396	78,295	(3,899)
	74,396	78,295	(3,899)

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

	30/06/2020	31/12/2019	Change
Receivables from the General Electric Group	58,514	58,514	-
Receivables from FCA Partecipazioni	9,132	11,259	(2,126)
Receivables from the Economic Development Ministry for disbursements pursuant to Law 808/85 - non-current portion	6,062	7,870	(1,808)
Guarantee deposits	542	535	8
Other non-current receivables	145	118	27
Total	74,396	78,295	(3,899)

"Receivables from the General Electric Group" of Euro 58,514 thousand refer to the recharge of the following tax charges:

- Euro 58,220 thousand relates to the payment notice received in July 2016 from the Tax Agency relating to registration, mortgage and land tax for 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. This receivable is recognised against an amount payable to the Treasury of like amount among non-current liabilities;
- Euro 294 thousand of charges relating to the tax dispute pertaining to tax year 2013, which was settled in 2018.

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 either indirect taxes concerning the above-mentioned extraordinary operations in 2013 or in general to the sector of the above-mentioned sale, providing Avio the sums requested by the Tax Office within the time period for the payments.

Regarding the dispute regarding the registration, mortgage and land taxes, in 2018 an appeal was made before the Piedmont Regional Tax Commission, which in judgment 1740/18 rendered on October 24, 2018 and filed on November 7, 2018 granted the Company's appeal in full. At the reporting date, there was no record of any appeal by the Italian Tax Office of the above judgment before the Court of Cassation.

It bears remarking that lawmakers have addressed the subject-matter of this dispute, which has to do with the application of Art. 20 of Italian Presidential Decree 131/1986 (the "Consolidated Law on Registration Tax"), in paragraph 1084 of Law 145 of December 30, 2018 (the "2019 Finance Act"), expressly granting the force of an official interpretation – and thus retroactive effect – to Art. 1, paragraph 87, letter a) of Law 205 of December 27, 2017 (the "2018 Finance Act"), which amended Art. 20 of the Consolidated Law on Registration Tax, limiting the discretion of the revenue authorities in reclassifying deeds subject to registration. In the light of the provision of the 2019 Finance Act, the provision introduced by the 2018 Finance Act should therefore also apply retroactively, for the benefit of the taxpayer, with the result that there is no longer any case to answer.

For further information, reference should be made to Note "3.24. Other non-current liabilities" and to the section "Legal and tax disputes and contingent 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 S.p.A. 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, of a discounted receivable from FCA Partecipazioni S.p.A. 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.

The decrease of Euro 2,126 thousand is due to the reclassification to short-term of the portion of the receivable due within 12 months.

"Receivables from the Economic Development Ministry for disbursements pursuant to Law 808/85 - non-current portion", amounting to Euro 6,062 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).

CURRENT ASSETS

3.10. INVENTORIES AND ADVANCES TO SUPPLIERS

The table below illustrates inventories at June 30, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Inventories	149,184	145,519	3,664
	149,184	145,519	3,664

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

	31/12/2019	Change	30/06/2020
Raw material, ancillaries and consumables	36,848	8,244	45,093
Raw material, ancillary and consumables obsolescence provision	(1,742)	(83)	(1,825)
Raw material, ancillary and consumables - net value	35,106	8,161	43,267
Products in work-in-progress	5,292	2,865	8,157
Provision for the write-down of work in progress	(170)	86	(84)
Products in work-in-progress - net value	5,122	2,951	8,073
Finished products and other inventories	3,261	-	3,261
Finished products and other inventories obsolescence provision	(2,119)	-	(2,119)
Finished products and other inventories - net value	1,142	-	1,142
Advances to suppliers	104,149	(7,447)	96,702
	145,519	3,664	149,184

The increase in inventories relates to greater production levels.

Advances to suppliers concern payments made in advance of the execution of the relative supplies based on conditions established in the purchase contracts. The change during the year 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 from clients 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 clients.

"Advances from clients 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 clients is as follows (in Euro thousands):

	30/06/2020	31/12/2019	Change
Contract work-in-progress	272,726	214,599	58,127
Advances for contract work-in-progress	(360,877)	(319,504)	(41,373)
Net total	(88,151)	(104,904)	16,754

The following table outlines advances from clients for contracts work-in-progress concerning production orders and research and development whose gross value is higher than advances received from clients and, therefore, the net balance is recognised to assets in the Consolidated Balance Sheet (in Euro thousands):

	30/06/2020	31/12/2019	Change
Contract work-in-progress (gross)	897,597	803,444	94,153
Advances for contract work-in-progress (gross)	(624,871)	(588,845)	(36,026)
Contract work-in-progress (net)	272,726	214,599	58,127

The following table outlines the situation of advances from clients for contracts work-in-progress concerning production orders and research and development for which the value of advances received from clients is higher than the gross value of contract work-in-progress and, therefore, the net balance is recognised to the liabilities section of the Balance Sheet (in Euro thousands).

	30/06/2020	31/12/2019	Change
Contract work-in-progress (gross)	1,128,582	1,050,897	77,685
Advances for contract work-in-progress (gross)	(1,489,458)	(1,370,400)	(119,058)
Advances for contract work-in-progress (net)	(360,877)	(319,504)	(41,374)

The Avio Group has matured benefits for research and development tax credits under Law No. 232 of December 11, 2016 "2017 Finance Act" against research and development 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 at issue 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, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Trade receivables	2,592	6,215	(3,623)
	2,592	6,215	(3,623)

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

	30/06/2020	31/12/2019	Change
Receivables from third parties	1,014	4,454	(3,440)
Receivables from associates and jointly controlled companies	993	1,146	(153)
	2,007	5,600	(3,593)
Receivables from associates and jointly controlled companies beyond one year	585	615	(30)
	585	615	(30)
Total	2,592	6,215	(3,623)

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):

	30/06/2020	31/12/2019	Change
Gross value	1,497	4,937	(3,440)
less: doubtful debt provision	(483)	(483)	0
Total	1,014	4,454	(3,440)

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):

	30/06/2020	31/12/2019	Change
Europropulsion S.A.	545	771	(226)
Servizi Colleferro S.C.p.A.	106	203	(97)
Potable Water Services Consortium	168	62	106
Termica Colleferro S.p.A. due within one year	174	110	64
	993	1,146	(153)
Termica Colleferro S.p.A. due beyond one year	585	615	(30)
	585	615	(30)
Total	1,578	1,761	(183)

3.13. CASH AND CASH EQUIVALENTS

The table below illustrates cash and cash equivalents at June 30, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Cash and cash equivalents	98,311	144,303	(45,992)
Total	98,311	144,303	(45,992)

Cash and cash equivalents mainly concerning balances on bank current accounts.
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, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Current tax receivables	34,914	33,162	1,751
Total	34,914	33,162	1,751

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

	30/06/2020	31/12/2019	Change
VAT receivables	22,927	20,961	1,966
Research and development tax credit (year 2019)	6,291	6,291	(0)
Receivables from tax authorities	5,415	5,628	(213)
EU VAT receivables	281	282	(1)
Total	34,914	33,162	1,752

The net increase in trade receivables of Euro 1,751 thousand is essentially due to the increase in the period's VAT receivable.

VAT receivables

VAT receivables, for Euro 22,927 thousand, include:

- Euro 12,414 thousand, relating to VAT reimbursement requests to the Tax Authorities;
- Euro 10,513 thousand relating to VAT receivables for which refunds have not yet been requested.

The maturation of the VAT relates to the fact that the parent company's Avio S.p.A. main client is 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 tax credit

Regulatory framework

The research and development tax credit was introduced by Article 3 of Legislative Decree No. 145 of December 23, 2013, converted with amendments, by law No. 9 of February 21, 2014, and subsequently amended by:

- the 2017 Budget Law (Law No. 232 of December 11, 2016), published in the Official Gazette on December 21, 2016 and in force since January 1, 2017;
- the 2019 Budget Law (Law No. 145 of December 30, 2018), published in the *Official Gazette* on December 31, 2018 and in force since January 1, 2019;
- the 2020 Budget Law (Law No. 160 of December 27, 2019), published in the Official Gazette on December 30, 2019 and in force since January 1, 2020.

Under the original rules, introduced by Decree-Law No. 145/2013 and in effect until prior to the amendments applied by the 2019 Budget Law and the 2020 Budget Law, the tax credit in question:

- was recognised against the investment specifically identified by the law made in the years between 2015 and 2020;
- was “incremental” in nature, in that it equated to, for each of the tax break periods, the excess of investments made in the year over average similar investments over the 2012-2014 three-year period (“historic benchmark average”);
- was equal to 50% of the excess costs incurred in the year over the historic benchmark average (until the amendments applied by the 2019 Finance Act, as set out below);
- was utilizable for an annual maximum amount of Euro 20 million (until the amendments applied by the 2019 Finance Act, as set out below);
- may be accessed also where research and development is contracted to third parties. In this case, the break may be utilised by the commissioner, if resident in Italy;
- was automatically accessible, without the need for a request for concession or administrative authorisation, and without complying with the obligation for cost certification by the independent auditing firm;
- was utilizable exclusively as an offset from the subsequent tax period to that in which the qualifying costs are incurred (until the amendments applied by the 2019 Finance Act, as set out below).

Due to the changes introduced by 2017 Budget Law, under the new paragraph 1-*bis* of Decree-Law No. 145/2013, introduced with effect from the 2017 tax year, the tax credit was, among other issues, extended also to costs incurred for research and development carried out by companies residing in Italy, as agents, on behalf of overseas principals.

Due to the 2019 Budget Law:

- the maximum amount of the tax credit that may be granted to each company was reduced from Euro 20 million to Euro 10 million with effect from January 1, 2019;
- the maximum amount of the tax credit was reduced from 50% to 25%, as limited to the costs of research and development activities not organized internally to the company, incurred in excess of the average amount of such investments undertaken in the three tax periods from 2012 to 2014. However, the 50% rate was confirmed for research and development activities organized internally to the company, i.e. for the personnel costs of employees directly assigned to such activities and, for externally commissioned activities, solely for contracts entered into with universities, research entities and organizations and innovative, independent start-ups and small and medium enterprises (SMEs). The benefit was extended to expenses incurred for the purchase of materials, supplies and other similar products directly used in 2019 R&D activities. These amendments enter into force from January 1, 2019;
- the use of the tax credit was only used after specific certification of the costs incurred had been issued by the independent auditor of the accounts. This amendment was already applicable to the tax credit accrued on the basis of the costs incurred in 2018;
- an interpretation rule was introduced for paragraph 1-*bis* of Article 3 of Decree-Law No. 145/2013 to establish that, where research and development is carried out on behalf of foreign principals, the tax benefit is granted to the agent exclusively in relation to the expenses concerning research and development carried out directly and in laboratories or structures located in Italy.

Lastly, the 2020 Budget Law significantly modified the tax relief for research and development activities as follows:

- 1) the previous tax credit provided for in Decree-Law No. 145/2013, with a maximum nominal amount of Euro 10 million (previously Euro 20 million), is confirmed for the 2019 tax period only. Before the 2020 Budget Law this credit was also to apply to the 2020 tax period;
- 2) the following new tax credits are established for the 2020 tax period only to replace the previous R&D credit:
 - 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 12% of the costs incurred in 2020, with a maximum of Euro 3 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 6% of the costs incurred in 2020 for such activities, with a maximum of Euro 1.5 million. The relief is increased (10% of the costs incurred in 2020 for such activities, up to a maximum of Euro 1.5 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 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 (12%, 10% or 6%) applied according to the nature of the activity eligible for relief;
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. it is now mandatory to submit a report to the Ministry for Economic Development, solely to permit the Ministry to obtain the information required to assess the performance, adoption and efficacy of the relief measures;
4. the costs eligible for relief must be stated net of other subsidies or grants received in any capacity for the same eligible expenses;
5. 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.

The same formalities established by the 2019 Budget Act for the previous R&D tax credit also apply to the new tax credits. These formalities include, for example, a report (i.e., certification) prepared by the independent auditors of the accounts attesting that the eligible expenses were effectively incurred and reflect the accounting documentation prepared by the company, in addition to an obligation for the beneficiaries to draft and retain a technical report on the purposes, contents and results of the eligible activities.

Recognition in the Financial Statements

These receivables are 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, in relation to 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.

The tax receivable at June 30, 2020 was unchanged on December 31, 2019 (matured in relation to costs incurred in the period) as awaiting certification from the independent audit firm for its use. The amount of the above receivable overall was Euro 6.3 million.

As established by the 2019 Budget Law, the tax credit maturing in relation to costs incurred in 2018 was utilised as an offset, following the release of the relative "certification" from the appointed auditor, as required by the above-stated regulatory changes.

Since the amendments introduced by the 2020 Budget Law entered into effect on January 1, 2020, they do not have immediate effects on the receivable recognised at December 31, 2019, which, as reported above, at the half-year reporting date is still recognised as its usage has not yet begun.

Tax receivables

Tax receivables of Euro 5,415 thousand principally concerned:

- receivables relating to the expedited VAT settlement of Se.co.sv.im. S.r.l. for Euro 1,956 thousand;
- IRAP receivables of Euro 1,026 thousand;
- receivables for withholding taxes on interest for Euro 947 thousand;
- tax receivables of the overseas subsidiaries Regulus and Avio France for Euro 535 thousand;
- other tax receivables of Euro 951 thousand.

EU VAT receivables

The EU VAT receivables relate to inter-EU transactions and amount to Euro 281 thousand.

3.15. OTHER CURRENT ASSETS

The table below illustrates other current assets at June 30, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Other current assets	12,832	9,142	3,690
Total	12,832	9,142	3,690

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

	30/06/2020	31/12/2019	Change
Economic Development Ministry for disbursements pursuant to Law 808/85	5,331	3,511	1,820
Receivables from FCA Partecipazioni	2,168	2,168	-
Employee receivables	1,233	989	244
Prepayments and accrued income	2,137	820	1,317
Grants/subsidies receivable	847	649	198
Other debtors	456	470	(14)
Other receivables from non-consolidated subsidiaries			
- Servizi Colleferro S.C.p.A.	315	494	(179)
Social security institutions	345	41	304
Total	12,832	9,142	3,690

Receivables from the "Economic Development Ministry for disbursements pursuant to Law 808/85", amounting to Euro 5,331 thousand, refer to the discounted value of the sums to be disbursed by the Ministry for Economic Development for projects qualifying as functional to national security or projects with common European interest, subsequent to the approval by the Inter-ministerial Committee for the Economic Programming of Resolution No. 28 of March 22, 2006 enacting directives for the aerospace sector, which will be received in the next year. The increase in the period is due to the reclassification of the receivables due by this date.

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", reference should be made to the comments at paragraph "3.9 Other non-current assets" in these notes. During the period, the instalment recognised at December 31, 2019 was received and the new instalment due within 12 months recognised, which is of an equal amount as the previous instalment.

With regards to the increase of Prepayments and accrued income of Euro 1,317 thousand on December 31, 2019, this mainly concerns prepayments, as the differing types of costs, such as for example software licenses, are invoiced at the beginning of the year and have one-year validity. Due to this fact, the prepayments made in the first half of the year are significant.

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, 2020; 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, 2020 comprised 26,359,346 ordinary shares.

3.17. SHARE PREMIUM RESERVE

The share premium reserve, originally totalling Euro 144,255,918, is restricted for the value of the treasury shares acquired. At December 31, 2019, the available value of the share premium reserve was Euro 141,588,361, as treasury shares for a value of Euro 2,667,556 had been acquired at that date.

During the period, treasury shares of Euro 1,407,034 have been purchased, with the available value at June 30, 2020 of the share premium reserve therefore totalling Euro 140,181,327.

3.18. OTHER RESERVES

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

	30/06/2020	31/12/2019	Change
Actuarial gains/(losses) reserve	(4,104)	(3,993)	(111)
Legal reserve	18,193	18,193	-
Treasury shares acquired	(4,075)	(2,668)	(1,407)
Unavailable treasury shares purchase reserve	4,075	2,668	1,407
Total	14,089	14,200	(111)

Other reserves comprise:

- a negative reserve of Euro 4,104 thousand regarding losses net of actuarial gains from the application of IAS 19 revised, with the relative tax effect where applicable;
- the legal reserve for a positive Euro 18,193 thousand;
- treasury shares acquired for Euro 4,075 thousand, corresponding to 315,300 treasury shares, equal to 1.196% of the total number of shares comprising the share capital.

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):

Consolidated companies	30/06/2020			
	% Non-controlling interests	Capital and reserves	Profit/(loss)	Equity non-controlling Interests
Spacelab S.p.A.	30.00%	2,501	(18)	2,483
Regulus S.A.	40.00%	5,256	127	5,383
		7,757	0	109
				7,866

NON-CURRENT LIABILITIES

3.20. NON-CURRENT FINANCIAL LIABILITIES

The movement in the account between December 31, 2019 and June 30, 2020 is reported below (in Euro thousands):

	30/06/2020	31/12/2019	Change
Non-current financial liabilities	37,000	42,000	(5,000)
Total	37,000	42,000	(5,000)

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

- loan of Euro 10 million 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 from the third to the seventh years, of which the first maturing on April 30, 2021 and the final maturing on October 31, 2025;
- initial loan of Euro 40 million 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 from the third to the seventh years, of which the first paid 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 programs 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 reclassification to short-term of the Euro 4,000 thousand instalment (concerning the Euro 40 million loan) and of the Euro 1,000 thousand instalment (concerning the Euro 10 million loan), both maturing on April 30, 2021. These two instalments, together with the Euro 4,000 thousand instalment maturing on October 31, 2020 are reported in the account "3.26. "Current financial liabilities."

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. To-date, these covenants have been complied with.

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):

	30/06/2020	31/12/2019	Change
Non-current financial liabilities for leasing	5,932	4,889	1,042
Total	5,932	4,889	1,042

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

	30/06/2020	31/12/2019	Change
Non-current financial liabilities to the associate Termica Colleferro S.p.A. as per IFRS 16	1,251	1,246	5
Non-current financial liabilities to third parties as per IFRS 16	4,681	3,643	1,037
Total	5,932	4,889	1,042

The financial liabilities to the associate Termica Colleferro S.p.A. relate to the lease of the electroduct 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 Guyana;
- 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):

	30/06/2020	31/12/2019	Change
- Defined benefit plans:			
Post-employment benefits	4,297	4,471	(174)
Other defined benefit plans	2,721	2,720	1
	7,018	7,191	(173)
- Other long-term benefits	4,005	3,998	7
Total employee benefit provisions	11,023	11,189	(166)
of which:			
- Italy	9,279	9,398	(119)
- Other Countries	1,744	1,791	(47)
	11,023	11,189	(166)

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

	Defined benefit plans	Other long-term benefits	Total employee benefit provisions
At 31/12/2019	7,191	3,998	11,189
Financial charges/(income)	(9)	(3)	(12)
Extraordinary charges/(income) from actuarial adjustment	-	-	-
Actuarial (gains)/losses in income statement	-	58	58
Actuarial (gains)/losses in comprehensive income statement	106	-	106
Pension cost current employees	64	79	143
Other movements	-	(46)	(46)
Benefits paid	(334)	(81)	(415)
At 30/06/2020	7,018	4,005	11,023

The table below illustrates the principal assumptions utilised for the actuarial calculation:

	30/06/2020	31/12/2019
Discount rate	0.22%	0.22%
Expected salary increases	2.13%	2.12%
Inflation rate	1.50%	1.50%
Average employee turnover rate	4.59%	4.46%

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, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Provisions for risks and charges	29,189	31,892	(2,703)
Total	29,189	31,892	(2,703)

The breakdown of the provisions for risks and charges at June 30, 2020 is presented below (Euro thousands):

	30/06/2020		
	Current portion	Non-current portion	Total
Provision for variable remuneration	2,485	3,108	5,593
Provision for legal and environmental risks and charges	1,397	18,652	20,049
Provision for contractual and commercial risks and charges	534	3,013	3,547
Total	4,417	24,772	29,189

These provisions include:

- provisions for variable remuneration for Euro 5,593 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 20,049 thousand;
- provisions for contractual and commercial risks and charges, mainly related to the provisions to cover potential commercial charges, penalties, charges and losses deriving from the conclusion of contracts in course, in addition to charges for rights pursuant to the provisions of Law 808/85 (regulation post 2006), amount to Euro 3,547 thousand.

The H1 changes in the total provisions, current and non-current portion, are illustrated in the table below (Euro thousands):

	31/12/2019	Provisions	Other changes	Utilisations	Releases	30/06/2020
Provision for variable remuneration	7,727	1,317	-	(3,451)	-	5,593
Provision for legal and environmental risks and charges	20,633	-	118	(702)	-	20,049
Provision for contractual and commercial risks and charges	3,532	15	-	-	-	3,547
Total	31,892	1,332	118	(4,153)	-	29,189

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

- the provision for variable remuneration was utilised for Euro 3,451 thousand, in consideration of the amounts paid to employees as bonuses related to the achievement of individual and company objectives. The provision of Euro 1,317 thousand mainly relates to variable remuneration which will be paid at the beginning of 2021, on the basis of the achievement of individual and company objectives for the year 2020, in addition to a long-term incentive plan for senior Group managers;
- the risks and legal and environmental charge provisions were utilised for Euro 702 thousand, concerning environmental charges.

3.24. OTHER NON-CURRENT LIABILITIES

The table below illustrates the account at June 30, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Non-current liabilities	130,334	134,185	(3,851)
Total	130,334	134,185	(3,851)

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

	30/06/2020	31/12/2019	Change
<i>Tax liabilities</i>			
Payables to the Tax Authorities for registration, mortgage and land tax 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.	58,220	58,220	-
Other tax payables	7,544	10,627	(3,083)
	65,764	68,847	(3,083)
<i>Liabilities relating to Law 808/85</i>			
Payables to the Economic Development Ministry (MiSE) for disbursements pursuant to Law 808/85 (rules pre-2007) - portion beyond one year	42,051	42,051	-
Deferred income on disbursements pursuant to Law 808/85 (post 2007) - beyond one year	19,781	20,859	(1,078)
Payables to MiSE for disbursements pursuant to Law 808/85 (rules as per MiSE Decree 3/07/2015) - portion beyond one year	1,292	1,283	9
Deferred income on disbursements pursuant to Law 808/85 (rules as per MiSE Decree 3/07/2015) - portion beyond one year	483	483	-
	63,606	64,676	(1,069)
Other payables	363	98	265
Deferred income	601	565	36
Total	130,334	134,185	(3,851)

Payables to the Tax Authorities for registration, mortgage and land tax 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.

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.

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.

Other tax payables

This account, amounting to Euro 7,544 thousand, refers to:

- for Euro 6,631 thousand, the long-term amount payable to the Italian Treasury, as recorded in the financial statements at December 31, 2019, a refund of a part of the research and development tax credit and related interest, pursuant to Decree-Law No. 145/2013, relating to the 2017 tax period and already used for offsetting. In particular, in view of the shift in interpretation of the 2019 Budget Law that occurred throughout 2019, and of the opinions of independent advisors, the Group decided to apply the authentic interpretation rule set out in paragraph 1-*bis* of Decree-Law No. 145/2013 retrospectively to 2017 as well, and therefore to redetermine a lower tax benefit due for that year. The restatement in question was also subject to a settlement deed signed with the Italian Tax Office on July 22, 2020, with which an instalment plan was also agreed to partially refund the amount;
- Euro 913 thousand, as the Tax payable of the subsidiary Se.co.sv.im. S.r.l. concerning the expedited settlement, following the application presented in 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 instalments of the taxes only, without penalties and interest.

Liabilities relating to Law 808/85

Payables to the Economic Development Ministry for disbursements pursuant to Law 808/85 (rules pre-2007) - portion beyond one year

This account (Euro 42,051 thousand) comprises the payables to the Economic Development Ministry relating to the disbursements, received pursuant to Law 808/85 and subsequent modifications and supplementations, undertaken for the promotion of research and development activities, including studies, tests and design relating to new programmes and other activities, in the aerospace industry. These sums are non-interest bearing and must be reimbursed in the period in which the revenues are generated from the programmes to which they refer. The payables are recorded at their nominal value.

This payable concerning the grants as per Law 808/85 is subject to the relative provisions valid up to 2006.

In 2006 the enacting regulations of Law 808/85 were modified. In particular, a specific regulation was defined for the programmes subject to intervention by Law 808/85 considered as functional to national security or projects of common European interest, which provide for, in place of the restitution of the disbursements granted, the payment of rights relating to the sale of the products developed within the programmes. For the programmes not within the above-mentioned category, the obligation remains for the restitution without payment of interest.

It is considered, following detailed analysis undertaken also with the assistance of primary legal firms and as communicated to the Ministry for Economic Development in previous years, that this new regulation is not applicable to the interventions undertaken prior to the adoption of Resolution No. 28/2006 of the Inter-ministerial Committee for Economic Programming, in relation to the specific situation of the programmes subject to the interventions, and therefore, as during H1 2020 there were no mandatory changes to the regulations in force, there were no changes in the criteria utilised to-date in the recognition in the accounts of the disbursements in question.

Deferred income on disbursements pursuant to Law 808/85 (post 2007) - beyond one year

The account, amounting to Euro 19,781 thousand, represents the initial counter-entry of the receivable from the Economic Development Ministry 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 1,292 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 amortized cost.

The difference between the nominal and present values of the amount receivable and payable is recognized 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.

Other payables

The account mainly includes the amounts received from the E. Amaldi Foundation by the subsidiary Spacelab S.p.A., which are paid in instalments.

CURRENT LIABILITIES

3.25. CURRENT FINANCIAL LIABILITIES

The table below illustrates current financial liabilities at June 30, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Current financial liabilities	17,749	28,749	(11,000)
Total	17,749	28,749	(11,000)

The account comprises financial payables to the jointly-controlled company Europropulsion, relating to the mechanism of distributing to its shareholders the financial resources available to the joint venture, in accordance with a specific treasury management contract.

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):

	30/06/2020	31/12/2019	Change
Current financial liabilities for leasing	1,618	2,646	(1,028)
Total	1,618	2,646	(1,028)

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

	30/06/2020	31/12/2019	Change
Current financial liabilities to the associate Termica Colleferro S.p.A. as per IFRS 16	99	149	(50)
Current financial liabilities to third parties as per IFRS 16	1,519	2,497	(978)
	1,618	2,646	(1,028)

The financial liabilities to the associate Termica Colleferro S.p.A. relate to the lease of the electroduct 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 Guyana;
- the lease of company cars.

3.27. CURRENT PORTION OF NON-CURRENT FINANCIAL PAYABLES

The table below illustrates this account at June 30, 2019 and December 31, 2018 (Euro thousands).

	30/06/2020	31/12/2019	Change
Current portion of non-current financial payables	9,069	8,075	994
Total	9,069	8,075	994

The current portion of non-current financial payables concerns:

- 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, 2020 and Euro 4 million due on April 30, 2021);
- an instalment of the Euro 10 million EIB loan, of Euro 1 million, maturing on April 30, 2021;
- the accrued interest at June 30, 2020 amounting to Euro 69 thousand.

3.28. TRADE PAYABLES

The table below illustrates trade payables at June 30, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Trade payables	83,917	100,335	(16,418)
Total	83,917	100,335	(16,418)

Trade payables of the Avio Group at June 30, 2020 amount to Euro 83,917 thousand; this amount includes, for Euro 4,868 thousand, trade payables to associated companies, jointly controlled companies and non-consolidated subsidiaries as follows (Euro thousands):

	30/06/2020	31/12/2019	Change
Europropulsion S.A.	3,836	680	3,156
Termica Colleferro S.p.A.	921	840	81
Potable Water Services Consortium	86	(30)	116
Servizi Colleferro S.C.p.A.	25	241	(216)
Total	4,868	1,731	3,137

3.29. CURRENT TAX PAYABLES

The table below illustrates current tax payables at June 30, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Current income tax payables	8,576	6,124	2,452
Total	8,576	6,124	2,452

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

	30/06/2020	31/12/2019	Change
IRAP payables	353	870	(517)
Payables for withholding taxes	1,292	1,167	125
Other tax payables	6,682	3,810	2,872
Foreign income taxes	249	277	(28)
Total	8,576	6,124	2,452

The IRAP payables decreased by Euro 517 thousand. This decrease is due to the net effect of the increase of Euro 351 thousand concerning the IRAP in the period and the decrease of Euro 868 following the abolition of the obligation to pay the 2019 IRAP balance, as per the "Relaunch Decree" (see Article 24 of Legislative Decree No. 34 of May 19, 2020).

Payables for withholding taxes, amounting to Euro 1,292 thousand, refer to employee and consultant withholding taxes.

Other Tax payables of Euro 6,682 thousand comprise the following items:

- for Euro 4,502 thousand, the amount payable to the Italian Treasury, as recorded in the financial statements at December 31, 2019, as a refund of a part of the research and development tax credit and related interest, pursuant to Decree-Law No. 145/2013, relating to the 2017 tax period and already used for offsetting in 2018. In particular, in view of the shift in interpretation of the 2019 Budget Law that occurred throughout 2019, and of the opinions of independent advisors, the Group decided to apply the authentic interpretation rule set out in paragraph 1-*bis* of Decree-Law No. 145/2013 retrospectively to 2017 as well, and therefore to redetermine a lower tax benefit due for that year. The restatement in question was also subject to a settlement deed signed with the Italian Tax Office on July 22, 2020, with which an instalment plan was also agreed to partially refund the amount;
- for Euro 223 thousand the liabilities relating to the settlement as per Article 5-*bis* of Legislative Decree 193/2016 (converted by Law 225 of 2016) agreed by the subsidiary Se.co.sv.im. S.r.l. with the Customs and Monopolies Agency on September 29, 2017, with regards to the tax dispute concerning electricity sold to the companies of the Colleferro industrial district in the period between 2001 and August 2005;
- for Euro 202 thousand, the portion within 12 months of amounts payable due to the settlement of a tax dispute relating to tax year 2013 reached by the parent Avio S.p.A. with the Italian Tax Office in 2018.

- Euro 166 thousand, as 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 instalments of the taxes only, without penalties and interest;

- for Euro 1,589 thousand, tax liabilities in respect of ongoing tax disputes.

Payables for foreign taxes totalling Euro 249 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 Guyana, a French overseas region and department in South America.

3.30. OTHER CURRENT LIABILITIES

The table below illustrates other current liabilities at June 30, 2020 and December 31, 2019 (Euro thousands).

	30/06/2020	31/12/2019	Change
Other current liabilities	28,223	23,234	4,989
Total	28,223	23,234	4,989

The breakdown of the account at June 30, 2020 is shown in the table below (Euro thousands):

	30/06/2020	31/12/2019	Change
Payables due to social security institutions	3,604	3,689	(85)
Employee payables	12,688	6,336	6,352
Other payables to third parties	5,512	5,526	(14)
Deferred income on disbursements pursuant to Law 808/85 - current portion	1,611	1,046	565
Other accrued liabilities and deferred income	4,808	6,637	(1,829)
Total	28,223	23,234	4,989

Amounts due to social security institutions

The account concerns amounts to be paid, amounting to Euro 3,604 thousand, relating to company and employee contributions, in accordance with regulations in force.

Employee payables

Employee payables amount to Euro 12,688 thousand and include remuneration to be settled, in addition to vacations and other rights matured and not utilised. The increase on December 31, 2019 relates to the vacations matured and not yet taken, in addition to a number of variable remuneration items which are paid in July.

Other payables to third parties

"Other payables to third parties" of Euro 5,512 thousand principally concern:

- liabilities towards the Italian Space Agency (ASI), minority shareholder of the subsidiary Spacelab S.p.A., for Euro 3 million, for dividends approved by the subsidiary's Shareholders' Meeting on April 17, 2019. At present, these dividends have yet to be disbursed to the shareholders pending the completion of the legal developments relating to research and

development tax credits, which contributed to operating results in the years to which they refer. Once these legal developments have been completed, the dividends will be paid in short order;

- liabilities for urban development charges due to the municipalities in which the Group operates for Euro 434 thousand;
- liabilities to the Italian Treasury for Euro 450 thousand, relating to the short-term share of the settlements described above in paragraph "3.25. Other non-current liabilities;
- liabilities to third parties for Euro 1,628 thousand, of which Euro 262 thousand to company bodies.

Deferred income on disbursements pursuant to Law 808/85 (post 2007) - current portion

The account, amounting to Euro 1,611 thousand, 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.

Accrued liabilities and deferred income

This account, amounting to Euro 4,808 thousand, mainly refers to the deferment of commercial costs and grant to the following year.

INCOME STATEMENT

3.31. REVENUES

Total revenues, comprising the change in contract work-in-progress and revenues from product sales and the provision of services, amounted to Euro 175,311 thousand. They amounted Euro 190,997 thousand in the first half of 2019.

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

	H1 2020	H1 2019	Change
Revenue from sales	469	1,455	(986)
Revenues from services	3,365	1,914	1,451
	3,834	3,369	465
Change in contract work-in-progress	171,477	187,628	(16,151)
Total	175,311	190,997	(15,686)

The revenues therefore include the effect of the accounting of research and development activities reported below.

Research and development tax receivables are recognised to the financial statements to the extent that the tax receivable is considered recoverable and utilisable. These credits are initially recorded in the account "Other current assets" and recognised 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 in the accounts "Service costs" and "Change in contract work in progress".

For further details on the revenue performance and the relative programmes, reference should be made to the "Operating results" paragraph of the Directors' Report.

3.32. OTHER OPERATING REVENUES

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

	H1 2020	H1 2019	Change
Income from the release of provisions	46	430	(384)
Income for the portion recognised to the income statement of the disbursements as per Law 808/85	532	545	(13)
Other income and operating grants	1,472	1,609	(137)
Over-accruals and similar in prior periods	264	17	247
Total	2,315	2,601	(286)

In the first half of 2020, the account comprised:

- income from the release of provisions for Euro 46 thousand, concerning the adjustment to the pension fund of the subsidiary Regulus S.A.;
- income for the portion recognised to the income statement of the disbursements as per Law 808/85 for Euro 532 thousand;
- other income and operating grants of Euro 1,472 thousand, including, primarily:
 - grants for Euro 554 thousand;
 - recoveries of expenses for Euro 918 thousand;
- - prior year income of Euro 264 thousand.

3.33. CONSUMPTION OF RAW MATERIALS

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

	H1 2020	H1 2019	Change
Purchase of raw materials	48,469	67,351	(18,882)
Change in inventories of raw materials	(7,917)	(7,118)	(799)
Total	40,552	60,233	(19,681)

3.34. SERVICE COSTS

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

	H1 2020	H1 2019	Change
Service costs	84,997	83,997	1,000
Rent, lease and similar costs	309	210	99
Total	85,306	84,207	1,099

Service costs, amounting to Euro 85,306 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 "Service costs" includes the amount of the emoluments due to the Avio Group's governing bodies, relating to:

- directors' fees of Euro 211 thousand (Euro 212 thousand in H1 2019) and specific committee fees of Euro 68 thousand (Euro 69 thousand in H1 2019);
- Supervisory Board fees of Euro 75 thousand (Euro 86 thousand in H1 2019);
- Board of Statutory Auditors' fees of Euro 93 thousand (Euro 98 thousand in H1 2019);
- Auditing Firm fees of Euro 78 thousand (Euro 73 thousand in H1 2019).

3.35. PERSONNEL EXPENSES

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

	H1 2020	H1 2019	Change
Wages and salaries	29,621	25,504	4,117
Social security expenses	6,534	6,415	119
Provision for variable remuneration	753	2,385	(1,631)
Other long-term benefits - current employees	64	270	(206)
Actuarial (gains)/losses recorded in P&L relating to other long-term benefits	58	104	(46)
Provision for "Other defined benefit plans"	1,584	1,556	28
Total	38,614	36,234	2,380

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 2020	H1 2019	Change
Blue-collar	393	383	10
White-collar	528	497	31
Executives	26	24	2
Total	947	904	43

3.36. AMORTISATION & DEPRECIATION

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

	H1 2020	H1 2019	Change
Property, plant & equipment	3,352	3,211	141
Right-of-use	906	755	150
Investment property	33	31	2
Intangible assets with definite life	4,098	4,021	77
Total	8,389	8,019	371

Amortization of intangible assets with a definite life primarily includes:

- amortisation of capitalised development costs of Euro 1,829 thousand (Euro 2,107 thousand in H1 2019);
- 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 2019).

3.37. OTHER OPERATING COSTS

This account amounts to Euro 3,128 thousand (Euro 3,267 thousand in H1 2019) and mainly comprises the following items:

- other operating charges of Euro 1,213 thousand (Euro 622 thousand in H1 2019). The increase on the comparative period of Euro 591 thousand is essentially due to two donations of Euro 250 thousand, one by the Avio Group to deal with the COVID-19 emergency to Colleferro Civil Protection and the other to the Kourou Hospital (in French Guyana).
- indirect taxes of Euro 935 thousand (Euro 888 thousand in H1 2019);
- accruals to personnel charge provisions of Euro 558 thousand (Euro 450 thousand in H1 2018);
- prior year charges of Euro 278 thousand (Euro 208 thousand in H1 2019).

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

The account includes the effect of the application of the equity method for the valuation of the investment held in the jointly-controlled company Europropulsion S.A. 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 investment of the Avio Group in the company. The effect recorded with reference to the first half of 2020, amounting to income of Euro 143 thousand, corresponds to the share of the net result recorded by the investee in the period (in the absence of consolidation adjustments impacting the result of the jointly controlled company).

In the comparative H1 2019 period, the effect of the valuation of investment in the above company was Euro 981 thousand.

3.39. COSTS CAPITALISED FOR INTERNAL WORKS

The account relating to costs capitalised for internally constructed assets, amounting to Euro 3,961 thousand (Euro 5,210 thousand in H1 2019), 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 details are as follows:

- internal development costs of Euro 3,335 thousand (Euro 5,178 thousand in H1 2019);
- costs for the internal production of tangible assets for Euro 626 thousand (Euro 31 thousand in H1 2019).

3.40. FINANCIAL INCOME

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

	H1 2020	H1 2019	Change
Financial income from amortised cost	130	263	(133)
	130	263	(133)
Realised exchange gains	246	58	189
Unrealised exchange gains	(29)	(29)	-
	217	29	189
Total	347	292	55

Financial income of Euro 347 thousand principally concerned:

- interest income from the discounting of receivables for Euro 130 thousand, of which;
 - Euro 77 thousand concerning the financial receivable of the associate Termica Colleferro S.p.A.;
 - Euro 53 thousand concerning the receivables from the Ministry for Economic Development for the disbursements as per Law 808/85;
- exchange differences for Euro 217 thousand.

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 2020	H1 2019	Change
Interest on EIB loans	219	218	1
Interest on other payables	305	30	275
Discounting on employee benefits	(12)	(1)	(11)
Financial charges from amortised cost	28	86	(58)
	540	333	207
Realised exchange losses	154	141	13
Unrealised exchange losses	(4)	(7)	3
	150	134	16
Total	690	467	223

Financial charges, amounting to Euro 690 thousand, increased Euro 223 thousand on H1 2019.

The increase is mainly due to financial charges stemming from the settlement with the Tax Agency on July 22, 2020 (Euro 181 thousand), stipulating the partial repayment through instalments of a portion of the research and development tax credit for 2017 (see Note "3.24 Other non-current liabilities").

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):

	H1 2020	H1 2019
Net deferred tax income/charge	(248)	304
Current taxes Italian companies	517	(831)
Current taxes overseas companies	(42)	(311)
	<u>227</u>	<u>838</u>

This charge therefore comprises:

- deferred tax charges of Euro 248 thousand;
- income from current taxes relating to Italian companies, entirely comprising IRAP, for Euro 517 thousand. In this regard, the Group benefitted from the extraordinary tax rules as a result of COVID-19 which permitted the releasing of income from the 2019 IRAP balance;
- current tax charges of overseas subsidiaries for Euro 42 thousand.

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

	H1 2020
Pre-tax result	8,191
Ordinary rate applied	24.00%
Theoretical tax charge	<u>1,966</u>

Effect of increases (decreases) to the ordinary rate:

Permanent increases	1,960
Permanent decreases	(4,204)
Temporary difference increases	6,332
Temporary difference decreases	(11,855)
Total changes	<u>(7,766)</u>
(Tax loss)/Assessable income*	<u>425</u>

* this assessable income exclusively concerns the overseas subsidiaries.

3.43. EARNINGS PER SHARE

	H1 2020	H1 2019
Group net profit (in Euro thousands)	8,309	6,787
Number of shares in circulation	26,359,346	26,359,346
Basic earnings per share – in Euro	0.32	0.26
Diluted earnings per Share – in Euro	0,31 ⁽¹⁾	0,25 ⁽¹⁾

⁽¹⁾ Diluted earnings 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 2020, 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 950 at June 30, 2020. At December 31, 2019, Group employees numbered 935.

Disclosure by regional segment

The regional breakdown of Group revenues (defined based on customer country location), in H1 2020 (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):

	30/06/2020
Guarantees given:	
Unsecured guarantees:	
Sureties issued to third parties on behalf of Group	46,926
Other guarantees	3,402
Total guarantees given	50,328
Guarantees received:	
Sureties and guarantees received	1,642
	1,642

Guarantees granted

Secured guarantees include sureties issued by third parties on behalf of the Group in favour of clients 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

In relation to the associate Termica Colleferro S.p.A., held 40% by Avio and held 60% by S.E.C.I. S.p.A., operator of a thermal electric power plant whose steam production is essential for the functioning of the Colleferro production facility, the following is outlined.

In February 2010, to assist plant construction, Termica Colleferro agreed with a banking syndicate a loan for a maximum Euro 34 million, with duration until February 24, 2022 and supported by unsecured and secured guarantees, including an on-demand surety of the parent company Seci for a maximum amount of Euro 44.2 million.

For the finalisation of this agreement with the lending banks, in 2014 Termica Colleferro requested and obtained from the shareholders Seci and Avio a commitment letter by which the shareholders committed to grant a shareholder loan for maximum amounts respectively of Euro 18.2 million and Euro 12.1 million, in proportion to the share capital respectively held and cumulatively corresponding to the residual portion of the bank loan at that date. The agreement sees that the shareholder loan shall be disbursed in a number of tranches on the request of Termica Colleferro, based on the operating requirements of the latter and subject to the issue of the loan to this latter by the banks.

In consideration of the deterioration of general electricity market conditions in subsequent years, in order to comply with the bank covenants, in December 2016 Termica Colleferro 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 loan restructuring agreement did not amend the guarantees granted by the shareholders SECI and Avio to the lending banks, with the exception of the extension of the original guarantees to the new maturity date.

At the reporting date, Avio has a financial receivable for the shareholder loan granted to Termica Colleferro of Euro 7.4 million, carried according to the amortized cost method at Euro 6.2 million. At June 30, 2020, there was no longer any residual commitment upon Avio to grant additional shareholder loans to this associate on the basis of the progressive repayment of its loan by Termica Colleferro. In fact, at June 30, 2020, the residual payable of Termica Colleferro was Euro 14.7 million and the contractual commitment of Avio had a maximum "ceiling" of 40% of this payable, i.e. Euro 5.9 million. As Avio had already disbursed to Termica Colleferro an amount of Euro 7.4 million, there are no longer residual commitments upon Avio under these agreements (the original commitment as per the 2014 agreements for Avio was Euro 12.1 million).

Avio however has not undertaken any commitment to increase the share capital of the associate.

The above loan issued to Termica Colleferro by the banks stipulates compliance by the company with the following financial covenants:

- 1) Net Financial Debt / Equity (NFP/E); and
- 2) Net Financial Debt / EBITDA (NFP/EBITDA).

In order to comply with the banking covenants, Termica Colleferro, Avio, SECI and the lending banks also signed an agreement in 2014 modifying the original loan agreement, in accordance with which Termica Colleferro has the right to remedy the potential violation of the financial covenants ("Equity cure") through the payment by the shareholders SECI and Avio to Termica Colleferro (pro-quota according to the limits of the respective share capital holdings in the company) of an amount as share capital increase and/or a shareholder loan which overall remedies the violation ("Cure amount").

On the basis of the information available at the reporting date from the investee Termica Colleferro S.p.A. as at December 31, 2018, the covenants established under the loan had been complied with.

Where Termica Colleferro does not comply with the covenants established by the above loan, Avio and SECI may be called to undertake additional share capital increases or grant an additional shareholder loan (subordinated) in a measure proportional to their respective holdings.

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 an industrial plan for the maintenance of the Group as a "performing" concern until November 4, 2019.

The associated company Termica Colleferro was not included in the companies presenting an administration procedure.

On January 17, 2020 the Court of Bologna ruled that the application for composition with creditors subject to a reserve filed by Seci S.p.A. on May 31, 2019 was inadmissible due to the failure by Seci S.p.A. to file the composition proposal and plan by the date January 3, 2020 fixed for this purpose by the Court of Bologna.

In the interim, on February 13, 2020 the Public Prosecutor's Office of the Court of Bologna filed a petition for a declaration of bankruptcy of Seci S.p.A. following which, the Court of Bologna initially fixed the hearing for discussion on April 3, 2020

On the basis of that reported and the information available from media outlets, due in part to the concurrent effects of COVID-19, Seci S.p.A. presented on March 27, 2020 before the Bologna Court a new agreed settlement application, in so-called full form.

As of today, this petition is still awaiting the Decree of admission from the Court of Bologna and, consequently, the bankruptcy petition filed by the Public Prosecutor's Office is pending.

In view of the fact that 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 Colleferro bank loan agreement, an acceleration clause for repayment of the loan, in order to clearly define its position vis-à-vis the banking sector and to prepare the 2019 financial statements on a going concern basis, on April 27, 2020, Termica Colleferro requested that the banking syndicate waive the acceleration clause in the loan agreement in the event that the parent company Seci S.p.A. presents an application for an arrangement with creditors.

Following a number of clarifications requested by the banks, the waiver request was resent on July 29, 2020 in order to receive a response in time for the approval of the financial statements according to the applicable deadlines, also in view of the extensions granted as a result of COVID-19.

Following lengthy examination of the waiver request by the banks, Termica Colleferro examined, including with the support of its external consultants, the possibility of waiting for the banks' response to the waiver request in order to approve the 2019 financial statements.

On August 6, 2020, the banks replied that, as they are awaiting information requested from the parent company Seci S.p.A. regarding the arrangement with creditors and more generally the foreseeable prospects of the overall restructuring process (also in relation to the arrangement with Officine Maccaferri S.p.A.), they are not in a position to carry out an assessment of the creditworthiness of the requests made by Termica Colleferro, while they shall not activate the acceleration clause.

Termica Colleferro immediately took action to ensure that the parent company Seci S.p.A. responded to the banks, and then made contact with the banking syndicate.

In the meantime, it should be noted that Termica Colleferro has regularly repaid the instalments of the loan due in 2020 and in particular in February 2020 and August 2020.

Legal and tax cases and contingent liabilities

At the 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 client indemnities. 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

Criminal case against Servizi Colleferro S.C.p.A for pollution of the Sacco river

As a result of the discovery of toxic substances in milk in June 2005 and the preliminary investigations of February 2009, in March 2010, the Republic of Velletri Public Prosecutor requested the citation of a number of individuals from Caffaro S.r.l., Centrale del Latte di Roma S.p.A. and Consorzio Servizi Colleferro (the legal representative and the presumed technical manager), alleging negligence causing the environmental disaster from the poisoning of the Sacco River waters and of substances intended for human consumption (milk), occurring in Colleferro, Segni and Gavignano until December 2008, and with regard to the consortium alone, the discharge of industrial wastewater without the prescribed authorisations in the same areas until November 2006. In particular, despite the fact that the Consortium was the sole party responsible for the final discharge of the industrial wastewater treatment plant of the area, its senior executives are accused of a failure to provide adequate safety measures, control systems and/or purifying treatments to prevent white water and first flush from the drainage of some areas in the area, collected by a trench facing the consortium wastewater treatment plant, flowing into the Sacco River, resulting in the contamination of the feed of dairy animals raised near the river. The Consortium operates on a non-profit basis with a main object to collect and treat waste water from the sites belonging to the consortium and sites in the industrial district of Colleferro.

The Ministry of the Environment, Land and Sea, the local municipalities and a number of private parties (associations and individuals) appeared as civil claimants in the trial. The claims are founded on the environmental damages pursuant to Part IV of the Environmental Code (Legislative Decree No. 152 of April 3, 2006) and liability in tort pursuant to Articles 2043 et seq. of the Civil Code due to personal injury. The total amount of the damages sought has been set by the adverse parties at approximately Euro 35 million.

At present, Servizi Colleferro S.C.p.A. is owned by the following consortium member shareholders: Avio S.p.A. (32%), Se.co.sv.im. S.r.l. (20%), Termica Colleferro S.p.A. (6%), Caffaro s.r.l. in extraordinary administration (5%), Recuperi Materie Prime S.r.l. (5%), Municipality of Colleferro (5%), EP Sistemi S.p.A. (6%), Lazio Ambiente S.p.A. (6%), Joyson Safety Systems Torino S.r.l. (5%) and Simmel Difesa S.p.A. (10%).

Finally, at the hearing of July 16, 2020, the Court of Velletri, in single-justice composition, fully acquitted Mr. Giovanni Paravani and Mr. Renzo Crosariol of the offense referred to in Section A) of the indictment, concerning the violation of Articles 113, 449, paragraph 1 (in relation to Article 434), 452, paragraph 1, No.3 (in relation to Article 439) of the Italian Criminal Code (negligent disaster), as judged to not have committed the act, consequently rejecting the claims brought by the civil parties against Servizi Colleferro S.C.p.A..

Se.co.sv.im. S.r.l./Caffaro

The Colleferro industrial district includes an industrial area known as "Benzoin and derivatives" that until December 31, 2007 was leased to Caffaro S.p.A., which since September 2009 was subject to an extraordinary administration proceeding. For the collection of Caffaro 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 challenged in the period between 2008 and 2012, before the Lazio Regional Administrative Court, 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), requesting cancellation, with which the Commissioner's Office sought damages from Caffaro. These motions were notified also to Secosvim as owner of the Benzoin area (leased by Caffaro until 2007), 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 this regard, during the proceedings the State Prosecutor requested the Regional Administrative 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 (as reported in the previous paragraph, relating to the "*Criminal proceeding against Consorzio Servizi Colleferro with regards to the pollution of the Sacco river*"). The hearing to discuss these appeals was held on June 20, 2018.

The hearings are still pending before the Regional Administrative Court of Lazio and the next hearing is scheduled for June 9, 2021.

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.

As part of the general audit conducted at the end of 2015 and concluding in 2017, the Finance Police challenged Avio S.p.A., 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 issue of the alleged non-payment of the indirect taxes applicable to the transfer of the business unit.

Following on from this matter, on July 28, 2016 the Tax Agency notified Avio S.p.A. of a settlement notice for registry, mortgage and land taxes for a total of Euro 58,220 thousand. These concern in particular registration tax for Euro 55,641,285, mortgage tax for Euro 1,719,057 and land taxes for Euro 859,529, with a total increased charge of Euro 58,219,871.

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, appealed the aforementioned settlement notice. The Piedmont Regional Tax Commission decided in the company's favour in judgment 1740/18 rendered on October 24, 2018 and 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 settlement notice and a corresponding receivable from the General Electric Group recorded for the same amount of Euro 58,220 thousand.

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

On June 4, 2019 the Piedmont DRE of the Tax Agency sent Avio S.p.A. questionnaire No. Q00041/2019 requesting information and documents concerning transactions undertaken in the 2014 tax year between the company and the subsidiary Regulus S.A., in order to assess the correct tax treatment of the remuneration according to the conditions and prices which would be paid between independent parties operating under free competition conditions and in comparable circumstances in accordance with Article 110, paragraph 7 of the Income Tax Law (covering the tax treatment of transfer pricing), on the basis that Regulus S.A. is tax resident in French Guyana.

Avio S.p.A. acted promptly, supported also by its tax consultants, to provide the Piedmont DRE with all of the requested information and documents.

In late November 2019, when the period in which the revenue authorities were able to issue assessments in respect of the 2014 tax period drawing to an end, the Piedmont Regional Department served two separate assessment notices, concerning IRES and IRAP respectively, on the Company, which promptly filed an application for a settlement, reserving the right to assess whether to seek conciliation of the dispute with the Piedmont Regional Department.

Despite various discussions and reciprocal attempts to reach a desired settlement of the aforementioned notices, the Company - while continuing to reiterate its full and loyal cooperation with the tax authorities - does not consider the conditions correct to proceed with the settlement of the assessment notices. In particular, without prejudice to the Company's many reservations regarding the legitimacy, in fact and in law, of the aforementioned assessment notices, the Company is confident of the correctness of its actions, and considers that it has acted in full compliance with the law, including in light of the OECD Guidelines and the Ministry of Economy and Finance Decree of May 14, 2018.

Believing, therefore, that it could not achieve compliance with the terms and conditions proposed by the Agency, the Company promptly challenged the two IRES and IRAP assessment notices in June 2020.

B) Se.co.sv.im. S.r.l. - Tax audits and disputes

A brief description of the Se.co.sv.im. tax dispute, in addition to a brief description of the main related contingent liabilities, is outlined below.

B.1.) Tax dispute with the Rome Customs Agency with regards to excise and provincial/municipal additions in the electricity sector

Period 2001 - 2005: with regards to the audit by the Rome Finance Technical Department with regards to consumption tax and related supplements due on electricity consumption in the January 2001 - August 2005 period, the appeal against the second level judgment in favour of Se.co.sv.im. by the Customs Agency and the relative counter appeal by Se.co.sv.im. are pending before the Court of Cassation. On September 29, 2017 it was considered appropriate, in view of the unfavourable opinion on the outcome of the dispute, to undertake an agreed settlement procedure with the Customs Agency pursuant to Article 5-bis Legislative Decree 193/2016, with payment in four annual instalments (plus interest of 2.10% annually) of the total amount of Euro 846 thousand. The settlement stipulated the cancellation of interest, late payment penalties and sanctions.

In September 2019 the third instalment and related interest were duly paid. The fourth and final instalment is to be paid in September 2020.

Period 2006 - 2010: with regards however to the issues raised by the Rome Finance Technical office, also with regards to excise and surtaxes in the electricity sector, concerning the years 2006-2010 and against which Se.co.sv.im. had taken legal action, in judgment No. 24678 of October 16, 2019 the Court of Cassation denied the Company's claims. The provisional payment, activated in 2013 and paid in monthly instalments, was made in May 2018 on a cautionary basis, with request of repayment of the excess amounts following the agreed settlement procedure pursuant to Article 6 of Legislative Decree 193/2016.

B.2) 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 Se.co.sv.im. lodged a timely appeal against the unfavourable judgment rendered by the Rome Provincial Tax Commission.

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, Se.co.sv.im. proposed an appeal at the Rome Provincial Court.

The Rome Provincial Tax Commission rejected the Company's claims in a judgment filed in December 2019.

The Company is assessing whether to lodge an appeal against the judgment.

B.3) Tax dispute relating to non-application of VAT on reclamation costs recharged to Avio in the years 2010, 2011 and 2012

In 2013, Se.co.sv.im. was notified of two VAT assessments for the years 2010 and 2011 concerning the alleged non-application of taxes to reclamation costs recharged to the consolidating company S.p.A. (total amounts, including penalties and interests, of Euro 2.5 million).

The Company appealed the above assessment notices before the Rome Provincial Tax Commission, which found in favour of the Company in its judgment of September 7, 2015. The Lazio CTR on December 12, 2016 accepted the appeal of the Tax Agency against the judgement of the Rome CTP. Therefore, Se.co.sv.im. appealed to the Cassation Supreme Court in June 2017. The provisional payment of this amount of Euro 2.5 million had not yet been activated, although the related request for suspension was rejected by the Rome CTP in December 2017.

On October 31, 2017 the assessment notice for the following year 2012 was received for higher taxes of Euro 644 thousand, in addition to penalties and interest of Euro 127 thousand, and against which an appeal was made to the Rome CTP. The Rome Provincial Tax Commission rejected the Company's appeal by judgment 18883/18 of November 11, 2018.

With the digitally presented application by May 31, 2019, Se.co.sv.im. complied with the expedited settlement of the pending tax disputes as per Article 6 of Legislative No. 119 of October 23, 2018, converted with amendments by Law No. 136 of December 17, 2018. Under the expedited settlement, the company is required to pay only taxes, for a total amount of Euro 1.6 million, without the application of penalties and interest. This amount shall be paid in 20 equal quarterly instalments, the first of which was paid on May 31, 2019. The sums thus paid will be charged as subsequent recovery from the parent company, Avio, under the agreements between the companies.

The documents relating to the settlement of the disputes in question were filed with the registry of the Court of Cassation, which ordered that the hearing be postponed to a new docket number. A copy of the petition for settlement was likewise filed with the Rome Provincial Tax Commission.

As of July 31, 2020, the Tax Agency had not notified the Company of any refusal of the settlement of pending litigation. The settlement of the disputes in which the company is involved must be considered definitive and legitimately reached.

- B.4) 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 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 IRAP) on ESA assets used 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.

The total amount of tax liabilities arising from this issue for the years from 2009 to 2017 was estimated at approx. Euro 2.190 million. However, the company has not made any accrual to the tax risks provision as considering, also on the basis of the opinion of its consultants, to have valid arguments in defence of its position.

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, 2020.

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 clients 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, 2020 essentially concerned the overall carrying amount of trade receivables, whose value at this date amounted to Euro 2,592 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 clients, 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 clients 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, 2020, 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, 2020 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 46 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, 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, 2020 and December 31, 2019 (in Euro thousands):

At June 30, 2020									
Counterparty	Inventories and Advances to suppliers	Trade receivables	Other current assets	Contract work-in-progress	Non-current financial assets	Trade payables	Other current liabilities	Advances for contract work in progress	Financial liabilities
Leonardo S.p.A.	1,620					661	230		
MBDA Italia S.p.A.		17		4,883				694	
MBDA France S.A.		3		10,947				287	
Thales Alenia Space Italia S.p.A.				147					
Vitrociset S.p.A.				115		263		113	
Companies with a connecting relationship and relative investee companies	1,620	20	0	16,092	0	924	230	1,094	0
Termica Colleferro S.p.A.		759			6,183	921			1,350
Europropulsion S.A.	39,058	545		39,646		3,836		48,518	17,749
Potable Water Services Consortium		168				86			
Servizi Colleferro - Consortium Limited Liability Company		106	313			25			
Associates and jointly controlled companies	39,058	1,578	313	39,646	6,183	4,868	0	48,518	19,099
Total related parties	40,678	1,598	313	55,738	6,183	5,792	230	49,612	19,099
Total book value	149,184	2,592	12,832	281,136	6,183	83,917	28,223	369,287	71,368
% on total account items	27.27%	61.64%	2.44%	19.83%	100.01%	6.90%	0.81%	13.43%	26.76%

At December 31, 2019								
Counterparty	Trade receivables	Other current assets	Contract work-in-progress	Non-current financial assets	Trade payables	Other current liabilities	Advances for contract work in progress	Financial liabilities
Leonardo S.p.A.					549	189		
MBDA Italia S.p.A.	17		2,461				1,172	
MBDA France S.A.			7,059				3,900	
Thales Alenia Space Italia S.p.A.			69					
Companies with a connecting relationship and relative investee companies	17	0	9589	0	549	189	5072	0
Termica Colleferro S.p.A.	725			6,106	840			1,395
Europropulsion S.A.	771		34,561		680		57,509	28,749
Potable Water Services Consortium	62				(30)			
Servizi Colleferro - Consortium Limited Liability Company	203	494			241			
Associates and jointly controlled companies	1,761	494	34,561	6,106	1,731	0	57,509	30,145
Total related parties	1,778	494	44,150	6,106	2,280	189	62,581	30,145
Total book value	6,215	9,142	214,599	6,106	100,335	23,234	319,504	86,360
% on total account items	28.60%	5.40%	20.57%	100.00%	2.27%	0.81%	19.59%	34.91%

In H1 2020 and H1 2019, the main income statement transactions by the Group with related parties were as follows (in Euro thousands):

Counterparty	At June 30, 2020			
	Operating Revenues and changes in contract work-in-progress	Operating Costs ⁽¹⁾	Financial Income	Financial Charges
Leonardo S.p.A.		153		
MBDA Italia S.p.A.	809			
MBDA France S.A.	8,306			
Thales Alenia Space Italia S.p.A.				
Vitrociset S.p.A.	0	714		
Companies with a connecting relationship and relative investee companies	9,115	867	0	0
Termica Colleferro S.p.A.	55	3,373	77	5
Europropulsion S.A.	44,639	9,415		
Potable Water Services Consortium	37	238		
Servizi Colleferro - Consortium Limited Liability Company	158	490	-	-
Associates and jointly controlled companies	44,889	13,516	77	5
Total related parties	54,004	14,383	77	5
Total book value	175,311	167,600	347	690
% on total account items	30.80%	8.58%	22.17%	0.72%

⁽¹⁾ The account includes raw material consumables, service costs and personnel expenses.

At June 30, 2019				
Counterparty	Operating Revenues and changes in contract work-in-progress	Operating Costs ⁽¹⁾	Financial Income	Financial Charges
Leonardo S.p.A.		252	-	-
MBDA Italia S.p.A.	1,995	-	-	-
MBDA France S.A.	7,331	-	-	-
Thales Alenia Group		600	-	-
Companies with a connecting relationship and relative investee companies	9,326	852	0	0
Termica Colleferro S.p.A.	67	4,196	220	10
Europropulsion S.A.	66,423	11,815		
Potable Water Services Consortium	1	150		
Servizi Colleferro - Consortium Limited Liability Company	1	313	-	-
Associates and jointly controlled companies	66,492	16,474	220	10
Total related parties	75,818	17,326	220	10
Total book value	191,244	180,673	292	467
% on total account items	39.64%	9.59%	75.23%	2.14%

⁽¹⁾ The account includes raw material consumables, service costs and personnel expenses.

Transactions with companies with a connecting relationship and relative investee companies

The transactions with Leonardo S.p.A., considered a company with whom a connecting relationship exists, concern assistance and consultancy services. Transactions with investee companies by Leonardo are typically of a commercial nature.

With regards to the client MBDA Italia S.p.A., the guarantees issued by leading credit institutions cover prompt compliance with the contractual obligations undertaken by Avio for the Camm-er orders. Their release is based on completion of the relative contractual milestones.

Transactions with non-consolidated subsidiaries

Group transactions with non-consolidated subsidiaries concern ordinary operating activities and are concluded at normal market conditions.

Transactions with associates and jointly-controlled companies

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.

The bank guarantees to the Sitab Consortium in liquidation concern supplies in previous years and, together with the Consortium, are expected to be withdrawn shortly.

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, 2020

The following table presents the key details of Avio Group investees at June 30, 2020:

Companies included in the consolidation scope at June 30, 2020	Holding
Parent	
Avio S.p.A.	-
Companies consolidated by the line-by-line method	
Spacelab S.p.A.	70%
Regulus S.A.	60%
SE.CO.SV.IM. S.r.l.	100% (*)
Avio Guyane S.A.S.	100%
Avio France S.A.S.	100%
ASPropulsion International B.V.	100%
Avio India Aviation Aerospace Private Limited (**)	100% (***)
Jointly controlled companies, measured at equity	
Europropulsion S.A.	50%
Associates, measured at equity	
Termica Colleferro S.p.A.	40%

(*) Holding through ASPropulsion International B.V.

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

(***) Investment held in part directly by Avio S.p.A. (95%) and in part through ASPropulsion International B.V. (5%).

9. INFORMATION ON PUBLIC GRANTS PURSUANT TO ARTICLE 1, PARAGRAPHS 125-129, OF LAW NO. 124/2017

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 2020:

Receiving company	Disbursing PA	Project	Years_costs Project	Loans issued in 2020	Collection date	Ministry for Economic Development
				(€ /000)		(€ /000)
AVIO SPA	Ministry for Economic Development	AMMEP - Additive Manufacturing by Mixing Elemental Powders	2018	102.70	06/02/2020	-
AVIO SPA	FINPIEMONTE	IR ² - Industrialization of Research Results - PISCO Project	2019	84	29/04/2020	-
				186.70		-

As reported in the Explanatory Notes in the tax receivable paragraphs, the Avio Group has in the past recognised the Research and development tax credit permitted under Article 3 of Legislative Decree No. 145 of December 23, 2013 and subsequent amendments.

In compliance with the provisions of Ministry of Economic Development Communication No. 185001 of July 1, 2020 regarding the fulfilment of electronic invoice stamping obligations, below is the list of invoices relating to the FCS project entitled ISAAC No. F/090051/01/X36 CUP B88I17001100008, Ministerial Decree No. 1216 of April 20, 2018:

TYPE OF EXPENDITURE	DESCRIPTION	ORDER	SUPPLIER	INVOICE	INVOICE DATE	INVOICE AMOUNT (net of VAT)	COST CHARGED TO THE PROJECT	PAYMENT DATE
EQUIPMENT	SUPPLY/INST. CUTTER AIROLA LAB.	I116558	COMEC INNOVATIVE SRL	1800354	21/12/2018	36,000.00	13,500.00	08/02/2019
EQUIPMENT	AUTOCLAVE AIROLA LAB.	I116837	MAROSO IMPIANTI	01/192	19/10/2018	27,000.00	7,031.25	20/12/2018
EQUIPMENT	AUTOCLAVE AIROLA LAB.	I116837	MAROSO IMPIANTI	02/244	27/12/2018	27,000.00	7,031.25	27/05/2019
EQUIPMENT	AUTOCLAVE AIROLA LAB.	I116837	MAROSO IMPIANTI	246/02	30/12/2019	27,000.00	7,031.25	09/04/2020
EQUIPMENT	VARIOUS COMPONENTS for compression tests	I116852	INSTRON	CD2018000037	22/11/2018	19,556.10	7,537.25	28/02/2019
CONSULTING	IMPREGNATION MACHINE CO-DESIGN	I116652	COMEC INNOVATIVE SRL	1800361	28/12/2018	494,000.00	494,000.00	01/04/2019
EQUIPMENT	SUPPLY/INST. FIBRE PREPARATION FRAME - AIROLA	I116795	OFFICINA MECCANICA BULGARO	130/19	20/05/2019	102,600.00	35,175.00	30/07/2019
EQUIPMENT	SUPPLY/INST. FIBRE PREPARATION FRAME - AIROLA	I116795	OFFICINA MECCANICA BULGARO	246/19	16/09/2019	17,100.00	4,987.50	16/01/2020
EQUIPMENT	SUPPLY/INST. FIBRE PREPARATION FRAME - AIROLA	I116795	OFFICINA MECCANICA BULGARO	326/18	21/09/2018	51,300.00	14,962.50	11/12/2018
MATERIALS	Huntsman Araldite LY3508BD	I117138	IMPRESA FORNITURE INDUSTRIALI SRL	1194	31/12/2018	5,068.38	883.50	20/06/2019
MATERIALS	DOUBLE-SIDED ADHESIVE TAPE ROLLS 9191 MM 50X25MT	I200213	VARTEC	2/171	22/02/2019	1,570.73	541.44	05/08/2019
MATERIALS	HEXION Epikote 828LVEL	I200338	BRENNTAG SPA	27188	29/03/2019	2,383.50	1,912.50	06/08/2019
MATERIALS	Huntsmann Araldite GT 7071	I200349	IMPRESA FORNITURE INDUSTRIALI SRL	513/06	08/04/2019	892.50	892.50	16/09/2019
MATERIALS	AlzChem AG DYHARD UR500	I200341	IMPRESA FORNITURE INDUSTRIALI SRL	630/06	30/04/2019	6,114.00	800.00	16/09/2019
MATERIALS	Carbon fabric spread tow T700sc-1200-50C BB 4kg	C117632	TORAY CARBON FIBERS EUROPE	FC19001141	28/03/2019	32,000.00	32,000.00	21/06/2019
MATERIALS	HEXION Epikote 828LVEL	C117717	BRENNTAG SPA	47168	31/05/2019	1,912.50	1,912.50	06/12/2019
MATERIALS	Huntsmann Araldite GT 7071	C117774	IMPRESA FORNITURE INDUSTRIALI SRL	822/06	31/05/2019	6,105.76	595.00	16/09/2019
MATERIALS	Carbon fibre fabric CC384 CIT	C11716	COMPOSITE MATERIALS ITALY SRL	1999001306	30/05/2019	19,625.00	19,625.00	16/09/2019
MATERIALS	Matting (glass) GW 123(122)-360 L5	C117718	PD FIBRE GLASS	924405	05/06/2019	2,020.32	1,790.32	06/11/2019
MATERIALS	Bilateral siliconised paper SC120 ISD 23	I200519	GASCOGNE FLEXIBLE	19060251	20/06/2019	22,374.50	22,374.50	07/10/2019
MATERIALS	Polythene GA OSLO EPA	I200563	PROMOCART SRL	308/001	30/09/2019	5,723.00	5,723.00	21/01/2020
MATERIALS	Various materials	I200728	OFFICINA MECCANICA BULGARO	229/19	27/08/2019	3,305.00	3,305.00	16/01/2020

MATERIALS	IMPR. MACH.: POL. TOWING SYST.	I200518	COMEC INNOVATIVE SRL	FV19-0165	23/07/2019	48,000.00	48,000.00	01/10/2019
MATERIALS	IMPR. MACH. - NEURAL NETWORK AND EL. FRAMEWORK	I200517	COMEC INNOVATIVE SRL	FV19-0164	23/07/2019	31,500.00	31,500.00	01/10/2019
MATERIALS	IMPR. MACH.: CALANDER UNITS	I200562	COMEC INNOVATIVE SRL	FV19-0166	23/07/2019	27,000.00	27,000.00	01/10/2019
MATERIALS	IMPR. MACH.: DI 1 LAM S-WRAP SYST.	I200579	COMEC INNOVATIVE SRL	FV19-0167	23/07/2019	66,000.00	66,000.00	01/10/2019
MATERIALS	Impr. Mach. Airola - vis. and contr. syst.	I200654	COMEC INNOVATIVE SRL	FV19-0168	23/07/2019	13,500.00	13,500.00	01/10/2019
MATERIALS	Impr. mach. Airola - carr., sheets and avv.	I200655	COMEC INNOVATIVE SRL	FV19-0169	24/07/2019	61,500.00	61,500.00	01/10/2019
MATERIALS	Impr. mach. Airola - tagle. and avv.	I200660	COMEC INNOVATIVE SRL	FV19-0174	24/07/2019	30,000.00	30,000.00	01/10/2019
MATERIALS	Impr. mach. Airola - secr. sit. and spread	I200656	COMEC INNOVATIVE SRL	FV19-0170	24/07/2019	19,950.00	19,950.00	01/10/2019
MATERIALS	Impr. mach. Airola - Svers. res. syst.	I200657	COMEC INNOVATIVE SRL	FV19-0171	24/07/2019	21,000.00	21,000.00	01/10/2019
MATERIALS	Impr. mach. Airola - ris./cool. syst.	I200658	COMEC INNOVATIVE SRL	FV19-0172	24/07/2019	12,000.00	12,000.00	01/10/2019
MATERIALS	Impr. mach. Airola - fabric unwinder	I200659	COMEC INNOVATIVE SRL	FV19-0173	24/07/2019	18,000.00	18,000.00	01/10/2019
MATERIALS	IMPR. MACH. - GRAMMAGE SYST.	I200322	COMEC INNOVATIVE SRL	FV19-0163	23/07/2019	24,450.00	24,450.00	01/10/2019
MATERIALS	IMPR. MACH. - GRAMMAGE SYST.	I200322	COMEC INNOVATIVE SRL	FV19-0038	28/03/2019	80,550.00	80,550.00	07/06/2019
MATERIALS	IMPR. MACH. IMPREGNATION SYSTEM	I200410	COMEC INNOVATIVE SRL	FV19-0039	28/03/2019	66,000.00	66,000.00	07/06/2019
MATERIALS	IMPR. MACH. - ROLLERS	I200322	COMEC INNOVATIVE SRL	FV19-0178	31/07/2019	49,050.00	34,500.00	01/10/2019
MATERIALS	IMPR. MACH. - CREEL	I200322	COMEC INNOVATIVE SRL	FV19-0178	31/07/2019	49,050.00	14,550.00	01/10/2019

In compliance with the provisions of Ministry of Economic Development Communication No. 185001 of July 1, 2020 regarding the fulfilment of electronic invoice stamping obligations, below is the list of invoices relating to the Innovation Agreement entitled SPTF no. F/130008/00/X38 CUP B81B20000030005 Ministerial Decree no. 318 of January 24, 2020:

TYPE OF EXPENDITURE	DESCRIPTION	ORDER	SUPPLIER	INVOICE	INVOICE DATE	INVOICE AMOUNT (NET OF VAT)	COST CHARGED TO THE PROJECT	PAYMENT DATE
CONSULTANCY	CREATION AND TESTING OF C-C SAMPLES	I201077	DASS SCARL	2/001	14.10.2019	50,000.00	50,000.00	13.12.2019
CONSULTANCY	SPTF-LRE - Exec. planning SAP system	I201033S	NOVEKA S.R.L.	43	27.11.2019	50,000.00	50,000.00	14.02.2020
CONSULTANCY	MS 1 REVISION AND CONCLUSION OF PREL PROJ	I200345	NOVEKA S.R.L.	17	30.04.2019	50,000.00	50,000.00	20.06.2019
CONSULTANCY	MS 2 PUBLICATION OF DEFINITIVE PLAN	I200345	NOVEKA S.R.L.	29	29.07.2019	184,000.00	184,000.00	07.10.2019
CONSULTANCY	MS 2 PUBLICATION OF DEFINITIVE PLAN	I200345	NOVEKA S.R.L.	36	26.09.2019	46,000.00	46,000.00	05.11.2019

10. SUBSEQUENT EVENTS

Business

Vega return to flight

Vega successfully resumed flight operations with the VV16 mission on September 3, 2020.

The VV16 flight was the first successful mission for the SSMS (Small Spacecraft Mission Service) load adapter, which made it possible to release 53 micro- and nano-satellites into sun-synchronous orbit. In particular, the VV16 mission was perfectly successful in placing in orbit seven micro-satellites with weights of 15 to 150 kg, along with 46 smaller CubeSats in a single flight, due to the innovative SSMS (Small Spacecraft Mission Service) load adapter. The satellites have various applications, including Earth observation, telecommunications, science, technology and education.

The successful resumption of Vega flight operations with a mission that made it possible, for the first time in Europe, to place 53 satellites in orbit with a single flight, represents fundamental confirmation of the reliability and leading-edge nature of the European carrier designed, developed and built by Avio.

Despite the postponements in March due to the COVID-19 epidemic and in June caused by the exceptional adverse weather conditions, the tenacity and professionalism of all Avio's staff in teams with all the partners allowed for a successful return to flight.

Other significant events

Completion of the share buy-back programme

On July 28, 2020 the Board of Directors of Avio S.p.A. resolved to complete the share buy-back programme, in accordance with the resolution passed by the Shareholders' Meeting on April 29, 2019, entrusting the execution of the programme to an independent intermediary. The programme was approved by the Shareholders' Meeting in April 2019 for a maximum total amount of approx. Euro 9 million, to be completed within a maximum period of 18 months (April 2019 – October 2020). The programme was implemented by the Board of Directors on August 2, 2019 through purchases carried out by an authorised intermediary acting in a fully independent manner.

On December 31, 2019, following the purchases made, Avio S.p.A. held 214,500 treasury shares with a total value of approx. Euro 2.7 million, representing 0.81% of the number of shares comprising the share capital.

On June 30, 2020, following the purchases made, Avio S.p.A. held 315,300 treasury shares with a total value of approx. Euro 4.1 million, representing 1.196% of the number of shares comprising the share capital.

At the approval date of these half-year financial statements, following the purchases made, Avio S.p.A. holds 452,394 treasury shares with a total value of approx. Euro 6.1 million, representing 1.72% of the number of shares comprising the share capital.

* * *

September 14, 2020

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



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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, 2020 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, 2020 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 14, 2020

This report has been translated into the English language solely for the convenience of international readers.

Avio S.p.A. (società per azioni) - Sede sociale: Roma, Via della Camilluccia, 589/A - Capitale Sociale: Euro 10.728.220.000,00

Avio S.p.A. (società per azioni) - Sede sociale: Roma, Via della Camilluccia, 589/A - Capitale Sociale: Euro 10.728.220.000,00

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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, 2020.
2. Verification of the adequacy and effective application of the administrative and accounting procedures for the preparation of the condensed consolidated half-year financial statements at June 30, 2020 was undertaken referring to the criteria established in the internationally accepted "Internal Controls – Integrated Framework" model.
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 14, 2020

Avio S.p.A.

Giulio Ranzo
Chief Executive Officer
(Signed)

Alessandro Agosti
Executive Officer for Financial Reporting
(Signed)