



# 2023 INTEGRATED REPORT



ALLEN



# Building tomorrow's world today

**At ALTEN, we see our specialists  
as architects - today's designers  
of tomorrow's world.**

As a world leader in Engineering and IT Services, we support businesses in their technological and sustainable transformation. Our commitment to them is to make a positive impact over time and on people, to push back the frontiers of innovation and to always stay one step ahead. We are guided by one ambition: designing the future in the present.

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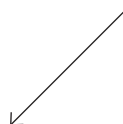
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# 01

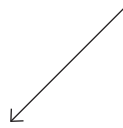
## Artificial Intelligence



The impact of Research and Development (R&D) coupled with Artificial Intelligence (AI) and Machine Learning on various sectors is monumental, radically transforming industries. From pharmaceuticals to automotive design, these technologies reduce time-to-market and deliver more accurate results.

A close-up photograph of a white industrial robotic arm with blue cables, set against a blurred background of a factory or laboratory.

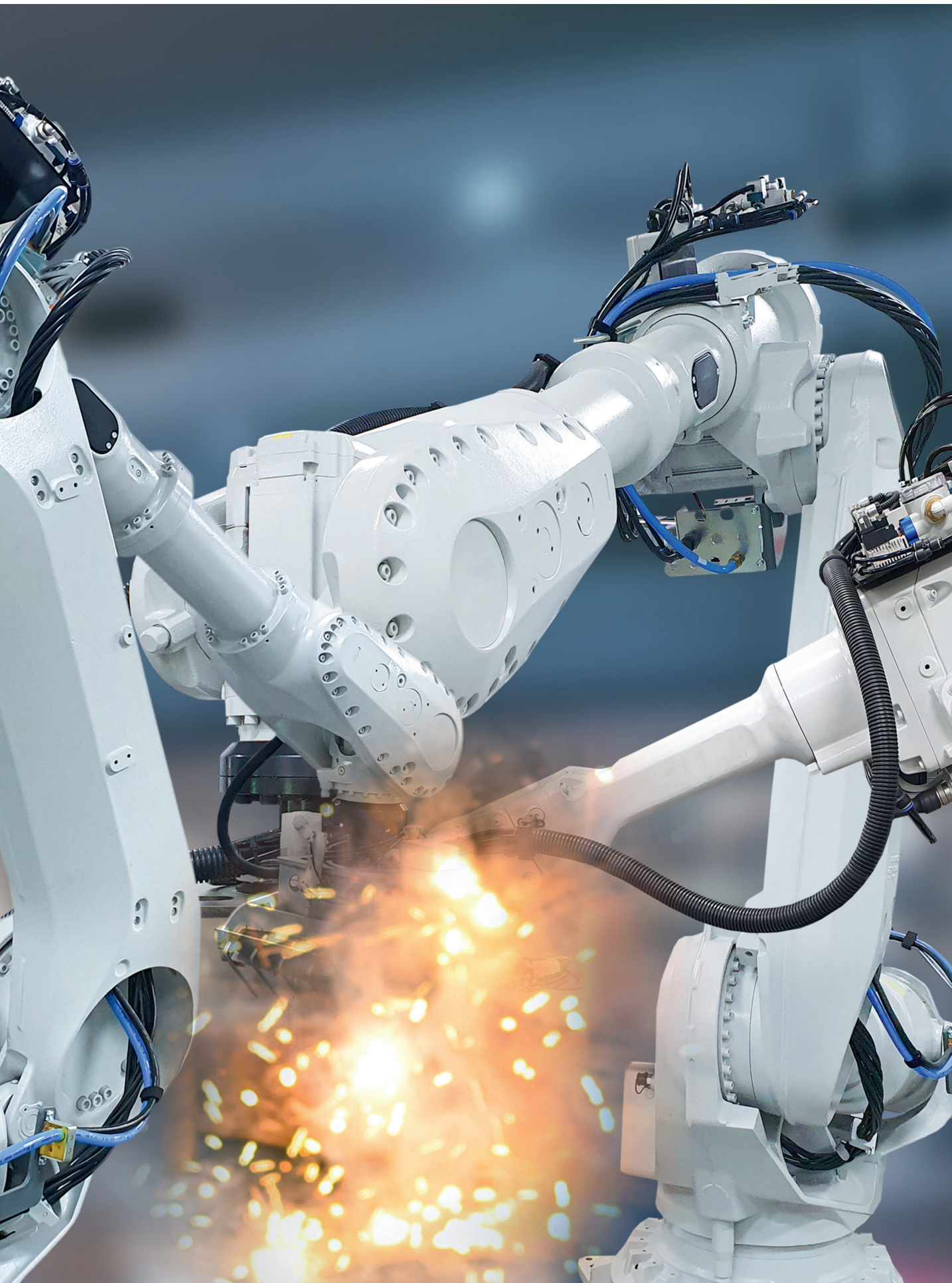
## Automation and Robotics



Automating tasks frees up human resources to concentrate on more complex problems. In laboratories and manufacturing processes, robotics improve precision while enhancing safety and performance by taking care of dangerous or repetitive tasks.

# 02



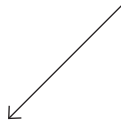






# 03

## Sustainable and green technologies



The transition to a safer, more sustainable and resilient world is driving R&D to focus on green solutions. From energy to eco-design and Green IT, innovation is now at the heart of the technological challenges facing businesses.

# Editorial

by **Simon AZOULAY**,  
Chairman and Chief Executive Officer



“

**The success of our 50-70 strategic plan is now based on a central challenge: ALTEN must remain the best choice for both Engineers and clients.”**



Against a difficult backdrop, the ALTEN Group successfully overcame the many challenges it faced, both in terms of a sharp downturn in the international economy and changes in its business model and the needs of its clients.

Today, we are the world's only independent leader in Engineering and IT Services. We owe this status to the Group's strong growth in recent years: we have gone from revenue of €1.75 billion in 2015 to more than €4 billion this past year. Despite lower results than last year, our Group posted satisfactory growth of 7.6% in 2023.

ALTEN is now a global Group. Over the last seven years, the development of our international business has continued to grow and now represents 70% of our revenue. Today, we are present in more than 30 countries around the world and have more than 57,000 employees, 88% of whom are Engineers. In 2024, we will pursue our objective of strengthening ALTEN's critical mass in certain geographical areas, such as Eastern Europe, Asia and North America. One way to achieve this is to increase the number of our targeted external acquisitions. With five acquisitions last year, we hope to significantly increase this number in the coming years. Our ambition is clear, and is set out in our 50-70 strategic plan: to exceed €5 billion in revenue and more than 70,000 Engineers by the end of 2026.

Over and above these figures, the Group has taken a structural turn by consolidating its international organisation to meet our clients' global and technological challenges.

Among these major changes, we have deployed the French Technical Division across the whole of Europe. We have strengthened our Business Development Department to meet the new expectations of our clients, who expect comprehensive, coordinated and consistent solutions. Finally, we have developed our management structure to deploy the ALTEN model internationally. We cannot rely solely on external recruitment; we must also focus on developing our talent internally, by encouraging international mobility in all functions.

The success of our 50-70 strategic plan is now based on a central challenge: ALTEN must remain the best choice for both Engineers and clients, provided we know how to satisfy them. The diversification of our business sectors is an asset in achieving this. Likewise, our financial position enables us to finance our growth and support the major technological transformations of the coming years.

For 35 years, our Group has been proud to work with its clients to build a more sustainable future that takes account of social, societal and environmental issues. I warmly thank all of our teams for their unwavering commitment. ●

**Simon AZOULAY,**  
Chairman and Chief Executive Officer

**Key Events** In 2023, we continued to strengthen ALTEN's reputation in order to consolidate our position as a strategic partner in our clients' technological challenges.

**Creating impact for our clients** 1

ALTEN is committed on a daily basis to supporting its clients' development strategy in the fields of innovation, R&D and technological IT systems. Two of the Group's major clients, JAGUAR LAND ROVER (JLR) in the UK and BOSCH in Germany, presented us with the "Best Supplier Award" in recognition of ALTEN's innovation and commitment to service quality.



**The place of women in industry is a real issue for society."**

**Simon AZOULAY** - Chairman and Chief Executive Officer

**Strengthening our commitments to increasing the number of women in scientific professions**

The place of women in industry is a real issue for society. Historically committed to increasing the number of women in Engineering professions and the professional integration of young people, ALTEN is committed to raising awareness and convincing women to join technical and scientific careers. For the seventh edition, a major awareness-raising campaign was rolled out, bringing together the testimonies of 12 women from 12 different countries at the heart of the technological transformation.

**Launch of the new "Building Tomorrow's World Today" brand campaign**

The result of several months of collaborative work with ALTEN managers and employees, this campaign reflects as faithfully as possible everyone's perception of the company. It aims to reinforce our vision and the role of the men and women who make up the Group as builders, creators and entrepreneurs. Its aim was to rally every employee around what unites us: high standards, passion, agility and ambition.

**50,000 Engineers today, 70,000 tomorrow**

In 2019, ALTEN announced the launch of its 50-70 strategic plan. In 2023, an important milestone was reached: for the first time, ALTEN surpassed 50,000 Engineers worldwide. The next milestone is 70,000 Engineers in 2026.



## Decarbonising the future of aviation 2

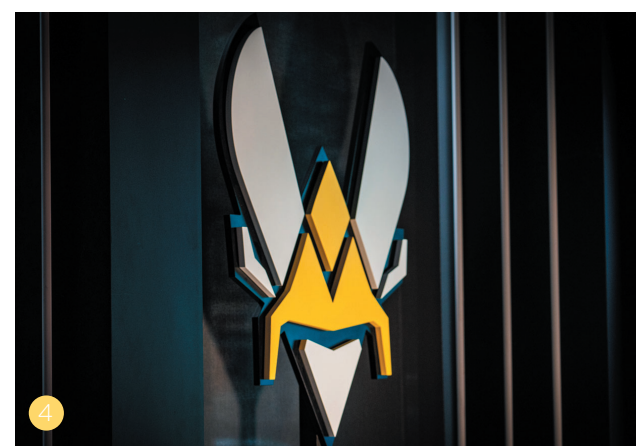
Decarbonising aviation is a major challenge, both in the eyes of the public and for the aeronautics industry. At the International Aeronautics and Space Show held at Le Bourget in France, ALTEN reaffirmed its commitment to the development of a new generation of Engineers in the aeronautics industry. The aim is twofold: firstly, to demonstrate that this industry is dynamic and actively contributing to creating a positive impact on the environment; secondly, to recognise that integrating new expertise and knowledge is essential to achieving the necessary transformations in future aircraft fleets.

## Acting for a low-carbon future

A letter of intent was signed with THALES, a world leader in defence and security, aerospace and digital identity and security technologies, during the Paris Air Show at Le Bourget in France. The Group confirmed its willingness to work together to combat climate change through its respective value chains.

## Industry 4.0: agile and sustainable 3

At the *Global Industrie* trade fair in Lyon, France, ALTEN, BOUYGUES TELECOM ENTREPRISES and SIEMENS FRANCE signed a three-year partnership for the development of Industrial 5G, pooling their respective expertise and their in-depth understanding of industrial and network issues. The main aim of the collaboration between these three organisations, which is aimed at CAC 40 companies as well as French SMEs, will be to deploy Industry 4.0 solutions through dedicated, tailored support for clients in terms of audits, transformation levers and implementation.



## Nuclear: a new horizon

As a partner to the big names in the nuclear industry, ALTEN occupies a privileged position as an observer of market dynamics and provider of cutting-edge technical expertise for the design, maintenance and safety of nuclear facilities. At the World Nuclear Exhibition in Villepinte, France, we reaffirmed our Group's positioning: with over 1,000 consultants, we support key players in the sector on all major projects across the nuclear value chain.

## Supporting France's biggest student Esport competition 4

Since 2019, ALTEN's commitment to Esport has continued to grow. For the second year running, ALTEN and Team Vitality have organised the biggest Esport tournament for students on Super Smash Bros. Ultimate. Nearly 500 students took part in the qualifying rounds across France and more than 15,000 people followed the final on Twitch.

**Key figures** Despite a slowdown in activity in 2023, ALTEN has demonstrated the resilience of its business model with satisfactory organic growth.

€4,068.8 m

in revenue

68.1%

of international revenue



57,000

Employees including

50,000

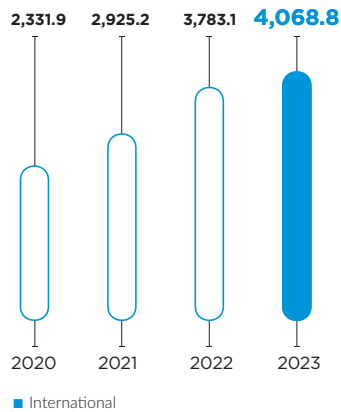
Engineers (88%)





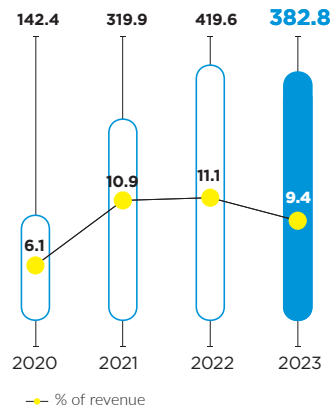
**REVENUE**

(In millions of euros)



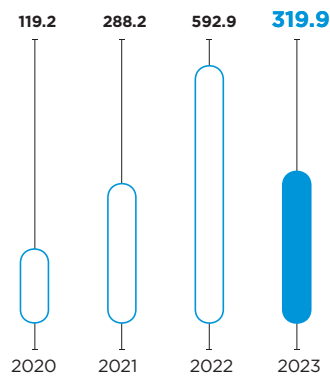
**OPERATING PROFIT ON ACTIVITY**

(In millions of euros)



**OPERATING PROFIT**

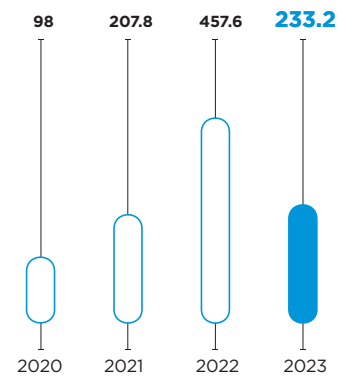
(in millions of euros)



**NET INCOME (ATTRIBUTABLE TO)**

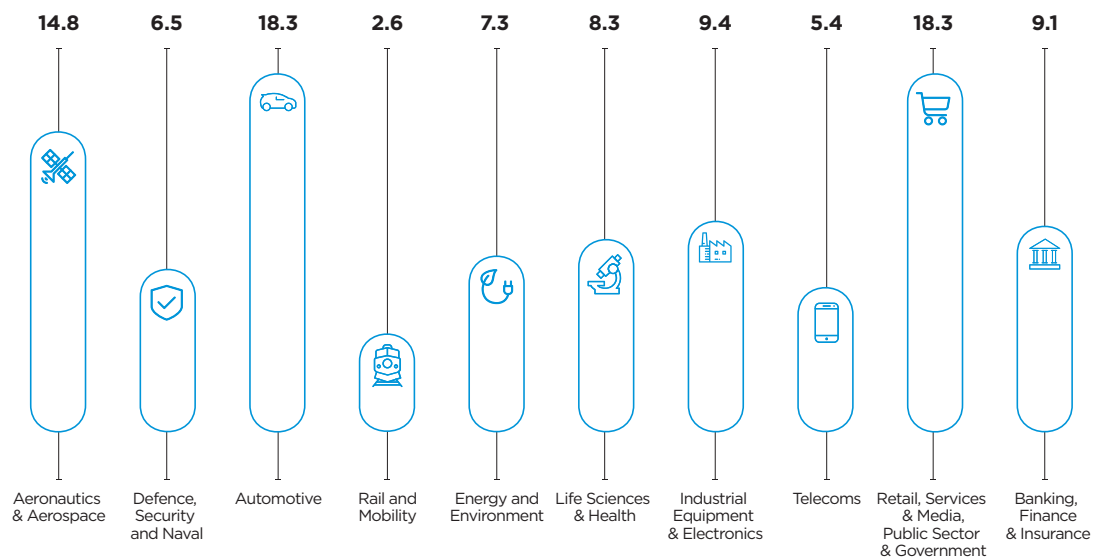
**OWNERS OF THE PARENTV**

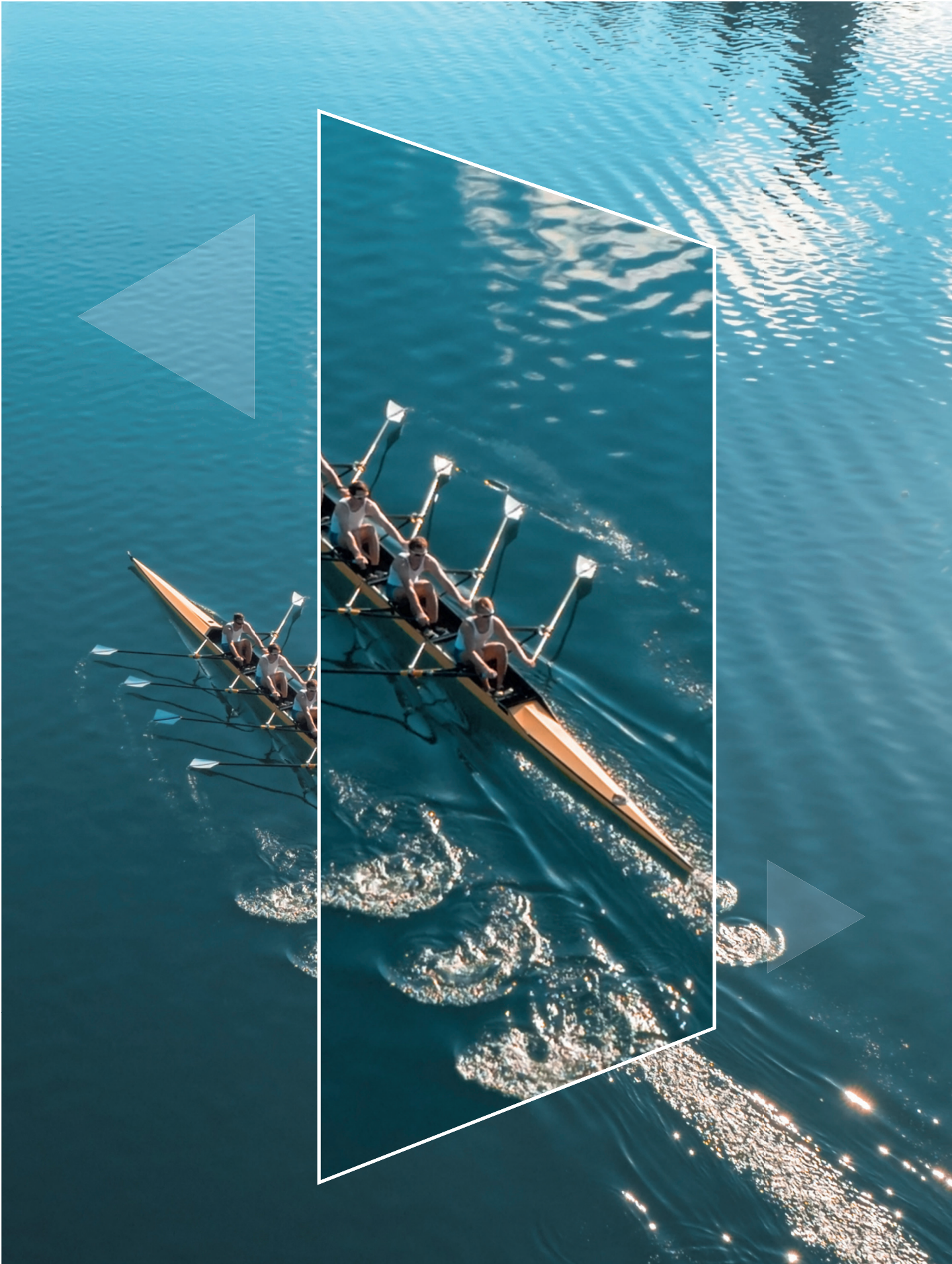
(in millions of euros)



**BREAKDOWN OF REVENUE BY BUSINESS SECTOR**

(% of revenue)







# A value-creating model

**We develop cutting-edge technological solutions to meet our clients' complex challenges.**

Our commitment to value creation is reflected in sustained growth and a recognised leadership position in the international market.

**HR Vision** As a world leader in Engineering and IT Services, ALTEN supports businesses in their technological and sustainable transformation. An Engineering culture, a passion for technology and high added-value projects: it's in a stimulating environment that our teams work hard every day to meet our clients' challenges.

## At the heart of ALTEN's success lie its talents

Whether at the heart of an aircraft, at the heart of a hospital patient or at the heart of society, we are convinced that Engineers are the architects who are building tomorrow's world today. With more than 57,000 employees worldwide, including 50,000 Engineers, our teams provide daily support for our clients' development strategies in the fields of innovation, R&D and technological IT systems.

### Making ALTEN the first choice

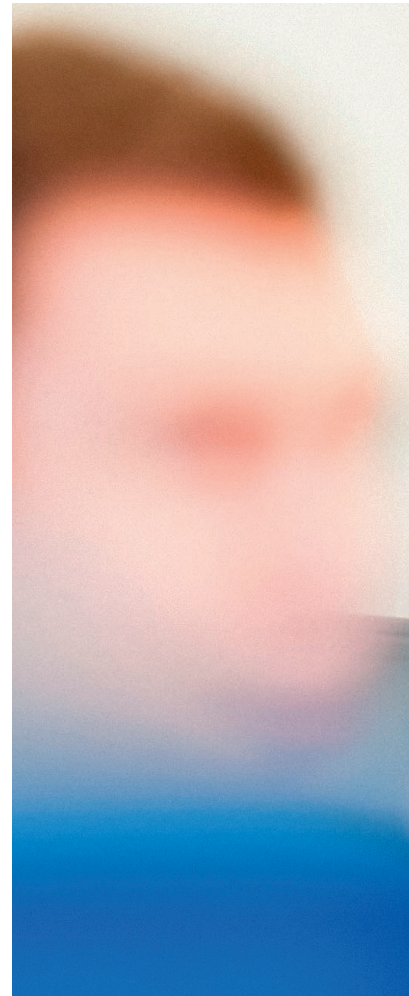
To support its growth, ALTEN recruits several thousand employees each year, including 4,500 in France alone in 2023. Various initiatives have been put in place, particularly for future young graduates. For example, the teams are stepping up their exchanges by attending specialist recruitment fairs and forums in France and abroad. These events are an opportunity for students and graduates to meet recruiters, to discover career opportunities and, moreover, to benefit from a wealth of recruitment advice from professionals.

ALTEN not only recruits, but also creates lasting links with students. Since 2011, ALTEN, a premium partner of the *Confédération Nationale des Junior-Entreprises* (CNJE), has been interacting with over 200 schools in France. This commitment is reflected in a constant presence at CNJE events and the ALTEN awards for the best Junior-Enterprise.

As a key player in Engineering employment and the professional integration of young people, ALTEN works on a daily basis to raise the profile of this profession and promote scientific and technical careers, starting at secondary school level. ALTEN is also committed to increasing the number of women in the scientific professions. The Group regularly highlights the diversity of the women who make up its workforce, helping to raise awareness of the vital role played by women in science and technology.

### ENHANCING EMPLOYER APPEAL THROUGH ESPORT

For the second year running, ALTEN in France, in partnership with Team Vitality, one of Europe's leading Esport companies, has organised France's biggest student tournament on Super Smash Bros. Ultimate. Several qualifying stages were held directly in the schools before the grand final, which was held in Paris at Team Vitality's offices, attracting more than 15,000 people simultaneously on Twitch.



# 31%

Number of women in the headcount



### ALTEN, A RECOGNISED EMPLOYER

Our efforts to attract and retain top talent are rewarded every year. ALTEN has won several prestigious certifications, including Best Managed Companies, Top Employer and Great Place to Work.

### Fostering the development of talent

ALTEN offers its employees a system dedicated to both functional and geographical mobility. The Group offers a variety of career paths at all levels, as well as development within its four streams: Specialist, Project Management, Business Management and Support Functions.

International adventure is also possible within its foreign subsidiaries. By pooling their efforts and transcending borders, employees are deploying the ALTEN model, where each individual can develop professionally.

Finally, ALTEN offers dynamic Human Resources management that promotes career diversity and skills development. The internal organisation adapts to expectations to build a personalised career path.

### Unleashing everyone's potential

Proud to be one of the leading employers of young Engineers, ALTEN invests in the transmission of its knowledge, thus contributing to the professional development of talent and enriching its skills base in the service of innovation.

ALTEN strives to create an environment where cultural diversity and the unique skills of each individual are valued. By fostering cross-border collaboration and encouraging professional development on a global scale, ALTEN is building an ecosystem where every talent contributes to shaping an innovative and sustainable future.

Aligning employee skills with changes in business lines and organisational structures is the foundation of the Group's success. ALTEN is firmly committed to an ambitious training policy, anticipating the challenges of tomorrow. The various in-house training centres, dedicated to each segment of its population (Engineers, Support Functions, Business Managers), create a space conducive to exchange and emulation, reinforcing genuine internal cohesion. The training courses are designed to be operational, in direct response to the needs expressed by the various business lines, in order to meet the challenges and issues faced by the experts. Specific programmes facilitate employee onboarding and a catalogue of in-house training courses supports them throughout their career. ALTEN attaches particular importance to the constant development of its programmes, incorporating innovations in the field of training as far as possible.

# 57,000

Number of employees worldwide

**Governance** ALTEN combines human values, sustainable development and an engineering culture in the service of performance to satisfy all stakeholders.

### The Board of Directors

The Board of Directors determines ALTEN's strategic directions and ensures their implementation, in accordance with its corporate interest, taking into consideration the social and environmental challenges of its activity. It controls the management of both financial and non-financial aspects and ensures the quality of the information provided to shareholders and the market.

At 31 December 2023, half the members of the Board of Directors were women (excluding the Director representing employees). The Board's diversity policy aims to ensure a variety of skills and experience and to ensure that its missions are carried out objectively and with an open mind.

### Composition as of the date of this document

- ▶ **Simon AZOULAY** – Chairman and Chief Executive Officer
- ▶ **Emily AZOULAY** – Director – Member of the Remuneration and Nomination Committee
- ▶ **Jean-Philippe COLLIN** – Independent Director – Member of the Audit Committee, the Remuneration and Nomination Committee and the CSR Committee
- ▶ **Marc EISENBERG** – Independent Director
- ▶ **Maryvonne LABELLE** – Independent director – Chairwoman of the Remuneration and Nomination Committee and Chairwoman of the CSR Committee
- ▶ **Aliette MARDYKS** – Independent Director – Chairwoman of the Audit Committee
- ▶ **Pierre-Louis RYSER** – Director representing employees
- ▶ **Jane SEROUSSI** – Director
- ▶ **Philippe TRIBAUDEAU** – Independent Director and Lead Director – Member of the Audit Committee

### General Management

The General Management implements the strategy defined by the Board of Directors and develops the business. It is assisted in its tasks by the Executive Committee and the Group Management Committee.

### Ethics and responsibility

ALTEN places ethics at the heart of its activities. The Group shares the highest standards in this area with its stakeholders. ALTEN is committed to conducting and developing its business in strict compliance with national and international laws and regulations and to making ethics and compliance a common priority for the entire Group.

The Group is also committed to promoting the balanced representation of women and men throughout its workforce, including within its governance bodies. In 2023, ALTEN SA obtained the score of 89 out of 100 on the gender equality index defined by the law "for the freedom to choose one's professional future".

89

Score out of 100 on the gender equality index





### The Executive Committee

The Executive Committee analyses the commercial and financial results and implements operational measures in line with the ALTEN Group's strategy.

Its composition as of the date of this document  
(top to bottom and left to right)



- ▶ **Simon AZOULAY**, Chairman and Chief Executive Officer
- ▶ **Bruno BENOLIEL**, Deputy Chief Executive Officer, responsible for Finance, Legal and IT Systems
- ▶ **Pierre MARCEL**, Deputy Chief Executive Officer in charge of ALTEN Germany
- ▶ **Olivier GRANGER**, Director responsible for International Scope 1
- ▶ **Stéphane OUGIER**, Executive Vice-President ALTEN France, Solutions subsidiaries and Eastern Europe
- ▶ **Pierre BONHOMME**, Executive Vice President ALTEN France, UK and North America
- ▶ **Gualtiero BAZZANA**, Executive Vice-President ALTEN for Enterprise Services and Telecoms
- ▶ **Pascal AMORÉ**, Executive Vice-President responsible for ALTEN Asia

### Group Management Committee

The Group Management Committee has 18 members, including five women. It assists the Executive Committee in implementing operational measures in line with the Group's business.



**Our international expansion and our position as a leader in the Engineering and Technology Consulting market mean that we have a responsibility towards all our stakeholders.**

Simon AZOULAY - Chairman and Chief Executive Officer

**Creating value** A world leader in Engineering and IT Services, ALTEN is committed to meeting the expectations of its stakeholders and anticipating their requirements by reconciling performance and sustainable development.

## Our resources

### Human Resources

- ▶ **57,000 employees** including **50,000 Engineers** in over **30 countries** across **five continents**.

### Intangible resources

- ▶ Extensive expertise in all fields of Engineering;
- ▶ R&D programmes and Innovation Labs;
- ▶ Project management methodology certified CMMI level 3;
- ▶ Integrated Information and Environment Management System for the Group.

### Societal Resources

- ▶ **111 partnerships** with **NGOs** or similar associations;
- ▶ **217 school partnerships**;
- ▶ Responsible Purchasing Charter, Ethics and Compliance Charter, Sustainable Development Charter.

### Financial resources <sup>(1)</sup>

- ▶ **€4,068.83 million in revenue** in 2023. **68.1% of revenue** generated outside France;
- ▶ Operating margin: **operating profit on activity 9.4% of revenue**;
- ▶ A very healthy financial structure: equity **€2,037.1 million** - Positive cash position: **€297 million**.

### Environmental resources

- ▶ Use of energy and natural resources <sup>(2)</sup>.

(1) At 31 December 2023.

(2) See 4.4 "Reducing the Group's environmental footprint".

## Our DNA

### Comprehensive technological coverage

- ▶ Engineering and outsourced R&D;
- ▶ IT & Network Services;
- ▶ Subsidiaries specialised in Consulting and Expertise.



Comprehensive and balanced coverage **of sectors**





**High-performance human resources and talent management processes**

- ▶ Multiple and varied career opportunities.

**5 LEVELS OF COMMITMENT**  
to meet clients' needs

**Fixed-price**

Fixed-price projects with commitment to results.

**Commitment to results**

Control, quality, time, delay, fixed price.

**Work units service contract**

Service contract with a commitment to results and performance.

**Commitment to results**

Deliverables industrialisation & productivity gains.

**Service contract**

Service contract with commitment of providing resources and achieving performance goals.

**Commitment to service quality**

Service level commitment & delegation of project management.

**Globalisation**

Gathering on a single contract covering several consulting projects.

**Commitment of providing resources**

Teams of consultants delivering a wide range of expertise on a single contract.

**Consulting**

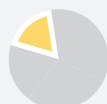
Consulting with commitment of providing resources.

**Commitment of providing resources**

Delivery of specific and flexible expertise.

 **21.3%**

Aerospace, Defence, Security & Naval



 **27.4%**

Services, Retail, Banking & Public Sectors



**Our value creation**

**Engineering expertise and culture**

(see "Strategy" of this Document)

- ▶ High-end positioning deployed on Engineering business lines;
- ▶ Engineering centres of excellence.

**Human capital development**

(see 4.2 "Career-accelerating employer")

- ▶ A key player in the employment of managers and Engineers and the professional integration of young people.
- ▶ Top Employer, Great Place to Work and Best Managed Companies.

**Targeted external growth strategy**

- ▶ **5 international acquisitions** in 2023.

**Societal commitments**

(see 4.3.6 "Regional solidarity")

- ▶ **2,889 man-days** of skills sponsorship.

**Assessments and certifications**

(see 4.1.5 "Ratings - Awards")

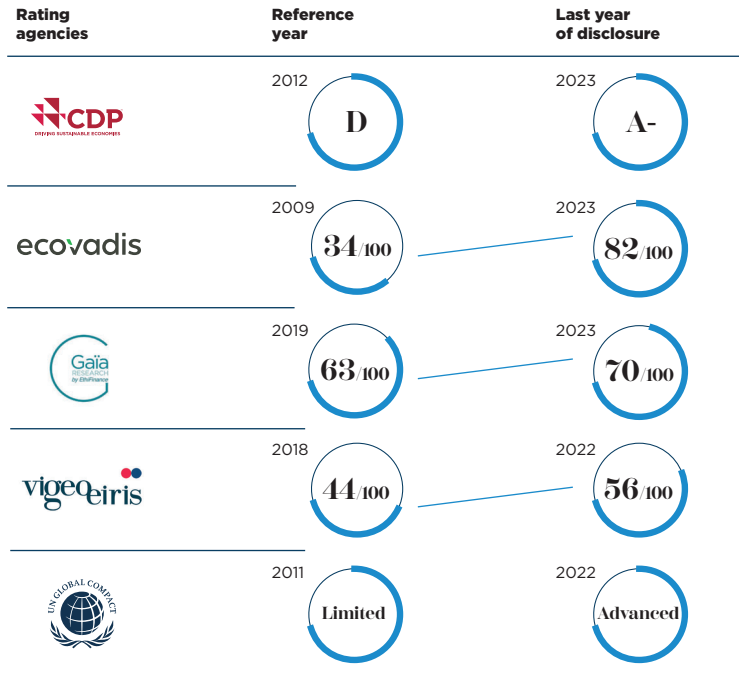
- ▶ EcoVadis: 82/100;
- ▶ CDP: A- rating in recognition of climate initiatives;
- ▶ CEFRI MASE;
- ▶ TISAX;
- ▶ Depending on the scope, ISO 9001, 9100, 14001, 19443, 27001, 45001.

**CSR Vision** Since joining the United Nations Global Compact in 2010, ALTEN has continued to work to limit its environmental impact and improve its social and societal footprint. Aware of our role and responsibility, we are committed to all our stakeholders every day.

## Putting words into action

As a committed company, ALTEN combines human values, sustainable development and an engineering culture in the service of performance to draw up its CSR strategy. The Group is a signatory and member of a number of environmental programmes and is developing partnerships around social and societal commitments.

Climate change, ethical and security issues, new forms of mobility, energy sobriety, diversity and inclusion, etc. - the Group is facing a host of challenges. By continuously strengthening its voluntary progress approach since 2010, ALTEN is fully integrating the United Nations' 2030 Agenda into its CSR strategy.



**Our international expansion and our position as a leader in the Engineering and Technology Consulting market mean that we have a social, societal and environmental responsibility towards all our stakeholders, whether they are employees, staff representatives, clients, shareholders, suppliers or partners.”**

Simon AZOULAY - Chairman and Chief Executive Officer

The Group's CSR strategy, which is based on the materiality study carried out in accordance with the requirements of the Global Reporting Initiative (GRI), has three main focuses:

- ▶ **Sustainable innovation:** we put our expertise and creativity at the service of innovative solutions for a more sustainable world.
- ▶ **The environment:** we reduce our environmental impact while promoting sustainable economic growth.
- ▶ **Human:** we encourage an inclusive corporate culture that values the diversity of our employees, so that together we can build a fairer, more caring future. We value skills development and support our talented people in their personal and professional development.

# Sustainable innovation:

transforming environmental challenges into an accelerator for research and innovation

Societal, environmental and industrial challenges are multiplying. ALTEN has unique know-how that combines Engineering and digital technologies to meet the ever-growing needs of its clients.

THE UN'S  
SDG



## Green AI: for greener technology

The ecological transition now concerns all economic sectors, including digital technology. Faced with the exponential digitalisation of services and the emergence of new technological tools such as IoT and AI, companies are becoming increasingly aware of the environmental impact of their infrastructures. In response to this problem, Green IT proposes a responsible approach to the management of IT resources. Against this backdrop, ALTEN is working on sober code, developing technologies using Artificial Intelligence and at the same time launching Green AI optimisation initiatives to reduce environmental impact as much as possible.

Carried out in an ecosystem of partners who are experts in their scientific, technological and/or academic fields, ALTEN Labs' work benefits from this collaboration either through theses or scientific partnerships, or through use cases for our Proof Of Concept (POC) or Minimum Viable Product (MVP) and the pooling of respective know-how, or through the introduction of new technologies.

## ALTEN Labs: our experts at the heart of sustainable innovation

Through the Smart Digital programme, which brings together the nine Smart Programmes developed by ALTEN Labs, the Group deploys highly complementary and cross-functional research fields in all our clients' sectors, systematically integrating a long-term sustainability approach, covering complex and global technical issues ranging from responsible management of industrial processes to reducing the carbon footprint of transport.

## Responsible industries: reducing the environmental footprint of factories

Industrial environmental efficiency refers to the ability of industrial companies to produce goods and services while minimising their negative impact on the environment.

Today's factories must be more flexible, more communicative and more efficient, while remaining at the service of people. ALTEN integrates eco-responsibility from product design to energy consumption in factories. With talk of Industry 4.0 and the massive deployment of connected objects to improve production, control resources, monitor data and thus reduce environmental impact and production costs, ALTEN, convinced that eco-design is adapted to the industrial systems of the Smart Factory, sees the need to consider the environmental impact of these objects from end to end, starting with the development of the industrial system and during its use.



# 31%

R&D in sustainable innovation in 2023

THE UN'S  
SDG



# Environment:

## Being aware of our role

The ALTEN Group's environmental strategy is broken down into action plans to preserve natural resources, protect biodiversity and mitigate climate change. Each of these action plans is based on 3 strong commitments: measure, reduce and raise awareness. As a signatory of Syntec-Ingénierie's Engineering Charter for the Climate since 2019, ALTEN actively participates in the collective effort and encourages all of its entities to have a proactive environmental approach, based on recognised standards or benchmarks.

# 70%

of the CSR headcount covered by an EMS

# 0

Zero net emissions by 2050

### A recognised carbon trajectory

ALTEN has announced the validation by the Science-based Targets initiative (SBTi) of its greenhouse gas emission reduction targets, which are considered to be in line with the levels required to achieve the objectives of the Paris Agreement and the 1.5°C trajectory by 2050. By also validating its long-term

environmental approach with SBTi, ALTEN is committed to achieving the goal of Zero Net Emissions by 2050. In the short term, ALTEN is committed to reducing its Scope 1 and 2 emissions by 59.8% in absolute terms and its Scope 3 emissions by 55.8% in terms of intensity.

### Being mindful of our environmental footprint

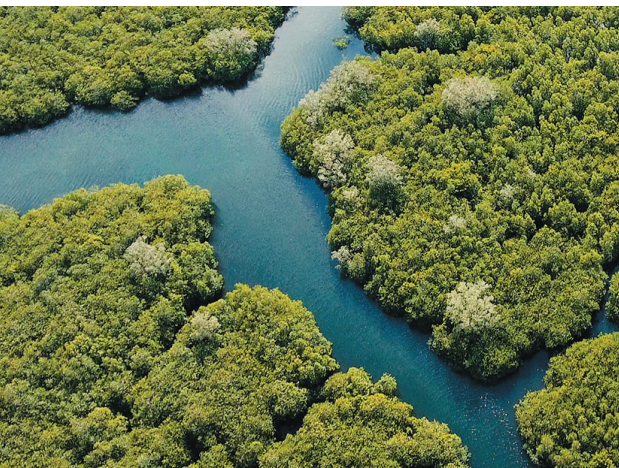
Our environmental approach is based on risk analysis and continuous improvement of practices. In 2022, 70% of the scope of our Environmental Management System (EMS) was covered, with some entities ISO 14001 certified. To limit our environmental footprint, we have chosen to occupy buildings whose energy performance contributes to our commitment to sobriety. Our mobility policy aims to support employees in switching to more environmentally-friendly modes of transport for their commute and to limit the impact of our

business travel. The move towards electrification of our vehicle fleets and the installation of charging stations in our car parks is a major contribution to this. Finally, throughout the year, a number of initiatives are aimed at raising awareness among our employees of the need to protect the environment: a conference on biodiversity, a climate fresk, e-learning modules on eco-gestures, environmental clean-up operations and the installation of beehives on the roofs of our buildings, for example.

### Taking action for the environment with all our stakeholders

We are aware that our activities give us an indirect environmental responsibility towards our clients and partners. As part of our responsible purchasing policy, we assess the environmental approach of suppliers. For those who are less mature, we plan to support them in their progress by giving them the benefit of our experience and our network.

In the countries where ALTEN operates, we are committed to having a positive impact on the communities around us. Numerous programmes are deployed in conjunction with foundations and associations of general interest that support causes with a social, medical or environmental impact. In addition, via the NGO REFOREST'ACTION, we help to finance the reforestation of forests in France, Peru and Senegal.



# Human:

## Celebrating the diversity of our talents

Diversity, equity, inclusion and belonging have a particular resonance at ALTEN and are an integral part of its CSR strategy. Our strength comes from the diversity of the talents that make up the Group: more than 57,000 employees in more than 30 countries around the world representing more than 100 nationalities. Our aim is for everyone to identify with who they are, their identity and their career path, while at the same time achieving professional fulfilment.

THE UN'S  
SDG



### Increasing the number of women in scientific professions

ALTEN is actively involved in promoting gender diversity, in particular by increasing the number of women in scientific professions. Proactive policies such as recruitment, mentoring, training, performance appraisal and the creation of role models are being implemented to make progress in this area. The signing of the United Nations Women Empowerment Principles and the creation of a Women at ALTEN community are key steps in our commitment.

Each year, the Group also rolls out a major campaign focusing on its Female Consultant Engineers to deconstruct stereotypes and unconscious biases, by offering inspiring accounts of their career paths and expertise.

### Supporting talents

At ALTEN, we value skills and never hesitate to entrust young talents with responsibilities. We offer each employee a career path based on merit, with support plans tailored to individual expertise and aspirations. Our ambition is to adapt skills to the needs of the market and to support professional projects. Training, career management, mentoring, mobility etc. the Group does everything it can to retain and engage talent and to build their loyalty to support growth as a responsible employer.

### Building an inclusive community

We are aware of the need to invest in a strategy that recognises people of all origins, ethnicity, age, gender, sexual orientation, religion and disability status. ALTEN is committed to offering equal employment opportunities, creating a working environment free from discrimination, and aims to establish and maintain a climate of tolerance and openness by raising awareness among its employees and stakeholders. The Group is a signatory of the Diversity Charter and works with associations to meet its commitments.

over  
**100**  
nationalities

**89/100**

ALTEN SA's overall score on the gender equality index

**31%**

share of women in the company





# A leading technology partner

**The Group covers the entire product development cycle for Engineering and IT Services technology projects.**

Our mission is to shape solutions that not only meet society's immediate needs, but also pave the way for a brighter future. By embracing this vision, we are committed to being the architects of a better world, where every project is a building block for the future.

**Geographical presence** As a world leader in Engineering and IT Services, ALTEN supports businesses in their technological transformation.

## A leading global technology partner

We operate in all sectors of industry and services: Aeronautics, Space, Defence, Naval & Security, Automotive, Rail & Mobility, Energy & Environment, Life Sciences - Health, Industrial Equipment & Electronics, Telecoms, Banking, Finance & Insurance, Retail & Services, Public Services & Government.

**57,000**

employees including  
88% Engineers

**30 + 6,500**

countries

clients

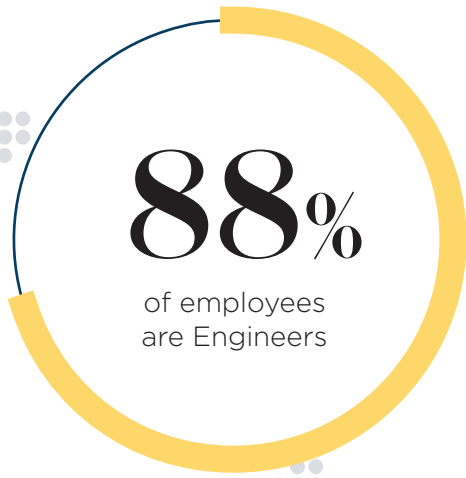
**€4,068.8m + 7.6%**

in revenue

revenue growth  
compared with 2022

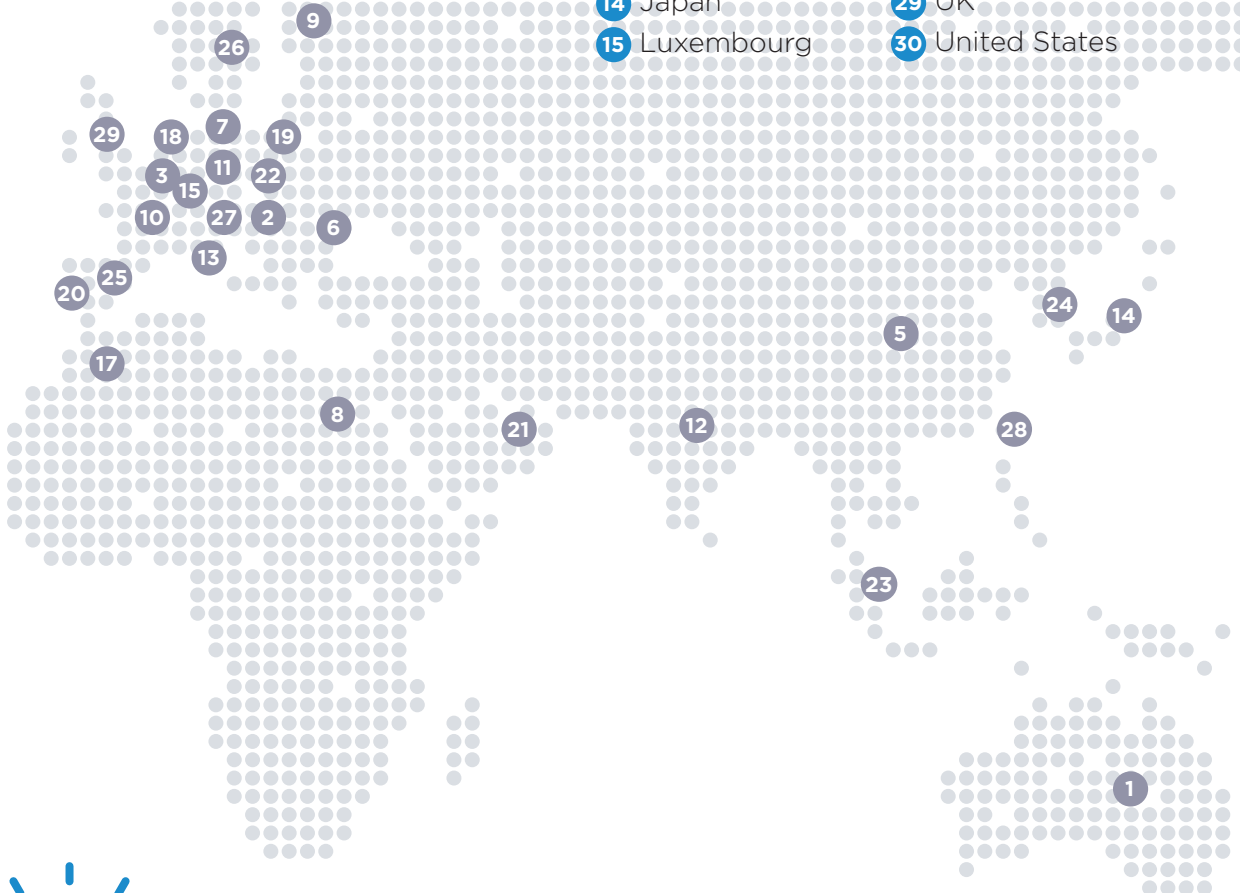






**Countries:**

- |                  |                    |
|------------------|--------------------|
| 1 Australia      | 16 Mexico          |
| 2 Austria        | 17 Morocco         |
| 3 Belgium        | 18 The Netherlands |
| 4 Canada         | 19 Poland          |
| 5 China          | 20 Portugal        |
| 6 Czech republic | 21 Qatar           |
| 7 Denmark        | 22 Romania         |
| 8 Egypt          | 23 Singapore       |
| 9 Finland        | 24 South Korea     |
| 10 France        | 25 Spain           |
| 11 Germany       | 26 Sweden          |
| 12 India         | 27 Switzerland     |
| 13 Italy         | 28 Taiwan          |
| 14 Japan         | 29 UK              |
| 15 Luxembourg    | 30 United States   |



31%

R&D in sustainable  
innovation

**Position** ALTEN's historical core business is Engineering and has been recognised for more than 35 years as the benchmark technological partner of major clients within the industry. The Group has developed its complementary and historical positioning in IT Services to provide high added-value solutions.



**70%**

of the activity dedicated to Engineering

**30%**

of the activity dedicated to IT Services

**Comprehensive technological coverage**

ALTEN is involved in all projects with a technological dimension for the Technical, Research & Development Divisions and IT Systems Divisions of major corporate, telecoms and service clients, requiring the involvement of high-level Consultant-Engineers.

To achieve this, we have put in place a world-renowned technical organisation of excellence.



## 1 CONSULTING

ALTEN's core business, consulting, helps clients meet their needs by providing functional, technical or support skills. The project is carried out on the client's premises based

on the commitment of providing resources, time spent and under the responsibility of an ALTEN Manager. ALTEN Engineers take charge of the project.

## 2 WORK PACKAGES

Work Packages have several levels of responsibility and risk sharing. They can be carried out directly on the client's premises or outsourced to an ALTEN site. They are supervised by ALTEN's Technical Division, a multidisciplinary team in line with the commitments defined with the client.

ALTEN provides the client with logistical resources such as premises, specialised software and secure communication channels. ALTEN can deploy specific organisations for transnational projects or involve its offshore structures in certain phases of the project. Work Packages constitute a barrier to entry for competitors because of the processes, methodology, tools and structures that require significant

investment. The selected service providers oversee increasingly large scopes and project management. Their controlled management processes must make it possible to organise the implementation of projects.

The expansion of Work Packages has major implications for ALTEN and for the client. Project feedback is capitalised on, and the search for productivity can lead to a transformation of the offering and/or the involvement of offshore structures for all or part of the project. These transformations are leading to an overhaul of processes and technical interfaces, both at ALTEN and with the client.

## 3 A UNIQUE CAPACITY FOR OFFSHORE DELIVERY

ALTEN has offshore structures in Romania, Poland, Spain, Morocco, Mexico, China, South Korea and India. This organisation model consists in handing over project management and interface to the front-office team, which is located close to the client in the principal's country, with another part of the implementation team in an ALTEN offshore centre (back office).

The client therefore works with the local ALTEN team, which will then transfer part of the activities to be conducted to the offshore centre. This enables ALTEN to provide its clients with teams that are fully conversant with the client's requirements, culture and language. The offshore portion can thus vary between 20% and 70% depending

on the projects concerned. Skills are ramped up through the incubation of part of the offshore teams in the home country of the service and may be completed by the temporary sending of employees to the offshore/nearshore centre. The overall organisation of the Technical Division guarantees the quality control and project execution processes, which must be identical regardless of the country in which the activity is carried out. Thanks to this approach, ALTEN's Work Packages offering is very competitive, all the while guaranteeing a high level of performance through the application of ALTEN's standard processes. More than 7,000 consultants are currently working in the Group's 21 delivery centres.

60%

of the Group's projects are Work Packages

21

delivery centres worldwide

**Business sectors** For over 35 years, ALTEN has distinguished itself by operating in a multitude of sectors within Industry and Services. By cultivating a diversity of skills, our Group offers comprehensive, tailor-made solutions to meet a wide range of client needs. Our ability to adapt to changes in the market while offering real added value strengthens our position: we are recognised as a world leader in Engineering and IT Services.

## Exploring ALTEN's business sectors



# Aeronautics



## MARKET TRENDS

In the aeronautics sector, we are witnessing an acceleration in production, combined with a significant optimisation in automation. This development is closely linked to a significant improvement in the performance of the supply chain and the production tool, with concrete implications for PMO, manufacturing engineering, PLM and data management. In addition to these changes, there is growing interest in developing vertical mobility. At the same time, the sector is becoming aware of the urgent need to reduce its carbon footprint, with studies into alternative solutions such as hydrogen-powered aircraft and biofuels. Finally, we are seeing the deployment of offshore solutions in the aeronautics industry.

### The aeronautics industry is constantly seeking greater safety, efficiency and sustainability.

To propel the transformation towards the aircraft of tomorrow, ALTEN supports key industry players in building incremental innovation strategies to support production rate increases and the development of new functionalities and systems. ALTEN also supports manufacturers and equipment suppliers in their deployment of new technologies (Big Data, IoT, augmented reality, etc.) at the factory level (manufacturing engineering, Factory 4.0) and the supply chain but also in client service and the airline sector. From predictive maintenance to collaborative client service platforms, ALTEN combines its knowledge of business processes and digital expertise to supply innovative solutions to its clients.

# Space



## MARKET TRENDS

Over the last two decades, a number of changes have made it easier and cheaper to access and use space. As a result, an emerging private space industry has taken over what was once the exclusive domain of government agencies. These companies are involved in a wide range of activities: they launch satellites, provide space services such as Earth observation and communications, develop new technologies including rockets and reusable spacecraft, and are even planning manned missions to the Moon and Mars. New Space promises to continue to open up new opportunities for scientific research, commercial applications and even space tourism. However, it also raises important questions about the governance of space and the ethical implications of private companies owning and operating space assets.

### The space sector is a dynamic industry in which the private sector is becoming increasingly involved.

Thanks to its technical expertise (structural, thermal, flight mechanics, spatial electronics, system Engineering, embedded software, etc.) ALTEN is involved throughout the life cycle of satellites and launchers (design, manufacturing and operation) with a historical presence of more than 20 years in key environments such as spatial electronics and AIT (Assembly, Integration and Tests). ALTEN is involved in a number of development projects responding to the challenges of more flexible and competitive launchers as well as the deployment of tools enabling its clients to best operate the different communication facilities with satellites.

## Defence, Security & Naval



### MARKET TRENDS

In recent years, the global geopolitical situation has led to a clear increase in military budgets, encouraging the design of new 'intelligent' equipment and munitions systems. This development is part of the wider context of the digitisation of conflicts and the growing need to prevent cyber-attacks. In addition, European sovereignty programmes such as SCAF, Eurodrone and the European Tank are continuing. These initiatives are designed to strengthen Europe's autonomy and defence capability. Finally, Supply Chain efficiency is proving to be a major challenge, enabling us to speed up production ramp-ups and respond more effectively to defence requirements.

### The growing fear of high-intensity conflicts around the world has prompted many governments to increase their military budgets.

ALTEN mobilises its Engineering and IT expertise to strengthen its clients' capabilities and meet complex national, land, maritime and digital security needs. In Defence Engineering, our teams are involved in the development of advanced aircraft, combat vehicles and embedded systems, contributing to the modernisation of armed forces. Our expertise in naval defence systems supports the design of new-generation ships and submarines. Our cutting-edge cyber security solutions address the challenges of data protection, biometrics and secure connectivity.

## Automotive



### MARKET TRENDS

The automotive sector is evolving rapidly and is currently at the centre of a number of structural challenges. In particular, we are seeing an acceleration in decarbonisation and significant advances in Electronic, Electrical Validation & Integration (EEV & I) architecture. Investment in the hydrogen sector is growing, as is investment in driver assistance and safety systems (ADAS), connectivity, multimedia and electronic engine control. Investment in batteries is also growing, with a particular focus on more sustainable technologies and greater autonomy, through the design of gigafactories. At the same time, the targets for productivity gains are becoming ever more ambitious: massification, X-shore growth, digital and data management, PMO, etc. Finally, mark-to-market issues are becoming increasingly important, with the value chain being turned upside down and the need to strike a balance between production costs (including R&D) and purchasing power.

### The automotive sector is evolving rapidly, marked by intense competition and constant technological advances.

Backed by its expertise in automotive Engineering, its project management methodologies and the performance of its international R&D structures, ALTEN is involved in crucial issues such as secure and connected autonomy, intuitiveness and comfort for the client, shared and globalised mobility and the sustainable low-carbon economy. Our value proposition is based on a global presence close to the design and production centres of car manufacturers and suppliers, technical expertise in key areas such as embedded electronics, powertrains, systems and synthesis, and proven digital skills in IS & Networks, offering end-to-end services.

## Rail & Mobility



### MARKET TRENDS

A number of trends stand out in the rail sector. Firstly, infrastructure modernisation is a priority, with massive budgets being mobilised in a number of countries, including France (€100 billion), Italy (€115 billion) and Germany (€80 billion). This trend illustrates the challenges of interoperability and harmonisation of standards and signalling systems. Secondly, demand is growing. Increasing the density of urban areas means that more transport services need to be provided. Finally, the appeal of rail transport is enhanced by its reduced carbon impact. With this in mind, the decarbonisation of materials is a major concern, with growing interest in sustainable alternatives such as batteries and hydrogen-powered trains.

### The rail industry is reinventing itself to meet the challenges of new forms of mobility.

The modernisation of rail infrastructure is a priority, driven by factors such as massive urbanisation, connectivity between countries and the need to electrify lines for low-carbon transport. In this demanding context, ALTEN is positioning itself as a catalyst for the transition to more sustainable mobility. In response to the challenges of capacity and emissions, our teams are actively working to modernise existing lines, focusing on innovative solutions such as advanced signalling systems (CBTC, ERTMS, etc.) and research into new energy sources to decarbonise non-electrified lines.

## Energy & Environment



### MARKET TRENDS

Le monde explore activement la production d'énergie  
The world is actively exploring sustainable energy production as a response to pressing environmental needs. In the nuclear sector, new projects such as the EPR2 and the SMR are emerging, while maintenance of the existing fleet remains a priority for governments, with the need to extend the lifespan of power plants and improve safety standards. Renovating and improving the performance of electricity transmission and distribution networks is another major challenge. At the same time, renewable energies are growing steadily, while investment in gas infrastructure is increasing, reflecting the growing importance of this energy source.

### The energy transition and collective awareness of climate change have highlighted the need to transform the global energy mix towards low-carbon sources.

At ALTEN, we are at the heart of these technological advances, actively participating in strategic projects in the fields of renewable energy, nuclear power and energy storage. Thanks to our diversified expertise, we are able to develop innovative solutions to meet evolving market needs. Anticipating our clients' challenges and developing agile solutions to meet them is at the heart of our expertise.

## Life Sciences & Health



### MARKET TRENDS

E-health is booming, with a focus on innovative medical equipment and improved patient monitoring. At the same time, we are seeing increasing outsourcing of R&D in the biotech industry, while Contract Development and Manufacturing Organizations (CDMOs) are stepping up their presence in production processes. Technological change is also reflected in the growing digitalisation of factories, optimising the efficiency of production resources thanks to tools such as: Product Lifecycle Management (PLM), Digital Twin and the Factory 4.0 concept. In addition, major work is being carried out in the fields of clinical studies, pharmacovigilance, biometrics and regulatory affairs. Finally, we understand the importance of Business Intelligence and Data Analytics, which play a central role in making informed and strategic decisions.

**Innovation is a constant challenge in Life and Health Sciences.** This need for constant transformation is complicated by regulatory requirements, the challenges posed by e-health, the emergence of combination products and the need to increase production rates. To support players in the sector, ALTEN is mobilising its areas of expertise, which include clinical research outsourcing services (CRO) and Life Sciences manufacturing operations (LSMO). Our highly interconnected international network of Technical Divisions enables us to provide fast, customised solutions. By putting innovation at the heart of our approach, ALTEN's expertise extends to areas such as regulation, quality assurance, quality control and regulatory compliance.

## Telecoms



### MARKET TRENDS

In the telecommunications sector, we are observing key trends among equipment manufacturers and operators. Equipment manufacturers are continuing to reduce their R&D budgets for 5G, while launching new projects in 4G/5G Ran baseband software and the Radio Technology Evolution Programme (RTEP). They are also continuing to invest in Software-Defined Network (SDN), Network Management System (e-NMS), equipment testing and PLM. On the operator side, the emphasis is on investment in data analysis, AI and Machine Learning to improve client satisfaction and margins. These trends testify to the dynamism of the telecommunications sector and its ability to respond to the changing needs of consumers.

**Given market trends such as the explosion in connected objects and the growing demand for digital services, the rapid deployment of very high-speed broadband is becoming a priority.**

ALTEN is committed to supporting its clients by highlighting its expertise in network virtualisation, transformation to the Cloud, and effective management of connection quality. ALTEN's agility, responsiveness and flexibility, supported by offshore centres of excellence abroad, make it possible to meet the challenges of the telecommunications market and help industry players succeed.



## Banking, Finance & Insurance



### MARKET TRENDS

Since mid-2023, we have seen a cyclical downturn in investment, particularly in North America and France. This is despite the emergence of promising trends such as open banking, which is opening up new business opportunities. The automation of processes and the modernisation of banking infrastructures are improving the efficiency and speed of services. What's more, migration to the Cloud offers greater flexibility and considerable gains in efficiency. In terms of security, cybercrime has become a major issue and investment in cyber security has increased. Finally, the application of the European DORA regulation - which aims to strengthen the fight against IT risks and cybercrime - underlines the importance of these challenges..

### Between strict regulations and dazzling technological advances, the entire sector is evolving at high speed.

Industry players have to reconcile the growing demand for personalised digital banking services with the crucial issues of cybersecurity and regulatory compliance. Through its expertise in artificial intelligence, data analysis and process automation, ALTEN helps its clients secure their IT systems, improve their operational efficiency and meet new user expectations. Whether in the development of anti-money laundering solutions, the design of financial aggregation platforms, or the implementation of cutting-edge technologies such as blockchain, ALTEN provides a wide range of services that meet the specific needs of its clients.

## Retail, Services & Medias



### MARKET TRENDS

Investment budgets in several key areas are stabilising. Firstly, in digitisation, UX/UI and AI, where we are seeing a gradual transition towards more advanced technologies to improve user experience and operational efficiency. Secondly, the sector is also focusing on infrastructure modernisation to optimise performance and sustainability. Thirdly, migration to the Cloud has become a priority, given the many advantages it offers in terms of flexibility and scalability. Finally, cyber security has become a major concern as companies seek to protect their sensitive data and information.

### The Retail, Services and Media market is moving towards omnichannel, with the aim of optimising client relations by consolidating the various points of contact.

All retailers are accelerating their digital transformation to deliver a seamless, multi-channel client experience. This digitisation now extends to internal and back-office processes. With its technological expertise in mobility, Cloud, Big Data, AI and virtual/augmented reality, ALTEN is positioned as a key player in accelerating the digital transformation of physical stores and improving their performance. The agility of our methods enables us to cover a wide range of areas, such as electronic payments and client experience, Supply Chain, UX, and marketing performance.

## Public Services & Government



### MARKET TRENDS

In the rapidly evolving digital age, technology is redefining the way governments interact with citizens, deliver services and engage in the democratic process. This digital revolution is not just changing the way citizens access public services; it is transforming the very fabric of public administration and governance. From e-government initiatives to open data projects and smart city developments, the impact of digital technology on public actions is profound.

**To improve their services and respond to the demands of citizens, public administrations are undergoing a major digital transformation.** ALTEN is committed to supporting public service players in defining long-term digital strategies, optimising budget performance and improving the services provided. The comprehensive expertise of our teams is a major asset when it comes to supporting public authorities in their application development projects aimed at dematerialising administrative processes and optimising the management of all procedures. The benefits are many: improved quality, greater transparency, proactive risk management, and the flexibility to adjust plans to meet deadlines and budgets. ALTEN draws on its network of over one hundred public bodies at international, national, regional and local levels.

## Industrial Equipment & Electronics



### MARKET TRENDS

Investment in semiconductors and electronics is currently levelling off, despite relocation strategies in Europe and the United States and the development of connected objects and embedded software. However, the intermediate capital goods sector, which is cyclical by nature, is experiencing a slowdown.

**The rapid evolution of technologies such as Artificial Intelligence, the Internet of Things (IoT), the Digital Twin and automation is not only improving efficiency,** but also ushering in a new era of complexity. The challenge of keeping abreast of these advances is intensifying, underlining the critical need for continuous learning and skills upgrading. ALTEN stands out for its expertise in the design, maintenance and optimisation of industrial and electronic equipment. Drawing on its in-depth knowledge of the needs and processes of industry, the Group provides agile, integrated solutions that combine the benefits of performance, safety and sustainable development.



ALTEN is an Engineering (70%) and IT Services (30%) Group with an 80% digital focus. Our diverse teams of experts play a key role in understanding the specific needs of each industry. We are not simply service providers, but partners committed to the technological success of our clients.

**Offers and expertise** ALTEN covers a wide range of expertise in Engineering and IT Services to provide a comprehensive response to its clients' technological needs. Guided by a constant commitment to technical excellence and anticipation of future needs, ALTEN offers a diversity of offerings and expertise, demonstrating our commitment to being the preferred partner of companies aspiring to excellence in a variety of sectors. A portfolio of more than 50 specialised subsidiaries around the world enables the Group to complete its offering.

# Comprehensive technological coverage

## 1. Mechanics & Materials

### Engineering Services

Rooted in new technologies and green energies, the Mechanics & Materials offering aims to optimise our clients' products, reconciling performance, safety and sustainable development. ALTEN advises, conceptualises, develops and perfects cutting-edge solutions in various sectors such as aeronautics, automotive and rail. With its multi-sector expertise, international teams and centres of excellence, the Group is positioned as a trusted partner for innovative projects.



## 2. Embedded software

### Engineering Services

ALTEN offers a complete range of services for the development of Embedded Systems, encompassing the avionics, rail, medical and automotive sectors. Our Engineers are proficient in standards such as DO-178, EN50128, EN62304 and ISO 26262, and master the entire software development process. Faced with the evolution towards connected and autonomous systems, ALTEN offers agile solutions, integrating the latest technologies such as artificial intelligence, Over-The-Air and cybersecurity.

*This expertise is provided jointly by ALTEN and its subsidiaries EXPERT GLOBAL, ACCORD GLOBAL TECHNOLOGY SOLUTIONS, CIENET & EEINS.*



### 3. Application software

#### Engineering & IT Services

At the heart of digital evolution, application development is a real driver of value creation. In a context where the industrial landscape is constantly changing, ALTEN offers a complete range of services to support businesses in their digital transformation. Our offer covers the modernisation of existing applications, the design and construction of new applications, and Third-party application maintenance (TMA). Incorporating a DevSecOps approach and a Green IT orientation, ALTEN focuses on the user and demonstrates a genuine and flexible commitment to innovation and sustainability.

*This expertise is provided jointly by ALTEN and its subsidiary OPTIMISSA.*

### 4. Cyber security

#### Engineering & IT Services

Aware of the importance of preserving information assets in the face of the growing cyber threat, ALTEN offers its clients a complete cyber-security solution. Structured around five specialist pillars, the offering encompasses Governance, Risk and Compliance, Protection and Integration, Audits and Penetration Testing, the Security Operations Centre (SOC), and the DevSecOps approach. ALTEN highlights its technical and agile know-how to support its clients in anticipating and responding to regulatory changes, while optimising their operational performance.

*This expertise is provided jointly by ALTEN and its subsidiaries ALCYS & METHODS.*

### 5. Data Management & AI

#### Engineering & IT Services

Data is the common denominator of any digital transformation. The ALTEN Group has the technical expertise and agility required to devise the best Data Management solutions and offer end-to-end support, from consulting to project deployment. Drawing on the skills of its LINCOLN and SDG solutions, ALTEN offers customised solutions, from data collection and analysis to the implementation of advanced algorithms. Mastering global projects, such as migration to the cloud or the creation of Data Factories, illustrates the Group's ability to optimise the operational efficiency of businesses and anticipate risks.

*This expertise is provided jointly by ALTEN and its subsidiaries SDG GROUP & LINCOLN.*

### 6. System Engineering and PDM

#### Engineering Services

Project coordination, linked to industrial set-ups that are sometimes multinational, requires efficient management systems to meet technical, regulatory, operational and safety constraints. ALTEN's Systems Engineering & PDM offer provides solutions for managing the complexity of your products by ensuring the coherent and effective integration of all system components, as well as their interoperability. Our teams, who comply with a wide range of international standards, are involved in optimising product lifecycle management, from design to manufacture and maintenance, right through to waste management and the recycling of systems and components.

*This expertise is provided jointly by ALTEN and its subsidiary ORION ENGINEERING.*

### 7. Project Management Office

#### Engineering & IT Services

The unprecedented changes that businesses are facing call for a greater need to adapt and manage change, in order to be more agile and efficient. ALTEN relies on the historical expertise of its subsidiary MI-GSO | PCUBED, Project Control and PMO Specialist for over 25 years, to ensure the success of complex projects, from digital transformation to change management, in all business sectors. Our dedicated teams of 3,000 consultants in 50 offices around the world bring agility, industry expertise and a forward-looking vision to each of our partners.

*This expertise is provided jointly by ALTEN and its subsidiary MI-GSO | PCUBED.*

## 8. Quality Assurance (QA)

### *Engineering Services*

ALTEN supports its clients in designing more efficient project, product and programme quality approaches that enable them to optimise costs and reduce the risk of non-compliance. The Quality Assurance offering is built around solutions ranging from Quality Management Systems (QMS) to digitisation, transforming practices to refocus quality on added value. Our experts adopt a multidisciplinary, cross-sectoral approach to devise and deploy solutions for managing non-compliance and continuously optimising quality control.

*This expertise is provided jointly by ALTEN and its subsidiaries AIXIAL and CADUCEUM.*

## 9. Manufacturing Engineering

### *Engineering Services*

At the heart of our transformation strategy, Manufacturing Engineering ensures high quality production. Focused on reliable, efficient and sustainable processes, ALTEN integrates the latest technologies such as IoT and 5G to move towards Factory 4.0. The aim of this transition is to optimise the value chain, while taking environmental impact into account. This offer links design and production, reducing Time to Market. ALTEN offers extensive expertise through four pillars, including Co-Design, industrialisation, industrial performance improvement and digital transformation for Factory 4.0.

*This expertise is provided jointly by ALTEN and its subsidiaries CADUCEUM, AVENIR CONSEIL & QUICK RELEASE.*



## 10. Construction & Infrastructure

### *Engineering Services*

A specialist in infrastructure modernisation, ALTEN designs innovative solutions, from design to maintenance, with a focus on Engineering, construction and commissioning. Using digital tools and technological advances such as the digital twin, ALTEN accelerates its clients' digital transformation strategies, enabling them to better anticipate risks. Personalised support combines on-the-ground expertise with historical know-how across all business sectors.

## 11. Health, Safety & Environment

### *Engineering & IT Services*

Companies are turning their attention to intelligent, secure resource management. ALTEN offers comprehensive expertise to meet its clients' current Health, Safety & Environment (HSE) requirements. The offer covers the implementation of systems for managing occupational risks, improving product safety, managing hazardous substances and sustainable development. ALTEN leverages its technical know-how and agility to help its clients anticipate and respond to local and international regulatory changes, while optimising their operational performance.



## 12. AMOA & Business Analysis

### IT Services

Faced with the challenges of digitalisation, our specialised approach is evolving with ecosystems, integrating SecDevOps and design thinking. Our Business Analysts guide every stage of the project, from defining requirements to implementation. The customisation of our Consulting & Support, Implementation & Deployment and Training solutions is designed to optimise value creation and meet users' real expectations. Our ongoing commitment is reflected in teams that are trained, supported, and that design and deploy with excellence.

## 13. Software testing

### IT Services

An essential pillar of software production and deployment chains, Software Testing is a vital component of digital transformation processes. We design and provide our clients with dedicated testing tools to ensure the quality and performance of our work. Our multi-specialist approach enables us to provide our clients with our historical expertise in all aspects of Test activities: consulting, automation, design and training.

*This expertise is provided jointly by ALTEN and its subsidiary QA CONSULTANTS.*



## 14. Cloud & Infrastructure

### IT Services

ALTEN stands out in the Cloud & Infrastructure sector by offering a holistic approach, aligned with the specific needs of each client. Our expertise in Cloud Transformation Consulting ensures strategic migration, while our Build & Move to Cloud service reduces integration times with consultants trained in the latest Cloud technologies. Site Reliability Engineering (SRE) guarantees operational reliability, essential in the current Cloud landscape. Finally, FinOps Optimisation ensures responsible financial management. Our aim: to lead our clients towards a successful Cloud transformation, to increase the security, efficiency and performance of their systems.

*This expertise is provided jointly by ALTEN and its subsidiaries CLEVERTASK & ACL DIGITAL.*



## 15. Green IT

### IT Services

By putting eco-design at the heart of our projects for more than 10 years, ALTEN has positioned itself as a pioneer in digital sobriety. Our Green IT approach, guided by knowledge, measurement and continuous improvement, enables our clients to reduce their environmental impact while optimising their applications. Our expertise ranges from maturity audits and eco-design to team training, creating a sustainable ecosystem with innovative partners such as GREENSPECTOR, CAST and WEDOLOW.

*This expertise is provided jointly by ALTEN and its subsidiary MI-GSO / PCUBED.*

# At the heart of the most daring technological projects

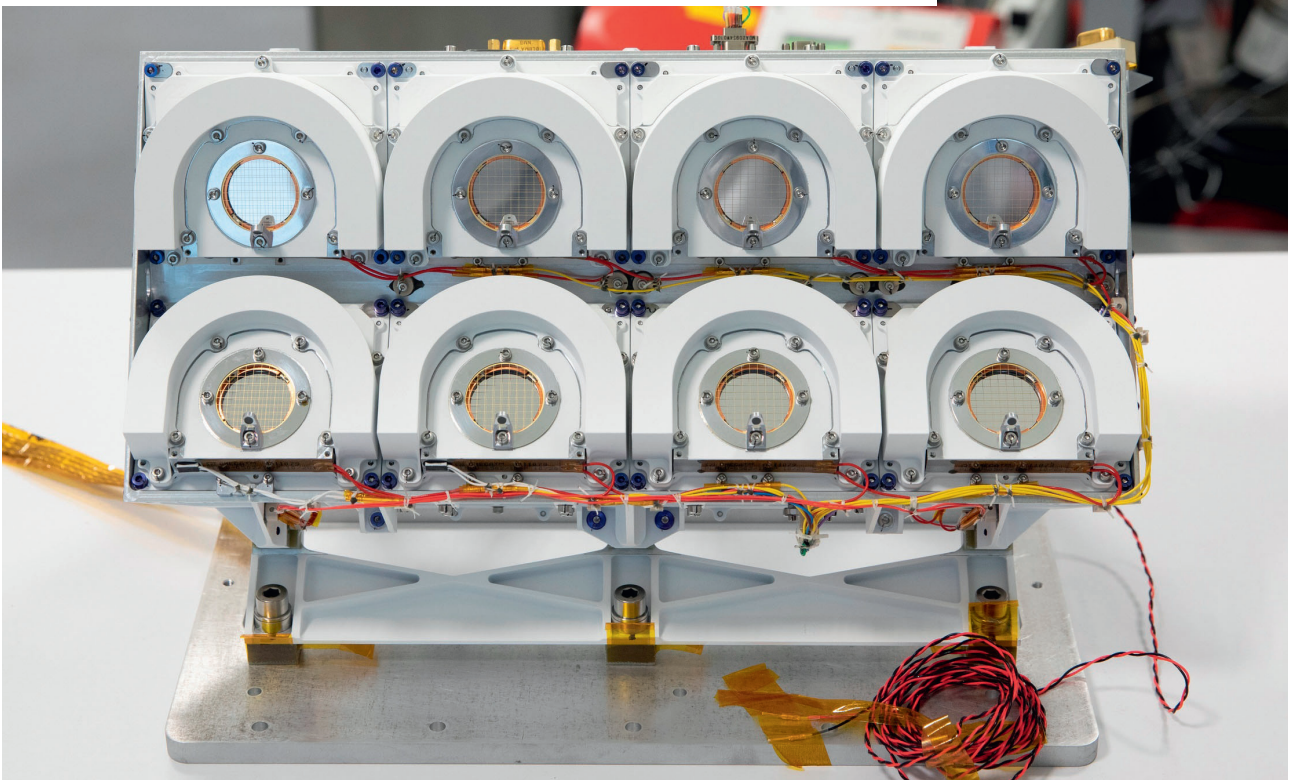
ALTEN stands out for its ability to work closely with its clients to bring their projects to fruition. Discover below a selection of projects where ALTEN's expertise has helped transform challenges into successful opportunities for its clients.

## DORN, the French instrument for the Chinese Chang'e 6 mission

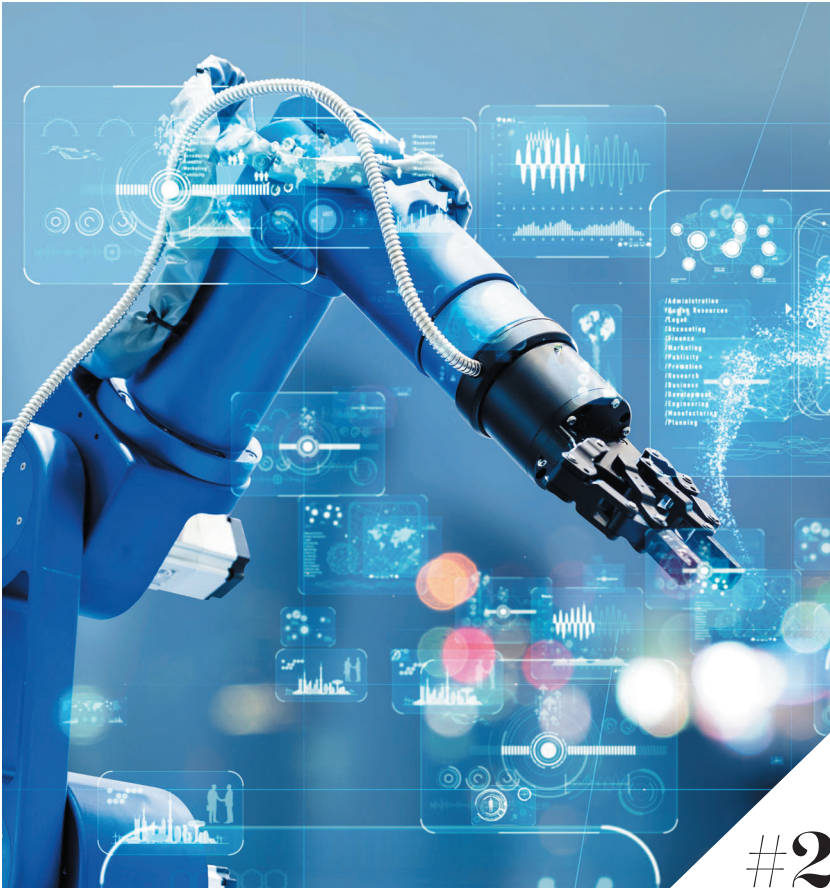
*Space: electronics expertise - France*

#1

The DORN instrument, designed and developed by IRAP, will be on board the Chinese Chang'e 6 mission in 2024 to measure for the first time the amount of radon escaping from the Moon. This measurement will provide a better understanding of the processes that govern the concentration of this noble gas on the lunar surface. ALTEN has contributed its electronics expertise to the DORN project by supporting IRAP in the design, development and integration of the FPGA-based electronic boards that will be carried on board the instrument. ALTEN overcame technical challenges such as miniaturisation, radiation resistance and reliability of electronic boards to meet the requirements of the project.







## COCA-COLA'S CPS Division launches the OEE-SPC for Global Efficiency Boost project

*Industrial equipment - International*

The COCA-COLA COMPANY's Commercial Product Supply (CPS) division has launched the OEE-SPC project to measure and improve performance in real time at all its global sites, as part of the digital transformation initiative - Plant of Future. EXPERT GLOBAL SOLUTIONS (EGS), an ALTEN Group company, provides technical, functional and project management support. Thanks to this project, CPS plants plan to improve their efficiency by 30%. A cutting-edge technological solution supported by advances in IoT and Big Data will enable factories to monitor workshops in near real time, opening up new opportunities for improving efficiency. EGS has played a key role in the development of the first versions of this application over the last five years, with successful implementation in the COCA-COLA MIDI and PUNE CONCENTRATE plants.

#2

## CSV: validation of IT systems in the Life Sciences industry

*Life Sciences & Health - Germany and Belgium*

The increasing integration of digital technologies in the pharmaceutical industry requires rigorous validation of the Computer System Validation (CSV) IT systems that control the automated production of medicines. This validation provides documented proof that a software application or computerised system will operate consistently and therefore meet the predefined Good Practice (GxP) guidelines. ALTEN's competence centre in Belgium provides this validation for its clients in the Life Sciences sector. In a recent migration project for a major pharmaceutical group, a team of 10 ALTEN Engineers successfully integrated and validated 48 critical devices in the client's IT network in Germany and Belgium.



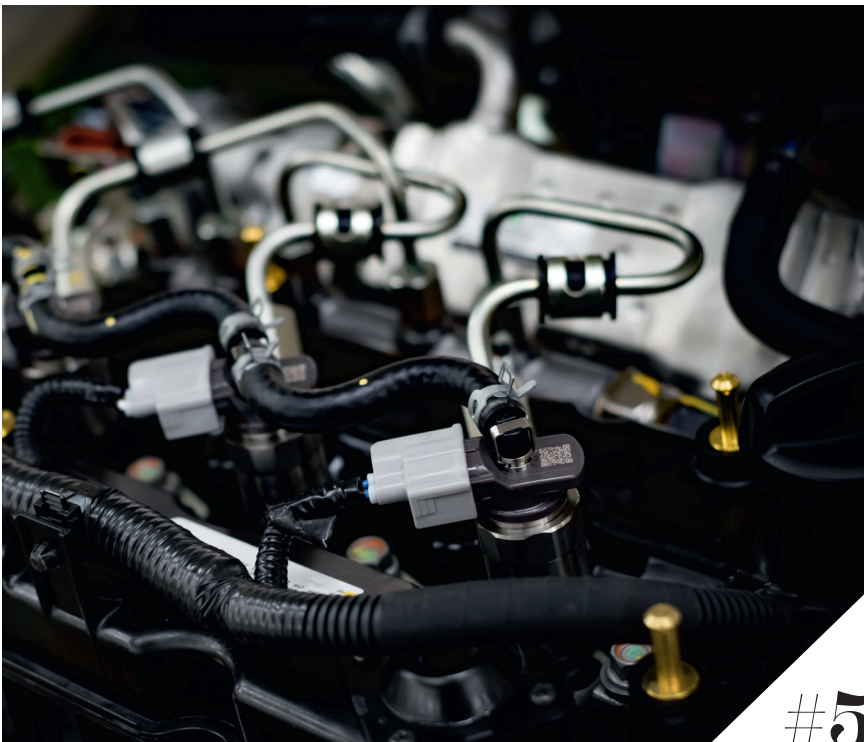
#3

#4

### ALTEN's expertise in Artificial Intelligence (AI) propels its clients into the future

*Artificial Intelligence in Telecoms - France*

For a telecom operator, ALTEN is committed to maximising the efficiency and innovation of client services by fully integrating AI into their internal processes. ALTEN's tailored solutions aim to improve the client experience by offering chatbots and advanced sentiment analysis. In addition, ALTEN provides AI tools to simplify the tasks of internal employees and offers development assistance. As a strategic partner, ALTEN continues to push the boundaries of innovation for its clients in an ever-changing landscape, ensuring their future success in the digital age.



#5

### Powertrain Engineering in the UK

*Automotive - UK*

A PREMIUM British car manufacturer has launched a project to develop a new range of compact, lightweight, low-emission petrol and diesel engines. ALTEN has mobilised its engine Engineers in the UK to support this ambitious project. The engines, designed for premium SUVs and sports cars, feature a configurable, flexible and modular architecture to incorporate future innovations such as new fuels, more advanced turbochargers and electrification. ALTEN, responsible for several Engineering Centres in the UK, is creating synergies between departments to improve productivity while reducing development costs for clients.



#6

## Improving sales performance with Big Data

Retail, Services & Media - France

ALTEN improves the business performance and user experience of 230,000 travel agents via AI integrated into their Cloud platform. This solution, developed by a world leader in IT solutions for the travel industry, enables a variety of services to be booked from tablets or computers. ALTEN engineers contribute to its development by applying AI and Machine Learning algorithms to profile, categorise and automatically extract travel agency characteristics. This Big Data analysis identifies best sales practices, optimising sales performance and the user experience.

#7

## An AGILE approach to developing e-government applications

Public services & Government - Europe

The AGILE approach offers a multitude of benefits, from quality and transparency to risk reduction and the ability to make adjustments to meet deadlines and budgets. ALTEN presented this methodology as part of the development of e-government applications for the Ministry of Finance of a European country. ALTEN develops and manages around 200 e-government applications used by 20,000 public officials. Thanks to the proposed methodology, deliveries are continuous and objectives can be easily realigned. User involvement throughout the process ensures visibility and transparency. After three years, the administration has fully adopted the AGILE approach, offering an improved user experience and more reliable applications, reinforcing the digital channel for government interactions.



## Research and Innovation

At a time when the call for sustainability is louder than ever, Research and Innovation are opening up new avenues for developing solutions that reduce environmental impact while improving business efficiency and performance. By promoting innovation and tackling the complex challenges of the world around us, ALTEN positions itself as a true partner of choice for its clients.

## Building the future through sustainable innovation



+ 100

internal research and innovation projects

+ 11

Labs around the world

31%

R&D in sustainable innovation in 2023

ALTEN's research and development programmes focus on always being one step ahead. Thanks to its ability to recruit, integrate, train and hire highly qualified Engineers, ALTEN is able to support its clients in all of their technological and industrial challenges.

### ALTEN Labs: innovation laboratories

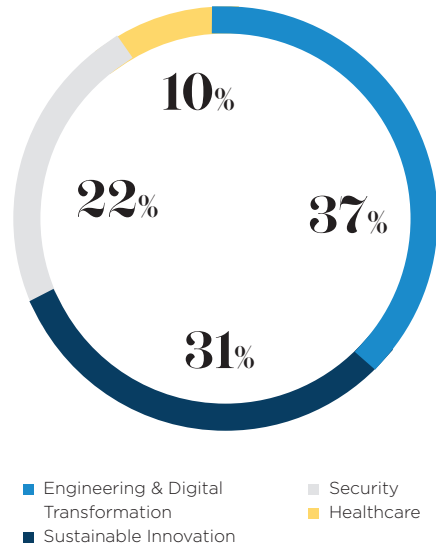
ALTEN Labs are working on various emerging technologies such as Big Data, AI, and virtual and augmented reality. Flexible, agile units, ALTEN Labs carry out projects ranging from energy efficiency in digital systems and industry to low-carbon mobility. They have a threefold objective:

- ▶ **Develop projects** and show our clients the breadth of our scientific and technological activities;
- ▶ **Involve ALTEN consultants** in innovative projects supervised by technical experts, thereby strengthening their skills and their creative spirit;
- ▶ **Cultivate a spirit of innovation** through a genuine community and an environment conducive to research.

Initiated in 2016, ALTEN Labs were designed to enable consultants of all levels of experience to test innovative technologies. In 2019, these laboratories were brought together within the Innovation Department. In total, more than 11 ALTEN Labs have been created in France and abroad.



**BREAKDOWN OF ALTEN R&D IN 2023**  
(in %)



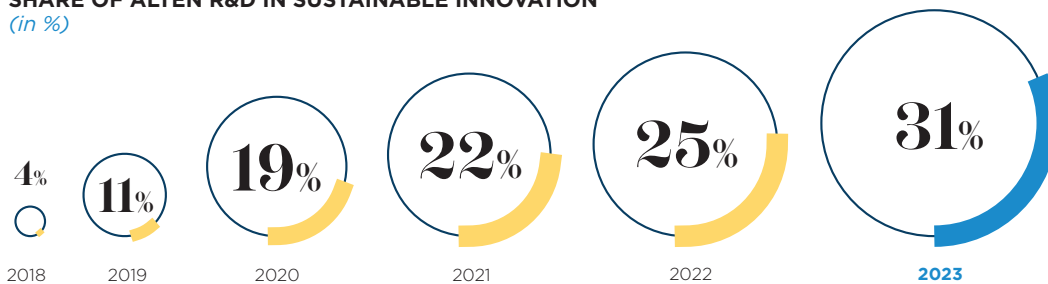
### Creating impact

Our Smart Digital initiative gives us a head start with nine main research programmes on cross-disciplinary themes, covering all our business sectors and always perfectly adapted to our clients' issues. Our innovation process is based on a bottom-up approach: our consultants directly develop our R&D projects on the basis of their wide-ranging experience, and each of them contributes his or her engineering skills to their realisation. The quality of our innovation processes and our technical support ensures the relevance of each project selected.

### Committed to all stakeholders

ALTEN works with partners who are themselves experts in their scientific, technological and/or academic fields. This federated ecosystem contributes directly to our research activities, either through scientific theses or scientific collaborations, or through use cases for our Proof Of Concept (POC) or Minimum Viable Product (MVP) and the pooling of our respective know-how, or through the introduction of new technologies into our work.

**SHARE OF ALTEN R&D IN SUSTAINABLE INNOVATION**  
(in %)



The Smart Digital strategy consists of combining the power and intelligence of digital data with the wealth of our business and sector experience.

# Smart Digital strategy

## Smart Data Exchange

A true Data Factory driven by Artificial Intelligence, Smart Data Exchange has been designed to assist the Data Scientist. A first platform collects, qualifies and reconciles data from various sources. A second platform helps them to design and qualify their analysis pipelines, while integrating security aspects 'by design'. All digital technologies are evaluated and applied: cloud tools, semantic data management and natural language processing, automatic and deep learning, meta-learning, cybersecurity, etc.

## Smart Factory 4.0

First introduced in the early 2010s, the concept of Industry 4.0 refers to the digitisation of product and service design, development, production and maintenance processes, boosted by Artificial Intelligence. Solutions using these new digital technologies and the associated benefits need to be integrated into an existing environment, which is often not conducive to change. The Smart Factory 4.0 Research Programme addresses the technical fundamentals of the factory of the future, such as the IoT (Internet of Things), the digital twin, AI, augmented reality, robotics, the integrated IT system and cyber security.

## Smart Design

With the Smart Design programme, ALTEN Labs are developing disruptive approaches to meet the challenges of designing complex technical systems combining the dimensions of products, services, processes or organisation. The increasing interdependence of technologies, uses and environmental or safety constraints means that the technical, human and financial resources deployed and decided at the upstream stage of the design process now need to be questioned and controlled. The aim? To measure their impact over the entire life cycle. At the same time, the length of development cycles must also be drastically reduced to meet the overriding criteria of Time to Market.

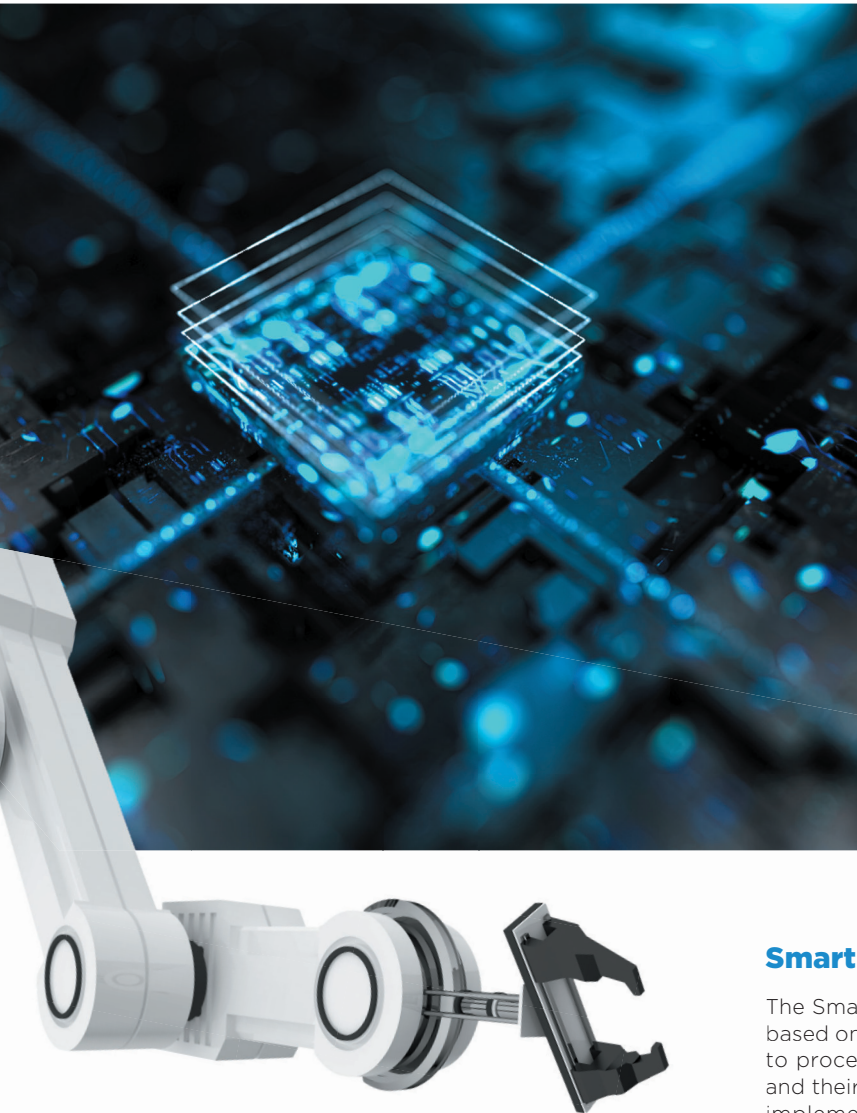
## Smart Transactions

In an increasingly connected and digitalised world, the challenges associated with data exchanges between individuals, businesses, software, databases, etc. are numerous: volumes reached, reactivity, interoperability, etc. We are therefore exploring the various technologies that can facilitate, enhance and secure these exchanges for the benefit of individuals and the various professional players in the tertiary and industrial sectors, while complying with changes in regulatory frameworks.

The Smart Transactions research programme, like the Fintechs in finance, the Insurtechs in insurance and the Regtechs in regulation, exploits technical possibilities to innovate and put technology at the service of business needs in the tertiary sector, as well as in the maintenance and operation of industrial products.

## Smart Mobility

Faced with environmental challenges, ALTEN has for several years included sustainable development at the heart of its development strategy and is devoting a growing share of its research and innovation efforts to it. The Smart Mobility Programme is a continuation of this commitment. It brings together innovative projects that focus on changes in mobility that are increasingly respectful of the environment and the well-being of users. The Smart Mobility Programme supports sustainable mobility through research into the increasing autonomy of vehicles, their cooperation with increasingly intelligent infrastructures, and the implementation of solutions to facilitate traffic flow and optimise multimodal travel.



### **Smart Green & Secure Systems**

The Smart Green & Secure Systems Research Programme brings together innovative projects in the field of embedded systems, focusing on security, eco-design, ambient intelligence and swarm systems. Its projects focus on the development of various platforms: 3D simulation, IoT, blockchain, NLP, etc. In particular, this programme addresses the issue of measuring the carbon footprint in eco-design at 3 levels: software (embedded or applications), connected objects and complex systems. In 2021, ALTEN received the “Jury’s Favourite” award in the “Corporate Strategy” category of the Responsible Digital Technology Awards, organised by the Institut du Numérique Responsable, in particular on the basis of the work carried out within this programme.

### **Smart Quality & Green Supply Chain**

The Smart Quality and Green Supply Chain programme is based on the observation that there is more and more data to process before making a decision, and that decisions, and their consequences, need to be tested before they are implemented. In other words: decisions that are secure, fast, effective and add significant value must be taken systematically. The programme aims to help Quality and Supply Chain players make these decisions as calmly as possible, using tools and methods developed by ALTEN.

### **Smart Communications**

With the support of a broad ecosystem of partners, ALTEN offers its clients solutions that complement their offerings, projects and innovation roadmaps to meet the needs of 5G use cases. The ultra-connectivity of today’s world requires improvements in a multitude of areas: coverage, energy efficiency, throughput, stability, reliability, etc. While 5G technology provides us with the technical means to do this, the Smart Communications Research Programme is adapting it to uses through innovative “breakthrough” solutions: Developers, radio engineers, project managers, profiles with functional skills... To move towards ever greater innovation and a connected future, ALTEN’s teams offer comprehensive expertise in combining tools and removing technological barriers.

### **Smart Healthcare**

The Smart Healthcare Programme is part of a drive to digitalise healthcare and centralise the patient experience, using new technologies such as AI, data science, IoT and cyber security. Clinical trials, which are essential for the launch of products and/or medical devices on the market, must comply with certain criteria to guarantee their safety, efficacy and reliability. The ambition of the Smart Healthcare programme is to accelerate the virtualisation of clinical trials, in particular the digitisation of procedures and the decentralisation of trials, while guaranteeing optimised patient recruitment and follow-up using connected solutions, AI and real-life data, without compromising reliability and safety.

**Industry 4.0 focus** In an ever-changing world, factories need to be more flexible, communicative and efficient, while putting people at the heart of the process. This is the focus of ALTEN's Smart Factory 4.0 research programme. The aim is to harmoniously integrate cutting-edge technologies for efficient, economical and environmentally-friendly production.

## **Smart factory 4.0:** putting people at the heart of Factory 4.0

### **Improving industrial performance**

ALTEN's Smart Factory 4.0 Research Programme is a concrete response to the major challenges facing the factory of the future. By combining nine strategic projects, this programme explores and deploys innovative solutions to transform industrial processes.

From real-time predictive maintenance to smart energy management and the distribution of intelligence via Autonomous Guided Vehicles, each section addresses a crucial facet of the digital transformation of factories. The concept of the digital twin, applied to production processes and internal logistics, promises a revolution in operational management. Robotics, with the design of a universal gripper, and digital continuity for additive manufacturing, open up new prospects for productivity and flexibility. In addition, predicting occupational accidents and securing IT systems against cyber attacks are core concerns in order to guarantee a safe and protected working environment.

These projects do not remain at the theoretical stage, but are tested and validated with industrial partners, ensuring their relevance and effectiveness in real environments. The Smart Factory 4.0 Research Programme thus embodies ALTEN's commitment to shaping the future of industry through innovation and collaboration.



### **Deploying Generative AI and Industrial 5G**

At the heart of the digital revolution, ALTEN's Generative Artificial Intelligence represents a major step forward in capitalising on past experience. This innovative technology acts as a virtual partner, enabling teams to quickly find relevant information and optimise their processes. As the interface between people and advanced technology, it simplifies day-to-day work and adds significant value at every stage of production.

ALTEN is at the forefront of innovation with its strategic use of 5G in Industry 4.0. Through dedicated solutions, this revolutionary technology is paving the way for a new era of industrial connectivity. Demonstrators such as the 5G Mini Robot are a perfect example of how 5G can improve the efficiency, flexibility and, above all, the safety of production operations. By operating a state-of-the-art network, ALTEN is giving concrete form to its vision of a more agile, efficient and resilient industry.



## Partnerships to drive industrial 5G and intelligent IoT

ALTEN has developed strategic partnerships with industry leaders such as SIEMENS and STMICRO-ELECTRONICS to meet today's technological challenges.

In collaboration with SIEMENS, we have successfully integrated the digital twin concept into the factories of the future, optimising our predictive and prescriptive algorithms directly on the production lines. This innovative approach reduces reliance on the Cloud for data

transmission, ensuring more efficient connectivity.

At the same time, our collaboration with STMicroelectronics is focusing on the deployment of an intelligent IoT infrastructure, which is crucial to the move towards Industry 4.0. Together, we are developing intelligent sensors for predictive maintenance and equipment monitoring applications, generating tangible benefits such as increased

lifespan for cutting tools in the aeronautics industry.

Under a three-way partnership with BOUYGUES TELECOM ENTREPRISES and SIEMENS France, ALTEN is contributing to the development of industrial 5G in France. This strategic collaboration aims to exploit the synergies between our respective expertise to promote the adoption of 5G in various industrial sectors, illustrating our commitment to innovation and digital transformation.



### THE MINI-FACTORY 4.0 DEMONSTRATOR

The ALTEN Lab research team in Toulouse has developed the "Mini Factory 4.0", a miniature drone assembly plant with a digital twin. This platform is a demonstrator of the added value that new technologies such as artificial intelligence can bring to industrial processes. Using machine learning algorithms, it can monitor and process the data collected in real time, helping to prevent production problems and reduce the risk of accidents. ALTEN Labs are at the heart of these initiatives, exploring the new frontiers of Industry 4.0 while placing people at the centre of digital transformation.





**ALTEN**

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