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20 years of innovation for those who make the world go round  

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Message from Patrice Caine
Chairman
and Chief Executive Officer
At the time this report is published, the world is experiencing one of its most serious crises with the COVID-19 pandemic. Through its magnitude and impact on our lives and societies, it is leading us, individually and collectively, to rethink our models and redefine our priorities for a safer future. It is also highlighting the important role of companies and their responsibilities to use their ability to positively contribute to our society’s progress. It is this economic, social, societal and environmental contribution of Thales in 2019 that I wanted to present to you through this integrated report.

Firstly, the acquisition of Gemalto on 2 April 2019 profoundly changed the Group’s scope by adding unique expertise in the fields of biometrics, secure connectivity and data protection. Already a leader in its other businesses - aerospace, ground transportation, defence and security - Thales has thus become the world leader in the digital identity, security and cybersecurity markets.

In addition to this economic performance, the ongoing involvement of the Group’s 82,600 employees also enabled an ambitious policy for a low-carbon future in line with the 2°C climate target to be implemented. We are also committed to eco-designing 100% of our new products and solutions by 2023.

In 2019, we also significantly strengthened our integrity and compliance programmes, deploying a network of more than 100 compliance officers and training nearly 10,000 employees in anti-corruption. This unprecedented level confirms the Group’s commitment and zero-tolerance policy towards corruption and influence peddling.

At the same time, we have implemented structured vigilance procedures for our subcontracting chains, reaffirming the Group’s focus on respect for Human Rights and international labour standards.

Finally, this year we also strengthened the Group’s societal commitment by launching the Thales Solidarity Programme, intended to finance and support solidarity mobilisation projects throughout the Group in the fields of education and professional inclusion, digital citizenship and environmental protection.

All these actions are part of Thales commitment to increasingly incorporate the United Nations’ Sustainable Development Goals into Thales strategy and confirm our constant commitment to the United Nations Global Compact since 2003.

In order to strengthen the buy-in of these challenges within the Group, we have decided to implement a variable compensation policy that includes more CSR criteria for a wider range of managers.

Finally, aware of the profound transformations that Thales is undergoing, I wanted us all to reflect together on what drives us collectively. This work, which involved more than 35,000 employees, led us to define Thales purpose: “Building a future we can all trust”.

Today, this confidence is our main asset to confront the unprecedented crisis that we are living through. While it is too early to accurately assess the short and longer-term consequences, it is however certain that the Group’s policy, based on the continual search for responsible economic performance that respects its stakeholders, remains the foundation of this trust, which is so essential in these times of upheaval.

CONFIDENCE IS OUR MAIN ASSET TO CONFRONT THE UNPRECEDENTED CRISIS THAT WE ARE LIVING THROUGH."
THALES IN 2019

GROUP PROFILE

KEY FIGURES 2019

<table>
<thead>
<tr>
<th>Revenue</th>
<th>€18.4bn</th>
<th>Organic growth (1) +0.8%</th>
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</thead>
<tbody>
<tr>
<td>EBIT (2)</td>
<td>€2,008m</td>
<td>10.9% of revenue</td>
</tr>
<tr>
<td>Free operating cash flow (2)</td>
<td>€1,372m</td>
<td></td>
</tr>
</tbody>
</table>

A WORLDWIDE PRESENCE

(breakdown of revenue by geographic area)

ORDER INTAKE: €19.1bn
NUMBER OF EMPLOYEES: 82,600
SELF-FUNDED R&D (2): €1,097m
DIRECT OPERATIONAL EMISSIONS OF CO₂ (3) -30% in 10 years

TOTAL SHAREHOLDER RETURN, OVER 5 YEARS (TSR) (as at 12/31/2019)
+128% Thales share
+65% CAC 40
+115% European Aeronautics and Defence Industry

4 OPERATING SEGMENTS
(breakdown of revenue by operating segment)

- AEROSPACE 31% EBIT 9.2% of revenue
- TRANSPORT 10% EBIT 2.9% of revenue
- DEFENCE & SECURITY 45% EBIT 14% of revenue
- DIGITAL IDENTITY & SECURITY 14% EBIT 10.3% of revenue

SHAREHOLDER STRUCTURE
(as at 12/31/2019 in shares)

- 26% FRENCH STATE
- 25% DASSAULT AVIATION
- 3% EMPLOYEES
- 46% OTHER SHAREHOLDERS

DIVIDENDS (in euros)

<table>
<thead>
<tr>
<th>Year</th>
<th>Dividend</th>
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<tr>
<td>2015</td>
<td>1.36</td>
</tr>
<tr>
<td>2016</td>
<td>1.60</td>
</tr>
<tr>
<td>2017</td>
<td>1.75</td>
</tr>
<tr>
<td>2018</td>
<td>2.08</td>
</tr>
<tr>
<td>2019</td>
<td>0.60</td>
</tr>
</tbody>
</table>

(1) Organic: at constant scope and exchange rates. (2) Non-GAAP financial indicators. See definitions on page 33 of the 2019 Universal Registration Document. (3) Emissions in Scopes 1, 2 and 3 (business travel). (4) In order to set an example for all the Group’s stakeholders, and to protect its financing capacities, if the COVID-19 crisis continues, the Board of Directors decided, during its meeting on 6 April 2020, to review its position with regard to the dividend in respect of 2019 (see page 40 of the 2019 Universal Registration Document).
OUR PURPOSE

BUILDING A FUTURE WE CAN ALL TRUST

Trust is essential for societies to flourish. Trust in our institutions. Trust in our systems. Trust in technology. Trust in each other.

At a time when progress offers huge opportunities and faces serious challenges, it is essential that the people we all rely on are trusted.

That’s why we strive to turn leading-edge technologies into solutions that are both imaginative and resilient, human-centred and sustainable.

So those we serve, our customers, can navigate uncertainty with confidence and new frontiers with optimism.

And together, we harness the extraordinary power of technology to build a future we can all trust.

OUR MISSION

At Thales we develop solutions which are increasingly sustainable and that help our customers think smarter and act faster – mastering ever greater complexity at every decisive moment along the way.

DATA IN THE CRITICAL DECISION-MAKING CHAIN

SENSING AND DATA COLLECTION
- Radar, sonar
- Optronic, electromagnetic and inertial sensors
- Passive detectors
- Network surveillance sensors
- Observation and electronic surveillance satellites
- Ground-based surveillance and intelligence
- Drones and airborne reconnaissance systems
- Biometric sensors

DATA TRANSMISSION AND STORAGE
- Secure and resilient communication networks
- Software-defined radios
- Tactical datalinks
- Satcoms
- Secure data centers
- Digital security solutions
- IoT connectivity modules

DATA PROCESSING AND DECISION MAKING
- Command systems
- Air and rail traffic management
- Mission systems
- Advanced information processing (imagery, video, semantics)
- Data merging, big data
- Jamming
- Missiles and other armaments

THALES IN 2019

THALES IN 2019 INTEGRATED REPORT

THALES
FOUR STRATEGIC ASSETS

EXCEPTIONAL R&D AT THE HEART OF A GLOBAL INNOVATION ECOSYSTEM

Thales dedicates 20% of its revenue to R&D, one third of its employees work in this area. The Group builds on an innovation ecosystem that has been co-developed with its customers, based on academic and entrepreneurial partnerships.

A UNIQUE PORTFOLIO OF DIGITAL COMPETENCIES

Thanks to the exceptional expertise of its teams and targeted external growth strategy, Thales builds its digital expertise around four major technologies which play a key role in critical decision-making chains: connectivity and mobility, big data, artificial intelligence and cybersecurity.

AN IN-DEPTH KNOWLEDGE OF ITS MARKETS

The resilience of Thales business model is based on five large markets which use the same technologies and know-how but have different business cycles. In virtually all its business activities, Thales is in the top 3 worldwide or ranks number one in Europe.

A GLOBAL FOOTPRINT

Thales operates in 68 countries and has customers in more than 100 different countries. Its close proximity to its customers, its longstanding experience of international markets and complex partnerships are proving to be key commercial assets.
AEROSPACE

AERONAUTICS
Electronic equipment to increase security and reliability of flights, civil and military aircraft simulators, connectivity and in-flight entertainment. Onboard equipment and functions for aircraft piloting, navigation and control.

GROWTH DRIVERS
- Increased research into operational and environmental efficiency on the part of airlines.
- Increased permanent connectivity requirements for appliances, for both pilots and passengers.

AREAS OF EXPERTISE
- The only global industrial company with leadership positions in both onboard and ground equipment.
- Present on the majority of types of civil and military aircraft and all the new aeronautics programmes.

CIVIL/MILITARY

COMPETITIVE POSITION

NO.2 WORLDWIDE
(cabin multimedia and connectivity)

NO.3 WORLDWIDE
(flight avionics)

SPACE
Equipment, payloads, satellites, systems and services for space programmes.

GROWTH DRIVERS
- Unique positioning of space systems to meet new communication and observation requirements.
- Military space: a growing priority for many countries.

AREAS OF EXPERTISE
- Global leader in construction of commercial telecommunications satellites.

CIVIL/MILITARY

COMPETITIVE POSITION

NO.2 WORLDWIDE
(civil satellites)

GROUND TRANSPORTATION
Rail signalling, control and supervision of urban and mainline rail transport networks.
Ticketing solutions.

GROWTH DRIVERS
- 60% of the world’s population will be living in towns or cities by 2030 (UN-Habitat).
- Public transports are recognised for their efficiency and climate impact.
- Strong trend towards more automated or even autonomous transport solutions.
- Renovation of signalling systems: a major lever in increasing the efficiency of existing infrastructures.

AREAS OF EXPERTISE
- Signalling solutions implemented for more than 85 underground lines in 45 cities.
- Inventor of standards for the rail sector: CBTC (Communication-Based Train Control) for metros and ETCS (European Train Control System) for mainline rail.
- Leader in driverless underground signalling.

CIVIL

COMPETITIVE POSITION

NO.2 WORLDWIDE
(rail signalling and supervision)
LEADER IN AEROSPACE, TRANSPORT, DEFENCE AND SECURITY

DEFENCE & SECURITY

Sensors and mission systems. Communications, command and control systems, networks and infrastructure systems, security and cybersecurity solutions for countries, cities and critical infrastructures.

GROWTH DRIVERS

• Increasing defence budgets.
• Rapid digitalisation of the armed forces.
• High demand for cybersecurity.

AREAS OF EXPERTISE

• Long-standing partner of the armed forces, throughout all of the value chain.
• World leader in radar and sonar technologies.
• Expert in secure communication networks, at the heart of collaborative combat solutions.
• Mastery of the new differentiating digital technologies.
• The air traffic control centres equipped by Thales cover more than 40% of the Earth’s surface.

DIGITAL IDENTITY AND SECURITY

Digital identity and security solutions. Identity management and control, data protection and encryption, biometrics, securing connected devices, subscription management and client authentication for mobile operators, bank cards.

GROWTH DRIVERS

• Fast-growing markets (data protection, connected devices, biometrics, etc.).
• More than 1,000 billion connected devices forecasted by 2035.
• Increasing dematerialisation in the cloud: authentication and data protection requirements.
• An offer that is very complementary to other Thales activities.

AREAS OF EXPERTISE

• No. 1 worldwide on data protection markets, secure identity documents, bank payment cards, physical SIM cards.
• Partner with more than 3,000 financial institutions, 450 mobile operators and 30,000 companies.
• Involved in more than 200 government security and identification programmes.
NEW GLOBAL STANDARD
IN DIGITAL IDENTITY AND SECURITY

In 2019, the new Digital Identity and Security Global Business Unit (DIS) was born from the merger of 15,000 Gemalto employees with the Group’s digital security businesses, Guavus and Thales eSecurity. Gemalto’s expertise and Thales know-how are perfectly matched. Thales is thus the only player capable of providing the world’s most demanding customers with the technologies needed for their digital transformation.

3 key technologies

The integration of Gemalto enables Thales digital strategy to be significantly accelerated. It strengthens the differentiation of the Group’s portfolio of businesses by adding unique expertise in 3 key technological fields related to digital security:

- **BIOMETRICS AND DIGITAL IDENTITY**
- **SECURE CONNECTIVITY OF THE INTERNET OF THINGS (IoT)**
- **DATA PROTECTION THROUGH ENCRYPTION**

Combined, they provide an unparalleled range of solutions to protect the digital service lifecycle.

Security solutions for all markets

More than 30,000 organisations already depend on Thales digital identity and security solutions to verify the identities of people and objects, authorise access to digital systems, analyse huge amounts of information in real time and encrypt data.

- **IDENTITY AND BIOMETRICS**
  
  Appropriate use of biometrics offers an optimal balance between ease of use and security. For day-to-day payments, the new biometric bank cards make it possible to pay for purchases simply and securely. Similarly, for access to critical sites - airports, industrial sites, administrations - enhanced biometric solutions ensure the identity of individuals, without the need for physical documents.
  
  - In Bahrain, thanks to the digital eSIM card, customers of mobile telephone operator VIVA may use their new mobile device the moment it is switched on, without having to insert a physical card.
  
  - In the Philippines, Thales supplied 30,000 biometric tablets to reduce fraud by verifying voters’ identity through their fingerprints.

- **DATA ANALYSIS AND IoT**
  
  By combining big data and artificial intelligence, Thales systems enable significantly increased efficiency of sensors and considerably improve the analysis of the data they produce, such as those provided by observation satellites or anti-mine sonars.
  
  - In the United States, AT&T has chosen Thales IoT technology to simplify and secure the connections of machines and objects to its network.

- **CLOUD PROTECTION AND SOFTWARE LICENSES**
  
  For companies, security concerns are a major constraint on data migration to the cloud. Thales HSM solutions (Hardware Security Modules) enable strong security checks and regulatory compliance to be ensured, while benefiting from the advantages of the cloud.
  
  - Thales provides security solutions for the world’s five “cloud computing” giants.

3 key technologies

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INTEGRATION BASED ON A SHARED CORPORATE CULTURE

Convinced that a successful integration is based to a large extent on the alignment of corporate cultures, Thales and Gemalto have worked carefully to share their respective strengths and values.

One to be #One, an approach based on employee commitment

“In order to build a future organisation, the cultural dimension cannot be ignored”(1): this observation applies more than ever to a Group whose success is based on innovation, expertise and collective performance.

In order to meet this challenge, as soon as the Gemalto acquisition was announced, a specific working group was set up to support and ensure the success of this project. Amongst other initiatives, a cultural audit was deployed to 13,200 Gemalto employees and 10,000 Thales employees worldwide. The survey not only highlighted many common values, but also revealed everyone’s strong commitment to this integration.

The passion for innovation is a cornerstone

Operating in stimulating environments and dynamic markets, Thales and Gemalto share a culture of innovation and technological challenge.

However, at the commercial level, because these two groups have very different customer types, distinct organisations and methods have resulted. For this reason, and to ensure rapid synergies, a collaborative change management policy adapted to everyone’s expectations was quickly put in place.

Expanded cultural diversity

In a few months, the Group’s workforce quintupled in Latin America, tripled in Singapore, doubled in the United States and in China. By welcoming more than 120 nationalities from Gemalto, Thales is even more focused on its inclusion and diversity policy, which is key to its development. In addition to promoting a richness of viewpoints and creativity, this cultural diversity is proving to be an invaluable asset for a better understanding of customers.

Bringing visions together through our purpose

The integration of Gemalto has highlighted the need for the new group to prioritise what collectively drives the 82,600 employees of the new group. The work, which involved more than 35,000 people, led Thales to define its purpose: “Building a future we can all trust”.

A TRANSFORMING AND AMBITIOUS INTEGRATION

10% operating margin in 2019

€3.1bn of revenue in 2019

€300 to 500m of revenue synergies by 2023

15,000 employees in 58 countries

More than 3,000 R&D engineers

DIGITAL IDENTITY AND SECURITY OFFER HIGH GROWTH PROSPECTS IN THE RANGE OF 10% PER YEAR BY 2023.

(1) Mercer International Study 2018 “Managing cultural risk to accelerate the potential value creation from a transaction.”
Since 2000, the year Thales was created, the Group has continued to develop, with the support of its greatest assets: its passionate and committed employees, close proximity to its customers and markets, a permanent focus on innovation and a determined corporate responsibility strategy.

2000
Thomson-CSF becomes Thales
Technology leader in defence and industrial electronics

2003
Dassault Aviation becomes a strategic shareholder

2005
Acquisition of 25% of the share capital of DCNS

2007
The New Thales, leader in critical information systems
Creation of Thales Alenia Space

2009
Thales becomes a signatory to the United Nations Global Compact

2012
Thales is recognised for the first time as one of the Top 100 most innovative companies in the world
Thales achieves the Advanced Level for the United Nations Global Compact

2013
Ambition 10 Strategic Plan
Strengthen the Group’s growth and profitability

2015
Acquisition of Vormetric

2017
Creation of the Digital Factory
Signature of the French Business Climate Pledge
Acquisition of Guavus

2019
Thales is recognised for the first time as one of the top 100 most innovative companies in the world
Thales achieves the Advanced Level for the United Nations Global Compact

€8,580m
GROWTH IN REVENUE FROM 2000 TO 2019
2019, a new year of progress for the Group

Transformative acquisition of Gemalto
Launch of the Group’s low-carbon future strategy
Thales joins the CAC40 index

Ground transportation
OCTOBER
With Thales, Portugal has a new generation of rail signalling. The existing systems have migrated to European standards of interoperability.

Defence & security
JUNE
The Direction Générale de l’Armement (DGA, French Defence Procurement Agency) awards Thales a major contract for the design and production of the ground segment of the new-generation satellite communication system for the French Armed Forces.

From 2023, the Armed Forces will have increased interoperable communication capacities in terms of flow, availability, resistance to threats and end-to-end connectivity.

Digital identity and security
AUGUST
The Thai Ministry of Foreign Affairs awards a seven-year contract to the DGM consortium, which includes Thales. This contract is for the supply of 15 million e-passports for its citizens. Thai citizens will soon have a biometric passport equipped with the highest performing secure integrated software recommended by the International Civil Aviation Organization (ICAO) to ensure quick border crossings.

Space
FEBRUARY
The Iridium® NEXT constellation, created by Thales Alenia Space, has been fully deployed. The 75 satellites are all operational. This is the highest performing, most flexible and most sophisticated constellation in the world.

Innovation
MARCH
The most powerful laser system in the world, developed by Thales and ELI-NP, reached a record power of 10 petawatts. This system will be the core instrument of a unique new advanced technology and fundamental research facility in nuclear physics.

JULY
AI for Humanity: Thales is committed to trustworthy artificial intelligence alongside other French companies.

DECEMBER
InnovDays: Thales presented an exceptional range of technologies and solutions which the Group uses to build a confident future.
VISION AND STRATEGY

AN INDUSTRIAL AND TECHNOLOGICAL EXPERT BECAME A DIGITAL TRANSFORMATION ACCELERATOR IN ITS MARKETS
MEETING GLOBAL CHALLENGES

Growth and urbanisation of the world population

60% of the population will be urban in 2030(1).

11.2 billion human beings on Earth in 2100.

Thales helps move 3 billion travellers worldwide on 86 metro lines in 40 of the world’s largest cities.

2 aircraft out of 3 take off or land thanks to Thales systems.

Exponential growth of data produced

50x the number of digital interactions in 2025 compared to 2010.

Thales helps secure 80% of global banking transactions and makes the information systems of 19 out of 20 of the world’s largest banks secure.

CHALLENGE: TO RESTORE CONFIDENCE

In all business sectors, there has been a dizzying growth in the amount of data produced; an airliner already generates about 15 gigabytes of data during each trip, and some even predict that each autonomous car could produce more than one gigabyte of data per second.

This huge amount of data that is constantly circulating and used, mostly in real time, poses significant safety and security challenges for governments and businesses alike: fake news, hacking or data manipulations are all growing threats with enormous potential impact.

Sowing permanent doubt can generate a general decline in the confidence of citizens, businesses and administrations. It is therefore essential to be able to verify information, identities and data in order to ensure that they have not been manipulated or diverted.

OUR RESPONSE

By capitalising on biometric, strong authentication and encryption technologies, Thales ensures the end-to-end protection of sensitive data.

CHALLENGE : TO MAKE CITIES SMARTER

The continued growth of the world’s population – particularly in Africa and Asia – coupled with expanding urbanisation is resulting in the proliferation of “mega cities”, i.e. urban areas with more than 10 million inhabitants. These population concentrations present major challenges in terms of security, transport, the environment and general quality of life.

“Smart city” solutions are based on the ability to agglomerate – in real time, if possible – the greatly varied data from heterogeneous sources: metro frequency, passenger flow, road traffic, power consumption and CO₂ emissions etc. and is used to best adapt the infrastructure and public services to the immediate needs of citizens.

This ever closer and more integrated management of cities is becoming an essential part of harmonious development and helps them to combat global warming.

OUR RESPONSE

Thales meets the UN Sustainable Development Goals to ensure access for all to safe, accessible and sustainable transport systems, at an affordable cost, positioned as the world No. 2 in railway signalling and supervision.

Energy transition and climate emergency

Global CO₂ emissions have increased nearly 50% since 1990(2).

Climate change is at the top of the agenda for an increasing part of the world’s population. At the same time, the attraction of the Western way of life in emerging countries and the development of new technologies, among others, continue to increase greenhouse gas emissions.

CHALLENGE: PROMOTE A SUSTAINABLE AND ECONOMICALLY SUPPORTABLE ENERGY TRANSITION

If digital was a country, it would already have 2 to 3 times the footprint of France(3). The exponential growth of connected objects, in particular, could have a colossal impact on CO₂ emissions, up to 23% of the environmental impact of the digital universe in 2025.

OUR RESPONSE

Thales has undertaken that 100% of its new products will be eco-designed by 2023. Thales is already working to develop digital technologies that consume less data and energy through the development of specific hardware and software solutions.

Mobile connectivity and multiplication of cyber threats

1,000 billion connected objects in 2035.

+89% growth in revenues from 5G in 2020.(1)

CHALLENGE: TO DEVELOP CONTINUOUS, SAFE AND SECURE CONNECTIVITY

The number of connected objects could be multiplied by 48 by 2025, according to the Green IT Institute. Their efficiency and reliability depend on near-continuous access to the global grid. In addition, whether for work or leisure, the people of the world want access to a high-performance mobile connection at all times. The ongoing development of 5G not only meets this demand but also leads to a multiplication of uses.

In this context, the ability to ensure a safe and secure connection becomes an essential issue, whether on the train or the underground, in an aeroplane or a car, whether in the city or a rural area. At the space level, low and medium-altitude communication satellite constellations and new, more flexible and high-performance satellite platforms are changing the game by offering unprecedented broadcasting capacity.

But this permanent connectivity cannot work without the simultaneous development of security solutions, capable of guaranteeing the reliability of the growing number of critical applications that now depend on these networks.

OUR RESPONSE

In avionics, Thales connected systems offer airlines and passengers an unrivalled degree of connectivity allowing fluid and continuous connections between the aircraft and the ground. They are shaping the future of air travel in terms of passenger experience, safety and flight efficiency.

Increase in the impact of artificial intelligence (AI)

8x the AI market in 2025 compared to 2019(2).

CHALLENGE: TO SET UP A TRUSTED, EXPLAINABLE, CERTIFIABLE AND SUSTAINABLE AI

The rapid increase in the processing power of processors and in data storage capacity has enabled artificial intelligence to take flight. This concept, which combines many different technologies, is attracting increasing interest from governments and companies.

In the course of a few years, over $15bn have been invested in startups specializing in the field of artificial intelligence, in order to harness this breakthrough innovation.

However, in years to come, this expansion could collide with the growing concerns expressed by citizens about these technologies, even if they are sometimes revealed to be irrational. It would therefore seem crucial to integrate into artificial intelligence development strategies answers to these legitimate questions on the societal and ethical challenges posed by the digital transformation of Society.

OUR RESPONSE

Thales is working on the development of responsible artificial intelligence, i.e. one that helps to make the best decisions while ensuring permanent human control and responsibility for actions taken. But it is also a frugal artificial intelligence in terms of data and energy, as performance should not be detrimental to the environment. These challenges are at the origin of the “Manifesto on AI for Industry”, initiated by Thales and implemented as part of the framework of the AI for Humanity initiative.

Global competition for talent

Worldwide, the number of unfilled positions in cybersecurity has risen 50% since 2015.

Around 60% of companies lack cybersecurity expertise internally.

Now a computer developer’s knowledge is estimated to be obsolete in 18 months, it used to take 5 to 10 years.

CHALLENGE: TO ENHANCE THE ATTRACTION OF COMPANIES

Due to the sustained growth in R&D investment and its internationalisation, profiles in electronics, cybersecurity or artificial intelligence are rare on the labour market and sought after by many players. The implementation of policies to attract talent is therefore a major challenge for companies. There can be significant consequences on the capacity for innovation or business development.

Potential candidates are increasingly aware of the companies’ economic and societal role within Society. Implementing social responsibility, integrity and inclusion policies is becoming an increasingly prevalent competitive advantage. Similarly, gender diversity in scientific and technical careers is an important issue for the future development of innovative companies.

OUR RESPONSE

Thales has long sought to reflect the diversity of the world in which it operates through a deliberate policy of diversity and inclusion. The Group partners with the main projects aimed at attracting young women towards scientific and technical careers, via the Women’s Forum or the Elles Bougent (“Girls on the Move”) Association.

(1) Source: Gartner August 2019 (2) Tractica Analysis - Artificial Intelligence Market Forecasts 2019.
OUR STRATEGIC PRIORITIES AND AMBITIONS

THE AMBITION PLAN IS IN LINE WITH OUR EXPECTATIONS. WE CONTINUE TO IMPLEMENT OPERATIONAL PERFORMANCE INITIATIVES WHILE AT THE SAME TIME ACCELERATING OUR R&D INVESTMENTS.

Patrice Caine, Chairman & Chief Executive Officer

IMPLEMENT POWERFUL OPERATIONAL PERFORMANCE LEVERS

Reinforce customer-centric organisation and culture

The customer-centric culture has grown in recent years thanks to new commercial and marketing initiatives which have increased the proximity of Thales sales teams to their customers worldwide.

The strong sales in 2019 and 2020 will support the accelerated growth predicted for the years to come.

Progress in 2019

An exceptional order intake in the 4th quarter.
A 30% market share in commercial telecommunications satellites.
Significant commercial success in the Defence industry in Europe and in emerging markets.

At the end of 2019, 72% of the 1,452 customers surveyed said they were satisfied or very satisfied with Thales.

Priorities for 2020

Accelerate the sales transformation project.
Streamline the organisation of international development.
Implement a new management model for key accounts.
Pay increased attention to opportunities in the support and maintenance of installed bases.

Relentlessly optimise operational performance

Thales continues to focus its operational attention on four main areas of competitiveness.

Purchasing Performance
- New organisation integrated globally.
- Target to ensure that all new suppliers have signed the new Purchasing and Corporate Responsibility Charter by 2023.

Efficiency of the support functions
- Implement standard and fully digitalised organisations worldwide.
- Steady decrease in the amount of administrative costs as a percentage of sales.

Competitive engineering
- Deploy the best digital engineering practices.
- Develop standard tools facilitating the design of complex systems.
- Maintain the skills of 30,000 engineering and R&D employees at the highest level.

Operational excellence
- Continuous improvement of operational excellence in bid management as well as project delivery, in a context of sustained business growth.
- Ambitious environmental policy: 20% decrease in direct operational emissions of greenhouse gases by 2023.

Significant improvement of gross margin and administrative costs since 2015

- Adjusted gross margin (a)
- Administrative costs as a percentage of sales

(a) At constant scope: 2015-2018 figures adjusted for the sale of GP HSM. 2019 excluding Gemalto.
INVEST TO SUSTAIN LONG-TERM GROWTH

Accelerate investments in R&D

Research and Development is a central function for the Group and a key differentiating and competitive actor, almost 40% of employees work in this area.

Thales invested €1,097m in self-funded R&D in 2019, i.e. 6% of its revenue in order to remain a key player in the great transformations of its markets.

The Group plans to significantly increase its investments in self-funded R&D by 2023. Moreover, in support of the Ambition 10 strategic plan, Thales implements a policy of targeted acquisitions to consolidate its technology portfolio and increase its growth potential.

Progress in 2019

The acquisition of Gemalto has allowed the company to increase its R&D investment capacity by more than 20%.

Priorities for 2020

Reinforcement of R&D spending focused on the development of transverse digital skills (cybersecurity, artificial intelligence, big data analytics, implementation of the Digital Factory).

In the forthcoming years, the Group plans to continue to increase its spending on self-funded R&D, which are expected to exceed €1.4bn by 2023.

More than €5bn invested in R&D over the next 5 years

(in million of euro)

More than €5bn allocated to acquisitions since 2017

Signature of the “Manifesto on AI for Industry” promoting the development of trustworthy AI, which is a source of growth and employment.

In the framework of cortAIx, the Group’s research center dedicated to AI in Canada, the Group is a pioneer in research on the certification of AI embedded on planes.

Priorities for 2020

Continue to support our customers towards a trustworthy digital transformation of trust based on ever-increasing resilient, explainable and secure technologies.

Moving forward on “frugal” solutions in energy and data to better meet current environmental issues.

Lead in digital transformation of markets

Thales has all the assets to play a key role in the ongoing digital transformation, thanks to:

- its position centred around critical decision-making chains, which by nature are increasingly digital;
- a network of Digital Factories (Paris, Montreal, Singapore) to develop new solutions in a flexible way;
- a number of partnerships formed within innovation ecosystems, with academic partners, innovative enterprises and companies, to innovate together in terms of use, business models and technologies;
- active interaction with startups for more than five years. Such actions have seen the development of more than 120 proofs of concept.

Execute on transformative acquisition of Gemalto

A major boost to Thales digital strategy, Gemalto acquisition will further differentiate the Group’s portfolio of activities by incorporating unique expertise in three key technological fields linked to digital security: biometrics and digital identity, secure connectivity for the Internet of Things (IoT) and data protection and encryption.

With the acquisition of Gemalto, Thales becomes the leader of the identity, digital security and cybersecurity markets, the only company in the world capable of offering complete solutions to secure the entire critical decision-making chain.

In the first few months following the integration, the teams identified opportunities for applications within a number of the Group’s products lines in the military and civil fields.

These new markets offer high growth prospects, in the range of +10% per year by 2023; these will be achieved by developing digital solutions and services.

Progress in 2019


Successful integration of the Gemalto teams within Thales, led by a dedicated project management team with the aim of maximising synergies as soon as possible after the acquisition is complete.

Cost synergies of €25m in 2019.

Revenue synergies: more than 20 projects won in 2019.

Priorities for 2020

Pursue the development of revenue synergies, with the objective of generating €300-500m in additional revenue by 2023.

Generate €60m in cost synergies in 2020 (€120m from 2022).
OUR VALUE CREATION PROCESS

ADDRESSING KEY SOCIETAL, ENVIRONMENTAL AND TECHNOLOGY TRENDS

Our resources

**INTELLECTUAL CAPITAL**
€1,097m in self-funded R&D.
A portfolio of more than 21,000 patents.
One-third of the workforce in R&D.
6 Innovation Hubs.
3 Digital Factories.
Over 50 academic partnerships.

**HUMAN CAPITAL**
82,600 employees.
More than 31,000 employee shareholders.
€7,388m in payroll.
16 hours of training per employee per year.

**ENVIRONMENTAL CAPITAL**
Launch of the low-carbon future strategy aligned on the 2°C climate target.
Renewal of our commitment supporting the French Business Climate Pledge.

**SOCIETAL CAPITAL**
A business ecosystem built on long-term relationships.
A strong ethics policy.
Purchases accounting for 46% of revenue.
Launch of the Thales Solidarity programme.

**FINANCIAL CAPITAL**
A very limited debt: €3.3bn at 31 December 2019
(€1.6bn excluding leasing debt).
€1,372m in free operating cash-flow in 2019.
Solid investment grade credit profile, S&P rating: A–.

4 fundamentals

- ATTRACTION AND RETENTION OF TALENTS
- RIGOROUS RESPONSIBLE APPROACH
- CONTROLLED RISKS
- OPERATIONAL EXCELLENCE

Our purpose

“Building a future we can all trust.”

Thales strives to turn leading-edge technologies into solutions that are both imaginative and resilient, human-centred and sustainable.

A resilient model built on a wide variety of clients and markets

- Government agencies: 15%
- Commercial customers: 20%
- Operators of critical infrastructures: 21%
- Armed forces: 44%
Exceptional R&D at the heart of a global innovation ecosystem
—
A unique portfolio of digital competencies
—
An in-depth knowledge of its markets
—
A global footprint

Solid governance that is adapted to current and future challenges
—
Ethics, integrity and responsible conduct are central to our model
—
Solutions to contribute to ecological transition

Markets sharing many technologies

Aeronautics  Defence  Security  Ground transportation  Space

Our achievements in 2019

INTELLECTUAL CAPITAL
Almost 450 new patents applied for in 2019, of which 25% in key digital technologies.
6% of revenue invested in self-funded R&D, +25% compared to 2018.
Thales once again ranked in the Top 100 most innovative companies in the world by Clarivate Analytics.

HUMAN CAPITAL
10,906 new recruits, including 7,832 permanent jobs.
94% full-time contracts.
2.56% absenteeism rate worldwide.
56% women on the Board of Directors.
The Group has operations in 68 countries.
 Ranked 3rd in businesses preferred by engineers (Universum France 2019).

ENVIRONMENTAL CAPITAL
4.6% reduction in energy intensity (toe/hours worked) since 2018.
Rated B by the Carbon Disclosure Project.
60% of non-hazardous waste is recycled (excluding one-offs).

SOCIETAL CAPITAL
72% of purchases made with EU suppliers, including 41% with suppliers in France.
€454m in tax (average rate of taxation: 26.3%).
€286m invested in the Social Outreach Economy by more than 20,000 employees who are members of the Thales Group savings scheme and the collective retirement savings plan.
At the close of 2019, 9,920 employees were trained in the fight against corruption.
Advanced Level of the United Nations Global Compact for the last 8 years.
Ranked among the leaders in the “Aerospace and Defence” category by the DJSI for the 3rd year running.
Largest French corporate contributor to microDON’s “Round Off Your Pay” initiative (in terms of amount raised and number of donors).

FINANCIAL CAPITAL
(2019 versus 2018)
Growth in revenue: +16.1%
EBIT growth: +19%
As a member of the Global Compact, Thales makes a concrete contribution to the transformation of the world through its core business and strategy. This is demonstrated in particular in its increased contribution to achieving the Sustainable Development Goals which are now fully taken into account by the Group.

4 PRIORITY SUSTAINABLE DEVELOPMENT GOALS

Whenever relevant, these four priority sustainable development goals are taken into account by Thales when launching new projects.

<table>
<thead>
<tr>
<th>SDG</th>
<th>BUSINESS PRIORITIES</th>
<th>DEVELOPMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Increase our R&amp;D investments and our public partnerships.</td>
<td>More than 40% of the Group's employees work in R&amp;D-related roles.</td>
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<tr>
<td></td>
<td>Contribute to sustainable and responsible industry.</td>
<td>Thales supports more than 200 doctoral students worldwide.</td>
</tr>
<tr>
<td></td>
<td>Develop our teams’ know-how and capacity for innovation.</td>
<td>In 2019, Thales allocated €1,097m to self-funded R&amp;D and each Thales employee completed 16 hours of training on average.</td>
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<td></td>
<td>Reduce the impact of our activities and products on climate change.</td>
<td>In 2019, Thales committed to reducing its direct greenhouse gas emissions by 40%, and its indirect emissions by 15% by 2030.</td>
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<tr>
<td></td>
<td>Anticipate the impact of climate change on our markets.</td>
<td>For more details, see page 24</td>
</tr>
<tr>
<td></td>
<td>Take part in the Accord de Paris commitments.</td>
<td>For more details, see page 38</td>
</tr>
<tr>
<td>13</td>
<td>Promote diversity and inclusion across the Group.</td>
<td>In 2019, women accounted for 32% of recruitment worldwide, 32.6% in Europe and 34.7% in France.</td>
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<td></td>
<td>Develop best practices in terms of female recruitment and careers.</td>
<td>At the end of 2019, 46 local networks were created to promote diversity. These networks bring together 3,200 men and women.</td>
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<tr>
<td></td>
<td>Fight against gender stereotypes.</td>
<td>For more details, see page 34</td>
</tr>
<tr>
<td>18</td>
<td>Fight corruption, place human rights at the centre of our value chain.</td>
<td>In 2019, Thales reviewed and reinforced its processes for fighting against corruption and influence peddling. A total of 9,920 employees received training on these subjects.</td>
</tr>
<tr>
<td></td>
<td>Support the creation of resilient and transparent institutions.</td>
<td>The Human Rights policy was also consolidated with the development of new due diligence procedures.</td>
</tr>
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</table>

6 SIGNIFICANT SUSTAINABLE DEVELOPMENT GOALS

Conscious of the significant challenges presented by the Sustainable Development Goals, Thales has gradually incorporated these into its CSR policy over the last two years.
Thales profitable growth model is based on an ecosystem of shared values. The Group’s economic success generates profits for the Company as a whole, which is essential to pursuing a resilient strategy. Value sharing is embodied not only financially but more widely, in the Group’s contribution to the UN’s Sustainable Development Goals.

NEW TECHNOLOGIES REVOLUTIONISE MEDICAL IMAGERY

In partnership with the Australian startup MicroX, Thales is developing next generation equipment based on the use of carbon nanotube-based cathodes, enabling better control of the X-ray beam during medical examinations. These technologies, combined with the use of artificial intelligence, enable the instantaneous display of a more accurate image and new diagnostic tools to be developed.

100% SOLAR ENERGY FOR A STRATOSPHERIC GEOSTATIONARY PLATFORM

The autonomous Stratobus platform uses a large number of breakthrough innovations intended to reduce its environmental impact: it is manufactured from recyclable subsystems and does not require a launcher to be positioned. Its ultra-light, flexible and high-efficiency photovoltaic modules were successfully tested in 2019. A first operational flight is scheduled for 2023.

Offset obligations, societal development drivers

Offset, also known as a countertrade, is the request for an economic return for the buyer country in the context of the award of an international public procurement contract, generally in the defence, security and major infrastructure projects sector. The projects supported aim to encourage the creation of local value and promote employment. These countertrade programmes are implemented in strict compliance with national legislation and ethical trade standards, in particular regarding the transparency of public contracts.

THALES ENABLES LOCAL EXPERTS AROUND THE WORLD TO EMERGE

Thales has long history of conducting offset projects in Malaysia and Oman. In Malaysia, the country has a vital need for quality rail infrastructure and wants to lead a development strategy in this area, for which Thales has been sought to provide assistance. In the Persian Gulf, the sultanate of Oman is among the best equipped countries in the region in digital systems. It is also crucial for the country that cybersecurity skills are maintained at the cutting edge.

In these two countries, Thales provided training for future local trainers in high-level courses. The Group has also developed comprehensive educational platforms for learners to practise railway signalling and cybersecurity in real-time situations.

Thales is thus enabling the emergence of a new generation of experts capable of ensuring the smooth operation and security of infrastructure networks in the future. In these countries where young people are passionate about technology, this training offers attractive career prospects to these new experts.

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(1) Corporate income tax shown in the adjusted income statement. See page 33 of the 2019 Universal Registration Document.
AN ORGANISATION FOCUSED ON INNOVATION

Driven by a passion to innovate, Thales is one of the few groups in the world capable of mobilising thousands of researchers and engineers, significant financial and technical resources, and world-class partnerships to build a confident future. As a source of progress, innovation increases the performance of our products tenfold, unites employees around a common project and provides competitive advantages.

BREAKTHROUGH INNOVATION AT THALES

Thales is designing solutions in a universe of extreme complexity. These systems, products and equipment often require long-term development. They are the product of sustained academic relationships, flexible methods and an industrial, commercial and scientific critical mass. These combined assets form an ideal breeding ground to promote the emergence of technologies and services that make tomorrow possible today.

The “second quantum revolution”

Thales actively participates in next generation electronics research, which uses the quantum properties of matter at the single atom scale. Quantum sensors enable magnetic and electromagnetic quantities, gravity and time to be measured extremely precisely with the help of ultra-complex calculations. Quantum communications will allow a more efficient spread of sensors and quantum calculators. Combining this together will enable new architectures for critical information systems to be created. In 2019, Thales completed a first series of trials on actual signals from a quantum technology-based spectrum analyser. Rare earth atoms contained in a crystal are capable of selectively and instantaneously filtering the electromagnetic signal received. This system has already demonstrated superior operational performance compared to traditional systems.

The TrUE AI approach, trusted artificial intelligence

The critical applications on which Thales is working need to rely on understandable and completely trustworthy technological systems. TrUE AI is the new Thales framework for developing projects in artificial intelligence. It follows transparency, ethics and intelligibility requirements. Thales seeks alternative paths to deep learning, criticised for its opacity and its high data and energy consumption. Regarding transparency, Thales is working to better identify data biases and develop ways to correct them. Lastly, security remains a key component: the authenticity of the data must be verified and guaranteed not to have been corrupted.

TO INNOVATE IS NOT ONLY TO BE AT THE CUTTING EDGE: IT IS ALSO TO OPEN NEW PATHS BY EXPLORING BREAKTHROUGH INNOVATIONS. THALES IS WORKING IN TWO AREAS IN THIS REGARD: DIGITAL AND DEEP TECH.

Marko Erman, Scientific Director

KEY FIGURES

An intellectual property portfolio enhanced by more than 23,000 patents

More than 450 patent applications in 2019, including 25% in key digital technologies

Thales has been ranked 7 times in the Top 100 Global Innovators of Clarivate Analytics

3 Digital Factories
DIGITAL, A GROWTH DRIVER IN ALL OUR BUSINESS LINES

The majority of Thales markets are digital in nature, as a link in critical decision-making chains. Digital technology enables new services and new business models to be offered in an increasingly wider range of applications. Value creation is shared: digitisation enables improved functionality to be offered to our customers and more recurring revenues for Thales.

Digital technologies structure the future of our industries

**BIOMETRICS: IMAGINING NEW ARCHITECTURES TO REDUCE THE TIME FOR COMPLEX COMPUTATIONS**

To improve the performance of its biometric matching system, Thales has worked in particular on the performance/efficiency trade-off of its computing architecture using the most advanced microelectronics techniques. The solution reduces the number of servers required and the carbon footprint by 30% compared to previous solutions.

In fact, biometric data processing and comparison require massive computational capacity. The Thales solution enables border agencies and any other government agency working in real time to benefit from a scalable solution, by reducing costs.

**PUREFLY, THE BRAIN OF TOMORROW’S AIRCRAFT**

Thales is developing PureFlyt, an innovative flight management system, which improves in-flight efficiency and security.

The PureFlyt system relies on data from the aircraft or drone, but also on data from the outside world, especially meteorological data. To do this, a massive volume of data, combining in-depth knowledge of avionics, connectivity and 40 years of expertise is processed in flight management systems. The artificial intelligence used in the design has enabled 100 million hours of flight experience to be accumulated.

The system calculates alternative trajectories in real time and reacts quickly to program changes. It allows crews to take better decisions, continually refine the trajectory and optimise the flight for lower fuel consumption and greater passenger comfort.

80% of our engineers are specialists in the systems or software

3,000 researchers

28,000 R&D engineers

Recognised as the leading European industrial company in the field of physics by Nature magazine

More than €1bn self-financed investments in R&D each year
Throughout the world, Thales supplies highly-complex systems, products and equipment. Their nature is often critical for its customers, governments, administrations and major corporations. Control of the risks related to these complex projects has long contributed to the Group’s performance.

The risk identification and management system deployed at all levels of the Group and overseen at the highest level makes it possible to better control the risks’ consequences, whether operational and strategic, legal and regulatory, or financial. This system also enables particular attention to be focused on societal and environmental challenges.

A PROACTIVE APPROACH TO IDENTIFY AND MANAGE RISKS

Integrated in the decision-making and operational processes of the Group, risk management is part of Group management and guides decision-making. It is based on a robust governance and control system.

**Risk governance**

**AUDIT AND ACCOUNTS COMMITTEE OF THE BOARD OF DIRECTORS**
(6 meetings in 2019)

Chaired by Anne-Claire Taittinger, Director.

- Responsible for ensuring the effectiveness of internal control and risk management systems.

**RISK MANAGEMENT COMMITTEE**
(2 meetings in 2019)

Chaired by the Chairman & CEO.

Includes the Chief Financial Officer, the Chief Operating and Performance Officer, the Group Secretary and General Counsel.

- Defines the acceptable risk level.
- Assigns responsibilities for managing and controlling risks.
- Verifies that risk management measures are fully comprehensive.

**RISK ASSESSMENT COMMITTEE**
(16 meetings in 2019)

Chaired by the Vice President, Audit, Risks and Internal Control.

Includes the Risk Director, Quality Director and Insurance Director.

- Analyses risks and evolving threats.
- Updates and prioritises risk levels (risk mapping).
- Prepares a consistent policy of prevention, internal control, audit and, where appropriate, transfer of risk to insurance companies.
- Issues recommendations to the Risk Management Committee.

**Risk Control System**

**AUDIT, RISKS AND INTERNAL CONTROL DEPARTMENT**

Certified by IFACI (three-year certification renewed in March 2019), attached to the Group Secretary and General Counsel.

Based on its risk assessments, the department is responsible for ensuring that:

- risks are managed via the performance of audits and the provision of guidance and advice across the Group;
- adequate internal controls are maintained.

The Group’s statutory auditors are in regular contact with the Audit, Risks and Internal Control Department.

**NETWORK OF 19 RISKS ADVISORS**

- Oversee main risk factors.
- Characterise risks.
- Monitor major incidents.
- Ensure continuous improvement of the system.

The key contacts for the Audit, Risks and Internal Control Department in Large Countries and Global Business Units are the Directors of Operations.

**EXTERNAL AUDITS AND CERTIFICATIONS**

For most of its operations, the Group is subject to a control environment imposed by its customers and regulatory authorities, which require strict certification and controls. These specific constraints are in addition to its statutory obligations.
A SYSTEM CONSTANTLY ADAPTED TO THE BUSINESS PRIORITIES

Risk mapping

Every year, Thales prepares and updates a map of the main risks to which the Group is exposed, regardless of their nature. This mapping is organised on the basis of a matrix of 19 risk factors. They break down into 56 independent, measurable risk scenarios, each attributed to a single line of responsibility.

Thales also carries out thematic risk mapping, particularly regarding anti-corruption and the prevention of influence peddling as well as cybersecurity.

Finally, twice a year, the Group prepares a risk mapping by Global Business Unit and by Large Country, in addition to the risks already identified and managed by operational management. The operational managements concerned, the Quality Department and the Insurance Department are involved in this work.

Clearly identified responsibilities

➤ 3 MAIN STRANDS OF RISK GOVERNANCE

- Expertise
  - CORPORATE (6 functional departments)
    Governance and organisation of risks shared at Group level (cash flow, foreign exchange, insurance, etc.)
- Entrepreneurship
  - 7 GLOBAL BUSINESS UNITS and their 29 business lines
    Risks related to major bids and projects, product policies, business strategy
- Compliance
  - 150 local OPERATIONAL ENTITIES
    Compliance with laws, regulations and internal processes (Chorus 2.0)

Audits

➤ INTERNAL

The internal audit and advisory plan, updated on a half-yearly basis and approved by the Audit and Accounts Committee, draws from risk analysis as well as current issues (bids and projects, product policy, supply chain, etc.) in respect of which specific risk factors have been identified. Audits are also conducted regarding the prevention of corruption and influence peddling, export control, joint venture governance as well as the integration of newly acquired companies, within approximately 18 months after closing.

Audit practices are regularly updated: as an example, in 2019, for small newly acquired entities, a practice known as the “Welcome” audit, focused on compliance and internal control, has been introduced. Lastly personal data protection has been taken into account in several audit practices.

In 2019, 75 internal audit assignments were conducted.

➤ EXTERNAL

Two statutory audit firms are appointed by the Group, in addition to firms occasionally called upon locally. Their due diligence (in-depth reviews, limited reviews or statutory reviews) is scaled according to the size and risks to which Group companies may be exposed.

Regarding anti-corruption, the fight against influence peddling, and actions taken as part of the duty of care, Thales calls on external service providers to complete specific audits at partners’ sites based on the risks identified or alerts received.

COVID-19 pandemic

Faced with the unprecedented health crisis caused by the spread of the COVID-19 coronavirus, Thales has given complete priority to protecting the health of its employees and their families, its customers and the population at large. At the same time, the Group has restructured itself to ensure business continuity, for its civil and military customers whose activities are critical, particularly in the fight against the pandemic and its consequences.

Eco-design helps to control environmental risks

Thales is committed to controlling climate risk by seeking to anticipate changes in environmental standards impacting its products and services. The Group has set itself the objective of accelerating its eco-design approach with the goal of applying it to all its developments by 2023.

While strengthening risk management, it will also take into account environmental impacts throughout the life cycle of products and systems, and develop functionalities focused on the environment. Furthermore, Thales continues to develop solutions leading to a better understanding of environmental challenges.

This approach also answers the need to create value for customers and to differentiate through innovation.
ETHICS AND INTEGRITY, AT THE HEART OF THE CORPORATE RESPONSIBILITY POLICY

For almost 20 years, Thales has implemented a proactive and increasingly demanding corporate responsibility policy. Thus, as of 2020, the CSR objectives in line with the six pillars of the Group’s CSR strategy are now taken into account to calculate the annual variable compensation for a large number of managers. The nature and destination of cutting-edge technologies developed by the Group, such as artificial intelligence or biometric recognition, can also raise new ethical questions which must be answered clearly. For this reason, Thales is committed to investing, together with all its willing stakeholders, in the definition of international standards and the dissemination of ethical, societal and environmental best practices.

A COMMITTED PLAYER GLOBALLY

The nature and destination of cutting-edge technologies developed by the Group, such as artificial intelligence or biometric recognition, can raise new ethical questions which must be answered clearly. For this reason, Thales is committed to investing, together with all its willing stakeholders, in the definition of international standards and the dissemination of ethical, societal and environmental best practices. This approach is embodied in particular in its involvement in the United Nations Global Compact of which it has been a signatory since 2003. As a result of Thales commitments to Human Rights, labour law, protection of the environment, and the fight against corruption, in 2012 it achieved the Global Compact Advanced level. Each year, Thales meets players involved in these issues at the United Nations Forum on Business and Human Rights.

Thales also contributes to the work carried out in the context of the International Forum on Business Ethical Conduct (IFBEC), a structure shared by the AeroSpace and Defence Industries Association of Europe (ASD) and the Aerospace Industries Association of America (AIA). Thales also actively participates in the working groups of intergovernmental organisations (OECD, United Nations, etc.). Moreover, conscious of the controversy linked to the use of white phosphorus in fireboxes, in 2019, Thales is committed to no longer producing or selling materials containing this substance by 2022. In this way, it responds proactively to its stakeholders.

In December 2019, Thales joined the association Entreprises pour les droits de l’Homme which is a place for the exchange of work and proposals from international companies for the better integration of Human Rights into company policies and practices.

In terms of the fight against discrimination, the signature of the LGBT+ commitment charter in May 2019 publicly confirmed the Group’s willingness to uphold an inclusive model and refuse all types of discrimination.

In keeping with its actions relating to the climate, in 2019, Thales reaffirmed its commitment to the French Business Climate Pledge and uses the globally recognised SBTi methodology to define the objectives of its low carbon policy.

Thales is also involved, along with eight other French manufacturers, in the “Manifesto on Artificial Intelligence for Industry”, which is part of the AI for Humanity initiative launched by the French government, the objective of which is to promote reliable AI.

A strengthened anti-corruption system

To protect itself against corruption, which is a major risk for multinational companies, Thales has had a zero tolerance policy in place since the end of the 1990s. This corruption risk prevention policy is subject to continuous improvement. These principles and policies are described in detail in the Group’s Extra-Financial Performance Statement. This is assessed regularly and was updated in 2019.

REINFORCEMENT OF GOVERNANCE

In 2019, 17 Chief Compliance Officers were appointed. They depend on a network of more than 100 compliance officers to promote and control the application of Thales principles of ethics, integrity and conformity throughout the whole Group.

TRAINING OF EMPLOYEES

The programme, which was reviewed in 2018 to propose an innovative training course, was completed by more than 9,700 employees in 2019, who were identified as the most exposed. The selection criteria are based on the professional pathway, the level of responsibility and the geographic region. In 2020, training on the fight against corruption and influence peddling formed part of the variable compensation criteria for a large number of managers.

EXTENDED ALERT SYSTEM

The alert system has evolved into a unique system open to employees and external and occasional staff. The Group counted 34 alerts in 2019, 26 of which were considered admissible. Of the 26 alerts, four related to allegations of potential corruption. All four alerts have been closed, since internal investigations have confirmed the absence of proven acts of corruption.

ASSESSMENT SYSTEM FOR THIRD PARTIES

The system for assessing the integrity of third parties of Thales aims to help with decisions on whether or not to enter into business relationships with a third party, to continue with a business relationship or to end one.

The Group has selected a specialist service provider with the skills and the means to conduct integrity checks (due diligence) in proportion to the assessment of the risk identified. These checks are included in the operating processes (purchases, business reviews, review of mergers/acquisitions, etc.).

Very strict control of exports

The Group exports its equipment and systems according to very strict rules designed to protect the national security of democratic states and combat the proliferation of weapons of mass destruction throughout the world. Compliance with the export control is therefore a critical challenge. In 2019, defence activities accounted for approximately 45% of Thales revenue.

The countries in which Thales manufactures systems and equipment for civil and military applications have strong governance, and exercise strict control over manufacturing and sales/marketing processes.

They are signatories of international laws and conventions regulating the production, sale, export, reexport and import of dual-use components, equipment and technologies, such as the United Nations Arms Trade Treaty, which came into force in late 2014, and which was strongly supported by Thales during the drafting process.

VIGILANCE IN MANUFACTURING AND PURCHASING

Many of Thales business activities are therefore subject to strict compliance with export regulations in various countries. In addition, a significant proportion of the Group’s products and solutions rely on items that are purchased from external suppliers. The Group therefore takes steps to ensure that it remains constantly aware of changes in legislation affecting purchased goods, particularly in the United States, where the Group spends over €1bn every year on goods and services that are liable to be subject to US export controls with extraterritorial reach.

ETHICS AND INTEGRITY ARE AT THE CORE OF CORPORATE RESPONSIBILITY. THEY ARE ALSO ESSENTIAL FUNDAMENTALS FOR CONFIDENCE. IT IS FOR THESE REASONS THAT THALES HAS FOCUSED SO MUCH ATTENTION ON THIS AREA FOR MORE THAN 20 YEARS.

Isabelle Simon, Group Secretary and General Counsel

Continue deploying the compliance policy for the protection of personal data

In order to ensure the coherent implementation within the Group of compliance with obligations relating to the protection of personal data and provide support to operational entities, Thales continued the deployment of its network of Personal Data Officers to ensure an appropriate network within all of the Group’s functions and entities.

Under the responsibility of the Group’s Data Protection Officer, they ensure the implementation of the Group’s personal data protection policy. The Group’s Executive Committee ensures regular monitoring of Thales compliance programme relating to the protection of personal data.

Rigorous processes to combat anti-competitive practices

Strict respect for national and international regulations on anti-competition practices is one of the pillars of the Group’s compliance programme.

A dedicated team of experts performs a competitive analysis of agreements and sensitive projects and issues all notifications required to the competent regulatory authorities in Europe or abroad. The Group also implements a policy to raise awareness of these rules, in particular for the drafting of guidelines and the implementation of specific training tools aimed at the most exposed employees.

A network of lawyers supports the operational units on a daily basis, monitoring cases that present potential risks and ensuring awareness sessions.
Thales is a public limited company with a Board of Directors. The composition of the Board is governed by the shareholders’ agreement between the Public Sector and the Industrial Partner (Dassault Aviation). This specifies that the Chairman and CEO is selected by mutual agreement and that the four external directors are appointed by means of a consultation process. A representative of each of the two shareholders that are signatories of the agreement sits in each specialist committee.

**AN EXPERIENCE AND REPRESENTATIVE BOARD OF DIRECTORS**

The Board of Directors has directors with very different experience which is relevant to their activity.

**A VARIETY OF EXPERTISES AND EXPERIENCES ALL OF WHICH COMPLEMENT ONE ANOTHER WITHIN THE BOARD**

<table>
<thead>
<tr>
<th>AREAS OF EXPERTISE</th>
<th>NUMBER OF DIRECTORS (EXCLUDING THE CHAIRMAN AND CEO) WHO SHARE THIS SKILL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeronautics &amp; Space</td>
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<tr>
<td>Transport</td>
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<td>Defence &amp; Security</td>
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<td>Digital†</td>
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<td>R&amp;D</td>
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<td>Management†</td>
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<td>Multicultural†</td>
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<td>Finance</td>
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<tr>
<td>Operations / Engineering / Production</td>
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<tr>
<td>HR / CSR</td>
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</tbody>
</table>

![Diagram showing number of directors with experience in different areas]

- **16 directors**
- **31% of independent directors**
- **54% of women**

**APPOINTMENT OF DIRECTORS**

1. Representing employee shareholders
2. Appointed by the trade unions
3. Proposed by the Industrial Partner (Dassault Aviation)
4. External Directors
5. Proposed by the public sector

**A BALANCE BETWEEN SENIORITY OF DIRECTORS**

- **6 from 0 to 4 years**
- **5 from 4 to 8 years**
- **5 from 8 to 12 years**

**BREAKDOWN OF AGES**

- **9 directors between 46 and 60 years**
- **7 directors over 60 years**
- **Average age of 61 years**

---

(1) Survey conducted by self-assessment based on posts held by directors. (2) One of the four key technologies for Thales. (3) Activity of the Chairman and CEO, CEO or Deputy CEO. (4) Activity based outside France or requiring several trips abroad. (5) Does not take into account directors representing employees and employee shareholders. Taking into account these directors, women comprise 56% of the Board of Directors.
**A Dynamic and Committed Board of Directors**

- 10 meetings per year
- 93% attendance rate
- 3 specialist committees
  - Audit and Accounts Committee
  - Governance and Remuneration Committee
  - Strategic and Corporate Social Responsibility Committee

**Work of the Board of Directors in 2019**

- Strategy, governance and finance
- Talent
- Integration of Gemalto
- Environmental policy
- Expected impact of Brexit
- Compensation
- Study of a draft purpose

---

**Presentation of the Executive Committee**

On 31 December 2019

14 members including

1. Chairman and CEO
2. Members of foreign nationality
3. Women and 12 men

---

**Principles of Compensation**

Compensation of the Chairman and Chief Executive Officer, Group EBIT and Equity Ratio Over the Last 3 Years

<table>
<thead>
<tr>
<th>Year</th>
<th>EBIT (in millions of euros)</th>
<th>Variable Part (in thousands of euros)</th>
<th>Fixed Part (in thousands of euros)</th>
<th>Equity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1,543</td>
<td>805.5</td>
<td>32</td>
<td>31%</td>
</tr>
<tr>
<td>2018</td>
<td>1,685</td>
<td>691.6</td>
<td>32</td>
<td>31%</td>
</tr>
<tr>
<td>2019</td>
<td>2,008</td>
<td>849.3</td>
<td>32</td>
<td>31%</td>
</tr>
</tbody>
</table>

---

**Stringent Requirements for Variable Annual Compensation**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Criteria</td>
<td>20%</td>
</tr>
<tr>
<td>- Free Operating Cash Flow</td>
<td></td>
</tr>
<tr>
<td>- Order Intake</td>
<td></td>
</tr>
<tr>
<td>Non-Financial Criteria</td>
<td>25%</td>
</tr>
<tr>
<td>- Social and environmental responsibility</td>
<td></td>
</tr>
<tr>
<td>- International footprint</td>
<td></td>
</tr>
<tr>
<td>- Transverse strategic actions</td>
<td></td>
</tr>
<tr>
<td>EBIT</td>
<td>35%</td>
</tr>
</tbody>
</table>

---

**Performance Criteria for Long-term Compensation**

40% Average Order Intake 2020-2022
40% Cumulative Free Operating Cash Flow 2020-2022
20% Stock Market Performance of Thales Compared to an Equally Weighted Index of 8 Peers and the Euro Stoxx Index

(1) Compensation of Patrice Caine/median salaries in France. (2) No amount is due when the amount achieved is more than 2% less than the revenue at fiscal budget. (3) No amount is due when the amount achieved is lower than or equal to 90% of the target. (4) Airbus, Alst, BAE Systems, Capgemini, Dassault Aviation, Leonardo, Rolls-Royce, Safran.
VALUE CREATION

A FUTURE OF SHARED CONFIDENCE
A CULTURE OF DIALOGUE AND PARTNERSHIP

INSPIRING AND ENGAGING OUR EMPLOYEES

The acquisition of Gemalto has given rise to a brand new scope, composed of more than 82,000 employees sharing a passion for innovation and collective performance. Thales men and women are at the core of the Group’s strategic vision and performances. Its human resources policy is based on an inclusive, innovative approach focused on innovation. In order to rise to the challenges of a world undergoing far-reaching change, Thales aims to allow each one to give the best of themselves and caring about everyone.

Key events in 2019

> **CHALLENGE: ATTRACT, RETAIN AND DEVELOP TALENT**

- The Group has continued its dynamic policy to attract employees, particularly through social networks (more than 550,000 people follow the Thales LinkedIn page).
- For a number of years, it has had partnerships with the education world and associations. In 2019, 415 Thales female sponsors now represent the Group within the Elles Bougent association.
- Discussions held to define the Group’s purpose have helped develop its employer brand. 3,700 employees have taken part in workshops organised in 40 countries.
- A new approach for one-to-one meetings, called Check-in, between the manager and employee, has been trialled in five countries. This new approach specifies more time for regular exchanges to deal with the employee’s whole experience and aims to respond to new expectations in terms of management. It will be deployed throughout the whole Group in 2020.

> **CHALLENGE: PROMOTE DIVERSITY AND AN INCLUSIVE CULTURE**

- There is a focus on actions which tend to favour diversity within teams on the international scale. Women therefore accounted for 33% of recruitments globally.
- The 46 local networks in favour of professional gender equality are presently coordinated under the global governance of the WmTh network (We In Thales).
- The Group has signed the Autre Cercle’s LGBT+ Charter association and complements this with a series of specific actions.

> **CHALLENGE: PROVIDE A SAFE AND HEALTHY WORKING ENVIRONMENT**

- In December 2019, Thales joined the #StOpE (Stop au sexisme Ordinaire en Entreprise) initiative, to combat everyday sexism in the workplace. In France, it has put in place a network of contacts for harassment and sexist action issues.
- Emphasis is placed on the training of local managers in health and safety at work.

“AT THALES, I HAVE FOUND A WELCOMING TEAM AND MANAGEMENT THAT ARE VERY ACCESSIBLE. I IDENTIFIED WITH THE VALUES PROMOTED BY THE COMPANY, WHICH WAS A PRIORITY WHEN ENVISAGING THE START OF MY CAREER.”

Camille Le Bellego, on work placement

---

To find out more about the Group’s commitment to its employees, see chapter 5.4 of the 2019 Universal Registration Document.
Customer confidence is at the core of Thales commitment and one of its key values. The nature of the Group's activities requires a sustainable relationship and engagement. Thales should act as a strategic partner of its customers, understand the challenges that they face, their strategic objectives and operational requirements. In this respect, the renewal of the customer culture is a key area in the Ambition 10 strategic plan.

Key event in 2019

> A NEW DIGITAL PLATFORM COVERS ALL THE 29 BUSINESS LINES AND COUNTRY ORGANISATIONS

Thales renew its customer relationship by deploying a digital platform dedicated to customer engagement and sales support. In keeping with the number of physical interactions which are the Group's trademark (local operations, specific meetings but also trade shows, conferences or user groups), digital interaction helps create links and relationships of trust. The digital platform makes a shared interface available to all the Group's customer relations professionals. It combines all of the references, marketing content and differentiators to promote offers and services globally. Thus, the sales cycle is supported by new practices and spaces shared with customers and prospective customers who appreciate this new fluidity.

By grouping together all of the offers and their features, the digital platform can also increase cross-selling and up-selling opportunities between the verticals. In particular, big data, AI or cybersecurity can also access all offers. Account managers are able to create value in each sector by integrating solutions that are just outside their traditional scope into their sales approach. The change is already significant at company level, with great commercial successes recorded from 2019 in all sectors.

BE AT THE CORE OF INNOVATION ECOSYSTEMS

Partnerships with SMEs and start-ups, innovation in an entrepreneurial dimension

For five years, Thales has structured its action towards innovative startups and SMEs. During this period, Thales has listed more than 1,000 start-ups. More than 120 proofs of concept have been submitted. Thales is also involved in the acceleration ecosystem as a founding member of Starburst, an incubator specialising in the aeronautics and space sector. Thales is also the cybersecurity adviser for Station F, the largest incubator in the world. The partnership can, in certain cases, take the form of an equity investment. In June 2019, Thales therefore announced the acquisition of the American company Psiberetix, known for its artificial intelligence for air combat.

The agility of the startups combined with Thales expertise in its markets allow breakthrough innovations to find economic meaning.

“AI for Humanity”, artificial intelligence for French industry

Thales, under the aegis of the Ministry of Economy and Finance, is at the initiative of an alliance around of artificial intelligence between a fortnight of French manufacturers of global dimension and from different sectors. This initiative was formalised by the signature of a Manifesto. The signatory manufacturers agree to work together, in an open innovation approach, to develop trustworthy AI, a source of growth and jobs within the industry.

For Thales, one of the first concrete actions embodying this movement was the creation of a shared research laboratory with EDF and Total. This laboratory will work on advanced themes within AI: explainability, learning through reinforcement and simulation.

Thales, a driver of open innovation

The Open Source approaches have profoundly changed the software world. Today, they are also revolutionising physical design, from the smallest of systems to data centres. In this respect, Thales actively contributes to the growth and adoption of Open Source Hardware concepts. Among other initiatives, the Group currently works in collaboration with the Indian Institute of Technology of Madras (India) on the development of a secure “System-on-Chip”[1], which is deterministic and high-performing.

A RESPONSIBLE SUPPLY CHAIN

The Group spends around half of its revenue on purchasing. The Procurement function is therefore at the core of the objectives of the Ambition 10 strategic plan. It aims to give Thales, at global level, a sustainable competitive advantage based on value creation, commercial partnerships and operational excellence.

This strategic vision, driven by 1,400 buyers in 35 countries, is entirely focused on the satisfaction of Thales customers. Thales Purchasing is also at the core of the Group’s corporate responsibility policy and forms part of its purpose: “Building a future we can all trust”.

GROUP PURCHASING
€8.3bn

BREAKDOWN OF PURCHASES BY SEGMENT

More than €2bn of purchases entrusted to almost 3,000 SMEs and MSBs

8.7/10 Supplier performance in corporate responsibility(1)

THALES CAN ONLY ACHIEVE EXCELLENT PERFORMANCE IF ITS SUPPLIERS ALSO DO SO!
Roque Carmona, Chief Procurement Officer

Key events in 2019

A NEW AND MORE EFFICIENT ORGANISATION FOR THE GROUP AND ITS PARTNERS

Close to its decision-making centres and its suppliers, Thales has set up a global organisation for its Procurement, structured around five large segments, which interact with the different Global Business Units and the Regions. The objective is to identify all the Group’s requirements to respond more efficiently.

In this same logic, a “Supplier Operations” function was created in 2019 within Group Procurement to improve the industrial maturity and supplier performance over the long term. Besides the performance measure (OTD and OCD)(2), it is also responsible for supplier qualification, particularly through audits, actions contributing to their development and crisis management.

REINFORCEMENT OF CORPORATE RESPONSIBILITY

Thales has performed a full review of its Integrity and Corporate Responsibility Charter, Partners & Suppliers in order to reinforce its commitments to essential principles in terms of employment, anti-corruption and influence peddling, management of conflicts of interest, protection of information, protection of the environment, respect for health and safety rules and ethics. The Group’s objective is to ensure that 100% of new partners sign this charter – or commit to equivalent principles – by 2023, in order to develop a supply chain that is even more responsible.

(1) Standards relating to labour, the environment, corporate governance, business ethics and export control. (2) OTD: On Time Delivery, indicator for measuring delivery times. OCD: On Conformity Delivery, indicator to measure the quality of parts. These indicators are standardised within the GIFAS.

THALES - 2019 INTEGRATED REPORT

VALUE CREATION
INTEGRITY AT THE CORE OF THE SUPPLIER RELATIONSHIP

In order to evaluate the capacity of its suppliers to respond to this essential challenge, Thales has focused on the management of risks in its supply chain. It has specific tools (increased questionnaires, audits, etc.) to respond in particular to their new requirements arising from legislation linked to the duty of care and the prevention of corruption and influence peddling. The commitment of suppliers to respect these challenges is a major part of sustainable relationships with Thales.

This year also saw the deployment of a specific initiative within the Aerospace sector, led by the GIFAS1, under the framework of the Duty of Care Act. Initially, Thales worked with Airbus to develop a shared platform to analyze their partners (questionnaires, assessments, action plans, audits, etc.) and thus identify the potential risks in terms of threats to Human Rights, the environment or health and safety breaches. This platform is now open to other players in the Aerospace sector.

ACTIVE MOBILISATION TOWARDS SMEs

For several years, Thales has pursued an inclusive policy in favor of SMEs. Founder of the SME Pact, signatory of the “Innovative SMEs” and “Responsible Supplier Relations” charters, in 2019, the Group increased its support for SMEs. In particular, this resulted in the signature by Patrice Caine, Chairman and Chief Executive Officer, Thales, of the new Action PME agreement of the Ministry for the Armed Forces. This pact aims in particular to improve information for SMEs, develop experiments, maintain partnerships forged during upstream studies, provide support with exports and finally promote startups. Thales has already adopted a rapid qualification process for startups and has established several partnerships with incubators and accelerators.

Moreover, a mediator listens to suppliers to avoid any conflicts which may arise, or at least resolve them as quickly as possible.

Support SMEs and MSBs in large export contracts

As part of the Rafale International joint venture, Dassault Aviation, Thales and Safran have found more than 100 SMEs to help their development in India. The deployment of a complete industrial ecosystem in India, as part of the offset markets, requires increased links between French and Indian SMEs. A pioneer in this field, the Ametra group opened a new wiring and electronic integration production plant in September 2019, as part of a joint venture with its Indian partner, Nucon Aerospace. Thanks to this new entity, the Ametra group has strengthened its international development and fully contributes to the strategic French-Indian partnership.

“OUR CUSTOMERS, AND IN PARTICULAR THALES, HAVE SUPPORTED THE CREATION OF THIS JOINT VENTURE FROM THE START.”

Anne-Charlotte Fredenucci, Chairwoman of the Ametra group

COVID-19: Thales remains responsive to its suppliers

Faced with the unprecedented health crisis across the world, a “supplier crisis unit” has been created. Its aim is to:

• analyse critical suppliers in order to list those that have or have not maintained their activity and thus identify the potential impact on the current and future projects and programmes;

• list the risk situations from the activity perspective in order to highlight the cash flow problems experienced by suppliers. In the aerospace field, specific monitoring is conducted along with the GIFAS1;

• stop claims and penalties for SMEs related to the crisis;

• ensure that payment deadlines are met despite potential internal disruptions (Thales has asked its suppliers to back up paper invoices with an electronic copy to ensure that documents are received).

Finally, Thales has passed on government measures to support companies in difficulty. In this respect, on a case by case basis, orders have been notified in advance, advance payments have been made, as have accelerated payments, in order to support the cash flow of SMEs. These actions are very much in line with the best practices developed within the Pacte PME association, of which Thales is one of the founding members.

A roadmap to engage suppliers in the Group’s low carbon strategy

In 2019, an action plan was drafted to reduce emissions linked to the supply chain. In this way, Thales helps its suppliers measure and reduce the carbon footprint linked to the production of the goods and services purchased.

In 2020, the IAEG2 will publish a sector guide for the calculation of emissions (purchasing of goods, services and equipment); Thales has helped prepare this guide.

(1) GIFAS: Groupement des Industries Françaises Aéronautiques et Spatiales (Association of French Aeronautics and Space Industries).
(2) IAEG: International Aerospace Environmental Group.
INNOVATION FOCUSED ON THE PLANET

Climate change and the scarcity of resources are major challenges, bearing physical as well as social risks. In line with its values and purpose of building a future we can all trust, for a long time now Thales has been committed to protecting the environment. In 2019, the Group increased its commitment to a low-carbon future, thus reaffirming the declarations made in the Business Proposals for COP21 in 2015, then in the French Business Climate Pledge in 2017 and 2019.

THALES LOW CARBON STRATEGY IN 3 POINTS

The strategy adopted by the Group for a low carbon future was determined using the methodology of the globally recognised Science Based Targets initiative (SBTi). This commitment has facilitated the definition of low carbon objectives in line with the Paris Agreement and consistent with the 2°C climate scenarios. The objectives of this strategy and the associated action plans were prepared in collaboration with multidisciplinary working groups, for each of the Group’s main sources of greenhouse gas emissions.

REDUCE OUR EMISSIONS AND THOSE OF OUR PRODUCTS

-40% of direct operational emissions by 2030(1), in absolute terms, with an intermediary target of -20% by 2023

-15% of indirect emissions by 2030(2), in absolute terms, with an intermediary target of -7% by 2023

Important work has already been undertaken to stabilise energy consumption on the Group’s sites between 2015 and 2018, despite production increases at the most energy-intensive sites. In 2019, an indepth study was conducted to put in place action plans specific to each country and to reduce direct operational emissions by almost 2% between 2018 and 2019.

For almost all of Thales products and services, the phase in which these are used by customers is the main challenge of the climate impact. The miniaturisation of systems, the pooling of functions at the core of a same appliance, charging batteries using solar panels can, for example, significantly help reduce the energy requirements of appliances and systems.

OFFER OUR CUSTOMERS INNOVATIVE AND ECORESPONSIBLE FUNCTIONS AND SERVICES

Digital solutions which are low-energy by design are essential to the responsible development of the science of digital data, algorithms and artificial intelligence.

In aeronautics, traffic management solutions can optimise trajectories and reduce waiting times at airports. Flight simulators reduce the number of hours required to train pilots. For rail, the future driverless train, which would allow the public transport offer in urban centres to be extended, requires a vast amount of information exchange in real time. Thales offerings ensure the fluidity and security of these exchanges.

For the connected city, Thales big data solutions exploit the gigantic sources of data for the benefit of the inhabitants. Services optimised in this way simplify life for the inhabitants and reduce their environmental impact.

HELP ACHIEVE A BETTER UNDERSTANDING OF CLIMATE PHENOMENA

3 generations of Sentinel satellites to observe climate change

Since 1974, Thales has been involved in the implementation of very high performing satellites and optical and radar instruments for the environment and climate change. The Group is a major player in observing the Earth, understanding climate change and environmental monitoring. By way of example, the Copernicus programme in which Thales Alenia Space participates, will position Europe as a major independent contributor to measuring anthropogenic emissions of CO₂.

The equipment provided by Thales is used to prevent forest fires and deforestation, monitor pollution sites or the illegal use of mineral resources, among others.

Climate change also has an impact on ocean levels. From 2021, the SWOT satellite will measure this with great accuracy. It will be the first in the world to be designed not to leave any debris in orbit at the end of its life.

In 2019, Thales redefined its social commitment strategy under the Thales Solidarity programme, in order to mobilise its resources and internal networks towards common objectives. An endowment fund took over from the Thales Foundation which reached the end of its 2014-2019 multi-year programme.

THALES FOUNDATION PROJECTS IN 2019

Since 2014, the Thales Foundation has been actively engaged with civil society players to contribute to two major challenges: education, through the teaching of science and educational innovation; and to supporting humanitarian emergency professionals, by promoting the prevention of the risks of natural and environmental disasters and response preparedness.

In 2019, the Foundation supported eight projects benefitting more than 1,500 pupils and their teachers. For example, in France, experiment kits for physics, chemistry, and life and Earth sciences allowed more than 100 hospitalised children to maintain a link with their schooling. More than 300 school children in the priority education network designed their own video game in beginner programming workshops.

In Togo, the Foundation financed a project for a training centre dedicated to repairing computers and software development. 140 young people can therefore be trained from 2020.

Actions of the Thales Foundation http://Foundation.thalesgroup.com/

IN FIVE YEARS, THE FOUNDATION HAS SUPPORTED A TOTAL OF 81 PROJECTS IN 22 COUNTRIES THROUGHOUT THE WORLD, WITH AN IMPACT ON ALMOST 200,000 PEOPLE.

Launch of the Thales Solidarity programme

After five years of significant achievements, Thales has redefined the social engagement strategy in line with the Group’s purpose and has created an endowment fund to take over from the Thales Foundation in 2020. Since confidence is essential to the growth of society, innovation must be open to as many people as possible. Thales is thus committed to benefiting civil society with its expertise and talents, to ensure that each one is a player today in the decisive changes of tomorrow.

THREE AREAS OF MAJOR COMMITMENTS

The solidarity actions supported by the Group are based around three new areas of commitment to make technology and innovation available for:

- Education and professional integration,
- Digital citizenship,
- Protection of the environment.

These themes are part of the Thales culture, that of a company full of technology enthusiasts for whom education and collective intelligence are essential levers to improve the world. By sharing its expertise and capacity to understand the technological and digital world, Thales can make a significant contribution to the fields in question.

Solidarity leave, a new form of voluntary commitment

In 2019, the Foundation tested a new type of voluntary commitment for its employees by funding Solidarity Leave®. This system, in partnership with the Planète Urgence association, allowed employees to take part in solidarity missions abroad during their leave. These volunteers could share their skills in computer training, project management, or marketing and digital communication with local associations in Togo, Cameroon, India and Peru. Their actions have resulted in a consolidated total of 200 training and coaching hours for 100 people in these countries.

Round off your pay

In 2019, the round off your pay scheme reached a new record: monthly micro-donations from 5,145 micro-donor employees in France, matched by the Company, collected more than €359,423 to support seven projects in Africa, Asia and the Pacific.

Géris, innovate for the regions

A subsidiary of the Thales Group, the consultancy firm Géris supports large groups, SMEs and local players in boosting the local economic fabric. In areas of employment impacted by de-industrialisation, Géris implements synergies to create sustainable employment, while helping SMEs in their digital or ecological transition.

For example, large groups can make available to SMEs experienced employees on a voluntary basis, or support employees in their project to set up a company.

Géris also develops a prospective vision in partnership with players in the region, to influence the implementation of relevant actions.

Géris assignments: www.geris.fr

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**FINANCIAL AND EXTRA-FINANCIAL PERFORMANCES**

**The strategic plan** **ambition** **has demonstrated its relevance since 2013**

<table>
<thead>
<tr>
<th>Revenue (in millions of euro)</th>
<th>Order intake (in millions of euro)</th>
<th>EBIT and operating margin (in millions of euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>18,401</td>
<td>2019</td>
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<td>2018</td>
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<td>12,698</td>
<td>2013</td>
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<table>
<thead>
<tr>
<th>Adjusted net income (in millions of euro)</th>
<th>Free operating cash flow (in millions of euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>1,405</td>
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<td>1,178</td>
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<td>982</td>
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<td>2015</td>
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<td>2014</td>
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<tr>
<td>2013</td>
<td>642</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>At this point, it is impossible to quantify the financial impact of the COVID-19 crisis on Thales financial statements. These impacts will depend in particular on the extent and the duration of the health measures taken by the different countries in which the Group operates. As soon as it is able to do so, Thales will specify the financial impacts of this crisis on its financial statements and will adjust the financial objectives.</td>
</tr>
</tbody>
</table>

**Another record year**

Thanks to the mobilisation of its 82,600 employees, Thales ended 2019 with a very dynamic fourth quarter. The entry into its books of 12 projects for more than €100m in the last quarter meant that we were able to significantly exceed the annual objective for order intake.
After three years of growth higher than 5%, revenue growth has paused, following the decline of the commercial space market and an exceptionally high comparison base in Transport. In the Defence and Security sector, the momentum is still strong.
EBIT and adjusted net income increased by 19% bolstered by the successful integration of Gemalto. Operational margin continued to grow and now accounts for 10.9% of revenue.

Boosted by these results, the roadmap for 2023 remains unchanged, focused on generating profitable growth in the long-term. The start of 2020 presented several factors of uncertainty: impact of coronavirus on the Group’s markets and supply chains, customs regimens in aeronautics, restart of operations for the Boeing 737 MAX, phasing of decision making by satellite operators. In this context, Thales business model, which is both resilient and balanced, is a recognised asset for the future.

**Strategic priorities remain unchanged**

At the same time, Thales continues to implement all the levers of its ambition 10 strategic plan, which drives profitable and sustainable growth.
The strengthened culture of operational performance and acceleration of the project to transform sales support the committed commercial momentum.

Essential to boosting the Group’s momentum, R&D investments continue to grow. They exceed one billion euros and represent 6% of revenue. Thanks to the integration of Gemalto and the continued investment in cutting-edge technologies, the Group’s expertise has been expanded or reinforced in the fields of artificial intelligence, big data and digital security in particular. Revenue synergies with the new Global Business Unit Digital Identity and Security have also already seen results, with more than 20 projects won in 2019.

Boosted by these results, the roadmap for 2023 remains unchanged, focused on generating profitable growth in the long-term. The start of 2020 presented several factors of uncertainty: impact of coronavirus on the Group’s markets and supply chains, customs regimens in aeronautics, restart of operations for the Boeing 737 MAX, phasing of decision making by satellite operators. In this context, Thales business model, which is both resilient and balanced, is a recognised asset for the future.
Recognised performance in corporate responsibility

Thales commitment to corporate responsibility has once again been recognised by extra-financial rating agencies. Thus, in 2019, for the third consecutive year, Thales was ranked among companies who have developed, at global level, the most advanced corporate responsibility in the “Aerospace & Defence” sector by the Dow Jones Sustainability Index (DJSI). At the same time, the extra-financial rating agencies MSCI and EthiFinance (Gaïa Rating) have awarded, respectively, the rating AA (4th consecutive year) and 83/100 to Thales for its corporate responsibility policy, thus highlighting the consistent effort made by the Company in this area.

In terms of the protection of the environment, the low-carbon strategy established in 2019 positions the Group in an ambitious plan to reduce emissions by 2030.

Particular attention has also been paid to the integration of Gemalto’s teams, further increasing the attractiveness of the Group as an employer.

### Workforce and female progression rate

| Year | Women % | Total | 2019
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>26%</td>
<td>82,600</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>66,000</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>65,418</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td>64,071</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>62,194</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>61,709</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>22%</td>
<td>61,763</td>
<td></td>
</tr>
</tbody>
</table>

### Total waste production

| Year | Production (b) (in tonnes) | 2019
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
<td>21,069</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>15,278</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>16,080</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td>14,967</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>15,045</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>15,614</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td>15,746</td>
</tr>
</tbody>
</table>

### Direct emissions Scope 1 & 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions (thousands of tonnes of CO2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>230</td>
</tr>
<tr>
<td>2018</td>
<td>213</td>
</tr>
<tr>
<td>2017</td>
<td>222</td>
</tr>
<tr>
<td>2016</td>
<td>216</td>
</tr>
<tr>
<td>2015</td>
<td>224</td>
</tr>
<tr>
<td>2014</td>
<td>254</td>
</tr>
<tr>
<td>2013</td>
<td>248</td>
</tr>
</tbody>
</table>

### New extra-financial ambitions for 2023

<table>
<thead>
<tr>
<th>NON-FINANCIAL OBJECTIVES</th>
<th>RESULTS 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of new suppliers committed to the principles of the new Purchasing charter</td>
<td>100% by 2023</td>
</tr>
<tr>
<td>Frequency rate of accidents at work with time off from work (Thales employees)</td>
<td>-30% by 2023H</td>
</tr>
<tr>
<td>Change in energy intensity (toe/hours worked)</td>
<td>-3% in 2019H</td>
</tr>
<tr>
<td>Reduction in direct operational CO₂ emissions (internal operations and mobility)</td>
<td>-20% in 2023H (in absolute terms)</td>
</tr>
<tr>
<td>Reduction in indirect CO₂ emissions (purchases and use of Thales equipments)</td>
<td>-15% in 2030H (in absolute terms)</td>
</tr>
<tr>
<td>Non-hazardous waste recycling rate (excluding one-offs)</td>
<td>&gt;75% by 2023</td>
</tr>
<tr>
<td>Percentage of women among new hires (long-term target)</td>
<td>40%</td>
</tr>
<tr>
<td>Percentage of women in top positions (long-term target)</td>
<td>30%</td>
</tr>
<tr>
<td>Percentage of Management committees with at least 3 women (long-term target)</td>
<td>100%</td>
</tr>
</tbody>
</table>

(a) Excluding one-off waste. (b) Data inclusive of Gemalto. (c) Reference year 2018
Launched in 2000, the United Nations Global Compact (UNGC)\(^{(1)}\) is both a policy platform and a practical framework for companies that are committed to sustainable business practices. It seeks to align business operations and strategies everywhere with 10 universally accepted principles. Over 9,900 companies in 159 countries have joined the Global Compact. **Thales has been a member since 2003** and has adopted the 10 principles of the Global Compact.

In 2012, through its annual Communication on Progress (COP), Thales reached the **Global Compact Advanced** level under the United Nations Global Compact Differentiation Programme, which evaluates companies on the basis of 21 specific criteria and represents the highest standard of **sustainability performance** and reporting. Thales is one of 636 companies in the world which are classified as Global Compact Advanced (6% of total companies adhering to the Global Compact).

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**Human Rights**

**Principle 1**  
Businesses should support and respect the protection of internationally proclaimed Human Rights within their sphere of influence.  
Pages 5, 22-23, 36-37, 39

**Principle 2**  
Businesses should make sure they are not complicit in Human Rights abuses.  
Pages 5, 22-23, 28-29

**Labour**

**Principle 3**  
Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.  
Pages 22-23, 36-37

**Principle 4**  
The elimination of all forms of forced and compulsory labour.  
Pages 22-23

**Principle 5**  
Businesses should uphold the effective abolition of child labour.  
Pages 5, 22-23, 36-37

**Principle 6**  
Businesses should uphold the elimination of discrimination in respect of employment and occupation.  
Pages 5, 22-23, 34, 36-37

**Environment**

**Principle 7**  
Businesses should support a precautionary approach to environmental challenges.  
Pages 16-17, 22-23

**Principle 8**  
Businesses should undertake initiatives to promote greater environmental responsibility.  
Pages 5, 22-23, 37, 38

**Principle 9**  
Businesses should encourage the development and diffusion of environmentally friendly technologies.  
Pages 22 to 25, 37, 38

**Anti-corruption**

**Principle 10**  
Businesses should work against corruption in all its forms, including extortion and bribery.  
Pages 5, 22-23, 28-29

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\(^{(1)}\) [www.unglobalcompact.org](http://www.unglobalcompact.org)
In a group as global and diversified as Thales, corporate responsibility is inseparable from the concepts of security and performance. Beyond its obligation to comply with laws and standards of ethical conduct, it is a key strategic advantage for the business. Resulting from the implementation of the best professional practices and the maturity acquired in this domain, this integrated report details the strategy, governance and financial and non-financial performance of the Group with a view to creating value. Thales believes this document will contribute to a better understanding of its business activities, the complexity of its working environments. It is also a testament to the Company’s commitment to all of its stakeholders.

**METHODOLOGY**

An internal working group under the guidance of the Ethics and Corporate Responsibility Department, and comprising members from several functional departments, was involved throughout the process to provide the underlying structure for this information. Several members of Thales Executive Committee also participated in producing the report. From the outset, the aim has been for the report to focus on the strategic priorities at Thales and to select only the most important facets of these. The integrated report supplements the 2019 Universal Registration Document and refers to it whenever necessary. The purpose of this report is to detail the way in which Thales interacts with its ecosystem and uses capital to create short, medium and long-term value.

**SCOPE**

The report covers the 2019 financial year (1 January 2019 to 31 December 2019). It includes medium and long-term outlooks and thus provides a forward-looking view of the Group within its environment.

**FOR MORE INFORMATION**

ethics.cr@thalesgroup.com
+33 (0)1 57 77 86 49

**OTHER THALES PUBLICATIONS**

2019 Universal Registration Document
Overview of Thales

Thales key corporate responsibility documents:
Code of ethics
Code of conduct – Prevention of corruption and influence peddling
User guide to the internal alert system

Thales would like to thank Group employees for their contributions.
This document is printed in France by an Imprim’Vert certified printer on PEFC certified paper produced from sustainably managed forest.

**PHOTO CREDITS**
