THALES

international innovation partnerships responsibility

For a safer world

aerospace space defence security

www.thalesgroup.com



"Our commitment is to leverage the very best of our expertise and our technologies to serve our customers around the world."

Luc Vigneron, Chairman & Chief Executive Officer, Thales

Profile

A global leader dedicated to security

With operations in 50 countries and 68,000 employees, Thales is a global technology leader for the aerospace, space, defence, security and transportation markets.

Building on proven capabilities in large-scale software systems, Thales is stepping up to the security challenges of its customers in an increasingly interconnected, technology-driven world.

Civil and military systems benefit from many of the same technologies and innovations. Developing these dual technologies has been a long tradition for Thales, with its global network of 25,000 high-level researchers and engineers.

Leveraging a global presence and spanning the entire value chain, from prime contracting to equipment, Thales plays a pivotal role in making the world a safer place.

KEY FIGURES

Growing revenues: 12.7 billion euros

> Thales achieved revenue growth of 8% in 2008, sustaining organic growth despite the impact of unfavourable exchange rates, due to the fall in the pound sterling and the dollar against the euro.

Record order intake: **14.3** billion euros

> Order intake reached a record level in 2008, growing 14% on a like-for-like basis, with new orders worth 2.7 billion euros for France and 2.8 billion euros for the United Kingdom. At 31 December 2008, the consolidated order book stood at almost 23 billion euros, equivalent to nearly two years of revenues.

Balanced order intake



Shareholding structure at 31 May 2009







Core **businesses**

Thales is a leading defence contractor and a major player in civil and commercial markets around the world. Its businesses are organised by market segment – Aerospace & Space, Defence and Security – and operate as a single organisation, sharing advanced technologies and drawing on complementary capabilities to meet the specific requirements of each customer.

AEROSPACE

erospace markets offer a vivid illustration of the benefits of dual civil/military technologies. Thales is the only company in the world with leadership positions in both onboard equipment and groundbased navigational aids and control systems. The company equips **all types of aircraft** – commercial airliners, military aircraft and helicopters – and is a first-tier partner of the world's leading manufacturers, including Airbus, Dassault Aviation, Boeing, Sukhoi and ATR, on all of their major programmes.

In air traffic management, Thales's capabilities span the **entire flight plan surveillance and security chain**, from departure gate through en-route control to arrival gate, in complex and saturated air transport environments.



















Thales Alenia Space has supplied half of the *International Space Station's* pressurised modules, the habitable part of the facility.

Thales is at the heart of the *Galileo* satellite navigation programme.

The *Syracuse III* military satellite communications programme.

hales is a major player in the space sector, offering complete solutions through a structural alliance with Finneccanica of Italy: the company has a 67% interest in the satellite systems specialist Thales Alenia Space and a 33% interest in Telespazio, a leading provider of satellite services.

The **Space Alliance** combines the expertise and resources of the two joint ventures to offer optimal, integrated end-to-end solutions and services.

Thales Alenia Space plays a central role on major civil and military worldwide programmes, in **four areas**:

- Telecommunications: Yahsat, Arabsat, Eutelsat, Syracuse, etc.
- Earth observation: COSMO-SkyMed, GMES (Global Monitoring for Environment and Security), Emergesat, etc.
- Science: ExoMars, Herschel and Planck, GOCE, etc.
- Navigation: Galileo, etc.





The world leader in telecom satellite payloads.

A leading player in major scientific programmes. Pictured here: the *Planck* satellite.

1 Thales is a first-tier supplier to major commercial aircraft manufacturers: Airbus (*A380*, *A350*, etc.) and Boeing (*B787*).

A key partner on Sukhoi's *Superjet 100* programme.

E Thales equipment and systems have made the *Rafale* omnirole combat aircraft the most sophisticated platform of its generation.

Thales supplies passenger cabins with in-flight entertainment and lighting solutions.

The TopOwl helmet-mounted sight/display places all essential flight control information right before the pilot's eyes.

The Eurocat air traffic management system equips more than 260 control centres, and 4,000 controller positions throughout the world.

Thales supplies simulators for all types of civil and military aircraft and helicopters.

CORE **businesses**

DEFENCE

hales is the European/leader in defence systems and provides high-tech products and systems to meet the requirements of air, land, naval and joint forces. The company's interoperable solutions, *CAISTAR* (Command, Control, Communications, Computers, Intelligence, Surveillance, Target, Acquisition, Reconnaissance), and UAV (Unmanned Air Vehicle) systems are designed to **counter new threats as they emerge**.

Thales designs systems for all types of aircraft, naval vessels and land platforms. These sophisticated systems detect threats, distribute information, support command decisions and control engagements in time-constrained contexts and with maximum reliability. Thales systems and solutions help to optimise the efficiency of military operations by coordinating the assets deployed by joint and coalition forces.

Thales recently launched a new range of air defence radars and has unveiled next-generation product families including a line of software-defined radios. A unique **multidomestic development strategy** has brought Thales local-player status in numerous European countries, as well as in North America and the growth markets of Asia and the Middle East.



















Thales is to supply the first software-defined radio, Liberty, for US security forces.

ThalesRaytheonSystems is prime contractor for NATO's ACCS LOC 1 (Air Command and Control System Level of Capability 1) programme.

Bushmaster: 800 vehicles already ordered.

Co-prime contractor for the CVF carrier programme in the United Kingdom.

Thales has developed the Battlespace Transformation Centre (BTC) to support its defence customers.

E Prime contractor for the United Kingdom's Watchkeeper tactical surveillance programme.

New Ground Master air defence radars selected by Estonia, Finland, France, Malaysia and Slovenia.

E In air defence, Thales is contributing to the major European missile system programmes, including SAMP/T (Sol-Air Moyenne Portée Terrestre).







1 Thales is involved in airport security operations at Dubai and Doha.

Supervision and security systems for oil and gas pipelines.

E Thales has been selected to implement the European Train Control System (*ETCS*) on the North-South rail project in Saudi Arabia.

SECURITY AND TRANSPORTATION

hales has carved out key strategic positions in civil security and ground transportation, focusing on the **four major markets** where it has achieved **leadership status**:

• Ground transportation (rail, urban, road): signalling, control & command and supervision, ticketing, etc. Thales is the world leader in integrated transport systems.

• **Critical infrastructure:** airports, harbours, land and maritime borders, energy supply and transport infrastructure.

• **Protection of sensitive personal data:** encryption, network security management.

• Management and operation of critical information systems for industry and financial institutions.

Thales is strongly involved in Mexico City's *Ciudad Segura* (secure city) project, one of the most ambitious urban security programmes ever launched.

S Over half of the world's banks and most stock exchanges rely on transaction security from Thales.





A GLOBAL player

NORTH AMERICA

Thales generates approximately 10% of its revenues in the United States and its US operations employ around 3,000 people. In defence markets, Thales now supplies interoperable tactical communication systems to all branches of the US military as well as helicopter sonar systems to the US Navy. The company is one of the two partners in the first-ever transatlantic joint venture in the defence sector, ThalesRaytheonSystems, the world leader in air command and control systems. In aerospace, Thales is supplying systems and equipment to the major aircraft manufacturers, including Boeing and Sikorsky. The company's in-flight entertainment business in Irvine, California, has achieved spectacular success in recent years. Thales currently supplies 90% of the ground-based navigation systems for the US national air traffic control infrastructure. The company has also secured a contract as a member of the ITT team to supply ADS-B technology (Automatic Dependant Surveillance-Broadcast) under the country's comprehensive air traffic modernisation programme.

Thales employs 1,200 people in **Canada**, primarily in the aerospace sector. Its Canadian operations are the company's centre of excellence for regional and business aviation as well as for flight control systems. In the defence sector, Thales has some impressive references. In 2009, the company won one of the largest support contracts ever awarded by the Department of National Defence in the field of battlespace management systems. Thales's Toronto centre is a world leader in metro signalling, and exports to customers around the globe.



EUROPE

With 55,000 employees in 11 countries, Thales has a strong base in Europe.

In **France**, the company employs 34,000 people. As the country's leading defence contractor, Thales has an involvement in all the country's major programmes for air, land, naval and joint forces (*Rafale* combat aircraft, *FREMM* multimission frigates, *Syracuse III* telecommunication system, etc.). Thales is an industry leader in civil markets, particularly transportation, a tier-one partner to Dassault Aviation, Airbus and DCNS – for which Thales is the industrial partner and shareholder with a 25% interest –, and is a key player in the research community, with a central role in numerous high-tech clusters.

In the **United Kingdom**, the second most important country for Thales, the Group employs 9,000 people. The company is one of the main suppliers to the Ministry of Defence and a key partner on such strategic programmes as the *CVF* aircraft carriers, the *Watchkeeper* UAV system, the *FSTA* tanker aircraft, the soldier modernisation, missiles, etc. In the civil domain, Thales contributes to the modernisation of the London Underground, and has won the first stage of the national identity card programme.

Thales is the leading defence company in the **Netherlands** and has made its Dutch operation one of its main centres of excellence for naval radars and combat management systems.

Thales employs more than 6,000 people in **Germany** working in the Group's three areas of expertise, particularly cabin systems for the aerospace market (Laupheim), and transportation for the security market (integration centre in Stuttgart).

In **Spain**, Thales employs more than 2,200 people in all three of its core areas of business, particularly security. Thales rail signalling solutions equip several of the country's high-speed lines.

In **Italy**, Thales employs 2,600 people and has established close ties with Finmeccanica through the Space Alliance. Thales also plays a key role in the defence (*FREMM* frigates) and security (urban transportation) sectors.

Thales has forged close relations with **Russian** industry for many years, especially in civil aerospace with Sukhoi on the *Superjet 100* programme, and also in the space and gas sectors.

Thales also has operations in **Portugal**, **Scandinavia**, **Eastern Europe** and **Turkey**. In addition, the company is a key partner to the European Union, the European Space Agency and other **major institutions**.

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LATIN AMERICA

In Mexico, Thales will help the authorities of Mexico City to conduct the large-scale *Ciudad Segura* (secure city) programme to improve urban security. In Brazil, where the company has been established for more than 30 years, Thales has made the Omnisys subsidiary its global centre of excellence in long-range L-band air traffic control radars. In Chile, a local subsidiary specialises in security solutions for telecommunications and banking applications. Recent contracts include upgrading the Santiago air traffic control centre and the capital's metro network.

A GLOBAL player

MIDDLEEAST

In **Saudi Arabia**, Thales supplies a major electronic air defence and protection system called *Al Madhallah* ("the umbrella") for the Royal Saudi Air Force. Other references include the *Sawari*, *Crotale* and *Shahine* contracts. In aerospace, Thales has been selected by Saudi Arabian Airlines to install in-flight entertainment systems on *Airbus A320* and *Boeing 777* aircraft. And in the space sector, Arabsat has chosen the consortium formed by Astrium and Thales Alenia Space to build and launch two new satellites. Thales recently signed its first mainline rail contract to equip the future North-South rail link, in partnership with SBG. Since 2005, Thales has provided a surveillance and management system during the Mecca Pilgrimage.

The company is also an active partner for the **United Arab Emirates**, where it was recently selected with EADS to supply a dual civil and military telecom satellite system, and has completed deliveries of the 62 new or upgraded *Mirage 2000-9* aircraft ordered in 1999. In **Qatar**, the consortium formed by Thales and ARINC is responsible for security infrastructure at the new Doha International airport.

68,000 employees in **50** countries

AFRICA

In Algeria, Thales is in charge of the installation of the ticketing system for the first metro line in the capital city of Algiers, the upgrade of the North Railway Bypass, and secures oil and gas infrastructures.

In Morocco, Thales contributes to the modernisation of the naval forces by equipping three new multi-mission frigates. In security solutions, the Group will install signalling systems for the Taourirt-Nador rail link, and has been selected to produce the contactless biometric ID cards.

In **Egypt**, the satellite company, Nilesat, has selected Thales Alenia Space as prime contractor to supply its telecommunications satellite. The Group is also in charge of the contactless fare collection system and integrated supervision and communication system for Line 3 of the Cairo metro network.

In South Africa, Thales will supply a contactless e-ticketing solution for the new high-speed Gautrain Rapid Rail Link between Johannesburg and Pretoria.



ASIA

Thales employs around 600 people in **China**, through joint ventures with local partners, mostly in the aerospace, space and transportation markets. The company upgraded the Beijing air traffic control centre in readiness for the 2008 Olympic Games and provided solutions for three new lines on the Shanghai metro, which were opened at the same time.

Thales has operated in **India** for more than 50 years. In the defence sector, recent highlights include the contract to supply systems for six *Scorpene* submarines. Thales has set up an avionics joint venture with Samtel and has supplied secure ticketing systems for the Delhi and Calcutta metros.

In **South Korea**, Thales and the Samsung Group joined forces in 2000 to create Samsung Thales Co. (STC) Ltd. Today, the joint company has more than 1,300 employees and a record of success, particularly in air defence programmes.

Thales's operations in **Singapore** include an important R&D facility. The company has also installed one of the world's most advanced air traffic management systems in this country under the *LORADS III* programme.

AUSTRALIA

Thales is a key defence contractor in Australia and employs 3,500 people. The company manufactures military vehicles in Australia, notably the *Bushmaster* protected mobility vehicle deployed by Australian forces in Iraq and by Australian and Dutch forces in Afghanistan. Thales is also involved in the modernisation of all three branches of the military: land (battlefield communication system), naval (*FFG* frigates) and air (equipment for *Tiger* helicopters). Thales's **Melbourne** facility is responsible for the continued development of the *Eurocat* air traffic management system, now recognised as a global industry standard. Used to monitor Australia's vast airspace, *Eurocat* has also been sold in China and numerous other countries. Thales supplies simulators for air forces as well as commercial airlines in the region and has been selected to implement free-flow tolling systems on several roads in the **Brisbane** area.

THE CUSTOMER: our top priority

At Thales, focusing on customers not only means meeting their current requirements, but also putting in place the technical, human and organisational resources needed to anticipate their future needs.

o guarantee long-term customer satisfaction, Thales is committed to continuous improvement in the quality of its systems, products and services throughout the programme life cycle. Underpinning this commitment are **three basic principles**:

• Anticipating and answering customer requirements: Thales has a network of commercial experts, key account managers and company-wide platforms all over of the world.

• **Supporting customers:** Thales guarantees the operational availability and reliability of its products, equipment and systems, throughout their life cycle. Thanks to its international footprint, the company has the capability to provide customers with timely, tailored through-life support and innovative services. A dedicated internet portal, **Customer OnLine**, is also available for customers.

• Measuring the quality of all programme deliverables: Thales conducts regular customer satisfaction surveys and carefully monitors each customer's supplier ratings.

Thales's **service commitment** structures the efforts of the entire workforce, as well as those of the company's partners and suppliers.





Anticipation: to work closely with its customers, Thales has established a worldwide network of integration centres.

Support: Thales provides a communications system to the NATO forces in Afghanistan (*ISAF*).

B Evaluation: customer satisfaction surveys, user forums and supplier ratings.







Talent and diversity: the fundamental strenghts of the Thales workforce.

5 The Code of Ethics guides the professional behaviour of the company's employees.

5 Thales has adopted the 10 principles of the United Nations Global Compact.

A RESPONSIBLE COMPANY

Within a comprehensive corporate responsibility policy, Thales attaches the utmost importance to ethical practices with respect to its customers and suppliers and all the company's other stakeholders, including employees, shareholders, financial markets, civil society and the environment. The company strives to develop **responsible business relationships** with its customers.

Thales is one of about thirty organisations specifically credited in the 2008 annual review of the **United Nations Global Compact**. The company earned recognition for its efforts to involve suppliers in its comprehensive ethics approach by introducing a Purchasing and Corporate Responsibility Charter.

Thales also strictly manages sales and transfers of technology and equipment, ensuring compliance with national, European and international laws and regulations and at the same time proactively deploying its own export control procedures, based on the highest international standards.

Thales's commitment to social responsibility hinges on a **Code of Ethics** and a dedicated organisation in charge of ensuring compliance with the principles it sets forth. The Thales Code of Ethics guides the professional behaviour of the company's employees with respect to its various stakeholders. It is an expression of the company's values and reflects its commitment to compliance with clearly stated principles of ethical business conduct. An e-learning awareness programme is also available to support its deployment.

Given the complexity of its business operations, increasing regulatory pressure and a growing demand for transparency, Thales has placed ethics and corporate responsibility at the heart of its management process.

A GLOBAL high-technology provider

esearch and development activities account for 20% of the company's consolidated revenues, amounting to €2.4 billion in 2008. With over 25,000 researchers and engineers working on cutting-edge technologies, 300 new inventions each year, a portfolio of 13,000 patents and more than 30 cooperation agreements with universities and public research laboratories in Europe, the United States and Asia, Thales is a

model of excellence in advanced technologies and innovation.

ADVANCED RESEARCH

Most advanced pre-product research is conducted by Thales Research & Technology (IRI), which employs around 500 people at Thales's central laboratories and focuses on the company's **five key technology domains**: optics and microwave; secure communications; software; information, command and cognition; and security.

OPEN RESEARCH

To develop the technologies it needs, Thales relies heavily on **cooperation between its research teams and the academic community**. Most TRT laboratories are therefore located on university campuses. In France, Thales's corporate research laboratory is on the campus of the École Polytechnique, one of the country's most prestigious engineering schools. Similarly, Thales research centres in the Netherlands and Singapore are located at Delft University and Nanyang Technological University (NTU). In the United Kingdom, the Reading laboratories have close ties with major British universities, including Cambridge, Surrey and Imperial College London.

In each major country of operation, Thales pursues a strategy of **solid partnership within the local industrial and scientific ecosystem**. Consolidating these local links, the company maintains a high profile in transnational networks, particularly at European level. Thales is a major player in numerous **hightech clusters** in France and the Netherlands, and on various European technology platforms (Acare, Artemis, Eniac, Nessi, etc.).

 The Palaiseau research laboratory.

Engineers and researchers from the world's most highly regarded scientific communities.

The award of the 2007 Nobel Prize in Physics to Albert Fert, scientific director of the Thales/CNRS Joint Physics Unit, testifies to the quality and value of the research conducted by Thales laboratories.





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