**Our purpose**
Contribute to the world’s progress and safety by delivering meaningful and innovative technological solutions.

**Our mission**
To be the international Aerospace, Defence and Security company that best enables its customers’ success, by thinking creatively and working with passion.
BUSINESS SECTORS
DIVISIONS, JOINT VENTURES
AND SUBSIDIARIES

Helicopters
- Helicopters Division
- Kopter (100%)

Defence Electronics & Security
- Electronics Division
- Cyber Security Division
- Leonardo DRS (100%)
- MBDA* (25%)
- Vitrociset (100%)
- Elettronica (31.33%)

Aeronautics
- Aircraft Division
- Aerostructures Division
- ATR* (50%)

Space
- Telespazio* (67%)
- Thales Alenia Space* (33%)
- Avio (29.63%)

* Joint ventures
% Leonardo’s share
ADVANCED SOLUTIONS, GLOBAL REACH

We are ranked among the world’s top ten players in Aerospace, Defence and Security, a global solutions provider and a trusted long-term partner of choice for governments, institutions and private customers, delivering cutting-edge and dual-use technologies.

We have solid industrial capabilities, nurture an outstanding human capital and pay constant attention to innovation. On these pillars, we plan our future and create value for all our stakeholders, pursuing a path of long-term sustainable growth.

Headquartered in Italy, we operate on a global scale, through a well-rooted industrial presence in four domestic markets, an international commercial network and strategic collaboration agreements and joint ventures.
Today, we operate across the globe, with 4 domestic markets – Italy, the United Kingdom, Poland and the United States, as well as an industrial and commercial presence in about 40 countries worldwide.

**GLOBAL HIGHLIGHTS**

- 150 Countries use products, services and solutions made in Leonardo
- 9,000 global suppliers for a total of € 9 billion value of purchases in goods and services
- 84% of revenues come from international markets

We establish strategic partnerships in the countries of greater commercial interest, according to a sound development model, based on industrialisation and investment programmes. We share our high-tech know how and industrial expertise with our partners, in order to contribute to a sustainable development of local industry, creating highly qualified jobs and disseminating a widespread culture of innovation.
YOUR PARTNER IN DELIVERING CAPABILITIES. ANYTIME, ANYWHERE

Being competitive in global markets requires technological and digital excellence, an international approach and customer intimacy throughout the lifecycle of products and relationships. We face these challenges with a qualified and reliable presence wherever we operate, putting our customers’ needs at the centre of our thoughts and daily actions.

HIGHLIGHTS

The International Flight Training School

In Galatina (Italy), it is born from the meeting of the Italian Air Force’s world-renowned in-flight training excellence and the Leonardo’s leadership in delivering proven integrated training solutions. The School is set to become an international reference for pilot training, starting with Phase IV (Advanced/Lead-In Fighter Training).

Leonardo’s new advanced training centre

For cyber and electronics activities in Lincoln (U.K.) has more than tripled our current capacity, enabling us to effectively respond to the growing market demand.

Training Academies

At Sesto Calende (Italy), Yeovil (U.K.), Philadelphia (U.S.) and Kuala Lumpur (Malaysia), as well as state-of-the-art training centres worldwide, underpin our helicopters’ training capabilities.

Leonardo ranked #1

By the 2020 Professional Pilot Helicopter Product Support Survey for the second time in twenty-four years: an important achievement for Leonardo and for our Customer Support Team.

The new helicopter maintenance centre

In Norway - opened by Kongsberg Defence & Aerospace as part of a thirty-year collaboration with Leonardo - improves the availability of maintenance, repair and overhaul (MRO) services of the transmission systems of AW101 and NH90 helicopters operational in Scandinavia and other geographical areas.
We are a recognised leading International Support, Service & Training Provider for our products and those of our partners, by building a reputation for delivering an innovative, cost-effective full spectrum of support, services, training and through-life solutions for our customers worldwide.

Pilot training
We are a world-leading provider of civil and military professional training services, for pilots, ground crews, operators and maintainers. We enhance the customers experience ensuring the most effective use of the platforms and systems, exploiting Live, Virtual, Constructive environments and distributed simulation.

Full services
We provide a wide range of performance-based and pay-per-use/turnkey type services, to support civil and military platforms and missions in all domains. Our Asset Performance Management (APM) and the Full Service offer are developed from the customer’s mission requirements and can be fulfilled utilising company’s own products, systems, equipment and skills.

Customer support
Leonardo collaborates with customers from the initial development phases of the programmes, defining the specifications and requirements, through to the final validation and post-sales assistance, to optimise development times and costs.
Technological innovation is one of the cornerstones of our Strategic Plan. To secure our long-term success, our products need to be innovative, fit for the future and tailored to market demands.

Collaborative innovation

For Leonardo, innovation comes in many forms. It is not purely based on the work of individuals, but also depends on the sharing of ideas and knowledge among many players, both inside and outside the company. We work with universities, institutes and research centres, customers, suppliers and start-ups, to develop new technologies and products. Together with our internal expertise, these partnerships aim to develop and improve our technology and product portfolio for the future, as well as enhancing basic research.

Our technologies

We are working on innovation across a huge array of disciplines every day, to build on our technological heritage and strengthen our approach for the future. We invest mainly in technologies identified as strategic and with dual-use applications, that allow the Group to foresee market demands, satisfy customer expectations and increase its industrial efficiency. We are focusing mainly on microelectronics for advanced radar sensors, E/O and I/R technologies for surveillance and countermeasures, unmanned surveillance and environmental monitoring activities, advanced and innovative materials, software, cyber and systems competencies to design products and come up with effective solutions.
Innovative Programmes

To gain the maximum benefit from our innovation programmes we participate to the most advanced international initiatives in the Aerospace and Defence sector.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>European MALE RPAS</td>
<td>To answer future UAS requirements</td>
</tr>
<tr>
<td>OCEAN2020</td>
<td>To provide enhanced situational awareness in a naval environment</td>
</tr>
<tr>
<td>Team Tempest</td>
<td>To provide technologies and expertise that will develop the Royal Air Force’s Next Generation Combat Air System</td>
</tr>
<tr>
<td>Clean Sky 2</td>
<td>To develop innovative technologies for a new Green Regional Aircraft and for a Next Generation Civil TiltRotor</td>
</tr>
</tbody>
</table>

Our Masterplan 2030

Create a network of Leonardo Labs to explore innovative enabling technologies

Become a 100% digitised company in all key processes

Be a pole of attraction for young international talents

People as Innovators

Through the Leonardo Innovation Award, we offer colleagues worldwide, as well as graduates and Ph. D. students, the opportunity to present new ideas and contribute to the development of future breakthrough technologies.

We work to bring the next generations closer to STEM disciplines, through a number of initiatives dedicated to all age student groups.

€ 1.5 billion

dedicated to Research & Development (11% of 2019 revenues)

4th

in the global Aerospace & Defence sector for Research & Development investments

(Source: The 2019 EU Industrial R&D Investment Scoreboard)

Over 9,000

employees engaged in Research & Development activities

About 10,600

engineers (mostly aeronautical, aerospace, electronics, mechanical, computer science and telecommunications)

About 90

universities and research centres with which Leonardo collaborates worldwide

19%

of the patent portfolio linked to the Innovation Award. 91% of these have since been applied in Leonardo’s systems, products and services

A 5%

compound annual growth rate (CAGR) of the patent portfolio in the last decade
ENABLING A SUSTAINABLE FUTURE

We feel a strong responsibility to grow together with the Countries in which we operate, with clear priorities to follow: identify technological development areas strategic for the future, invest in people and skills to oversee these areas, support our supply chain, promote eco-efficiency in products and processes, and rely upon a responsible business model.

This is sustainability for Leonardo, in a continuous balance between available resources and market challenges, aiming to be investment grade.

We give our contribution to the achievement of the SDGs for the United Nations 2030 Agenda, aiming to make positive impacts for our stakeholders and our planet, making Leonardo ready for the next global sustainability challenges.

Recognized Aerospace & Defence Industry leader in the Dow Jones Sustainability Indices, listed for the 10th consecutive year.

<table>
<thead>
<tr>
<th>Highlights and Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualified employment and growth of SMEs</strong></td>
</tr>
<tr>
<td>- 69% of our employees have STEM background</td>
</tr>
<tr>
<td>- 78% of our employees are proud to work at Leonardo</td>
</tr>
<tr>
<td>- €9 billion of purchases of goods and services, 81% of which related to domestic markets and the majority from SMEs</td>
</tr>
<tr>
<td><strong>Physical and cyber security for people, territories, urban communities and critical infrastructures</strong></td>
</tr>
<tr>
<td>- Over 5,000 networks and 70,000 users provided with cyber security services in 130 Countries</td>
</tr>
<tr>
<td>- Air traffic control systems at approximately 300 airports</td>
</tr>
<tr>
<td>- Over 70 M-346s delivered to four Air Forces and 84 C-27J to 14 Countries</td>
</tr>
<tr>
<td><strong>Monitoring and prevention of climate change and emergencies management</strong></td>
</tr>
<tr>
<td>- 90,000 tonnes of CO₂ avoided thanks to the use of virtual training in 2018-2019 period</td>
</tr>
<tr>
<td>- Over 1,000 helicopters used in rescue missions</td>
</tr>
<tr>
<td>- Over one million radar scenes captured by the COSMO-SkyMed constellation</td>
</tr>
<tr>
<td><strong>Competitiveness and economic, technological and social development</strong></td>
</tr>
<tr>
<td>- 110,000 jobs and €8.5 billion of added value created in Italy, 23,000 jobs and €1.5 billion of added value in the United Kingdom</td>
</tr>
<tr>
<td>- €4.5 billion of total R&amp;D expense for the 2017-2019 period</td>
</tr>
<tr>
<td>- Responsible for 18% of all high-tech Italian manufacturing exports in 2019</td>
</tr>
<tr>
<td><strong>Diffusion of scientific citizenship and promotion of STEM skills</strong></td>
</tr>
<tr>
<td>- 5,000 under 30 new hires and 2,500 internships, apprenticeships and training initiatives in the 2017-2019 period</td>
</tr>
<tr>
<td>- 22 Italian and 5 international universities participated in the 2019 Innovation Award</td>
</tr>
<tr>
<td>- Thousands of children and students involved in STEM events, educational labs and contests</td>
</tr>
</tbody>
</table>
LEADING TECHNOLOGIES IN EVERY DOMAIN

Air, land, sea, space and cyberspace: wherever defence and security are needed, our customers find in Leonardo effective solutions for their requirements, through a complete and integrated offer based on state-of-the-art technologies with dual-use applications, as well as on innovative support and training services.

» AIR PLATFORMS & SYSTEMS
» UNMANNED SYSTEMS
» LAND SYSTEMS
» NAVAL SYSTEMS
» SPACE SYSTEMS
» SECURITY & CYBER SOLUTIONS
With over 100 years of experience in the aeronautical sector, Leonardo is committed to relentless research and development activities to provide high-performance aircraft and helicopters suitable for every type of mission, innovative support services in line with evolving customers’ needs, as well as advanced solutions for training and simulation.

We design and produce an extensive range of advanced helicopters covering all the main categories, from the 1.8 tonne single-engine to the 16 tonne three-engine. Most of our products are designed for dual-use and ensure a wide range of missions with outstanding performance and safety. We manage the entire helicopter development and production cycle, including avionics and weapon systems integration.

Our tactical airlifters are multi-mission platforms, combining operational flexibility with the robustness needed to accomplish military missions, thus carrying out an extensive range of specific tasks, both in civil protection and in battlefield support.

Our multi-mission aircraft, dedicated to surveillance, maritime patrol and anti-submarine warfare, are highly cost-effective, as they have been developed combining existing platforms for regional transport with dedicated avionic systems including mission management systems and specific sensors for maritime patrol missions.

We take part in major global military aircraft and helicopter programmes to develop new generation fighters, as well as helicopters for land and naval applications.

In civil aviation, we are part of world-class partnerships to design and produce regional aircraft and advanced aerostuctures for the best-in-class airliners in the world.

Our platforms are equipped with our state-of-the-art airborne systems including integrated mission systems, radars and sensors, electronic warfare systems, avionic systems, electro-optics and simulation systems. They also can carry an extensive range of advanced weapon systems, including missile systems, to ensure effective engagement of symmetric and asymmetric threats. We also equip non-proprietary platforms with the full suites of our sensors and systems.

We design, develop and produce a range of aircraft that covers the entire pilot training syllabus, which can be tailored to the requirements of pilots assigned to fly with any Air Force. Platforms are complemented by an integrated Ground Based Training System to offer customers worldwide a turnkey solution, delivering the highest quality standards.

Our tactical airlifters are multi-mission platforms, combining operational flexibility with the robustness needed to accomplish military missions, thus carrying out an extensive range of specific tasks, both in civil protection and in battlefield support.

Our multi-mission aircraft, dedicated to surveillance, maritime patrol and anti-submarine warfare, are highly cost-effective, as they have been developed combining existing platforms for regional transport with dedicated avionic systems including mission management systems and specific sensors for maritime patrol missions.

We take part in major global military aircraft and helicopter programmes to develop new generation fighters, as well as helicopters for land and naval applications.

In civil aviation, we are part of world-class partnerships to design and produce regional aircraft and advanced aerostuctures for the best-in-class airliners in the world.

Our platforms are equipped with our state-of-the-art airborne systems including integrated mission systems, radars and sensors, electronic warfare systems, avionic systems, electro-optics and simulation systems. They also can carry an extensive range of advanced weapon systems, including missile systems, to ensure effective engagement of symmetric and asymmetric threats. We also equip non-proprietary platforms with the full suites of our sensors and systems.

Pilot Training

Trainers that cover the whole training path: from basic-advanced (M-345) to advanced and Lead-In Fighter Training (M-346).

Platforms also available in fighter trainer version and multi-role light-fighter attack version (M-346FA).

An Integrated Ground Based Training System for military pilots and ground crew, in Live, Constructive and Virtual environments, complements the aerial offering.

Helicopters training academies and state of the art training centres to underpin our training capability, all featuring the latest synthetic training devices combined with a comprehensive programme of training courses for commercial and military aircrew, maintainers and technicians.

Services include civil type rating courses alongside basic training, refresher training and complete turnkey solutions.
Combat

Share of 36% by value in the Eurofighter Typhoon programme combining design, development, testing, industrial production and avionic engineering. For the U.S. Joint Strike Fighter (F-35) production of wings, centre fuselages and avionics, as well as aircraft assembly for the Italian Armed Forces and international customers. Industry partner alongside UK Ministry of Defence to develop the next generation Combat Air System (Tempest).

Multi-role

Special mission aircraft for maritime patrol and anti-submarine warfare (ATR 72MP, ATR 72ASW), as well as multi-mission aircraft for tactical transport (C-27J), also in variant with C3-ISR (Command, Control, Communication, Intelligence, Surveillance & Reconnaissance) and fire support capabilities (MC-27J).

Airborne systems

High performance integrated solutions installed on board Leonardo non-Leonardo platforms (fighters, trainers, multi-role and surveillance A/C, UAS, helicopters, medium and long range civil aircraft: among others, Typhoon, F35, AWACS, NATO AGS, V22, NH90, M-146, PXH4, A320, A400M, A350).

The ATOS surveillance system has been installed on a wide range of platforms, with over 45 units sold.

Airborne radar and sensors for Maritime & Land Surveillance, and Fire Control (from Mechanical Scan to AESA technology), EO/IR systems, laser pointers.

Electronic warfare & self-protection systems: sensor for threat detection and localisation, Digital Radio Frequency Memory (DFRM) countermeasures (BriteCloud), Directed Infra-Red Countermeasures - DIRCM (Mysis), Defensive Aid Suite (DAS) controllers.

Solutions for ISTAR missions to provide a real time, tactical scenario and the highest level of situational awareness and data exploitation/dissemination: on board manned (ATOS) and unmanned (SkyISTAR) platforms.


Civil Transport

Twin-engine turboprop aircraft (ATR 42 and ATR 72), within the ATR joint venture. Advanced material aerostructures for major civil aircraft programmes (Boeing 787, Airbus A321).

A complete range of commercial helicopters (AW119Kx, AW109 Trekker, AW139, AW189) to meet the most demanding requirements for Medical and Rescue Services (EMS and SAR), Security Services, Energy Services, Utility roles and Executive and Private Transport.

Development of the AW609, the first tiltrotor for civil and government applications, combining the benefits of a helicopter and a fixed wing aircraft.

The AW101 is the most advanced versatile and capable multi role helicopter available today for heavy multi-role and naval operations in the most demanding environments.

The PIRATE (Passive Inhaled Airborne Track Equipment) sensor, capable of operating in heavily cluttered scenarios, is on board the Eurofighter.
Unmanned Systems

We invest significant resources in developing Fixed and Rotary Wing Unmanned Systems (RUAV) to cover the widest range of civil and military applications.

Leveraging our experience based on the in-house development of different models of technological demonstrators, we have also played a key role in the nEUROn programme, the European technology demonstrator for an Unmanned Combat Aerial Vehicle (UCAV).

We are partner in the new European MALE (Medium Altitude Endurance) RPAS programme, together with major aeronautics players (Airbus and Dassault). The programme envisages the development of an unmanned aerial system able to perform long missions at medium altitudes and aims to promote the development of advanced technology and supporting expertise, maintaining fundamental industrial capabilities and skills within Europe.

In the air domain, our offer is complemented by aerial targets that provide the most realistic threat simulator. Offering multi-payload configurations for threat representative scenarios, our systems are used worldwide both for Test and Training activity.

In the naval and maritime domain, we also develop autonomous underwater vehicles that can operate both in remote control and in stand-alone mode and have important interoperability with other platforms and a flexible multi-role capability to fulfill a variety of mission objectives.

We develop end-to-end Unmanned Air Systems, already operational with multiple export customers, embracing platforms, sensors, mission systems and ground control stations, delivering a high degree of situational awareness. Our solutions are also offered through full lifecycle service contracts. UAS are equipped with our Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) solutions, based on integrated and agnostic architectures, thus capable of operating on any platform and with any on board equipment.

The future predicts a world of machines with growing autonomy, relying on increasingly sophisticated sensors designed to guarantee awareness of the surrounding environment, in support of cognitive and decision-making processes. In this perspective, Leonardo is committed to develop Unmanned Systems able to carry out a broad range of surveillance missions, with high interoperability with other platforms and a flexible multi-role capability to fulfill a variety of mission objectives.

For those Customers not looking for the purchase and management of the entire System, Leonardo can provide the Turnkey Service. Based on the requirements agreed with the Customers, the mission is planned and executed by Leonardo personnel. Risk and investment are then minimized for the Customer.

We are also partner in the European MALE RPAS programme, to meet the Armed Forces advanced requirements for ISTAR surveillance and defence missions.

Leonardo provides Unmanned Aerial Vehicle Traffic Management Systems (UTM) able to guarantee the security of unmanned aerial vehicles’ flights beyond line of sight. The systems integrate multiple technologies for safe handling of remotely controlled aircraft and support pre-flight planning, flight surveillance, emergency management and flight data recording.

RUAV

AWHERO is a state-of-the-art 200kg class Tactical RUAV, complying with civil/government, military and maritime requirements. It is controlled through a Ground Control Station (GCS) able to manage multiple missions during all stages of flight. The GCS enables mission planning/re-planning, mission management and control of sensor payloads such as Radar and Infrared/Electrooptical.

Aerial targets

Mirach is a Family of subsonic multi-role multi-threat target drones, designed to test and qualify a wide variety of defence systems.

Mirach 40 provides high-performance coupled with low operative costs, combining flexibility and mission reliability. Mirach 100/5 delivers certified reliability and maneuverability, together with unparalleled versatility. Mirach Systems can be set-up with tailored payloads configurations and delivered to Customers also as a Turnkey Service: Customers define the Aerial Target mission requirement, while Leonardo deploys and executes the full mission.

Micro UAV

CREX-B1 is an advanced electrically powered micro UAV system providing real-time intelligence, capable of autonomous flight, navigation, vertical landing or short track landing. The micro UAV system is specifically designed for Special Operational and Tactical Forces for “over the hill” and “around the corner” intelligence missions. CREX-B1 is a back packable system that can be ready to fly for a new mission in a few minutes.
In current worldwide ever-changing scenarios, where conventional threats combine with new asymmetric ones, Leonardo can provide all Armed Forces with secure communications, information superiority, situational awareness, agile command capability and full control of its own sensors, assets and weapons.

We provide and integrate sensors, platforms, weapons and complete C4I solutions, from strategic to tactical levels, into fully-fledged systems for Armies, Air Forces and Navies. Our solutions guarantee real-time sharing of tactical information between platforms and command posts and include advanced applications that increase automated support to military commanders at all operational levels. Our interoperable C4ISTAR systems maximise the value of all manned and unmanned sensors deployed on and above the battlefield.

We are market leader in Battlefield Digitisation programmes, providing all deployed land forces, from the single soldier to combat vehicles and to the entire Brigade/Division, with the equipment necessary for successful military operation performance in joint or multinational environments.

We own a complete portfolio of advanced and battle-proven products, including ground-based radars, fire control systems, guns, optronic systems, persistent surveillance networks, mission planning systems and interoperable, high data rate communication solutions.

We deliver highly effective turnkey and stand-alone solutions that meet even the most challenging Air Surveillance and Defence requirements. We provide effective protection against all air and missile threats, including ballistic missiles, for both homeland defence and expeditionary environments, leveraging a number of in-house produced high-tech sub-systems and components.

Our long-range radars, in fixed and deployable version, well proven and robust, have been integrated with the most modern command and control systems, providing all the early warning air surveillance and tracking functionalities necessary for national airspace control and for management of air operations.

Leonardo’s turnkey systems guarantee effective surveillance and defence of national borders and territory, coastal areas and waters. Our solutions enable net-centric operations of border guards, patrol units, Special Forces and of all Armed Forces involved in the protection of the homeland.

The offer is complemented by integrated logistic support solutions that include full training, also using realistic simulation of the operating environment, and in-service system support, so to ensure a long product lifecycle and to maximise the customer investment value.

**Air Surveillance & Defence**

Leonardo’s RAY 3D/EL and DL/M solid state phased array radars, fixed and deployable, are the solution of reference, worldwide, for Long Range Air Surveillance.

The KRONOS multi-mission AESA radars provide superior detection and tracking accuracy to counter all threats, including cruise missiles or UAVs, flying at low altitude, or tactical ballistic missiles.

Available in both fixed and mobile configurations and integrated with top class medium and short-range missiles, KRONOS radars support both surveillance and fire control at the same time, with each radar capable to drive multiple missiles against multiple targets.

Leonardo’s land products include radar integration systems, command & control systems, software defined radios, tactical & strategic communication networks, fire control systems, complete identification friend or foe (IFF) systems, precision approach radars, deployable ATC systems and weather radars.

**Coastal Surveillance & Border Control systems**

Leonardo’s complete solutions for defence and security of land and maritime borders integrate specific suites of high performance static, deployable or mobile radars and E/O sensors, UAVs and satellites with local, regional or national command and control centers, allowing persistent protection from any type of intrusion and prompt detection of illegal activities.
Naval Systems

We have over 60 years of leadership in the naval domain providing and integrating combat systems and sensors, for more than 100 naval vessels worldwide. This expertise has led us to develop solutions that meet all the requirements of any type of modern ship, of any class and displacement, from small patrol boats to minesweepers and aircraft carriers, enabling them to carry out any kind of mission, whether above water or underwater.

We offer Combat Management Systems that provide the most advanced capabilities for the acquisition, merging and management of data to achieve a total situation awareness for an effective evaluation of operational scenarios and management of available resources, thus ensuring fast and effective decision-making.

On board ships, we integrate a wide range of products and related expertise, including naval communications, navigation systems, radar sensors, fire control systems and electro-optics, as well as UAVs, different calibre guns, missiles, torpedoes, sonar and electronic warfare suites, in order to provide Combat System proven capability to comply with any possible operative scenario.

Surveillance and reconnaissance functions, always the front line of defence, are performed by multi-functional radar systems capable of simultaneously assuring medium-long range surveillance, volumetric search and missile guidance which, complemented by electro-optics, sonar and satellite imaging systems, integrate into an advanced underwater, surface and airborne threat detection and monitoring system. An extensive range of other proprietary radar systems offers advanced monitoring, early warning, navigation and precision docking functions.

A scalable, interoperable and completely secure communication structure forms the true backbone of the system, providing the information superiority needed to operate successfully in any scenario.

Reaction against detected threats leverages a full range of weapon systems, including small/medium calibre naval guns with guided ammunition, surface-to-air and anti-ship missile systems, torpedoes, targeting systems and anti-torpedo and anti-missile countermeasures, to provide any surface unit with a fully stratified defence capability.

Our light, medium and heavy weight helicopters can be used for an increasing variety of missions (transport, SAR, maritime patrol and anti-piracy operations, protection from underwater and surface threats), in the harshest maritime conditions.

Our fixed wing turboprop and jet aircraft can perform a number of missions in the maritime domain, such as maritime patrol, anti-submarine warfare and anti-surface warfare.

We provide ship propulsion with a hybrid system made of silent, efficient electric motors, for low speed and gas turbines or diesel systems for high-speed in various combinations and structural architectures.

Naval Dominance

Latest generation Combat Management System (ATHENA®) to integrate monitoring functions, scenario representation, navigation support, mission planning, data link and training on board.

KRONOS family of multi-functional radars based on AESA (Active Electronic Scanning Antenna) technology, also including the new fixed faces radars in X and C band, as well as the new Kronos Power Shield in L band.

Radar systems for surveillance (SPS732), fire control (NA30S), PAR (SPN720) and IFF (SIR-M).

Integrated Naval Combat Systems

KRONOS, a multi-functional AESA radar, is used on naval vessels of 400 gross tons and above for point defence, air and sea surveillance, littoral warfare, and missile and gunfire support.

Communication systems to meet all net-centric operational requirements (strategic communications, tactical networks, Software Defined Radios & terminals, satellite communications).

A global leadership in naval weapon systems: guns (76/62 Super Rapid, Marlin 40), 127/64 LW and also minor calibres), guided and unguided ammunition (Vulcano, DART), launchers, missiles (MUSTE, Aster), light and heavy weight torpedoes (MU90, Black Shark, Black Arrow, A244/S mod. 3), sonar systems and anti-torpedo advanced countermeasures for ships and submarines.

Naval Helicopters

Advanced and versatile helicopters from 5 to 16 tonne class, to fulfil ISR, maritime interdiction, ASW, ASuW, SAR, airborne surveillance & control, amphibious support, MEDevaC, troop transport missions (AW159, NH90 NFH, AW101). Fully equipped with integrated avionics, self-protection suites, mission systems, weapon systems (missiles, guns).

Our RUAS (AWHERO) and UAS (FALCO family) are also suitable for maritime applications.

We also provide advanced acoustic systems for Anti-Submarine Warfare (ASW) missions.

Power Generation & Propulsion

An extensive range of systems for power generation, conversion and distribution, as well as platform environmental systems.
Space Systems

Leonardo is a global player in Earth observation, remote sensing of atmospheric phenomena and ecosystems, communications and navigation, intelligence services, space exploration missions. Its complementary expertise includes the development of satellite systems, orbiting infrastructure and ground systems, satellite services and operations, thus covering the entire value chain of the space industry.

This legacy allowed Leonardo to establish the Space Alliance with Thales in 2007, creating the first operator in the European space industry, with a presence in the most important international space programmes and able to compete with the major global players in the space industry.

The Space Alliance created two joint ventures: Telespazio (67% Leonardo and 33% Thales), responsible for development and management of ground systems, satellite operations and services, earth observation services and Thales Alenia Space (67% Thales and 33% Leonardo) for satellites and orbiting structures manufacturing.

The complementary skills of the two companies enable the Space Alliance to fully meet any market requirement, providing solutions for all users’ needs.

In addition to the Space Alliance’s activities, Leonardo designs and produces a wide range of highly reliable solutions for earth observation, planetary exploration, navigation and telecommunication programmes, such as attitude sensors, RF equipment, solar panels, atomic clocks, robotic devices.

Thanks to its consolidated expertise in the space field, Leonardo is a key partner of European institutions on the Galileo system and Copernicus programme. Furthermore, through Telespazio and e-GEOS, it manages the COSMO-SkyMed constellation. Leonardo’s space presence also includes a minority shareholding in AVIO, leader in the space launcher sector and in spacecraft propulsion and space travel.

We are also involved in EGNOS, the first European satellite navigation system for improving GPS accuracy. We are also involved in EGNOS, the first European satellite navigation system for improving GPS accuracy.

The European programme Copernicus, through the new Sentinel satellites, will improve the monitoring of the environment, understand the effects of climate change and contribute to civil security.

Through Telespazio’s and Thales Alenia Space’s activities, jointly with our in-house activity in Space Systems, we cover the following programmes:

**Communication**

SICRAL: design and production of the ground segment and development of the entire system’s architecture. ATHENA-FIDUS: development and putting into orbit of satellites, control centre, launch and in-orbit services and supply of the AA-STR star tracker. In the marine domain, we also provide global communication - data & voice - services in Ku, Ka, L, C and X band.

**Earth Observation**

COSMO-SkyMed: prime contractor for the satellites and for the entire ground segment. e-GEOS (an ASI/Telespazio company) manages geo-information services through the acquisition, processing and analysis of satellite data. COPERNICUS: design and integration of the constellations.

**Navigation**

Galileo: architecture of the whole system and management of the satellite constellation operations; supply of the Passive Hydrogen Maser (atomic clock). We are also involved in EGNOS, the first European satellite navigation system for improving GPS accuracy.

**Science & Exploration**

Rosetta: drill and navigation camera for Philae lander; assembly, integration and test activities of the satellite; Control System and Mission Planning System; supplying of the A-STR, autonomous star tracker.

ExoMars (2016 – 2022): prime contractor for planning on both missions; development of the Ground Communication Infrastructure and the operational simulator; supply of the A-STR star tracker and the photovoltaic assemblies.

**Space & Ground Infrastructure**

Building of more than half of the habitable volume of the International Space Station, ATV material transport vehicle for ESA and PCM for the NASA’s Cygnus resupply vessel. Integrated Satellite Systems and IOC (In-Orbit Control) services for launch, early orbit phase and routine operations.

For the second ExoMars mission, scheduled in 2022, Leonardo will also contribute a complete drill system to the rover.

ATHENA-FIDUS is a telecommunication system that can support and complement the terrestrial networks in case of unavailability or damage.

Leonardo’s long and consolidated tradition in the space sector, which began in the 1960s.

With e-GEOS we provide geospatial applications and services for environmental protection monitoring, natural disaster mapping, oil spill and ship detection for maritime surveillance and thematic mapping for agriculture and forestry.
Leonardo is a world leader in the delivery of tailored, highly resilient solutions and security services. Leveraging synergies between information technology, communications, physical and cyber security, Leonardo provides customers with a wide knowhow, systems, processes, services and advanced technologies for territory security and control, critical infrastructures protection and major event security.

By integrating technologies for surveillance and protection, information management, automation, mobility and communications, our solutions provide agencies with the operation management support required to prevent, detect, react to and recover from threats and emergency situations.

Our offer also includes integrated networks and secure communications supporting reliable and efficient operations and information management.

Leonardo is able to drive the digital transformation of military and civil organisations through the design and development of flexible, scalable and highly reliable critical information systems.

Leveraging its proprietary assets and the extensive know-how in protecting countries and critical national infrastructures, Leonardo develops innovative solutions employing artificial intelligence and analytics that significantly enhance the capability to anticipate threats, manage risks and guarantee effective management of attacks both in the physical and cyber domains.

Leonardo supports fast, efficient and safe air and maritime traffic, ensuring the security of people and goods. With a significant track record in providing advanced systems and control centres for the management and control of air and maritime traffic, Leonardo is a global player in this sector.

Over 150 countries worldwide are currently using radar systems and control centres developed and provided by our Company to manage air traffic.

Leonardo’s technology and experience in information management and control systems are also at the basis of border protection solutions, relying on existing platforms for homeland security, intelligence and investigation activities.

Leonardo also develops and supplies worldwide highly accurate weather radars with field-proven reliability. The METEOR systems are used for the precise detection and tracking of thunderstorms, wind shear and other severe weather phenomena.

Leonardo is among the leaders in providing baggage-handling solutions for airports employing proprietary, cutting-edge cross-belt technology that has been proven in projects for leading operators worldwide.

Cybersecurity
Cybersecurity solutions and services for cyber-attacks proactive prevention, management and remediation based on a portfolio of cutting-edge technologies. Our next generation intelligence-driven SOC (Security Operation Centre) integrates cyber threat prevention, vulnerability management and security incident response.

We provide threat intelligence solutions to predict and prevent cyber threats against Governments, CNI, enterprises and investigation support systems supporting Blue Lights agencies activities.

Our situational awareness platforms are designed to efficiently react to cyber-attacks, through decision support and in-depth analysis of occurred incidents.

We also offer cyber range & training solutions simulating complex cyber-warfare scenarios, to train security operators both in the civil and in the military sector.

Infrastructure Protection & Homeland Security
We design and produce solutions integrating equipment, software and systems to guarantee the security of people and infrastructures. SC2 is Leonardo’s support framework to manage safety & security in different contexts: major events, airports and ports, urban security and territory control. It supports daily operations as well as emergency interventions. The framework integrates safely different sensors and heterogeneous systems, including secure communications, to provide a complete situation awareness, a prompt aid to security processes and a useful decision support.

Air & Maritime Traffic Management
Our Air Traffic Management (ATM) systems improve safety and efficiency at each phase of flight, from departure to destination airport.

Our portfolio includes en-route, approach and A.SMGCS systems, primary and secondary surveillance radars, ADS-B stations, aid navigation systems, weather radar and landing systems and a wide range of airport information systems and services.

Leonardo provides the Vessel Traffic Management System (VTMS), for vessel traffic control, marine environment monitoring and support for search and rescue operations at sea.

Automation
Baggage handling solutions for airports employing cutting-edge cross belt technology. Our solutions also find application in parcel sorting and material handling sector, sustaining market growth due to the e-commerce boom.

We offer critical communication systems based on the TETRA and DMR standards, as used by more than 50 countries, and integrated software platforms that form the core of control rooms used by security forces.