

THALES

Quality, Environment & Safety Manual

Together
Safer
Everywhere

www.thalesgroup.com



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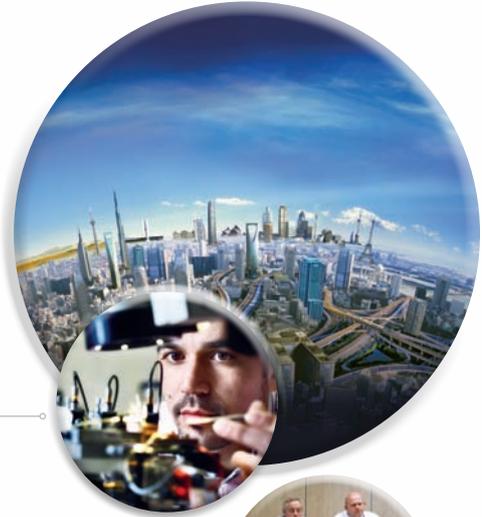
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THE CHAIRMAN'S PLEDGE

**Patrice Caine,
Thales Chairman & CEO**

P. Caine



We are a global organisation focused on helping our **customers** to perform difficult tasks in critical environments by supplying the systems, equipment and services they need. We serve both civil and military organisations, bringing them world-class technical expertise, well-established local teams and a commitment to long-term service quality and continuous improvement.

The key drivers of the Group's ongoing development as a company are a commitment to excellence, growth in expanding markets, improved competitiveness, quality and innovation.

These key areas of focus lie **at the heart of Ambition 10, our new strategy for the next ten years.**

In striving to achieve its objectives, the Group recognises that it is vitally important to **enhance quality and customer satisfaction**

on a continuous basis, while complying with strict technical standards and behaving as a socially and environmentally responsible enterprise.

I personally undertake to pursue and uphold these governance policies and ensure that they are rigorously implemented and applied in a way that is totally transparent to our customers and all our stakeholders, partners and suppliers.

Achieving this objective will require the continuing engagement of each and every Thales employee.

I am counting on everyone in the Group to implement these policies with determination.

THALES'S CORE BUSINESS ACTIVITIES

1 Aerospace

Thales provides equipment, systems and services — both in the air and on the ground — to support its customers in meeting the challenges of growth, safety, economic and environmental performance, security and passenger comfort. Market leadership in avionics, air traffic management and space systems makes Thales the world's only company with the capacity to provide a comprehensive end-to-end response to the challenges of air transport.

2 Space

The Group provides commercial, institutional and military customers with an exceptional combination of expertise spanning the entire value chain from equipment, payloads and satellites to systems engineering and services. These capabilities enable Thales to offer its customers complete solutions and play a central role on large-scale civil and military programmes.

3 Ground transportation

Thales systems and services make it possible to operate transport infrastructures at higher capacity and convey passengers and goods to their destinations more quickly, more safely and at lower cost. The Group develops innovative solutions based on cutting-edge technologies, such as CBTC (Communications-Based Train Control) systems, ETCS (European Train Control System), contactless smartcards, etc.

4 Defence

Thales designs systems and equipment to support the armed forces in accomplishing their missions in the traditional defence environments — air, land, sea and space — as well as the emerging environments of urban operations and cyber warfare. From system design to through-life support and personnel training, Thales provides a range of services to ensure that the solutions it provides deliver optimum performance over the long term.

5 Security

Thales provides integrated, resilient solutions to help its customers to protect citizens, sensitive data and infrastructure more effectively. The Group's distinctive strengths include the ability to integrate large-scale, complex systems, and leverage customers' legacy solutions.



1



2



3



4



5

2
3

KEY DATA

LAND & AIR SYSTEMS

(dual civil/military markets)

- Surface radars
- Air traffic management
- Military air operations
- Advanced weapon systems
 - Missile electronics
 - Optronics
 - Armament
- Protected vehicles

AVIONICS

(dual civil/military markets)

- Commercial avionics
 - Military avionics
- Helicopter avionics
- In-flight entertainment
 - Electrical systems
- Training & simulation
- Microwave & Imaging Subsystems

GROUND TRANSPORTATION SYSTEMS

(civil markets)

- Signalling for main line
- Signalling for urban rail
- Integrated communication & supervision systems
- Revenue collection systems

DEFENCE MISSION SYSTEMS

(military markets)

- Above water systems
- Under water systems
- Electronic combat systems
- Intelligence, surveillance, reconnaissance

SPACE

(dual civil/military markets)

- Telecommunication
- Observation
- Exploration
- Navigation

SECURE COMMUNICATIONS & INFORMATION SYSTEMS

(dual civil/military markets)

- Radio communication products
- Information technology security
- Network & infrastructure systems
- Protection systems
- Critical information systems

Revenues in 2014 (excluding taxes)

13 billion euros

Civil and Defence

Self-funded
R&D
675
million euros

61,000
employees

in

56 countries



6,000
projects

28
business lines

6
Global Business
Units

180
product
lines

Our motto

Our mission statement

Our values

Our three pillars

Our nine strategic topics

The three strategic levers

Our performance programme

Together – Safer – Everywhere

Wherever safety and security are critical, Thales delivers.
Together, we innovate with our customers
to build smarter solutions everywhere.

Customer Trust

One Team, One Thales

Developing our People

Accountable and Committed to Excellence

Agile and Innovative

GROWTH

> Drive Ambition



- Growing Markets
- Large Contracts
- Services

COMPETITIVENESS

> Fuel Growth



- International Industrial Footprint
- Customer Driven Competitive Innovation
- Engineering and R&D Competitiveness

PEOPLE

> Support Success



- Leadership and Diversity
- Customer Value and Customer Mindset
- Teamwork and Incentives

• Excellence in Delivery

• Efficiency of Structure

• Competitiveness in Sourcing

AMBITION BOOST, PERFORMANCE IMPROVEMENT PROGRAMME

9 strategic topics / / 3 strategic levers



"Ambition 10 is our ten-year vision and Ambition Boost is the performance programme that will make that vision a reality". Patrice Caine, Chief Executive Officer

AMBITION BOOST

A MANAGEMENT TOOL FOR A STRATEGIC VISION

- Developed on the basis of genuine collective intelligence, **Ambition 10**, Thales's strategic vision, sets out a series of ambitious long-term goals.
- Ambition 10 focuses on three key pillars:
 - > growth;
 - > competitiveness;
 - > people.

- Developed by operational units for operational units, **Ambition Boost** is the performance programme that will enable us to achieve the objectives set out in Ambition 10. Ambition Boost provides a structured framework and a common language so that Global Business Units, Countries and Functions can agree on priorities, define and implement performance initiatives and share best practices.
- Ambition Boost covers all the strategic topics in Ambition 10, and is deployed across the entire Group. It is a genuinely powerful **management tool**, designed to allow each unit to identify its own improvement **priorities** and define the associated **action plans**.
- As the Group's roadmap for the coming years, **Ambition Boost** provides the link between short- and medium-term goals and Thales's long-term strategic vision.



QUALITY POLICY



The Quality policy is applied across all Thales entities, each of which can tailor it to particular business areas and local conditions in order to meet their specific challenges with the necessary responsiveness and flexibility. It is launched and coordinated at Group level, and focuses the entire company on achieving the desired results.

GUARANTEEING CUSTOMER SATISFACTION

Meeting commitments to customers and continuously improving quality of delivered solutions, products and services

striving for excellence by implementing necessary improvements, and sharing improvement objectives and results.

Measuring quality based on key metrics

measuring punctuality, compliance with specifications, and responsiveness to customer demands. Depending on the sector, other quality criteria can include technical performance, reliability and security of systems and products.

Improving processes, applying them effectively

to reduce any risk that might jeopardise our ability to meet commitments and improve collective efficiency.

One team, one Thales: synergies, capitalisation of know-how, expertise, best practice, efficient teamwork.

THE QUALITY & CUSTOMER SATISFACTION FUNCTION

- **Bid and project quality assurance**

Engineering, industry and services

- **Customer satisfaction**

Global satisfaction survey, improvement initiatives

- **Chorus 2.0 Management system**

Processes, roles, documentation, training, verification system

- **Continuous improvement**

Maturity, efficiency

Quality underpins all our work, and everything that we provide to our customers.

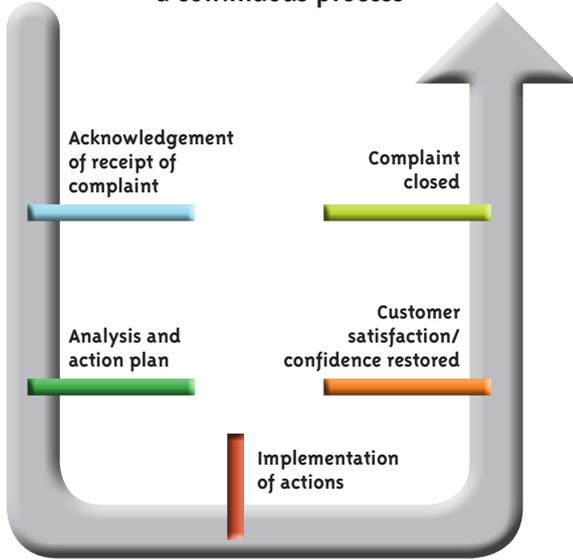
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1,800
employees



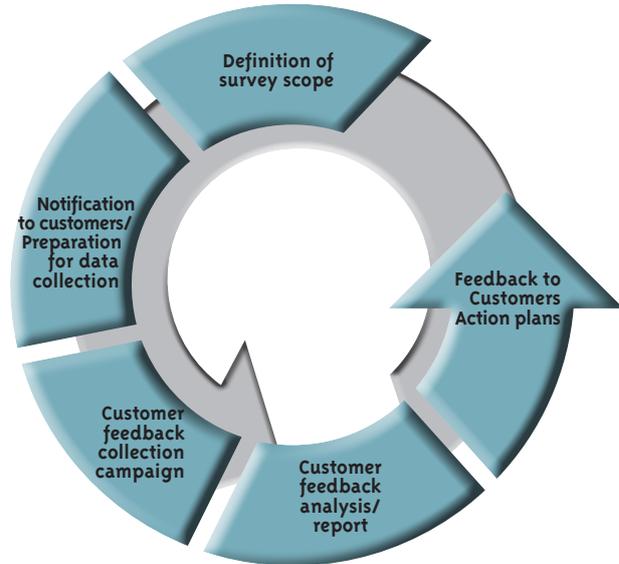
CUSTOMER SATISFACTION | TWO KEY DRIVERS

Customer complaints management: a continuous process



A comprehensive complaints management process that includes root cause analysis and implementation of preventive as well as corrective actions.

Customer satisfaction survey



A Group-wide customer satisfaction survey policy.

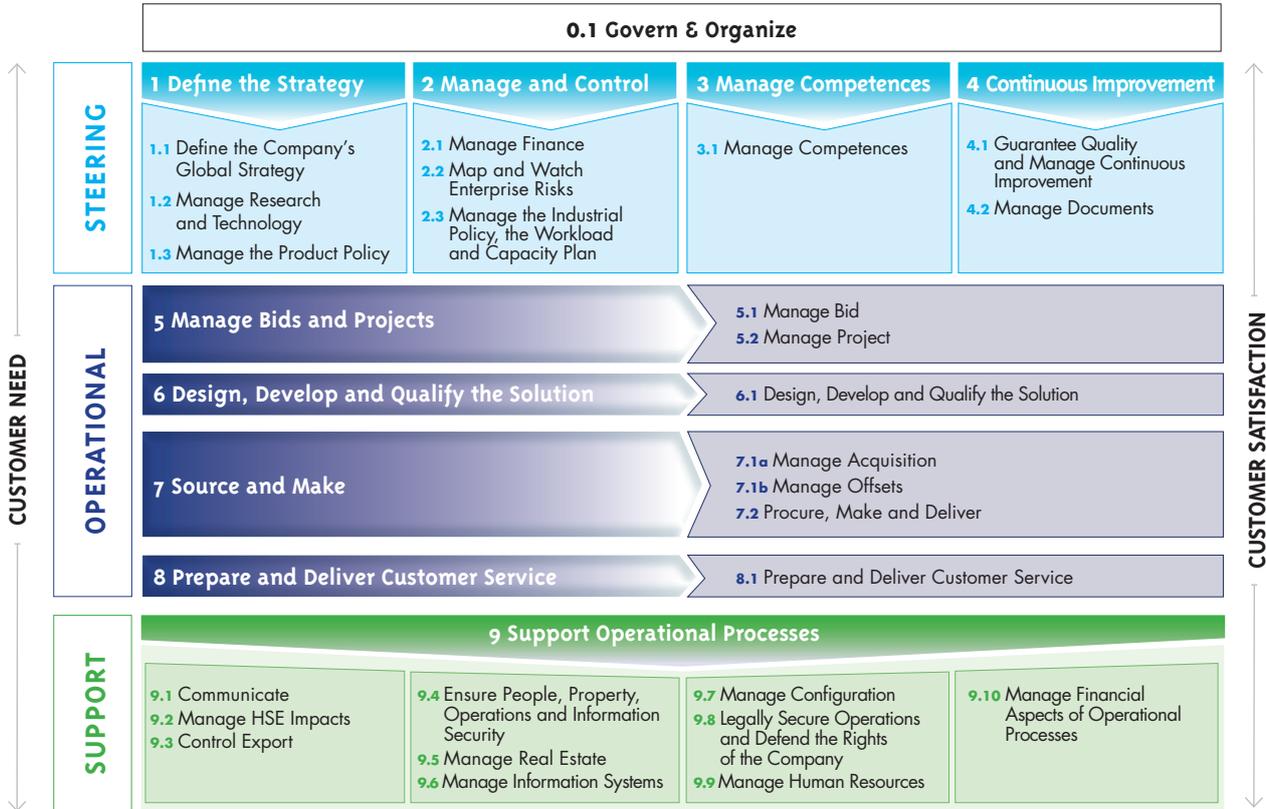
We aim to ensure that all our customers are “satisfied” or “very satisfied”.

GROUP MANAGEMENT SYSTEM



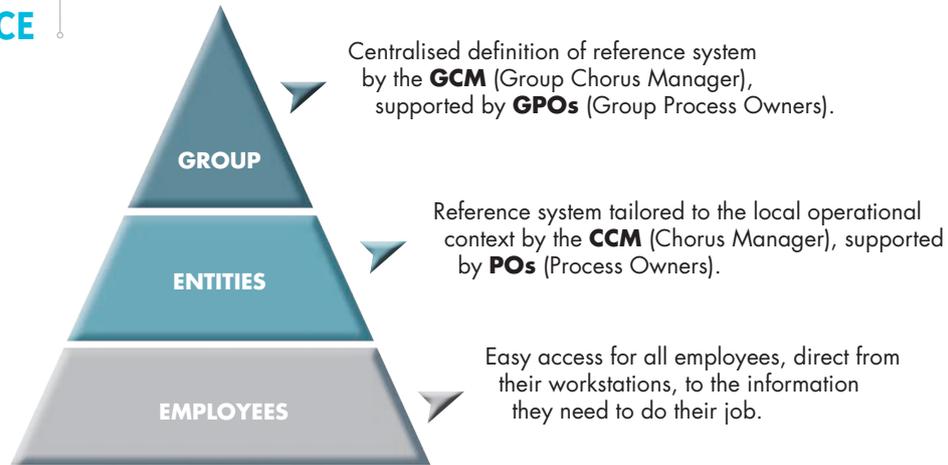
- **The Chorus 2.0 Group management system** is structured around **processes**. For each process, the system defines the roles, activities, reviews and documents to be applied, as well as the rules and arrangements for tailoring deployment where necessary. It also includes the Process Implementation Verification System (PIVS) and any associated training elements.
- **This single, unified system is applicable to all entities**, but can be adapted to suit the local operational context. It is designed to give each Group employee **easy access** to the information they need to do their job. It enables a greater focus on quality in all key process stages, complies with the requirements of applicable codes and standards, and fosters **sharing of best practices** and collaborative working through the use of a **common language**.
- It helps boost **individual and collective performance** by promoting the use of optimised processes across the organisation, and helps us to attain our goal of becoming a global company:
One team, one Thales.

CHORUS 2.0 PROCESS MAP



Quality & Customer Satisfaction

MANAGEMENT SYSTEM GOVERNANCE



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- The Thales process management system is developed, managed and distributed by the Group Quality & Customer Satisfaction Department, in conjunction with companies, countries and Global Business Units.
- Group Process Owners oversee the definition of processes and their rollout within the Group, define the associated rules and objectives, measure their application and effectiveness, and check that processes are being effectively implemented and continuously improved, in conjunction with local correspondents.
- The Quality Department is responsible for overall architecture as well as content management, notably through a dedicated change/configuration management organisation. These management procedures involve the GPOs and local representatives within entities.
- The entities apply the Group management system, adapting and supplementing it according to their own specific activities.

ROLES AND RESPONSIBILITIES

The Group Quality Department

- Proposes Quality policy and objectives, drives improvements in customer satisfaction, and provides indicators to support decision-making. The Department ensures that the policy is deployed within Group companies and countries.

Entity directors (company and/or country)

- Approve entity objectives and improvement strategy on the basis of operational and cross-cutting criteria. Provide the resources needed to achieve these objectives, and chair management reviews.
- Are responsible for process management: they coordinate local adaptation, rollout and continuous improvement of the reference system in their respective entities, check that it is implemented, monitor application of the processes, and ensure that quality is independent.

The Entity Quality Department

- Proposes quality objectives for the entity and the associated improvement strategy in line with the Group's quality objectives. Provides support for the improvement programme, and provides indicators to support decision-making. Implements the Group management system, supplementing it if necessary.
- Monitors/measures customer satisfaction, manages associated action plans, oversees service and product Quality assurance activities conducted by operating teams, and manages supplier Quality.

Entity managers

- Communicate team objectives and make sure that they are taken into account at the process level. Oversee the application of the management system and the adoption of Group best practices in order to achieve objectives.

CONTINUOUS IMPROVEMENT

A SHARED FRAME OF REFERENCE BEHAVIOURS FOCUSED ON ACHIEVING MATURITY AND EXCELLENCE

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To continually enhance customer satisfaction, Thales strives for lasting improvements in the punctuality and quality of the solutions, products and services it delivers.

In order to achieve this, within the scope of its performance improvement plans, Thales makes the necessary commitments, measures performance (in terms of punctuality, compliance, after-sales service quality, etc.), and implements the corresponding action plans in a way that is as transparent as possible to the customer.

Thales evaluates the maturity of its operational processes on the basis of international standards and models (CMMI®, APICS-OM BoK/SCOR®, ISO).

Each Thales entity commits to the following:

- improvement objectives and strategy incorporated into the entity-level strategic plan, and then translated into individual and team objectives;
- an improvement programme, Ambition Boost, deployed across all levels of the entity that includes priority improvement actions;
- a metric for results designed to be shared within the organisation and with customers, with a special focus on quality and timeliness;
- reporting of associated results to the Group's higher management bodies;
- use of common methods, models and tools to carry out improvement.

**CONTINUOUS
IMPROVEMENT**
ARCHITECTURE,
METHODS & TOOLS

Operational activities

Projects, System/Hardware/Software
Engineering, Acquisition, Services

Industrialisation, Procurement,
Production, Delivery, Support

Compliance

Verification of process implementation

**Continuous
improvement**

CMMI®⁽¹⁾

DEV

ACQ

SVC

SCPA

SCOR®⁽²⁾

APICS SSC

**Certifications
and
Assessments**

ISO 9001 – ISO 14001 – OHSAS 18001 – SCAMPISM⁽³⁾

**Methods
&
Tools**

Lean, Six Sigma, PDCA, DMAIC, VSM, Ishikawa, 5S, etc.

Quality & Customer
Satisfaction

Abbreviations:

• **ACQ:** Acquisition • **APICS SSC:** Association for Operations Management and Supply Chain Council • **CMMI:** Capability Maturity Model Integration • **DEV:** Development • **DMAIC:** Define Measure Analyse Improve Control • **PDCA:** Plan Do Check Act • **SCOR:** Supply Chain Operations Reference • **SVC:** Services • **VSM:** Value Stream Mapping

(1) © CMMI is registered in the US Patent and Trademark Office by Carnegie Mellon University.

(2) © SCOR is a registered trademark of the Supply Chain Council in the United States and Europe.

(3) [SM] SCAMPI is a service mark of Carnegie Mellon University.

BID & PROJECT QUALITY POLICY

Bid/Project managers and Quality Assurance managers are responsible for delivery on commitments and customer satisfaction.

**Bid/Project
managers**

- Are responsible for the quality of product or service delivery, i.e. meeting commitments and complying with requirements, and for customer satisfaction.
- Prepare the management plan and associated plans, and approve the quality plan.
- Implement the methods and tools for executing the project, adapted to the specific context.
- Ensure that processes are applied by all those involved in projects, in liaison with operational department managers.

**Quality
Assurance
managers**

- Are ultimately responsible for customer satisfaction.
- Prepare the quality plan, and support the teams responsible to make sure that actions are carried out according to the plan.
- Ensure that any preventive/corrective actions or specified improvements are carried out, and certify that the products or services delivered are compliant.
- Check that processes are implemented.

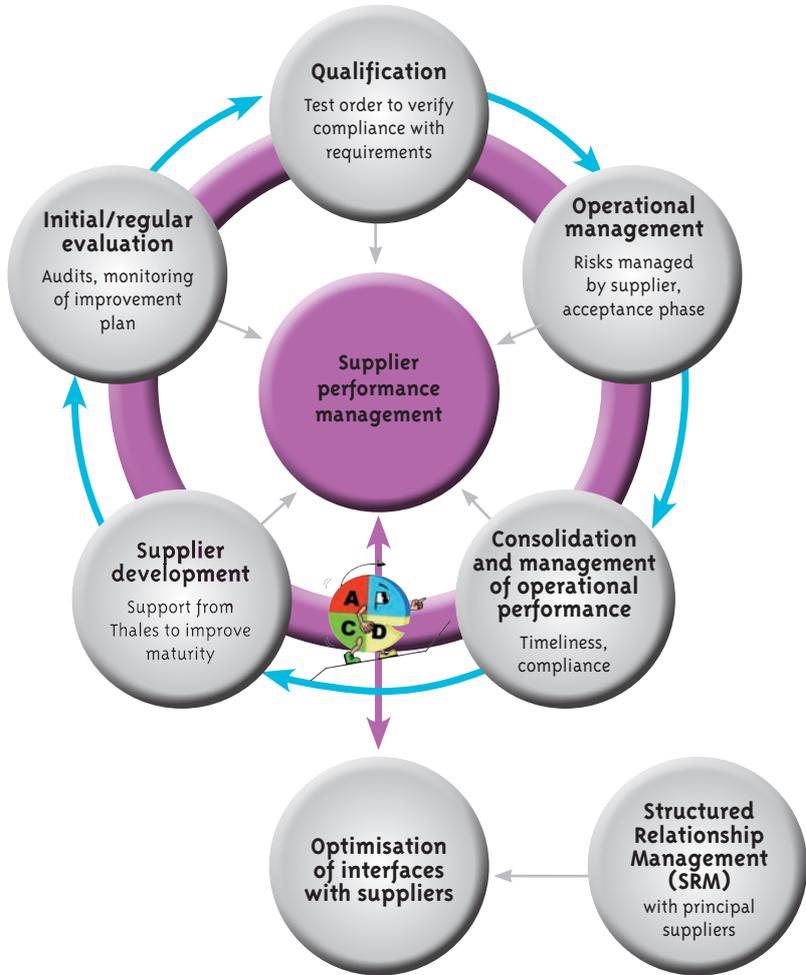
Quality management starts in the bid phase, and continues throughout the life cycle of each project. It is formalised at project reviews and/or milestone reviews.

Quality assurance managers exercise their duty to alert and right to veto in accordance with the conditions laid down in the management system.

SUPPLIER PERFORMANCE MANAGEMENT

Thales's supplier performance management policy is based on the needs and expectations of its customers and the requirements of applicable standards. The policy involves advance evaluation of suppliers' capabilities, and monitoring of their performance during the execution of contracts. Purchasing managers and quality managers, in close cooperation with internal decision-makers, implement Thales's supplier quality assurance policy, which has two main components:

- supplier evaluation and qualification;
- management of supplier operational performance



VERIFICATION OF PROCESS IMPLEMENTATION

18
19



A comprehensive process implementation verification system

CERTIFICATIONS

Thales has achieved and continues to maintain certifications across its various business activities. The purpose of these certifications is to demonstrate the Group's ability to manage processes in line with customer expectations.

Quality

All activities: ISO 9001 certification.

Other certifications, depending on activities:

- AQAP 2110;
- EN 9100;
- EASA Part 21 G for production activities (Europe);
- EASA Part 145 (Europe) and FAR 145 (USA) for maintenance activities;
- EASA Part 147 for aerospace maintenance training.

Environment

- ISO 14001 certification for production sites.

Workplace health and safety

- OHSAS 18001 certification:
 - for production sites;
 - and/or entities with "external worksite" activities.

HEALTH, SAFETY & ENVIRONMENT COMMITMENTS (HSE)

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21

- Comply with legal and other requirements, including customers' requirements.
- Minimise and control the risks and impacts relating to health, safety and environment (occupational disease/accidents, pollution/releases/exposure, natural resources consumption, waste, biodiversity, climate change, etc.).
- Integrate environmental performance as a factor of competitiveness and innovation through products and services.
- Be a socially responsible enterprise by integrating HSE item at every level of the organisation, and improving performance.
- Involve the Supply Chain in the HSE commitments.

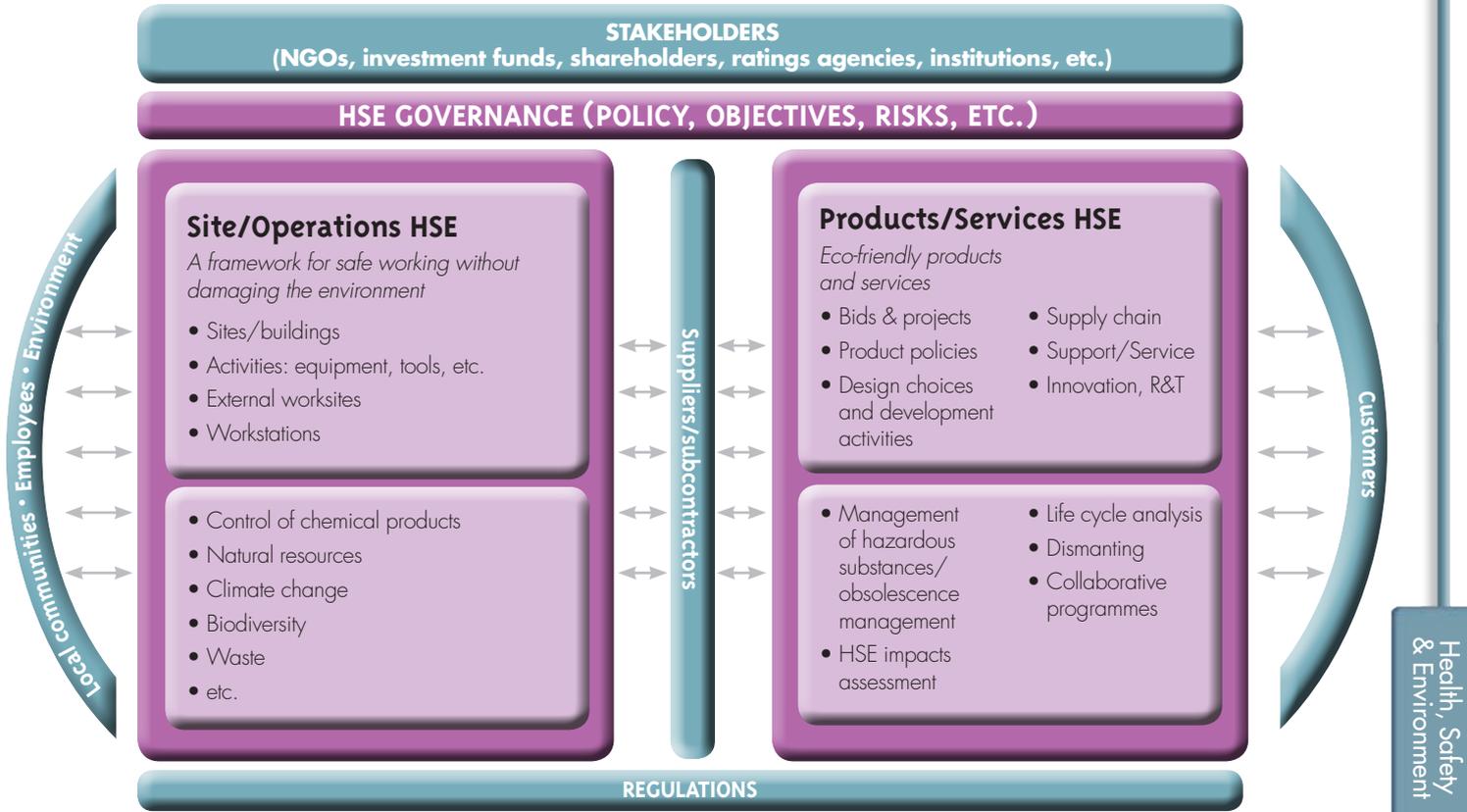
Chorus 2.0 management system

- A dedicated process, "Manage HSE impacts", which interfaces with all processes.
- HSE requirements and activities directly integrated into operational processes.

- **A HSE policy** deployed within all Group activities
- **Performance objectives** to federate the whole approach and mitigate the risks
- **Periodic measurements** to assess the efficiency of the actions and the performance improvement
- **An international HSE organisation** supporting the HSE Sites and HSE Products networks
- **Dedicated training programmes** delivered by Thales University
- **Skills management** supported by a job family



A CROSS-CUTTING SAFETY/ENVIRONMENT APPROACH



To find out more about the Thales Group

- Registration Document
- Social Report
- Corporate Responsibility
- All these reports can be downloaded from our website: www.thalesgroup.com

THALES

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• Design: PUBLICORP • 01 55 76 11 11 • 13527 • December 2015.



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