Connecting Pieces of Your World

2015 SUSTAINABILITY REPORT

Ansaldo STS

A Hitachi Group Company

Ansaldo STS in brief 1
Sustainability at Ansaldo STS 2
Letter from the CEO and General Manager 6
Contents 8

COMPANY PROFILE 10

SUSTAINABILITY GOVERNANCE 42

INNOVATION 70

THE ENVIROMENT, HEALTH AND SAFETY 80

OUR PEOPLE 104

SUPPLY CHAIN 138

COMMUNITY 148

ECONOMIC SUSTAINABILITY 166

Ansaldo STS in brief

Ansaldo STS[1] is active all over the world as a **contractor and supplier of turnkey services and solutions for large global projects for passenger and freight railways and metro lines.**

In addition to being known for the provision of turnkey projects for large metro lines, **Ansaldo STS has broad experience in the high speed sector as a supplier and integrator of all sub-systems: interoperable signalling and system, telecom, power supply, rolling stock integration, electrification and wayside equipment.**

It designs, builds, installs and operates signalling systems and components to manage and control railway and metro lines.

It is an international Organization based in Europe, the Middle East, North Africa, the Americas and the Asia Pacific region.

Four **key strategic pillars**

- ***Business driven*** – business-focused Organization;
- ***Strategic centre*** – management founded on strong, centralised guidance;
- ***Efficiency*** – industrialisation of the executive methods and globalisation of R&D (research and development) activities to develop a standard product portfolio;
- ***Global*** – global management of the procurement process.

1. In this report, "Ansaldo STS" and "group" mean all companies included in the 2015 consolidation scope, while "Ansaldo STS S.p.A." means the parent.

Sustainability at Ansaldo STS

SUSTAINABILITY GOVERNANCE

INTERNAL SUSTAINABILITY COMMITTEE

Composed of the managers of the main company functions, this committee defines strategic guidelines, commitments and projects for sustainable development and social responsibility. It reports directly to the CEO and General Manager and through him to the Board of Directors. By developing the CSR Manager's skills to support the activities of the committee, Ansaldo STS will make the measures aimed at achieving sustainability targets even more effective, intensifying their ongoing monitoring and reporting.

MATERIALITY ANALYSIS

Ansaldo STS defines the content of the Sustainability Report by asking group management and its stakeholders for their opinions on the different aspects to be considered in the report. This enables the company to more thoroughly report on sustainability issues that affect its stakeholders' judgements and decisions.

STAKEHOLDER INVOLVEMENT

Ansaldo STS is committed to understanding the needs and expectations of its people and involving them in projects to develop skills and expertise. It is focused on constantly monitoring its customers' satisfaction and plays an active part in handling relations with local communities be they municipal authorities, citizen associations, users of metros and trains, companies or local labourers. It also participates in research and training projects with institutions and universities.

SUSTAINABILITY PROGRAMME

Reporting on its commitments, investigations of the quality of its interaction with its stakeholders and the results of the materiality analysis allow Ansaldo STS to compile an annual sustainability programme that is focused on constant improvement.

SOCIAL INNOVATION

Ansaldo STS operates daily with the aim of improving quality of life by designing new transport systems which, every day, carry millions of people and materials without polluting, by developing increasingly compact and energy-efficiency hardware, by researching new green technologies and, above all, by optimising consumption and avoiding waste.

RESEARCH AND DEVELOPMENT FOR CUTTING EDGE PRODUCTS AND SOLUTIONS

In 2015, Ansaldo STS invested approximately €39 million in research and development to supply its customers and end users with cutting-edge products and solutions and the very best railway and urban rail transport system design and construction methods and procedures in order to increase safety and reduce their direct and indirect environmental impact.

SAFETY AND RELIABILITY

Ansaldo STS ensures that it develops and delivers products, applications and systems that are: safe, in compliance with Italian and international laws applicable to railway systems and reliable, pursuant to its customers' needs and its internal quality standards. It achieves this through RAMS (Reliability, Availability, Maintainability & Safety) activities.

PRODUCTS AND SOLUTIONS THAT RESPECT THE ENVIRONMENT

For Ansaldo STS, innovation is synonymous with respect for the environment: it is committed to researching products and solutions that contribute to reducing energy and raw materials consumption. It pays increasing attention to using environmentally-friendly materials, starting at the design stage.

THE ENVIRONMENT, HEALTH AND SAFETY

FIGHT AGAINST CLIMATE CHANGE

Ansaldo STS reports on direct and indirect greenhouse gas emissions (Scopes 1, 2 and 3) in accordance with the GHG protocol[2], undertaking to decrease these emissions, in part through people mobility policies, plans to cut energy consumption and improve efficiency, use of energy from renewable sources and to manage waste effectively.

INTEGRATED QUALITY, SAFETY AND ENVIRONMENT SYSTEM

Ansaldo STS has an Integrated Management System (IMS) for the quality, safety and environment, which integrates all group processes in one single structure, enabling the Organization to operate with shared objectives. It has also certified its individual sites in accordance with UNI EN ISO 14001 and OSHAS 18001 standards.

WORKERS' HEALTH AND SAFETY

Promoting the health and safety of its workers is a strategic commitment for Ansaldo STS. The company also tracks "near misses" – which are accidents without consequences resulting from undesired or unexpected situations, which could potentially harm people or things – to identify the appropriate solutions before a real accident happens.

2. The Greenhouse Gas Protocol (GGP) is the most widely used international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions.

OUR PEOPLE

PEOPLE CARE

“People care” is one of our five central values in our Organization. “People Care” is a far-ranging concept for Ansaldo STS which covers worker wellbeing as both professionals and as people. It focuses on work environments and monitors relations between managers and their teams and between colleagues. Ansaldo STS offers a wide range of benefits and services.

TRAINING AND PROFESSIONAL GROWTH

Ansaldo STS considers professional, managerial and specialist training a fundamental lever to enhance its people’s skills. The Global Job System is applied to the entire workforce and interacts with the Performance Development Plan to plan career objectives and individual development paths that match new business contexts.

SUPPLY CHAIN

SUPPLY CHAIN SUSTAINABILITY

Ansaldo STS is committed to defining, sharing and implementing a sustainability roadmap for its supply chain to promote a sustainable business culture with its suppliers. The aim is to progressively improve the economic, environmental and social impact (labour and safety practices, respect for human rights and the development of local communities) along the entire supply chain.

COMMUNITY

RESEARCH PROGRAMMES WITH INSTITUTIONS AND PARTNERSHIPS WITH UNIVERSITIES

Ansaldo STS contributes to our society’s technological advancement by participating in research projects with Italian and EU institutions and training projects with universities on issues such as safety, energy efficiency, satellite signalling and the monitoring of railway transport system infrastructure.

CORPORATE AND SUSTAINABILITY COMMUNICATION

This is the seventh Ansaldo STS Sustainability Report edition in accordance with the Global Reporting Initiative guidelines and with certification by an independent auditor. Ansaldo STS adheres to the Global Compact and is a founding sponsor of the Global Compact Network Italy Foundation. It also participates in the Carbon Disclosure Project and is on UNIFE's Sustainable Transport Committee.

ECONOMIC SUSTAINABILITY

BUSINESS STRATEGY AND MODEL

Ansaldo STS's economic sustainability is its strategic answer to the macroeconomic context and transportation market trends, based on a business model that develops distinctive abilities and the necessary skills to boost the company's competitiveness in markets.

CORPORATE GOVERNANCE

Ansaldo STS's corporate governance system is designed to maximise value, monitor business risks and achieve transparency with the market, balancing the interests of all its shareholders, with specific attention to minor ones.

Mugnano Station line MetroCampania Nord Est

Letter from the CEO and General Manager

Dear Stakeholders,

This year, Ansaldo STS publishes the seventh edition of the Sustainability Report, a process that began in 2009 with the aim of narrating the company's commitment on the sector of signalling and integrated railways transport systems and the implementation of increasingly advanced, safe, reliable and sustainable products to respond to the growing mobility demand.

Andy Barr
CEO and General Manager

In recent years the world has changed dramatically, and it is not enough to have a good product, if society and customers' requirements are not understood and the capacity to create solutions, and above all, value for both is missing.

The question we must ask ourselves every time we think about the physical realization of our components or we design of a great line is: how can we, through our projects create value for the entire community, not only for those who specifically use our transport systems, but all the people who come into contact with them? How do we innovate to improve the quality of everyone's life?

Our own answer is in the pages of this report: in our daily commitment to find new solutions and in the determination with which we face new challenges, our gaze locked towards the opportunities the future is offering to us.

Today, Ansaldo STS is part of the Hitachi Group whose mission has always been to contribute to social well-being through technological development. By combining advanced IT systems, internet and cloud technologies the Group aims to provide new solutions to improve the quality of life on a global scale.

A single vision, even if derived from different stories, contributes to the solution of the problems that society is facing and for which technological innovation plays an important role.

Over the past year Ansaldo STS further improved its path towards sustainable development both in terms of results achieved and reporting capacity. The 'analysis of materiality' was updated to include new stakeholders and a thorough analysis of economic, social and environmental risks to accurately describe how the company is able to handle them and convert them into opportunities for growth.

Ansaldo STS further reduced greenhouse gas emissions in 2015 thanks to its policy on energy savings and sustainable mobility, ranking among High Scores companies of the Carbon Disclosure Project. The frequency and severity of accidents at work has further reduced and the Company won the Best Practice Award at the third conference organized by AICQ (Italian Association of Quality Control) thanks to the implementation of the Safety and Security Instruction for Traveler.

Ansaldo STS has also continued intense research and development and is increasing investment both through participation in research projects with national and EU institutions and promoting technological and managerial training in partnership with the Universities.

In addition to increasing the economic value as a company, Ansaldo STS works with customers to create new solutions and real value to society. We help to create a safer society, moving millions of people around the world in a comfortable and safe way.

I'm very proud and would like to thank all of our stakeholders and all the people I've met in the company for their warm welcome. Since the beginning I have appreciated the passion and intelligence which all people in Ansaldo STS have dedicated working with such high professionalism.

We proceed with our own approach, but even stronger because we are part of Hitachi group , who share our ethics, business philosophy and passion.

Let's continue working this way by providing our technical added value, cultural and human partnership, our experience and ethics to keep improving the quality of our products, our capabilities and solutions which distinguish us in the world.

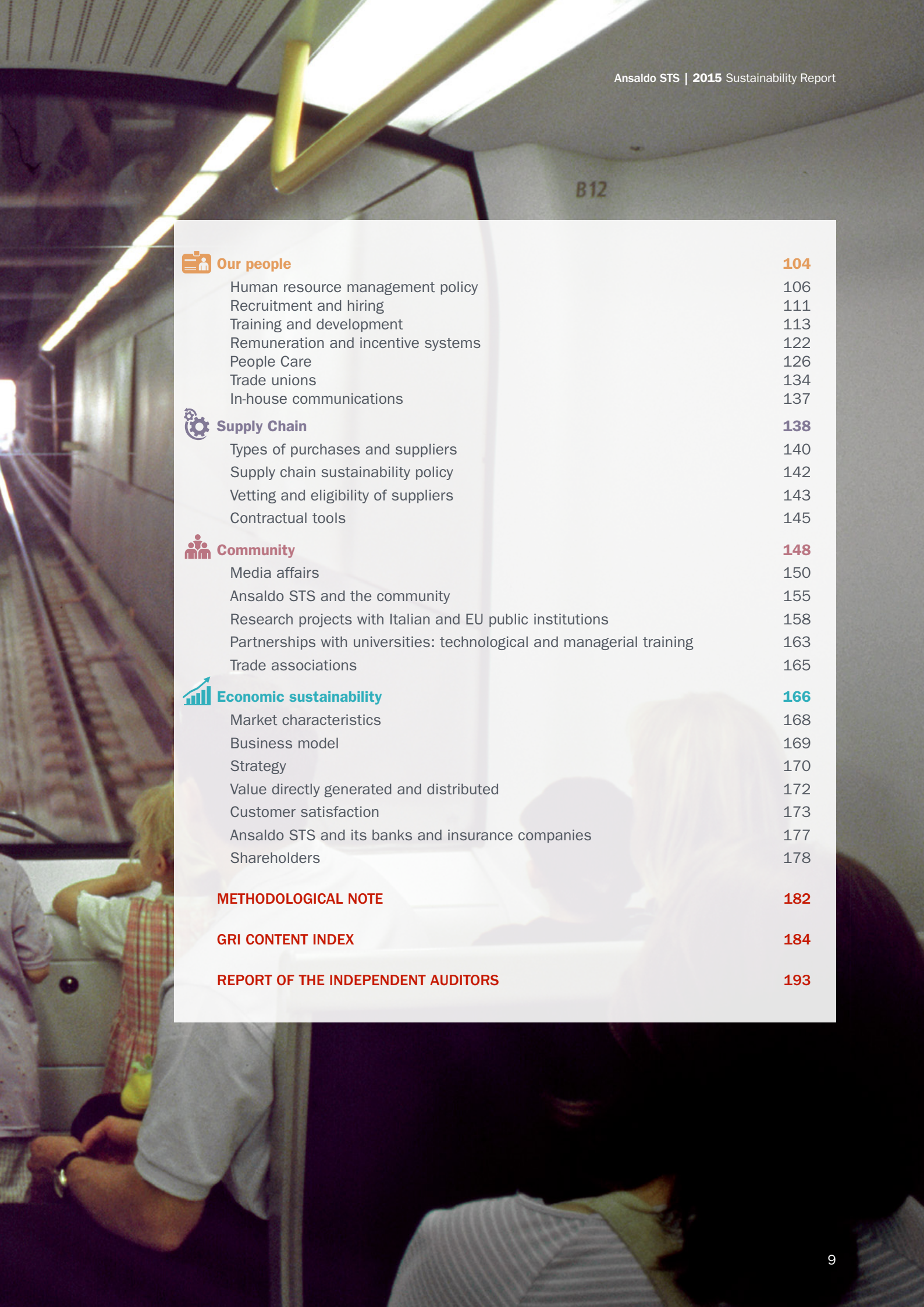
Contents

Company profile 10
- Our mission 12
- Organizational structure 14
- Business lines 17
- Ansaldo STS around the world 22
- Company history: milestones 24
- 2015 results 26
- Main ongoing projects 30
- Corporate governance 32
- Internal control and risk management system 40

Sustainability governance 42
- Sustainability governance 44
- Materiality analysis 46
- Sustainability risks and opportunities 48
- Stakeholder engagement 54
- Sustainability programme 61
- Ethics and integrity 64
- Local corporate social responsibility 68

Innovation 70
- Innovation governance 72
- Main products conceived and undergoing development 72
- Product and solution safety and reliability 75
- Energy efficiency and respect for the environment 76
- Investment in innovation and intellectual property 79

The Enviroment, Health and Safety 80
- Environmental sustainability 82
- Environmental policy 83
- Environmental training 84
- Climate change 86
- Environmental performance 90
- Health and safety 100



Our people 104

Human resource management policy 106
Recruitment and hiring 111
Training and development 113
Remuneration and incentive systems 122
People Care 126
Trade unions 134
In-house communications 137

Supply Chain 138

Types of purchases and suppliers 140
Supply chain sustainability policy 142
Vetting and eligibility of suppliers 143
Contractual tools 145

Community 148

Media affairs 150
Ansaldo STS and the community 155
Research projects with Italian and EU public institutions 158
Partnerships with universities: technological and managerial training 163
Trade associations 165

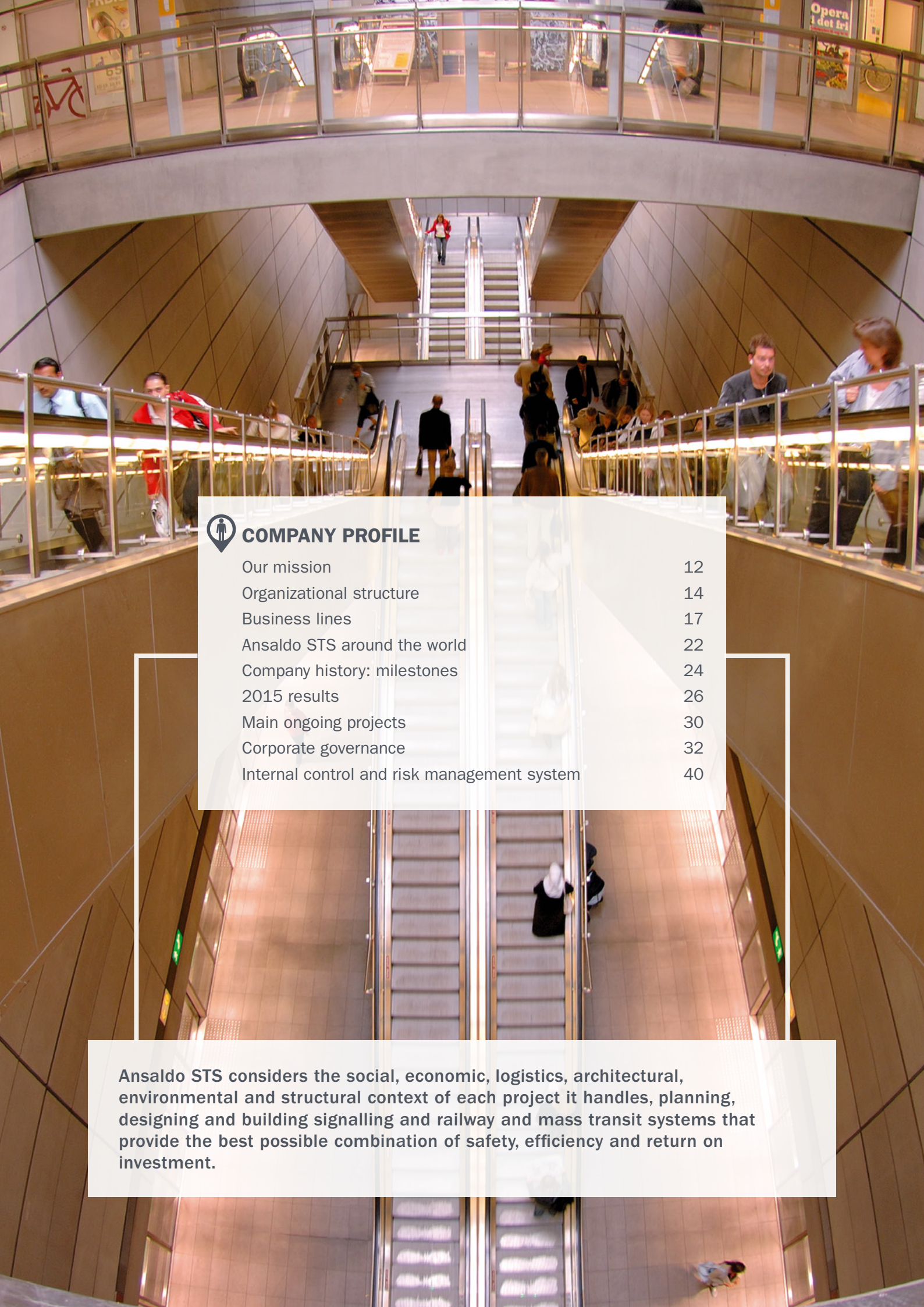
Economic sustainability 166

Market characteristics 168
Business model 169
Strategy 170
Value directly generated and distributed 172
Customer satisfaction 173
Ansaldo STS and its banks and insurance companies 177
Shareholders 178

METHODOLOGICAL NOTE 182

GRI CONTENT INDEX 184

REPORT OF THE INDEPENDENT AUDITORS 193



COMPANY PROFILE

Our mission	12
Organizational structure	14
Business lines	17
Ansaldo STS around the world	22
Company history: milestones	24
2015 results	26
Main ongoing projects	30
Corporate governance	32
Internal control and risk management system	40

Ansaldo STS considers the social, economic, logistics, architectural, environmental and structural context of each project it handles, planning, designing and building signalling and railway and mass transit systems that provide the best possible combination of safety, efficiency and return on investment.

In summary

Revenues
+6%
(from € 1,303 million to € 1,384 million)

Net profit
+15%
(from € 81 million to € 93 million)

-8.3%
GHG production (from 2014 to 2015)

34.3%
electrical energy from renewable sources

+11.8%
R&D investments (€ 36.9 million expensed directly)

+4.8%
economic value distributed to stakeholders (€1,354 million)

0.14
frequency of injuries at office sites

0.27
frequency of injuries at production sites

Our mission

Ansaldo STS combines experience and human, financial and technological resources to provide innovative solutions in the design and construction of equipment and systems for conventional and high-speed railway lines and mass transit rail network signalling and automation for both passengers and freight.

Our commitment to sustainable development can be seen in the countries in which we operate, across five continents, through the widespread application of our business vision, focus on environmental and social issues, and how we foster a collaborative environment and respect for local cultures through our work. The more we make sustainable long-term decisions, the better the interaction between our company, society and the environment will be, and this approach is part of our competitive edge.

Our values

To achieve its objectives and growth and maintain its sector leadership, Ansaldo STS bases its operations on solid, unwavering ethical values and principles. Everyone in the Organization is required to uphold this culture and make the same commitment to ethical conduct, embracing the company's principles and values. Ansaldo STS's values, and those on which it has based its business are:

FOCUS ON CUSTOMERS

Our technologies safely move millions of people every day. This drives Ansaldo STS to do its best to increase and maintain high excellence services for rail transport users. Ansaldo STS exists because of its customers, insofar as the company is able to understand and meet their requirements and expectations, helping them resolve any related problems.

INNOVATION AND EXCELLENCE

Understanding, studying and developing solutions to improve responses to customers and market offers lie at the crux of Ansaldo STS's activities, in which work is constantly focused on providing customers with innovative and excellent products that represent the company's competitiveness on the market.

PEOPLE

Customer satisfaction and the development of new products depend on the abilities of the professionals working to achieve them, Ansaldo STS's employees. This is why Ansaldo STS is a company founded on people. Everyone in the company's Organization works to make Ansaldo STS a good place to work, where people learn, achieve and celebrate success. Ansaldo STS always prioritises its people and their safety.

TEAM SPIRIT

None of these operating objectives can be achieved by one person alone. The company's professionals work in a single, integrated Organization, capable of making the most of their different cultures and professional training. This team spirit can also be found in managers who ensure cooperation and the growth of the company culture, while achieving established objectives and the company's mission. Ansaldo STS strongly encourages attainment of its people's aspirations through team objectives.

INTEGRITY

If people are to work together effectively, mutual trust must be fostered, and this is only possible if everyone works and acts in a way that is transparent, loyal, honest and proper. Similarly, customers must have the absolute certainty that integrity is a fundamental value for Ansaldo STS, and that this value is reflected in its products, through the utmost care and attention to safety.

Organizational structure

Ansaldo STS boasts an integrated, global Organization capable of providing an adequate response to demand for standardised solutions in the railway transport market and, in particular, the signalling technology market.

It has four key pillars:

Business Driven	Business focused organisation
Strategic centre	Strategic management model founded on a strong, centralised guide
Efficiency	Industrialisation of the executive methods and globalisation of R&D activities to develop a standard product portfolio
Global	Global management of the procurement process

And it is based on the coexistence of:

- **Organization:** Organizational units with specific professional areas of expertise;
- **Team-based organization:** functional teams that aim to achieve an objective in order to ensure the effective and efficient functioning of the main business processes: offer, execution, development and innovation.

Art Station Lala line 6 metro Naples, artwork of Nanni Balestrini

Organization

Over the past few years, the market has become increasingly dynamic and competitive, seeing a progressive consolidation of market leaders of ever larger sizes through mergers and acquisitions involving companies in the sector.

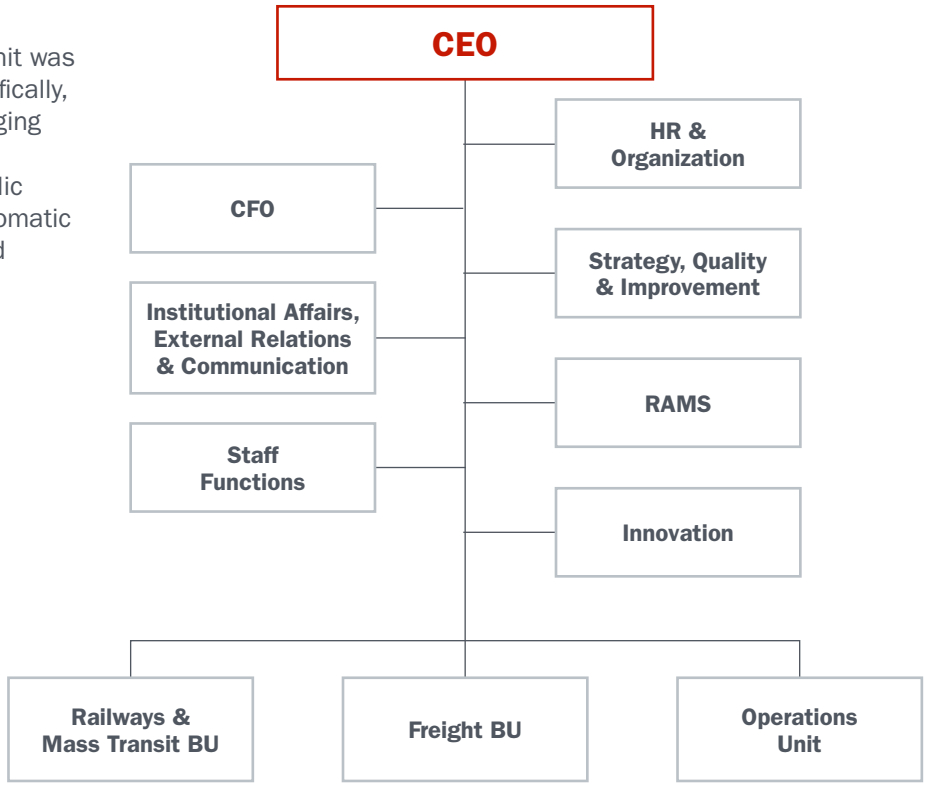
This trend, along with the need to respond to competitive pressure on prices and the standardisation of products and technical solutions, has led Ansaldo STS to revise its Organization to further improve efficiency and effectiveness.

The following are the main elements underpinning the company's Organizational structure:

- **clear Organizational identification** of a strategic unit directly reporting to the CEO with responsibility for defining strategic guidelines relating to business development and management of the product/technical solutions portfolio on Ansaldo STS's markets;
- **identification and Organizational segregation of business/project management** from the technical performance of projects by establishing business units and an Operations Unit;
- **identification and clear segregation of the businesses** that currently characterise Ansaldo STS's offer: Railway/ Mass Transit and Freight transport;
- **clear Organizational identification of a unit directly reporting to the CEO with direct responsibility for safety/RAMS** ("Reliability, Availability, Maintainability & Safety");
- **clear Organizational identification of a unit directly reporting to the CEO** with direct responsibility for Institutional Affairs, External Relations & Communication;
- **Human Resources** (HR & Organization Unit), **Administration, Finance and Control** (CFO Unit) **and Staff Functions increasingly** focused on generating value by acting as business partners to facilitate and support the achievement of the company's short, medium and long-term objectives.

Accordingly, the main structure consists of the following Organizational units directly reporting to the CEO:

The Institutional Affairs, External Relations and Communication Unit was set up in November 2015. Specifically, the Unit is responsible for managing relationship and representation activities with public bodies, public and private administrations, diplomatic representations and national and international trade associations.



The Railways & Mass Transit and Freight Business Units

- responsible for managing the performance of both projects and sales activities at global level, in line with the centrally-defined strategic guidelines;
- organised by market areas referred to as regions. Each region covers a geographical area in which Ansaldo STS currently has projects underway;
- they have a central Organizational unit responsible for performing/coordinating the bidding activities in the individual regions;
- they perform sales activities for business expansion/ development on markets not yet covered (new geographies) by implementing the strategic guidelines defined by the central Strategy, Quality & Improvement Unit.

The Operations Unit
is responsible for:

- developing and managing the product/platform/application portfolio by implementing the strategic guidelines defined by the central Strategy, Quality & Improvement Unit;
- identifying and implementing efficiency-improvement activities and programmes, which, in line with the group's strategic guidelines, ensure continuous improvement in the efficiency and effectiveness of the implementation and development of technical products/solutions;
- providing the business units with all parts, systems and services to optimise procurement and production times and costs;
- managing technical resources;
- ensuring the implementation of shared processes, procedures and tools;
- ensuring the capitalisation and exchange of knowledge.

Team-based organization

Collaboration, management of work groups and a process-based approach are key factors in the successful implementation of the business strategy, as no single Organizational unit has all the required levers to achieve business targets.

To ensure a structured and formalised approach to its project activities, Ansaldo STS has defined an internal Organizational structure for project teams that operate in key processes: the Bidding Team and the Project Team.

The teams are composed of people assigned from the relevant operating units who have the necessary skills for the projects. The teams work as levers in the management of interdependencies, interfaces and conflict, and ensure coordination between units. The aim is to ensure an indepth focus on customers, efficiency and standardisation of processes and flexibility. Each team is led by a Team Manager with ultimate responsibility for the team's output and coordinates the team's resources.

Depending on the scope of the work and the requirements, the hierarchical function or centre managers select team members. Each team member is assigned a specific job and responsibility for identifying the required resources. Once they have been assigned to a team, members answer to the team manager with respect to deadlines, costs and the quality of the output.

Business Lines

Integrated system solutions

All over the world, Ansaldo STS assists its customers to design and develop reliable and sustainable solutions for rail transport networks, making mass transit more efficient and safe and contributing to resolving the problems caused by the growth and concentration of the urban population.

From passenger to freight transport networks, from urban to high speed or conventional interurban and cross border transport, Ansaldo STS designs and uses cutting edge technology to meet operators' requirements and optimise service regardless of traffic density and complexity.

Ansaldo STS has made its mark on the railway sector by using state-of-the-art technologies for large projects, such as:

- **ERTMS / ETCS technologies**, adopted to make high speed lines safer and more interoperable;
- **Satellite positioning technology** for the effective and safe management of railway traffic;
- **Driverless and unmanned solutions** for better operating efficiency and flexibility and to cut operating and maintenance costs;
- **CBTC signalling technologies** to improve service using the distancing logic based on moving blocks, mainly used for metros;
- **Catenary-free technology** (TramWave®) to protect the environment and historical city centres;
- **Large component portfolio**, which includes all signalling aspects and system solutions (such as point machines, signals, level crossings, relays, etc).

Ansaldo STS's success factors

- CUTTING EDGE TECHNOLOGY
- INNOVATIVE APPROACH TO COMPLEX PROJECTS
- INTERNATIONAL REACH AND GLOBAL CAPACITY
- EFFICIENT SOLUTIONS FOR INTEROPERABLE SYSTEMS
- CAPACITY TO BUILD INTEGRATED SYSTEMS

Public transport solutions

For Ansaldo STS, public transport means above all urban transport. Characterised by high traffic densities and a considerable volume of passengers in rush hours over relatively short distances, urban transport requires high safety, availability, flexibility and reliability levels to ensure operational efficiency and comfortable travelling for passengers.

Metros

Binary circuit systems	CBTC systems
Milan metro, Lines 1 and 2 (Italy)	Paris (France), Line 3 - (12 km)
Rome metro, Lines A and B (Italy)	Shenyang (China), Line 1 (29 km) and Line 2 (25 km)
Naples metro, Line 6 (Italy)	Chengdu (China), Line 1 (15 km) and Line 2 (41 km)
Paris RER A (France)	Xi'an (China), Line 2 (26.6 km)
Naples metro, Line 1 (Italy)	Hangzhou (China), Line 1 (53.6 km) and Line 2 (18.6 km)
Seoul, Lines 5, 7 and 8 (South Korea)	Zhengzhou (China), Line 1 (26.2 km)
Dallas, DART light rail (US)	Ankara (Turkey), Lines M1 (32 km), M2 (18 km), M3 (8 km) and M4 (5 km)*
Portland, West Side Corridor light rail (US)	Dalian (China), Lines 1 and 2
Shanghai, Line 2 (China) - 2002 & Extension	Navi Mumbai metro (India), (21 km)
Lisbon, Line B (Portugal)	Stockholm (Sweden), Red Line (41 km)
Los Angeles, Green Line (US)	South-eastern Pennsylvania Transportation Authority (SEPTA) CBTC Media Sharon Hill Lines (29 km)
Tanjin-Binhai, (China)	Tianjin (China), Line 5 (35 km)
Charlotte, South Corridor light rail (US)	
Pittsburgh, South West Corridor light rail (US)	
Belo Horizonte metro (Brazil)	
Shanghai, Line 2, West side extension (China)	
Chicago, Blue Line (US)	
Genoa, Line 1 (Italy)	
Sao Paulo, Lines 7 and 9 (Brazil)	
Shanghai, Line 2, East side extension (China)	
Pittsburgh, North Shore Corridor (US)	
Washington DC, Red Line & Blue Lines (US)	
Los Angeles County Metropolitan Transportation Authority (LACMTA), West Side Subway Extension (US)	
Massachusetts Bay Transportation Authority (MTBA), PTC System (US)	

*Ankara Metro received the Safety Assessment Approval for CBTC operation.
Updated Ankara Metro progress is highlighted with the completion of the CBTC system installation, testing and commissioning activities for the M1, M2, M3 lines in August 2015. On 17th March 2016 Safety Assessment Report and Certificate for M1, M2 and M3 lines was issued for regular Revenue Service in CBTC mode. The CBTC system for the M1, M2 and M3 lines have been available to the Client use, ready for Revenue Service, since 17th March.

Driverless metros

Binary circuit systems	CBTC systems
Copenhagen Lines M1/M2 (Denmark)	Taipei, Circular Line (Taiwan)
Riyadh Princess Noura University Campus (PNU) (Saudi Arabia)	Copenhagen, City Ring (Denmark)
Brescia metro (Italy)	Milan metro, Line 4 (Italy)
Milan metro, Line 5 (Italy)	Riyadh metro (Saudi Arabia)
Rome metro, Line C (Italy)	Lima metro, Lines 2 and 4 (Perù)
UI-Shinseol (Korea)	Glasgow metro (Scotland)
Honolulu metro (US)	
Thessaloniki metro (Greece)	

Turnkey driverless metros around the world

Driverless metros ensure high performance in terms of technology and transport capacity. The main driverless metros built by Ansaldo STS around the world (Ansaldo STS has managed Lines M1 and M2 in Copenhagen since 2002, Milan line 5, Milan line 4, Brescia, Rome line C, Thessaloniki, Taipei, Riyadh, Copenhagen Cityring lines M3 and M4, Honolulu, Lima, etc.) are listed below. Ansaldo STS currently manages driverless metro projects around the world that cover more than 250 km.

	Track	Stations	Headway	Capacity	Trains	O&M
Copenhagen M1/M2	21 km double track double tunnel	22	min 90 s	12,000 (4p/m2)	34 3 carsper train (39m)	13 + 3 years In operation since 2002
Brescia	13.7 km double track single tunnel	17	min 90 s	17,000 (6p/m2)	21 3 cars per train (39m)	2 years of operation 7 years of mainten.
Thessaloniki	9.5 km double track double tunnel	13	min 90 s	21,000 (6p/m2)	18 4 cars per train (50m)	3 years of service assistance
Rome line C	25 km (+17) double track double tunnel	30 (+12)	min 120 s	36,000 (6p/m2)	30 (+13) 6 cars per train (108m)	Local existing Operator training
Milan line 5	12.6 km double track single tunnel	19	min 75 s	28,000 (6p/m2)	21 4 cars per train (50m)	27 years as member of the Concess.
Taipei (CBTC)	15.4 km double track viaduct	14	min 90 s	26,000 (6p/m2)	17 4 cars per train (70m)	Future system extension: 52 km, 56 stations, 64 trains
Riyadh Princess Noura Univ. Campus	11.3 km double track viaduct	14	min 90 s	4,400 (2.5p/m2)	22 2 cars per train (29m)	3 years
Copenhagen City-ring (CBTC)	17 km double track double tunnel	17	min 100 s	12,000 (4 p/m2)	28 3 cars per train (39m)	5 + 3 years
Honolulu	32 km double track viaduct	21	min 90 s	7,200 (3.2 p/m2)	20 4 cars per train (38.5m)	12 years
Milan Line 4 (CBTC)	15.2 km double track double tunnel	21	min 75 s	28,000 (6p/m2)	47 4 cars per train (50m)	25 years as member of the Concess.
Riyadh Line 3 (CBTC)	40.7 km double track double tunnel	22	min 90 s	18,000 (6p/m2)	47 2 cars per train (32m)	10 years option In operation in 2019
Lima Lines 2-4 (CBTC)	35 km double track single tunnel	35	min 80 s	Line 2 32,500 Line 4 15,500 (6p/m2)	42 6 cars per train (108m)	30 years as member of the Concess.
Glasgow Subway (CBTC)	10.5 km twin subway lines	15	min 90 s		17 (39 m)	10 years

Tram systems (including catenary-free solutions)

- Midland Birmingham light metro, Line 1 (UK)
- Metrolink, Manchester (UK)
- Sassari light metro (Italy)
- Dublin, Lines A, B and C (Ireland)
- Florence, Lines 1, 2 and 3 (Italy)
- Metro Campania Nord Est (Italy)
- Zuhai, (catenary-free) (China)

Railway solutions

A trendsetter in cutting edge technologies

- Ansaldo STS has been a global trendsetter in railway technologies for decades:
- In France, since 1981, with the Paris-Lyon line (the first high-speed line in Europe)
- In Spain, with the construction of the first high-speed line (Madrid-Lerida), using ERTMS technology
- In the United Kingdom, with the first high-speed line connecting Paris to London and the first ERTMS-line (Cambrian line)
- In Sweden, with the Haparandabanan line (the first ERTMS line)
- In Morocco, with the Tangier-Kenitra line (the first high-speed line and first-time application of ERTMS technology in Africa)
- In Italy, with the first-time application of ERTMS Lev. 2 technology to the country's high-speed system.

High-speed and main line technologies:

- TVM: tailor-made signalling system developed by Ansaldo STS in the early 1980's to meet the specific needs of the first high-speed lines in France, China and South Korea.
- ERTMS/ETCS Lev. 1 & Lev. 2: signalling standard solutions coupled with technologies for high speed, conventional and heavy transport lines and railway networks with increased safety and interoperability.
- Ansaldo STS is part of the eight UNIFE companies that developed the ERTMS project together with the European Union, economic parties in the railway sector and the GSM-R technology industry.

ERTMS/ETCS Lev. 1/Lev. 2 main contracts

United Kingdom
Cambrian Line *Lev. 2*

Belgium - Netherlands
Onboard *Lev. 1/2*

Scandinavia
STM Nordic

Sweden
Haparandabanan *Lev. 2*

Germany
Saarbrücken - Mannheim *Lev. 2*
Berlin - Rostock *Lev. 2*
Velaro-D - Onboard *Lev. 1/2*

France
East European HSL *Lev. 2*
Le Mans - Rennes HSL *Lev. 2*
Tours - Bordeaux HSL *Lev. 2*
Tournan - Marles en Brie *Lev. 1/2*
Onboard *Lev. 1/2*

Czech Republic
Poříčany - Kolín *Lev. 2*

Austria - Hungary
Vienna - Budapest *Lev. 1*

Spain - France
Figueres - Perpignan *Lev. 1/2*

Romania
Campina-Predeal *Lev. 1*

Spain
Madrid - Lerida HSL *Lev. 1/2*
La Robla-Pola de Lena HSL *Lev. 2*
Atocha Bypass *Lev. 1/2*
Onboard *Lev. 1/2*

China
Zhengzhou - Xi'an *Lev. 2*
Shijiazhuang - Taiyuan *Lev. 1*
Onboard *Lev. 1/2*

Italy
Rome - Naples HSL *Lev. 2*
Turin - Milan HSL *Lev. 2*
Brescia - Treviglio HSL *Lev. 2*
Treviglio - Pioltello Pilot *Lev. 2 (BL3)*
Milan - Bologna HSL *Lev. 2*
Onboard *Lev. 1/2*

South Korea
On-Board KTXII, EL8200, EMU, EL8300 *Lev.1*
DLOCO 25 *Lev 1*
EMU 138 *Lev 1*

Morocco
Tangeri – Kenitra HSL *Lev. 1/2*

India
Chennai - Gummidipoondi *Lev. 1*
Delhi - Agra *Lev. 1*
Onboard *Lev. 1*

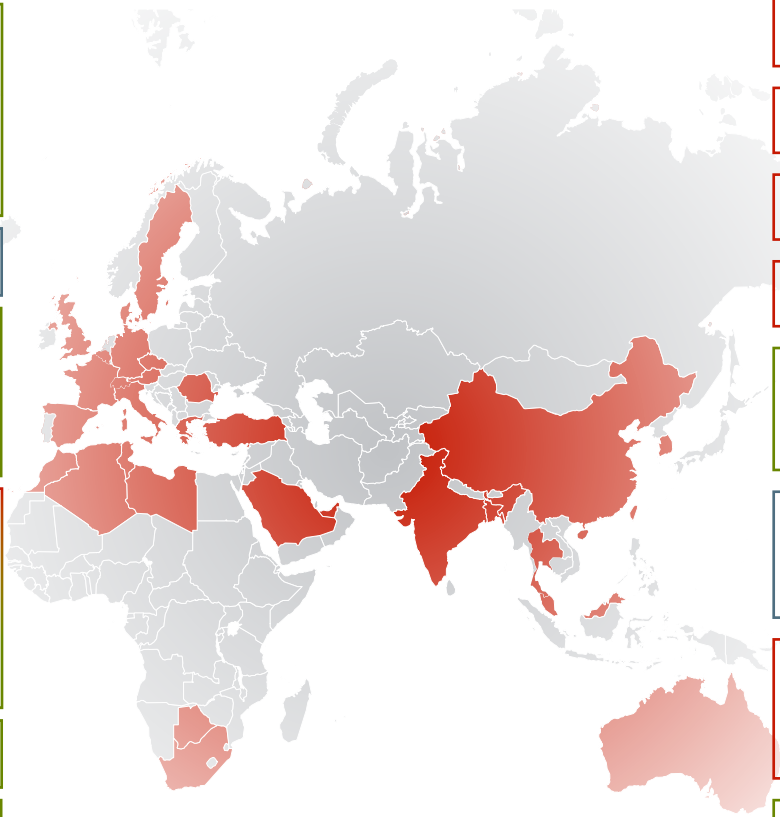
Algeria
Oued Tlelat - Tlemcen *Lev. 1/2*
Onboard *Lev. 1/2*

United Arab Emirates
Shan-Habshan-Ruwais *Lev. 1/2*

Libya
Tripoli - Al Khums - Sirth
Abu Grain - Sebha

Greece
Onboard *Lev. 1*

Turkey
Mersin - Toprakkale & Boğazköprü - Yenice *Lev. 1*
Gebze - Köseköy *Lev. 1*
Onboard TCDD EL 80 *Lev 1*



Greenfield Projects Brownfield Projects OBU-only Projects

Freight and heavy transport solutions

Freight and heavy transport lines

Ansaldo STS is a global partner in the freight, heavy and mining railway transport sector. Sophisticated modular and scalable control and planning systems contributed to a significant increase in the safety, reliability and efficiency levels of railway lines.

The benefits of the solutions offered by Ansaldo STS's freight and heavy transport systems

Ansaldo STS's innovative signalling and telecommunication system includes satellite positioning, claiming another first in terms of upgrading and operational flexibility of railway lines used for heavy transport and mining. Furthermore, this system:

- is based on Ansaldo STS's solid experience, knowledge and technology;
- is modular and scalable;
- allows the implementation of cost-effective solutions which can be strengthened and expanded over time;
- allows smooth migration to a fully automated system (including management of driverless trains).

Railway projects for the Australian mining industry

Ansaldo STS has designed and implemented transport and signalling solutions for Western Australia's heavy mining railway transport and is currently delivering a number of turnkey systems in the Pilbara region, in the north-west of the country. This is the first driverless railway to be used for heavy transport: thanks to Ansaldo STS's driverless technology, a 1,500 km railway line for heavy transport is being automated.

Ansaldo STS's main freight transport contracts - Australia

- Rio Tinto Iron Ore, Framework Agreement – 2,000 km, Signalling and telecommunication systems: Signalling system based on radio communication with driverless trains – wayside and vehicle
- Roy Hill Iron Ore Project– 350 km, Signalling and telecommunication systems: Signalling system based on radio communication with satellite positioning – wayside and vehicle
- Fortescue Metal Group, Signalling and telecommunication systems– 250 km, (interlocking) signalling system and telecommunications
- Hamersley Iron, Lang Hancock railway line – 65 km, Signalling (Interlocking, ATP system) and telecommunication system and freight protection system along the line system
- Aurizon (formerly, Queensland Rail (QR) National) – Design and implementation of several (interlocking) signalling projects in East Australia in association with the Synergy Alliance
- Pilbara Iron 7-Mile Yard– Design and implementation of (interlocking) signalling systems
- Australian Rail Track Corporation (ARTC) – Design and implementation of several signalling and telecommunication projects (interlocking, train movement control and supervision system, TLC) in association with the ARTC – Ansaldo STS Network Control Systems Alliance (AANCSA)
- Australia Rail Track Corporation (ARTC) / Lockheed Martin – 120 km, pilot project, design and supply of advanced train management systems (ATMS) (train movement advanced management systems), (interlocking, train movement control system, ATP, satellite positioning) – wayside-vehicle
- Robe River Iron, projects for Western Creek - Cape Lambert & Mesa A line– Signalling (interlocking, train movement control system, automatic train protection (ATP), freight protection system along the line) and telecommunication systems - wayside-vehicle
- Brookfield (formerly WestNet Rail) Midwest Rail– Signalling systems (interlocking and computer-assisted train control system) for several projects
- Newcastle Coal Infrastructure Group (NCIG) Port-Kooragang line– Signalling systems (interlocking and train movement control system)
- Public Transport Authority (PTA) (formerly Westrail) Koolyanobbing-Kalgoorlie– 190 km, Signalling systems (interlocking)

Ansaldo STS's main freight transport contracts - North America

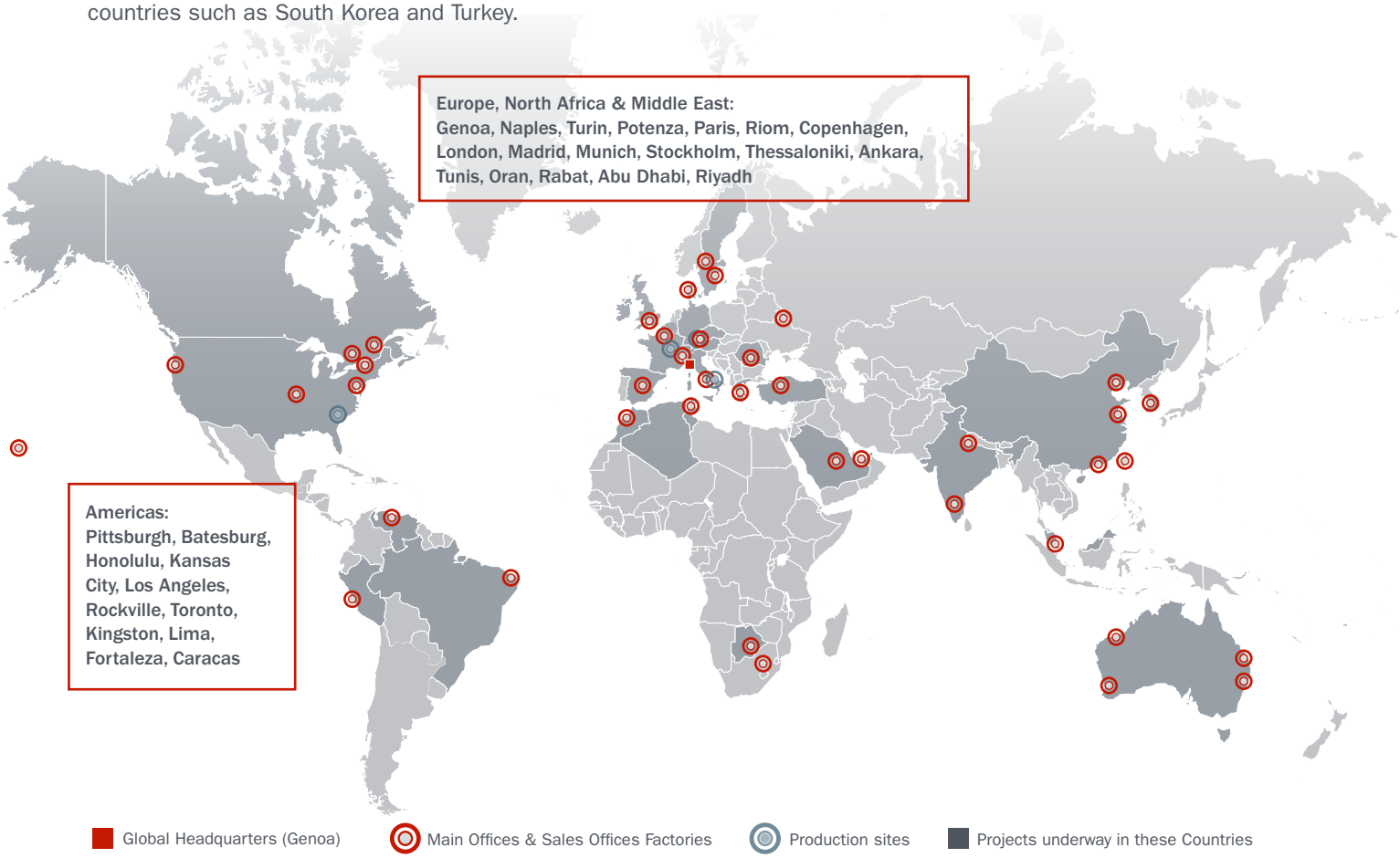
- PTC (Positive Train Control) system
  - PTC VitalNet® ™ systems and components already developed for:
    - Union Pacific
    - CSX Transportation
    - Burlington Northern Santa Fe Railways
  - TSR server for PTC Office:
    - SEPTA
- Office systems
  - Over 80,000 km of freight transport lines managed using ASTS office systems, including:
    - Union Pacific (Planning system for traffic optimisation)
    - CSX Transportation (Control, supervision and automation system)
- MicroLok® II components for interlocking and signalling (LED, level crossings, relays, track circuits, point machines)
  - Over 10,000 units sold to US and Canadian railway companies, including:
    - Union Pacific
    - CSX Transportation
    - Burlington Northern Santa Fe Railways
    - Canadian Pacific
    - Canadian National Railway
    - Alaska Railroad
    - Norfolk Southern
    - Kansas City Southern Lines
    - Quebec North Shore & Labrador Railway

Ansaldo STS around the world

Ansaldo STS, headquartered in Genoa, has four main operating companies:

- Ansaldo STS S.p.A. with offices in Genoa, Naples, Piossasco (TO) and Tito Scalo (PZ);
- Ansaldo STS US, with offices in Pittsburgh (Pennsylvania) and Batesburg (South Carolina);
- Ansaldo STS France, with offices in Les Ulis and Riom;
- Ansaldo STS Australia with offices in Brisbane.

Ansaldo STS also owns operating entities in Germany, Sweden, Finland, the UK, Spain, China, India, Malaysia, Botswana, South America and Canada as well as many permanent establishments and partnerships in other countries such as South Korea and Turkey.



	EMPLOYEES	
COMPANY	**2015**	2014
ASTS[3] ITALY	1,555*	1,490*
ASTS FRANCE	822**	792**
ASTS USA	672	712
ASTS APAC	656	736
ASTS CHINA	67	69
Total	**3,772**	**3,799**

	REVENUE (€'000)		ORDERS (€'000)	
GEOGRAPHICAL AREAS	**2015**	2014	**2015**	2014
Italy	321,918	326,397	173,870	435,515
Rest of Europe	338,856	336,511	351,584	383,798
North Africa and the Middle East	104,593	97,105	76,038	10,255
The Americas	246,713	166,173	479,761	675,728
Asia Pacific	371,757	377,322	254,773	319,672
Total	**1,383,837**	**1,303,508**	**1,336,027**	**1,824,968**

* Including Ansaldo STS Deutschland GmbH employees
** Including Ansaldo STS UK Ltd. and Ansaldo STS Sweden AB employees.
3. ASTS is used to refer to the group of companies in each geographical area.

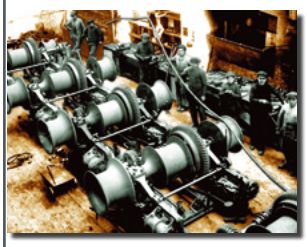
LOCATIONS	COMPANY
Central and Eastern Europe and the Middle East	
Italy, Naples	Ansaldo STS S.p.A.
Italy, Genoa	Ansaldo STS S.p.A.
Italy, Piossasco (TO)	Ansaldo STS S.p.A.
Italy, Tito Scalo (PZ)	Ansaldo STS S.p.A.
Italy, Campi Bisenzio (FI)	Ansaldo STS S.p.A.
Italy, Brescia	Ansaldo STS S.p.A.
Italy, Boscoreale (NA)	Ansaldo STS S.p.A
Denmark, Copenhagen	Ansaldo STS S.p.A.
Romania, Bucharest	Ansaldo STS S.p.A.
Greek, Thessaloniki	Ansaldo STS S.p.A.
Turkey, Ankara	Ansaldo STS S.p.A.
Germany, Munich	Ansaldo STS Deutschland GmbH
Arab Emirates, Abu Dhabi	Ansaldo STS S.p.A
Saudi Arabia, Riyadh	Ansaldo STS S.p.A
Western Europe and Africa	
France, Les Ulis	Ansaldo STS France S.A.
France, Riom	Ansaldo STS France S.A.
UK, London	Ansaldo STS UK Ltd.
Spain, Madrid	Ansaldo STS Espana S.A.U.
Spain, Zaragoza	Ansaldo STS Espana S.A.U.
Sweden, Solna	Ansaldo STS Sweden AB
Sweden, Johanneshov	Ansaldo STS Sweden AB
Sweden, Torsby	Ansaldo STS Sweden AB
Morocco, Rabat	Ansaldo STS France S.A.
Tunisia, Tunis	Ansaldo STS S.p.A.
Libya, Tripoli	Ansaldo STS
Botswana, Gaborone	Ansaldo STS South Africa PTY Ltd.
The Americas	
US, Pittsburgh	Ansaldo STS USA Inc.
USA, Batesburg	Ansaldo STS USA Inc.
US, Honolulu	Ansaldo Honolulu JV
US, Rockville	Ansaldo STS USA Inc.
US, Kansas City (Lenexa)	Ansaldo STS USA Inc.
Canada, Toronto	Ansaldo STS Canada Inc.
Canada, Kingston	Ansaldo STS Canada Inc
Venezuela, Caracas	Ansaldo STS S.p.A
Brazil, Fortaleza	Ansaldo STS DO Brazil Sistemas de Transporte Ferroviario e Metropolitano LTDA
Peru, Lima	Ansaldo STS S.p.A
Asia Pacific	
Australia, Brisbane	Ansaldo STS Australia PTY Ltd.
Australia, Perth	Ansaldo STS Australia PTY Ltd.
Australia, Belmont	Ansaldo STS Australia PTY Ltd.
Australia, Canningvale	Ansaldo STS Australia PTY Ltd.
Australia, Karratha	Ansaldo STS Australia PTY Ltd.
Australia, Sydney	Ansaldo STS Australia PTY Ltd.
Australia, Newcastle	Ansaldo STS Australia PTY Ltd.
South Korea, Daejeon	Ansaldo STS France S.A.
India, Bangalore	Ansaldo STS Transportation Systems India Private Ltd
India, Kolkata	Ansaldo STS Transportation Systems India Private Ltd
India, Delhi	Ansaldo STS Transportation Systems India Private Ltd
India, Noida	Ansaldo STS Transportation Systems India Private Ltd
India, Jharkhand	Ansaldo STS Transportation Systems India Private Ltd
India, Kharagpur	Ansaldo STS Transportation Systems India Private Ltd
India, Palwal	Ansaldo STS Transportation Systems India Private Ltd
India, Tundla	Ansaldo STS Transportation Systems India Private Ltd
India, Ghaziabad	Ansaldo STS Transportation Systems India Private Ltd
Bangladesh, Dhaka	Ansaldo STS Transportation Systems India Private Ltd
Malaysia, Petaling Jaya	Ansaldo STS Malaysia SDN BHD
Taiwan, Taipei	Ansaldo STS S.p.A.
China, Beijing	Ansaldo STS Beijing Ltd.
China, Shanghai	Ansaldo STS USA Inc.
China, Hong Kong	Ansaldo STS Hong Kong, Ltd.

Company history: milestones

1853

Gio. Ansaldo e C. is founded in Genoa. At the time, Ansaldo was already synonymous with excellence in the Genovese industry.

1880



Ansaldo e C. is founded for the construction and maintenance of railway equipment. At the turn of the century, the company begins building boats. Production stretched from the port of Genoa towards Sampierdarena and Sestri Ponente, and the company employed more than 10,000 people.

1904

Ferdinandino Maria Perrone acquires Ansaldo. In a few years, the company grows to own the production sites, encompassing iron and steel processing, foundries and military production sites and employing about 17,000 employees in Genoa alone. In 1918, Ansaldo has a record 80,000 employees.

1935

Ansaldo e C. is rescued by Bank of Italy after World War I and the financial crisis of 1929. The crisis ends with the establishment of IRI (the Institute for Industrial Reconstruction) which takes control of Ansaldo and sells it to Finmeccanica in 1948.

1980

Finmeccanica and Ansaldo jointly create Ansaldo Trasporti (ATR). ATR operates as a company/prime contractor active in the integrated system segment and is listed on the Milan Stock Exchange in 1986.

1988

Ansaldo Trasporti acquires 100% of Union Switch & Signal (US&S), now Ansaldo STS USA, a leading signalling system company. In 1989, it acquires 49% of CSEE Transport, formerly known as Compagnie de Signaux pour Chemins de Fer, headquartered in Paris.

1990

Ansaldo enters the North European market by acquiring the transport division of Standard Radio & Telephone (SRT). The new company is named Ansaldo Trasporti Signal System AB (ATSS). In 1993, Ansaldo Trasporti lists US&S on the NASDAQ.

2001

Ansaldo Trasporti transfers its Systems business unit to Ansaldo Trasporti Sistemi Ferroviari, a new company created in 2000. Ansaldo Trasporti is delisted and merged into Finmeccanica.

2007-09

- **2007:** Ansaldo STS develops the first Vital Positive Train Control™ system for the railway network in Alaska.
- **2008:** the first ERTMS line in India is supplied and delivered.
- **2009:** the new catenary-free system, TramWave®, is unveiled at the UITP fair.

2012

In Australia, Ansaldo STS's signalling solution is hailed as a revolutionary technological innovation at global level. Indeed, the centralised interlocking and automatic train protection (ATP) system uses satellite positioning.

2014

On many occasions, 2014 was defined as a record year. As well as recording positive financial results, Ansaldo STS achieved and exceeded many objectives in its core business during the year.
The main orders acquired include, Lima metro Lines 2 and 4, Milan Line 4 (Italy), the Aarhus LTR system (country) and the variation to the Copenhagen City Ring (Denmark), the Navi Mumbai Metro (India) and several contracts with Rio Tinto (Australia).

1995

Through US&Sit enters the Australian market and then Asia Pacific. In **1997**, US&S Australia becomes the regional headquarters. In **1996**, Ansaldo Trasporti creates Ansaldo Signal NV in which all signalling activities, specifically Union Switch & Signal and those of CSE (of which it acquires the remaining 51%) are concentrated. The company is listed on the NASDAQ and remains so until 2000.

2006

In 2006, a special purpose entity - Ansaldo STS - acquires all Ansaldo Signal and Ansaldo Trasporti Sistemi Ferroviari shares from Finmeccanica. At the end of March 2006, Ansaldo STS is admitted to the STAR segment of the Milan Stock Exchange.

2010-11

- **2010:** after awarded the contracts metro Genoa and Naples, the year ends with the acquisition of the Copenhagen contract to build the Cityringen.
- **2011:** Ansaldo STS arrives in Hawaii by signing a very important contract worth a total of US$1,344 million for the development of the technology and supply of vehicles for the new driverless urban rail in Honolulu. The contract entails the design, construction, operation and maintenance of Honolulu's new line, stretching roughly 32 kilometres and stopping at 21 stations.

2013

Ansaldo STS is awarded the contract to develop the technological part of the longest line (over 40 km) of the new Riyadh metro in Saudi Arabia, confirming the company's increasing renown for its solutions and experience in the development of metro lines around the world.
In the field of innovation, in 2013, research projects become fruitful with the first contract for a tram powering solution without overhead lines called TramWave® in the city of Zhuhai (China).

2015 results

On 24 February 2015, Hitachi Ltd. and Finmeccanica S.p.A. reported that they had signed binding agreements whereby Hitachi would purchase Finmeccanica's entire equity investment in Ansaldo STS S.p.A. (approximately 40% of share capital) and AnsaldoBreda S.p.A.'s current business, except for some revamping activities and specific residual contracts. The closing of the above transaction is expected to take place in 2015 and is subject to specific conditions, typical for this kind of transactions, such as antitrust and regulatory authorisations. Since 2 November, Hitachi has become the new majority shareholder, with an equity investment of 40%. On 4 January 1016, Hitachi Rail Italy Investments S.r.l. launched a public tender offer for the remaining 60% of Ansaldo STS's shares.

Revenue
+6%
from €1,303 to €1,384 million

Profit for the year
+15%
from €81 to €93 million

Operating profitability
+0.2 p.p.
from 9.6% to 9.8%

Share price
+18%
strong growth

Net financial position
+ €45 million
from -€293.4 to -€338.7 million (positive net cash)

Free Cash Flow
+ €12 million
from €76 to €88 million

Main plant roll-outs

Projects 28

Km Approx. 1,800

Stations 78

Metro

- Milano Line 5 (San Siro)
- Metro Roma Line C (Parco di Centocelle to Lodi)
- CBTC Metro in Cina: Chengdu line 1
- Hangzhou line 1
- Hangzhou line 4 (phase 1)
- Shenyang line 2
- Dalian line 1 (phase 1)
- Dalian line 2 (phase 1)
- Tianjin line 5 (phase 2)

High speed lines

- Seoul-Busan (phase 2)
- Honam Line
- Paris-Strasbourg (LGV EE phase 1)

Conventional line

- Modernization project of Torino-Padova line*
- CTC extension Firenze-Roma*
- ACC & SCC: Napoli & Palermo nodes enhancement
- Modernization project of the national line
- Interlocking (9 stations)
- Mersin Toprakkale*

Freight lins

- Roy Hill: VBTO revenue service
- Rio Tinto: AutoHaul® pilot runs

* Attivation of a line portion as scheduled.

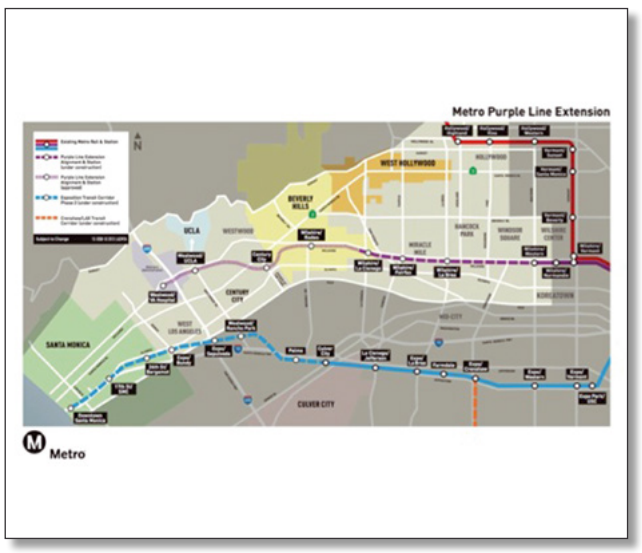
Acquired orders

In business terms, 2015 was the year of contracts.

US$338 million contract awarded by the **Massachusetts Bay Transportation Authority (MBTA)** for the provision of a complete Positive Train Control (PTC) system along the entire railway line (commuter and other). This contract is another step forward for Ansaldo STS in its role of railway technology system integrator in North America, obtained in the wake of the success of many global turnkey projects. Ansaldo STS's scope of activity will include the design, integration, material delivery, on- and off-board installation, testing, delivery, technical support and documentation of the PTC system. This system will provide an ACSES II and I-ETMS-based integrated system on all commuter railway lines, enabling MBTA to meet its obligations with the Federal Railroad Administration's (FRA) requirements.

US$53.2 million contract awarded by **Southeastern Pennsylvania Transportation Authority (SEPTA)** for the development and installation of Communications Based Train Control(CBTC) technology on the Media Sharon Hill lines. Thanks to the new signalling system, the SEPTA integrated control centre will centrally supervise and program lines, while improving line performance and safety. Ansaldo STS is currently working with SEPTA on the installation of a PTC system on 13 of its lines to meet the current requirements of the FRA.

US$31.5 million contract awarded to design, supply, test and deliver a Signalling and Train Control (S&TC) system for the **west-side extension of the Los Angeles metro**. The extension will be approximately 3.9 miles long, from the current Wilshire/Western Station final stop to the new Wilshire/La Cienega station and will include a total of three stations. The new system will ensure safe and efficient train movement along the main line of extensions and route management tracks (interlocking). The system will meet the relevant requirements through Automatic Train Protection (ATP), Automatic Train Operation (ATO) and Automatic Train Supervision (ATS) systems, as well as the Train-to-Wayside Communication (TWS) system.



Main orders acquired in 2015

COUNTRY	PROJECT	CUSTOMER	VALUE (€m)
US	MBTA Positive Train Control	MBTA	**305**
Australia	RAFA - Variation Orders	Rio Tinto	**162**
Denmark	Copenhagen Cityringen O&M and variation	Metroselskabet	**119**
Other	Components	Other	**73**
Saudi Arabia	Riyadh Metro - Iconic stations	ADA	**62**
US	Components	Other	**54**
US	SEPTA Sharon Hill	SEPTA	**48**
Other	Service & Maintenance	Other	**44**
Spain	Madrid - Lleyda maintenance extension	ADIF	**42**
Italy	Naples Line 6 - Variation Orders	Naples municipal authorities	**30**
US	Los Angeles West Side Subway	LACTMA	**28**
France	Bistandard onboard Plan programme SNCF	SNCF	**18**
US	NYCT 4th - 6th Avenue	NYCT	**15**
Italy	Trenitalia repairs	Trenitalia	**13**
Italy	CTO STB rolling stock upgrade	Trenitalia	**12**
China	Tianjin metro line 5	Insigma	**10**

Awards

Transport Deal of the Year 2015

Line 5 of the Milan metro was named Transport Deal of the Year 2015 at the PFI Awards, a prestigious event promoted by the Project Finance International Magazine which recognises financial excellence around the word. This is the first example of project financing for urban transport infrastructure in Italy which was completed as planned and without additional costs.

The M5 uses Ansaldo STS driverless technology, featuring remote control of daily railway traffic and providing passengers with an ongoing and reliable service.

P3 Deal of the Year

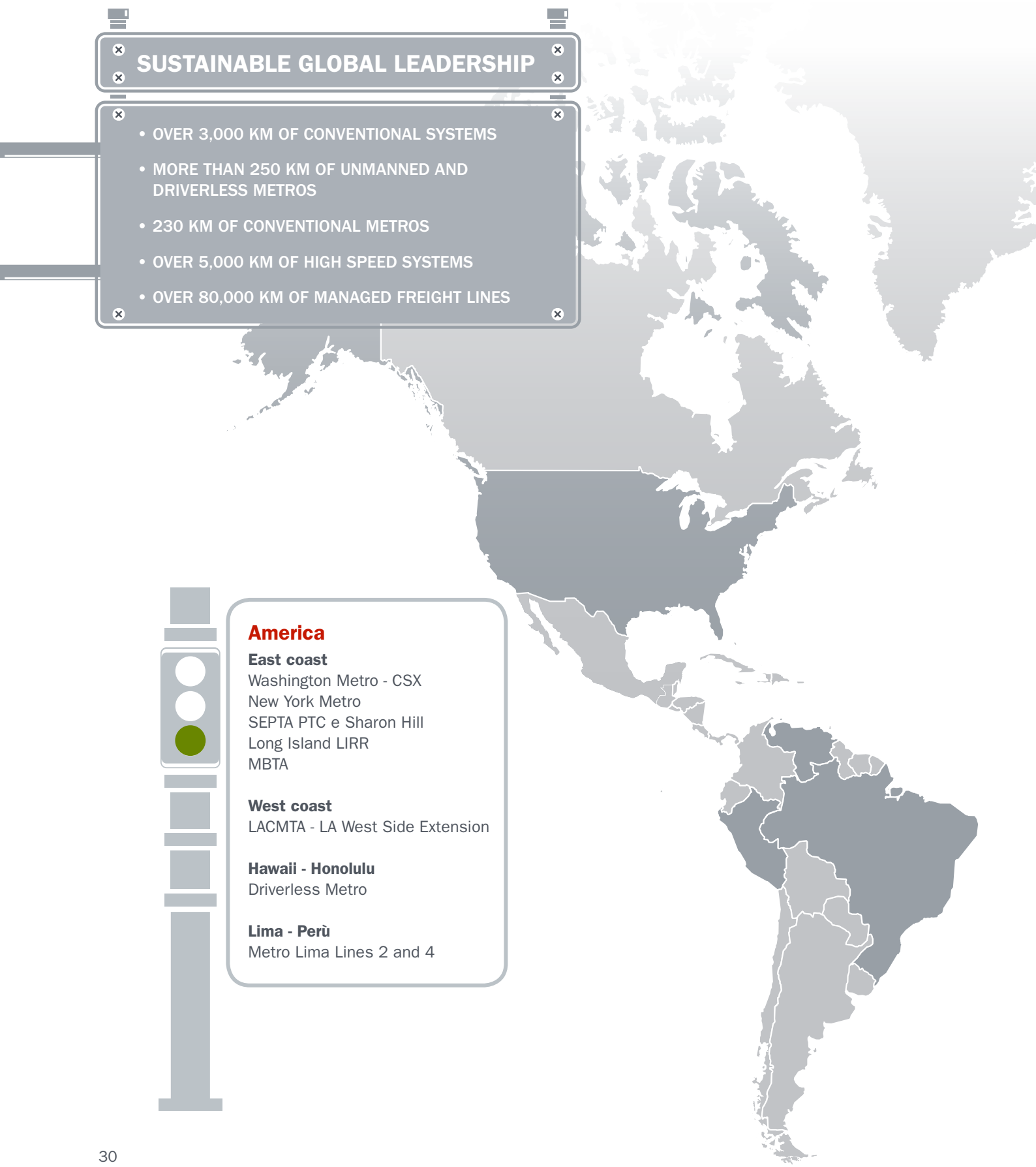
Line 2 of the Lima metro, the largest public/private partnership in Perù, to be carried out on international financial markets, was named P3 Deal of the Year at the PFI Awards, Latin America category, promoted by Project Finance International Magazine. Ansaldo STS is part of the Nuevo Métro de Lima consortium. The solutions for this project feature the Communication-Based Train Control (CBTC) technology with Unattended Train Operation (UTO), currently the most sophisticated signalling technology in the Mass Transit sector.

Copenhagen metro, bridge

Main ongoing projects

SUSTAINABLE GLOBAL LEADERSHIP

- OVER 3,000 KM OF CONVENTIONAL SYSTEMS
- MORE THAN 250 KM OF UNMANNED AND DRIVERLESS METROS
- 230 KM OF CONVENTIONAL METROS
- OVER 5,000 KM OF HIGH SPEED SYSTEMS
- OVER 80,000 KM OF MANAGED FREIGHT LINES



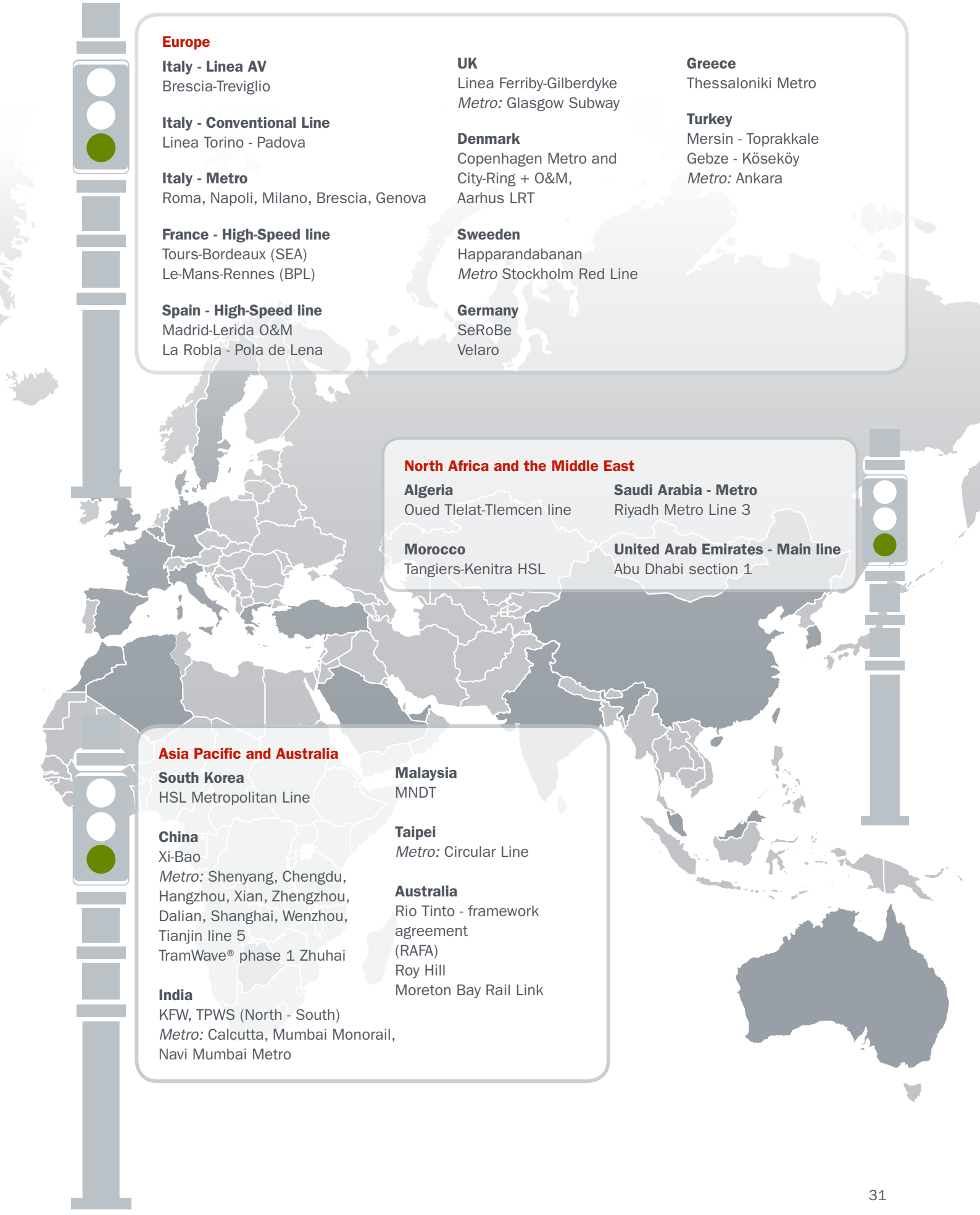
America

East coast
Washington Metro - CSX
New York Metro
SEPTA PTC e Sharon Hill
Long Island LIRR
MBTA

West coast
LACMTA - LA West Side Extension

Hawaii - Honolulu
Driverless Metro

Lima - Perù
Metro Lima Lines 2 and 4



Europe

Italy - Linea AV
Brescia-Treviglio

Italy - Conventional Line
Linea Torino - Padova

Italy - Metro
Roma, Napoli, Milano, Brescia, Genova

France - High-Speed line
Tours-Bordeaux (SEA)
Le-Mans-Rennes (BPL)

Spain - High-Speed line
Madrid-Lerida O&M
La Robla - Pola de Lena

UK
Linea Ferriby-Gilberdyke
Metro: Glasgow Subway

Denmark
Copenhagen Metro and City-Ring + O&M,
Aarhus LRT

Sweeden
Happarandabanan
Metro Stockholm Red Line

Germany
SeRoBe
Velaro

Greece
Thessaloniki Metro

Turkey
Mersin - Toprakkale
Gebze - Köseköy
Metro: Ankara

North Africa and the Middle East

Algeria
Oued Tlelat-Tlemcen line

Morocco
Tangiers-Kenitra HSL

Saudi Arabia - Metro
Riyadh Metro Line 3

United Arab Emirates - Main line
Abu Dhabi section 1

Asia Pacific and Australia

South Korea
HSL Metropolitan Line

China
Xi-Bao
Metro: Shenyang, Chengdu, Hangzhou, Xian, Zhengzhou, Dalian, Shanghai, Wenzhou, Tianjin line 5
TramWave® phase 1 Zhuhai

India
KFW, TPWS (North - South)
Metro: Calcutta, Mumbai Monorail, Navi Mumbai Metro

Malaysia
MNDT

Taipei
Metro: Circular Line

Australia
Rio Tinto - framework agreement (RAFA)
Roy Hill
Moreton Bay Rail Link

Corporate Governance[4]

Ansaldo STS adopts a corporate governance system that is based on the highest business management transparency and fair practice standards. This corporate governance system is compliant with the provisions of law and with the regulatory provisions of CONSOB and Borsa Italiana. It is also in line with the contents of the code of conduct for listed companies adopted by Borsa Italiana S.p.A. - which Ansaldo STS has implemented - and international best practice. The corporate governance system is aimed at maximising value for shareholders, monitoring business risks, transparency with the market and reconciling the interests of all shareholders, with particular attention on smaller shareholders.

Ansaldo STS's corporate governance system is based on a traditional model, and includes:
- shareholders' meetings;
- the Board of Directors, which includes the following committees;
  - risk and control committee;
  - appointments and remuneration committee;
- the board of statutory auditors;
- the independent auditors.

The company's main corporate governance tools are listed below:
- by-laws;
- code of ethics;
- Organizational, management and control model pursuant to Legislative decree no. 231/01;
- shareholders' meeting regulations;
- Board of Directors' regulations;
- risk and control committee regulations;
- appointments and remuneration committee regulations;
- related party transactions - procedure adopted pursuant to article 4 of Consob regulation no. 17221 of 12 March 2010;
- procedure for keeping and updating the register of persons with access to privileged information;
- procedure for the management and communication of privileged information;
- internal dealing code of conduct.

Board of Directors

Ansaldo STS's Board of Directors has the widest powers for the management of the company, with the power to take any and all suitable action to achieve the company purpose, except for those reserved for shareholders.

The current Board of Directors was appointed by the shareholders during the ordinary meeting held on 13 May 2016.

BOARD OF DIRECTORS IN OFFICE

Office	Components	In office since	In office until	List (M/m)	Exec.	Non-esec.	Indep. under the code	Indep. under the Cons. fin. act	%	Risk and control committee ***	Risk and control committee **	Appointments and remuneration committee ***	Appointments and remuneration committee **
Chairman	Alistair Dormer	13 May 2016	Shareholders' meeting approving the 2018 financial statements	M	X	-	-		N.A	-	N.A	-	N.A
Deputy Chairman	Katherine Jane Mingay	13 May 2016	Shareholders' meeting approving the 2018 financial statements	M	-	x	-	-	N.A	-	N.A	-	N.A
Director	Andrew Thomas Barr	13 May 2016	Shareholders' meeting approving the 2018 financial statements	M	x	-	-	-	N.A	-	N.A	-	N.A
Director	Katharine Rosalind Painter	13 May 2016	Shareholders' meeting approving the 2018 financial statements	M	-	x	x	x	N.A	X	N.A	Chairman	N.A
Director	Giuseppe Bivona	13 May 2016	Shareholders' meeting approving the 2018 financial statements	m	-	x	x	x	N.A	-	N.A	-	N.A
Director	Rosa Cipriotti	13 May 2016	Shareholders' meeting approving the 2018 financial statements	m	-	x	x	x	N.A	-	N.A	-	N.A
Director	Alberto de Benedictis	13 May 2016	Shareholders' meeting approving the 2018 financial statements	M	-	x	x	x	N.A	Chair-man	N.A	X	N.A
Director	Mario Garraffo	13 May 2016	Shareholders' meeting approving the 2018 financial statements	M	-	x	x	x	N.A	X	N.A	X	N.A
Director	Fabio Labruna	13 May 2016	Shareholders' meeting approving the 2018 financial statements	m	-	x	x	x	N.A	-	N.A	-	N.A

* This column indicates M/m, showing whether the member was elected from a majority (M) or minority (m) list.
** This column indicates the percentage of director participation in board and committee meetings respectively during the period considered (no. of meetings attended/no. of meetings held during the term of office).
*** In questa colonna è indicata con una "X" l'appartenenza del componente del C.d.A. al Comitato.

4. For additional details, reference should be made to the "Directors' report on the corporate governance system and the implementation of the code of conduct for listed companies for 2015".

The following table illustrates the composition of the Board of Directors in 2015.

BOARD OF DIRECTORS IN OFFICE until 13 May 2016											Risk and control committee		Appointments and remuneration committee	
Office	Components	In office since	In office until	List (M/m)	Esec.	Non-esec.	Indep. under the code	Indep. under the Cons. fin. act	% **	Number of other offices ***	****	**	****	**
Chairman	Alistair Dormer	2 November 2015 (1)	Shareholders' meeting approving the 2017 financial statements	M	X(6)	-	-	-	100	-	-	-	-	-
Deputy Chairman	Karen Boswell	2 November 2015 (2)	Shareholders' meeting approving the 2017 financial statements	M	-	X	-	-	100	-	-	-	-	-
CEO	Stefano Siragusa	2 November 2015 (3)	Shareholders' meeting approving the 2017 financial statements	M	X	-	-	-	100	-	-	-	-	-
Director	Giovanni Cavallini	2 November 2015	Shareholders' meeting approving the 2017 financial statements	m	-	X	X	X	100	1	Chair-man	100	- (7)	-(8)
Director	Bruno Pavesi	2 November 2015	Shareholders' meeting approving the 2017 financial statements	M	-	X	X	X	100	-	X	100	X(9)	100
Director	Giulio Gallazzi	2 November 2015	Shareholders' meeting approving the 2017 financial statements	m	-	X	X	X	100	-	-	-	Chair-man(10)	85,7
Director	Alessandra Piccinino	9 November 2015 (4)	Next shareholders' meeting	-	-	X	X	X	100	1	-	-	X	100
Director	Paola Giannotti	2 November 2015	Shareholders' meeting approving the 2017 financial statements	m	-	X	X	X	100	-	X	100	-	-
Director	Mario Garraffo	25 November 2015 (5)	Next shareholders' meeting	-	-	X	X	X	100	3	-	-	-	-

(1) Alistair Dormer was appointed chairman of the Board of Directors by the shareholders in their meeting of 2 November 2015.
(2) Karen Boswell was appointed deputy chairwoman of the Board of Directors on 25 November 2015, replacing Ryoichi Hirayanagi.
(3) Co-opted by the Board of Directors on 11 December 2013 and, with effect from 1 January 2014, replacing Mr. Grasso.
(4) Co-opted by the Board of Directors on 9 November 2015, replacing Barbara Poggiali.
(5) Co-opted by the Board of Directors on 25 November 2015, replacing Ryoichi Hirayanagi.
(6) Alistair Dormer, as chairman of the Board of Directors, has an executive role, although he did not receive any specific proxy from the board. Consequently, he does not hold any executive role within the company, due to the positions he holds in the Hitachi Group.
(7) From 1 January 2015 to 2 November 2015, Mr. Cavallini has been a member of the Appointments and remuneration committee.
(8) Being a member of the Appointments and remuneration committee from 1 January 2015 to 2 November 2015, Mr. Cavallini participated in 5 out of 6 meetings.
(9) From 1 January 2015 to 2 November 2015, Mr. Pavesi has acted as chairman of the Appointments and remuneration committee.
(10) From 1 January 2015 to 2 November 2015, Mr. Gallazzi has been a member of the Appointments and remuneration committee.

BOARD OF DIRECTORS BY AGE AND GENDER	MEN	WOMEN
< 40	-	-
40-50	1	-
51-60	2	3
> 60	3	-

DIRECTORS WHO LEFT DURING THE YEAR										Risk and control committee		Appointments and remuneration committee	
Office	Components	In office since	In office until	List (M/m)	Esec.	Non-esec.	Indep. under the code	Indep. under the code	% **	***	**	***	**
Chairman	Sergio De Luca	15 April 2014(1)	30 October 2015(2)	M	X(3)	-	-	-	92.3	-	-	-	-
Deputy Chairman	Domenico Braccialarghe	1 October 2014(4)	2 November 2015	_	-	X	-	-	76.9	-	-	-	-
Deputy Chairman	Ryoichi Hirayanagi	2 November 2015	20 November 2015	M	-	X	-	-	100	-	-	-	-
Director	Alessandra Genco	15 April 2014	2 November 2015	M	-	X	-	-	100	-	-	-	-
Director	Paola Pierri	15 April 2014	2 November 2015	M	-	X	X	X	92.3	X	100	-	-
Director	Barbara Poggialii	15 April 2014	3 November 2015	m	-	X	X	X	100	X	100	-	-

(1) Co-opted by the Board of Directors on 14 June 2007. On 11 December 2013, Mr. De Luca resigned from the office of CEO and was appointed chairman of the Board of Directors with effect from 1 January 2014.
(2) Mr. De Luca announced he would resign on 30 October 2015 with immediate effect.
(4) As Chairman of the Board of Directors, Mr. De Luca has not received any operating proxies. However, he is considered to be an executive director pursuant to the code of conduct as he has been the Operations general manager of Finmeccanica S.p.A., which manages and coordinates Ansaldo STS, since 1 January 2014.
(4) Co-opted by the Board of Directors on 1 October 2014, replacing Luigi Calabria who acted as director and deputy chairman from 1 January 2014 to 1 October 2014.

Appointment of the Board of Directors

The company is managed by a Board of Directors consisting of at least seven and not more than 13 members. Before electing the board, the shareholders decide what the number of members will be within this range. The directors are appointed for up to three years and can be re-elected pursuant to article 2383 of the Italian Civil Code.

In line with the amendments to the Consolidated finance act introduced by Law no. 120 of 12 July 2011, the current by-laws – following the most recent changes made by the shareholders at the extraordinary meeting of 6 May 2013 – provide for mechanisms to ensure a balance of men and women on the boards of directors and statutory auditors, which will be applied upon the first three renewals of the board of statutory auditors after one year following the date when the aforementioned law takes effect (i.e. after 12 August 2012).

The directors are appointed by the shareholders during an ordinary meeting by voting for lists.

Each list must include two candidates who meet the independence requirements provided for by law, indicating them separately and placing one at the top of the list.

Furthermore, lists with a number of candidates equal to or more than three must include candidates of different genders, in accordance with the notice of call of the shareholders' meeting, so that the new Board of Directors is comprised of members of the least represented gender, in accordance with current legislation. In the event of fractions, the number is rounded up. If these obligations are not met, the list is considered as not having been submitted.

In order to ensure the effective participation of non-controlling owners in corporate management and the transparency of the selection and appointment process for directors, the by-laws explicitly enable each shareholder to submit or participate in the submission of one list only, that each candidate can be presented in one list only or will be considered ineligible and that each rightful voter can vote for one list only.

The shareholders elect the Chairman of the Board of Directors, selecting the Chairman from among the members of the board. If the shareholders do not elect the Chairman, the Chairman is elected by the board itself. The board can also elect a Deputy Chairman, replacing the Chairman when the Chairman is absent or unable to chair the board.

For additional information on the appointment of the Board of Directors during the ordinary shareholders' meeting of 13 April 2016, reference should be made to the Company's website[5].

Directors' requirements and duties

Under the by-laws, in order to take office as director, one must not only meet the requirements of honourableness provided for by current legislative and regulatory provisions (or any similar requirements established by equivalent provisions), but must also meet the specific requirements of professionalism indicated in the by-laws.

In particular, candidates may not be appointed director of the company, and if they have been appointed, their term of office is considered immediately terminated, if they do not have at least three years of overall experience in the following:

- administration or supervision activities or managerial duties with companies with a share capital of at least €2 million;
- professional activities or university teaching as a full professor of legal, economic, financial or technical/scientific subjects closely related to the company's business activity; or
- senior management functions with public bodies or administrations active in the credit, financial and insurance sectors or, in any case, in industries which are closely related to the company's business activity.

This experience can be assessed on the basis of the candidates' *curriculum vitae*, which should contain exhaustive information on the personal and professional characteristics of each candidate and be available to the public, along with each list pursuant to article 144-octies.1 of the Issuers Regulation. The Board of Directors verifies that these requirements are met by each of its members.

Non-executive directors

The Board of Directors is mainly comprised of non-executive members (who have not been assigned any operating powers and/or management functions within the company) to guarantee, given the number of such directors and their degree of authority, that their judgement significantly influences board decisions.

Non-executive directors bring their specific expertise to board discussions, to support the examination of matters considered from a different perspective and to encourage the adoption of well- thought out resolutions, in line with the company's interests. At present all members, except the CEO and Chairman, are non-executive directors.

5. http://www.ansaldo-sts.com/it/governance/consiglio-amministrazione/nomina

Independence of directors

In implementation of the provisions of the code of conduct, on 9 November 2015, following the appointment of the directors and co-opting of Alessandra Piccinino, and with respect to the director Mario Garraffo on the date he was co-opted (25 November 2015), the Board of Directors has evaluated, based on the statements of the above people, whether the independent directors are party to any relationships that could, or could appear to, jeopardise their independent judgement. The findings of this evaluation were disclosed to the market in a press release on 9 and 25 November 2015.

On 13 November 2015, after the appointment of the directors and co-opting of Alessandra Piccinino, and with respect to the director Mario Garraffo on 9 December 2015, the board of statutory auditors, on the basis of the statements made by the directors and considering the board's findings, certified the board's evaluation of the independence of its members in accordance with the criteria.

Following the appointment of the Board of Directors by the shareholders in their ordinary meeting on 13 May 2016, the Board of Directors checked: i) on 16 May 2016, the independence of the following directors: Katharine Rosalind Painter, Alberto de Benedictis, Giuseppe Bivona, Rosa Cipriotti and Fabio Labruna and ii) on 24 May 2016, the independence of the director Mario Garraffo. The findings were disclosed to the market in the press releases dated 16 May 2016 and 24 May 2016.

The independent directors met without the other directors on 17 November, 1 December and 16 December 2015 to express the opinion required by article 39 bis of the Issuer Regulation on the mandatory public tender offer launched by Hitachi Rail Italy Investments S.r.l. on all Ansaldo STS's shares.

Board of directors activities and assessment of its functioning

In 2015, the board held 18 meetings. Any absences were duly justified. The average length of the board's meetings in 2015 was approximately three and a quarter hours.

The meetings of the Board of Directors saw the participation, depending on the items on the agenda, of the Chief Financial Officer, the Chief Operating Officer, the Internal Audit Manager and, upon the Chairman's recommendation, other company managers, in order to provide suitable details on the items on the agenda.

In 2015, the secretary to the board and General Counsel & Compliance function manager Filippo Corsi participated in all the board meetings.

In accordance with the by-laws, the Board of Directors meets whenever the Chairman, or another member in his place, deems it necessary, or upon the written request of the majority of board members.

On 15 February 2016, with respect to the annual evaluation process of the size, composition and working of the board and its committees, in accordance with the recommendations of article 1.C.1.g) of Borsa Italiana's code of conduct for listed Companies, the board decided not to carry out this evaluation process in 2015 since most directors, appointed by the shareholders in their meeting of 2 November 2015, held this office for the first time.

Merano station

Committees

In order to increase the efficiency and effectiveness of the work of the Board of Directors, the risk and control committee and the appointments and remuneration committee have been established within the board and in accordance with the criteria of the Company's code of conduct.

In this respect, following the approval of the new code of conduct in December 2011, the Company approved the adoption of the principles in the updated code, thereby updating its corporate governance system to meet the new provisions.

Specifically, on 18 December 2012, the Company decided, inter alia: (i) to set up an appointments committee, combining it with the previously established remuneration committee and naming the new committee - vested with the dual function - the "appointments and remuneration committee", approving its regulation; and (ii) to modify and redefine the duties and functions of the different parties involved in the company's internal control and risk management system, also approving the regulation of the "risk and control committee".

Risk and control committee

The risk and control committee currently in office is comprised of three directors, who are all non-executive and independent. They are the directors Alberto De Benedictis (Chairman), Mario Garraffo and Katharine Rosalind Painter, appointed by the Board of Directors on 16 May 2015. Pursuant to the code, at the time of their appointment, the Board of Directors examined the accounting and financial experience of its chairman, Alberto De Benedictis, and the members Mario Garraffo and Katharine Rosalind Painter. In the period from 1 January 2015 to 2 November 2015, the risk and control committee was comprised of Giovanni Cavallini (Chairman), Paola Pierri and Barbara Poggiali. From 10 November 2015 to 13 May 2016, the risk and control committee was comprised of the directors Giovanni Cavallini (Chairman), Paola Giannotti and Bruno Pavesi.

The committee meetings are governed by an internal regulation which was last modified by the board on

Switch rails of the Merano line

18 December 2012, in accordance with the new code of conduct dated December 2011. The regulation, in its updated version, is available on the company's website[6].

The risk and control committee has advisory, proposal and preliminary preparation functions on behalf of the Board of Directors, mainly in relation to the definition of guidelines for the internal control and risk management system and the periodic evaluation of the adequacy and effective functioning of the Organizational structure of such a system.

Specifically, the committee is responsible for verifying the functioning and adequacy of the internal control and risk management system, as well as the effective compliance with procedures and internal directives adopted to both ensure sound and efficient management and identify, prevent and manage, insofar as possible, financial, operational and fraud risks to the detriment of the company.

Appointments and remuneration committee

In accordance with the provisions of article 37 of the market regulation, all members of the appointments and remuneration committee are non-executive and independent.

The committee was appointed by the Board of Directors on 16 May 2016 and is comprised of the non-executive independent directors Katharine Rosalind Painter (Chairwoman), Alberto De Benedictis and Mario Garraffo.

In the period from 1 January 2015 to 2 November 2015, the appointments and remuneration committee comprised Bruno Pavesi (Chairman), Giovanni Cavallini and Giulio Gallazzi. From 10 November 2015 to 13 May 2016, the appointments and remuneration committee comprised the directors Giulio Gallazzi (Chairman), Alessandra Piccinino and Bruno Pavesi.

In accordance with article 6.P.3 of the code of conduct, when the committee members were appointed, the company's Board of Directors verified and certified that all the directors had accounting and financial expertise and experience.

The committee's activities are governed by a regulation in line with the code of conduct. The board approved the regulation on 29 January 2007 and it was later modified on 12 May 2008, 5 March 2012 and 18 December 2012. The regulation is available on the company's website[7].

With respect to the code of conduct committee's functions for both its role in the appointment of directors and remuneration, reference should be made respectively to articles 5 and 6 of the code, which can be found on the Borsa Italiana S.p.A. website[8].

Directors' remuneration

Information on the remuneration of the directors, the general manager and key managers is given in the remuneration report, which is prepared pursuant to articles 123-ter of the Consolidated finance act and 84-quater of the Issuer Regulation, published on the Company's website[9] and made available to the public in the other ways provided for by current legislation. On 25 March 2015, the company's Board of Directors, with the prior approval of the appointments and remuneration committee, approved the company's remuneration policy for 2015 and Ansaldo STS's remuneration report, prepared pursuant to article 123-ter of the Consolidated finance act. The first section of the report illustrates the Company's remuneration policy and the procedures followed to adopt and implement this policy and it was therefore put to a non-binding vote by the shareholders on 23 April 2015, in accordance with article 123-ter. The shareholders approved the report.

Furthermore, on 25 February 2016, upon the proposal of the appointments and remuneration committee, the Board of Directors approved the remuneration policy for 2016.

On the same date, the Board of Directors approved, with the prior approval of the appointments and remuneration committee, the remuneration report pursuant to article 123-ter of the Consolidated finance act. In accordance with the aforementioned article 123-ter.6 of the Consolidated finance act, the first section of the remuneration report, which illustrates the 2016 remuneration policy for members of the Board of Directors, the general manager and key managers, was approved by the shareholders' meeting on 3 May 2016.

Board of statutory auditors

The statutory auditors are appointed by the shareholders during an ordinary meeting by voting for lists. In line with the amendments to the Consolidated finance act introduced by Law no. 120 of 12 July 2011, the current by-laws – following the most recent changes made by the shareholders at the extraordinary meeting of 6 May 2013 – provide for mechanisms to ensure a balance of men and

6. http://www.ansaldo-sts.com/sites/ansaldosts.message-asp.com/files/downloadspage/7_regolamento_comitato_controllo_e_rischi_clean_0.pdf
7. http://www.ansaldo-sts.com/sites/ansaldosts.message asp.com/files/downloadspage/5_regolamento_comitato_nomine_e_remunerazione_clean.pdf
8. http://www.borsaitaliana.it/borsaitaliana/regolamenti/corporategovernance/codice2015.pdf
9. http://www.ansaldo-sts.com/it/assemblea-azionisti-2015

women on the boards of directors and statutory auditors, which will be applied upon the first three renewals of the board of statutory auditors after one year following the date when the aforementioned law takes effect (i.e. after 12 August 2012).

As with the presentation of lists of candidates for the appointment of members of the Board of Directors, if a list of candidates for the office of statutory auditor is not submitted within the above term, the lists will be considered as not having been submitted.

The lists include the names of one or more candidates, and the number listed may not exceed the number of members to be elected. Each candidate can be presented in one list only or will be considered ineligible. Lists are divided into two sections: one for candidates for the office of standing statutory auditor and one for candidates for the office of substitute statutory auditor. The first candidate in each section must be registered with the roll of certified auditors and have at least three years of experience in the performance of legally-required audits.

Furthermore, the lists that, considering both sections, include a number of candidates equal to or greater than three must also include, for both the first two candidates on the list for standing statutory auditors and the first two candidates on the list for the replacement statutory auditors, candidates of different genders.

The Chairman of the board of statutory auditors is appointed by the shareholders and is the standing auditor elected by the minority, unless only one list is voted for or no list is submitted. In these cases, the shareholders appoint the Chairman of the board of statutory auditors according to the legal majorities.

The current board of statutory auditors was appointed by the shareholders in their ordinary meeting of 15 April 2014 and it has three standing statutory auditors and three substitute statutory auditors.

During the year, the board held 11 meetings. The following table provides information on the attendance of each statutory auditor at the meetings of the board of statutory auditors and the Board of Directors in 2015:

Level crossing

Board of statutory auditors in office

Members	Board of statutory auditors attendance	Board of directors attendance
Giacinto Sarubbi (Chairman)	100%	100%
Renato Righetti	100%	100%
Maria Enrica Spinardi *	91%	94.7%

*in office since 15 April 2014.

The board of statutory auditors is responsible for monitoring:

- compliance with the law and by-laws;
- compliance with the principles of correct administration;
- the adequacy of the company's Organizational structure in the areas for which it is responsible, the adequacy of the internal control system and the administrative/accounting system, and the latter's reliability in correctly reflecting operations;
- the actual implementation method of the corporate governance rules established by the codes of conduct prepared by the companies that manage regulated markets or trade associations, with which the company is required to comply through public disclosure;
- the adequacy of the company's instructions to its subsidiaries pursuant to article 114.2 of the Consolidated finance act;
- the financial disclosure process;
- the efficiency of internal control, internal audit and risk management systems;
- the legally-required audit of the annual separate and consolidated financial statements;
- the independence of the independent auditors or independent audit company, particularly with respect to the provision of non-audit services to the company;
- the compliance of the company's related party-transaction procedures with the principles of the related-party regulation and their compliance, reporting to the shareholders in this respect pursuant to article 153 of the Consolidated finance act.

Internal control and risk management system

Ansaldo STS's internal control and risk management system provides for the involvement of the following officers:

- Board of directors;
- Director responsible for the internal control and risk management system;
- Risk and control committee;
- Internal Audit Manager;
- Manager in charge of financial reporting pursuant to Law no. 262/2005;
- Supervisory body set up in implementation of Legislative decree no. 231 of 8 June 2001;
- Board of statutory auditors.

With the assistance of the risk and control committee and also on the basis of the activities of the director responsible for the internal control and risk management system, the Board of Directors defines guidelines for this system, so that the main risks to which the company is exposed are correctly identified and adequately measured, managed and monitored. It also determines the degree of compatibility of such risks with business management in line with the strategic objectives identified. In addition, within the scope of the definition of strategic business and financial plans, the Board of Directors defines the nature and level of risks, in accordance with the issuer's strategic objectives. The methodological approach taken to evaluate and manage the internal control and risk management system refers to the internationally recognised Enterprise Risk Management framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO report).

The Internal audit unit's audit plan was approved by the Board of Directors as required by Borsa Italiana's code of conduct for listed companies and the unit head prepares regular reports for the risk and control committee. Specifically, audit procedures performed in 2015 covered contract, engineering and development, purchases and compliance of certain significant procedures for compliance purposes and monitoring progress of the actions plans drawn up as a result of the audit work.

In order to ensure that the conduct of all those operating on the company's behalf or in its interests is always consistent with the principles of correctness and transparency in business dealings and company activities, Ansaldo STS has adopted an Organizational, management and control model (the "Model") in line with the requirements of Legislative decree no. 231/01 and the guidelines issued by Confindustria, Italy's main Organization representing Italian manufacturing and service companies. The code of ethics is an integral part of this Model. The company has also set up a supervisory body to monitor application of the Model.

The Model was last updated by resolution of the Board of Directors on 25 February 2015[10], mainly to include the self-laundering crime (introduced by Law no. 186 of 15 December 2014), certain regulatory updates (Law no. 69/2015 on "Anti-corruption law" and Law no. 68/2015 on "Environmental crimes") and some Organizational updates.

The Model is available on the company's web site.

Ansaldo STS S.p.A.'s supervisory body has several members, including two external members, one of whom serves as Chairman, and both of whom were selected among academics and professionals with demonstrated expertise and experience in legal, economic and financial issues, as well as one internal member who is the interim General Counsel & Compliance manager. The Board of Directors approved the current composition of the supervisory body on 6 May 2013, providing for the presence of two external members to further accentuate the board's independence and autonomy.

Any conduct contrasting with the ethical principles described in the code of ethics or the indications in the Organizational, management and control model pursuant to Legislative decree no. 231/01 can be anonymously reported to the supervisory body, which evaluates the reports in accordance with the relevant company procedure currently in place. In this respect, in 2015, no reports were made and no sanctions were imposed following violations pursuant to Legislative decree no. 231/01.

10. For additional details, reference should be made to the "Directors' report on the corporate governance system and the implementation of the code of conduct for listed companies for 2015".

Ansaldo STS - Satellite-based Signalling System & Telecoms for Train Control System

SUSTAINABILITY GOVERNANCE

Sustainability governance	45
Materiality analysis	46
Sustainability risks and opportunities	48
Stakeholder engagement	54
Sustainability programme	61
Ethics and integrity	64
Local corporate social responsibility	68

Ansaldo STS boasts a widespread presence on international markets with operations in varied contexts and many different stakeholders, making governance of sustainability issues and the management of relationships between Ansaldo STS and its stakeholders of the utmost importance. Stakeholders include any party - individuals, groups, companies or institutions that are public or private with a direct interest in the company's activities.

22

reported objectives:
19 met and 3 postponed
due to the organisational change

35

new sustainability objectives defined in 2016 (+60%)

New economic, social and environmental **risk - benefit analysis**

New materiality matrix

Reporting of Ansaldo STS France, US and Australia **CSR local initiatives**

Global Compact membership for the fifth year

Involvement of local communities: the Honolulu, Lima and Copenaghen metro experience

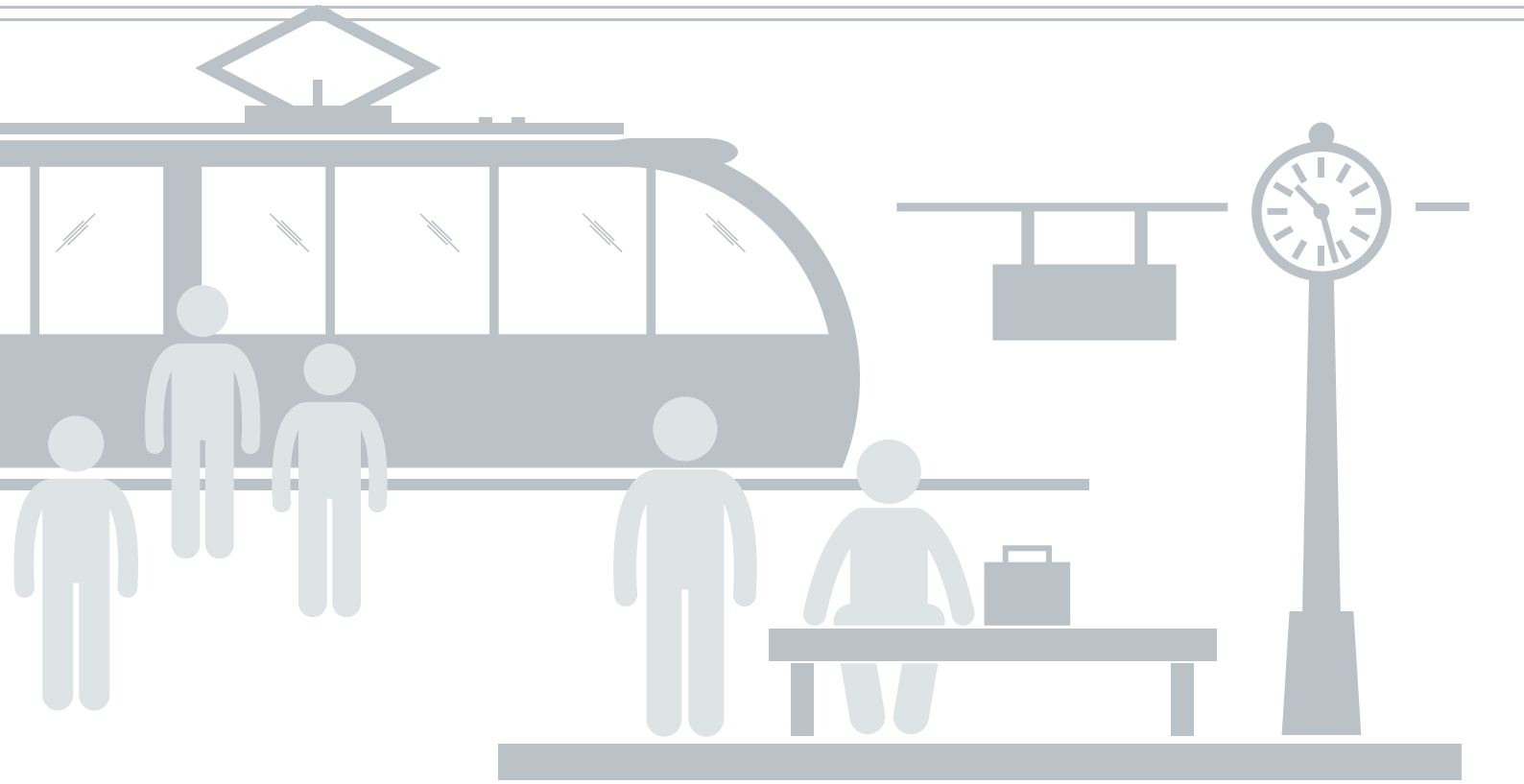
Founding sponsor of the Global Compact Network Italy foundation

Sustainability governance

Transparency and upstanding conduct in operations and trust and cooperation with *stakeholders* are the ethical principles to which Ansaldo STS aspires to effectively and fairly compete on markets, improve customer satisfaction, increase value for shareholders and develop the skills and professional growth of its human resources. The company's socially responsible conduct leads to its focus on sustainable development, which for Ansaldo STS is two-fold:

- it is tied to the achievement of the company's mission, which is to develop railway and mass transit systems and create increasingly sophisticated products and solutions that are safe and environmentally-friendly;
- it is based on the ways in which the company pursues its mission: Ansaldo STS has a corporate governance model, an internal control and risk management system, an integrated environment, safety and quality management system and has established an Internal Sustainability Committee, enabling it to continue on a sustainable growth path and ensuring that each member of its staff acts in accordance with a culture of responsibility.

Ansaldo STS is aware that its ability to develop efficient, long-term and sustainable solutions affects the quality of life of future generations.

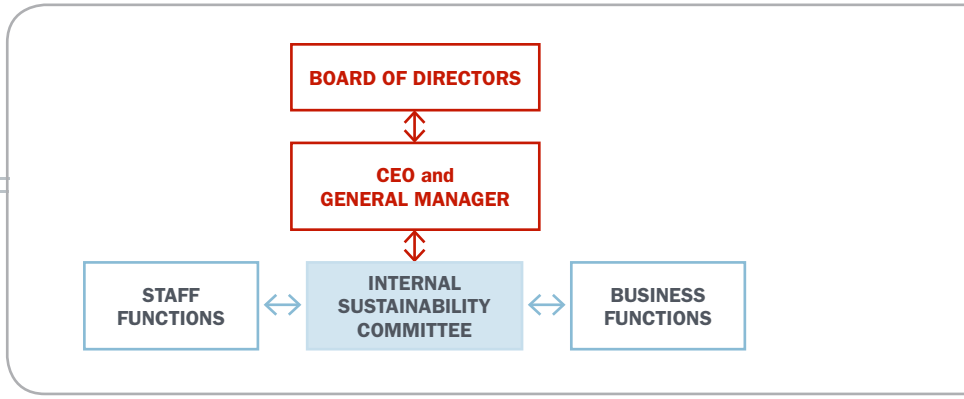


Internal sustainability committee

In 2011, Ansaldo STS set up the Internal sustainability committee (also referred to as the "Committee"), made up of the managers of the main company functions. The Committee's mission is to define the company's strategic guidelines for sustainable development and the promotion of social responsibility initiatives and see that they are implemented. The Internal Sustainability Committee reports directly to the Chairman and CEO of Ansaldo STS and collaborates and coordinates with the company's Organizational units.

The Committee is responsible for:

- assessment of social and environmental risks that concern the company's operations and evaluating the related performance;
- definition and monitoring of the sustainability programme, made up of financial, social and environmental objectives;
- implementation of the relevant codes and rules of social and environmental conduct defined by the company (code of ethics and EHS procedures and policies) or relating to international standards (Global Reporting Initiative, the Global Compact, the Carbon Disclosure Project, etc.);
- definition and coordination of listening to, discussing with and involving stakeholders: sharing results and the steps to be taken;
- definition and implementation of an internal and external sustainability communications plan.



In 2015, the Internal Sustainability Committee specifically engaged in the following activities:

- expanded the materiality analysis by involving new stakeholders in order to define their priority in terms of sustainability;
- extended the opportunities and risks analyses tied to sustainability management, through their description and identification of their importance (low, medium, high);
- defined and discussed the 2015 reporting project with the following objectives:
  - adopt the Global Reporting Initiative G4 Sustainability Reporting guidelines;
  - confirm the Global Compact and participate in the Carbon Disclosure Project;
  - improve internal and external sustainability communications;
  - participate in the Global Compact Network Italy projects.

The Board of Directors' involvement

The Board of Directors is involved in approving the Sustainability Report while the CEO prepares and approves the sustainability programme, i.e., the action plan to be implemented during the year, targets, reporting and communications.

Materiality analysis

Aspects that have a direct or indirect impact on an Organization's ability to create, preserve or damage its economic, environmental or social value, or those of its stakeholders and society in general are material.

Ansaldo STS has analysed the most relevant aspects of sustainable development and reported them to its stakeholders. This has contributed to developing a corporate responsibility culture both within and outside the company.

The analysis, performed for the third consecutive year, included more stakeholder categories (suppliers, banks and customers).

The stakeholders' judgement was "weighted" based on a map which assessed their ability to influence the company's performance and to be influenced by it.

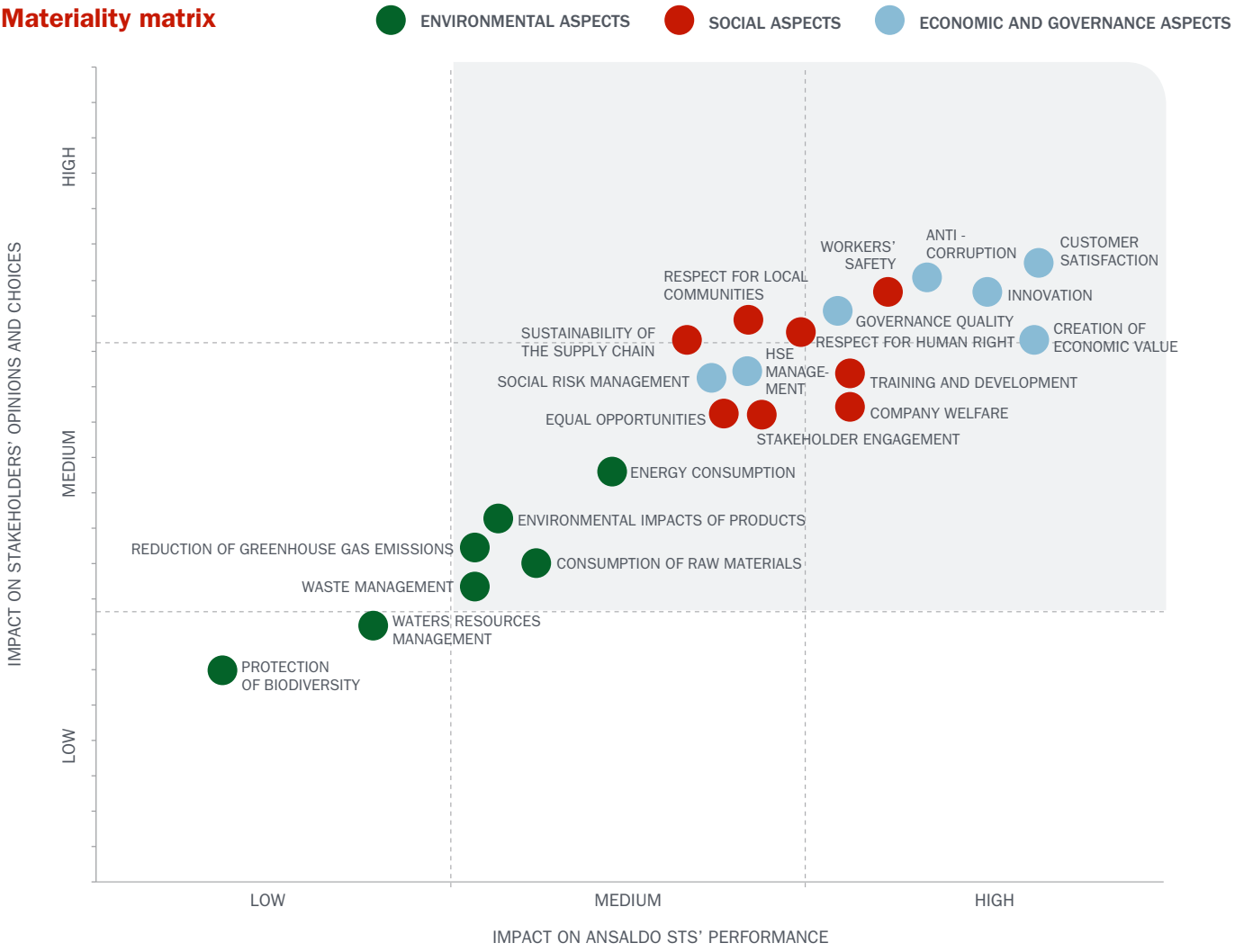
Aggregation of the results gave the following matrix.

Link

> For more information on the method, see "Methodological note" page 182

There were no significant changes compared to 2014.

Materiality matrix



The stakeholders and Ansaldo STS remain generally in agreement: aspects considered important to the company are also important to stakeholders.

Economic and governance aspects have a great influence both in terms of stakeholders' opinions and the impact on the company's performance. *Customer satisfaction, Creation of economic value* and *Innovation* are, in this order, the seen internally as the most influential aspects affecting the company's performance.

Customer satisfaction and *Anti-corruption* are also the most influential economic aspects with respect to stakeholders' opinions. The *Quality of governance* and the *Integrated quality, safety and environmental management* system are highly influential aspects with respect to both Ansaldo STS's performance and stakeholders' opinion. *Social risk management* has a medium to high influence on both stakeholders' opinions and the company's performance.

Social aspects have a medium to high influence on stakeholders' opinions and performance. *Workers' safety*, *Training* and *Welfare* are considered as factors that have a high positive impact on the company's performance internally. *Workers' safety* is the most important of the three for stakeholders.

Respect for human rights is extremely important, both internally and externally, while *Respect for local communities* is more important externally. *Sustainability of the supply chain* was also valued as of medium to high importance and influences stakeholders' opinions more while the *Equal opportunities* and *Stakeholder involvement* aspects have the same impact on opinion and the company's performance.

Environmental aspects have a medium to low influence both with regards to the stakeholders' opinion of the company and its performance. This is mainly due to the following factors: the type of business carried out by Ansaldo STS and its sector is not seen as problematic in environmental terms; moreover, internally, the company is aware of the care taken to manage these aspects.

Consumption of energy and raw materials is seen by the company as important to its performance: if the company can reduce this, it saves money, positively affects the environment and improves its stakeholders' opinion of it. A reduction in the Environmental impact of products has a medium to high effect on stakeholders' perception: the better they are found to be by customers, the more competitive a company becomes.

The *Reduction of greenhouse gas production* has a medium and medium-low effect on stakeholders' opinions and the company's performance, respectively.

Finally, *Water management* and *Protecting biodiversity* are the least important aspects both externally andinternally. This is due to the general view that only certain material impacts can damage biodiversity, which is not the case with regard to Ansaldo STS.

Sustainability risks and opportunities

Ansaldo STS pursues Enterprise Risk Management by identifying and assessing the main business risks using a risk assessment structured activity that is discussed with senior management and the CEO. In addition to identifying and assessing risks, process risk assessment includes risk management measures, such as the preparation of adequate action plans whose implementation is monitored every quarter.

As a result of Ansaldo STS's analysis of the risks and opportunities of the important sustainability aspects, it has been able to act in advance and effectively preserve the social and environmental value of its business.

Risk was graded as follows: low, medium and high, showing the valuation of the risks before they are dealt with: the higher the score, the greater the attention paid by the company to reduce the residual risk and, in most cases, transform it into an opportunity for growth.

ECONOMIC AND GOVERNANCE ASPECTS			
TRANSPARENCY AND ANTI-CORRUPTION	**RISK**	• Commission of crimes and especially corruption by key company personnel, also assisted by consultants and sales representatives, in markets characterised by little transparency and high corruption levels	**Value** HIGH
	RISK MANAGEMENT	• Consider the risk of non-transparency and corruption in the measurement of country risk when deciding what markets to enter and work on • Tailored Organizational and procedural measures to prevent the commission of crimes and especially the risk of corruption	**Stakeholders involved** • Customers • Suppliers • Partners • Competitors
	OPPORTUNITY	• Promotion of ethical reputation internally and externally, by committing to compliance with ethical standards and existing Organizational and procedural rules	
PRODUCT/PROCESS INNOVATION	**RISK**	• Wrong estimation of this sector's innovation needs • Inadequate or late management of products' and components' obsolescence	**Value** HIGH
	RISK MANAGEMENT	• Internal definition processes of the product portfolio and check of technological competition • Specific processes for effective management of obsolescence	**Stakeholders involved** • Customers • Human resources
	OPPORTUNITY	• Increased competitiveness arising from appropriate management of innovation needs and correct definition of priorities • Expected benefits on maintenance and spare parts efficient management	
CUSTOMER SATISFACTION	**RISK**	• Inadequate management of customer satisfaction and customer complaints. A late and/or inadequate response to customers and expected satisfaction levels could compromise Ansaldo STS' s relations with customers and worsen their interaction for ongoing projects	**Value** HIGH
	RISK MANAGEMENT	• Assembly of an inter-functional customer satisfaction team • Monitoring and monthly reporting to senior management on the 22 most critical customer satisfaction projects • Customer satisfaction interviews with key customers, after issue of a presentation letter from the CEO • Half-yearly customer satisfaction self-assessments by the 55 main project teams • "After roll-out" analysis and customer feedback to improve product reliability • Global management of the customer satisfaction activity for senior management	**Stakeholders involved** • Customers • Human resources
	OPPORTUNITY	• Improved relationships with customers • Improved products • Improved customer interface for ongoing projects • Greater ability to exploit commercial opportunities	

Follows: ECONOMIC AND GOVERNANCE ASPECTS

CHANGE IN THE MARKET AND MACRO-ECONOMIC CONTEXT	**RISK**	• The uncertainty of the financial and macro-economic context, the political unrest in some geographical areas, the policies to reduce public deficit, the reduction in raw material prices and the market consolidation may have a negative effect on competitiveness and performance as well as the contraction of margins on new orders • Increasingly complex (project financing) or less favourable/onerous contractual conditions may cause a decrease in financial performance and the contraction of margins on new orders • The optimisation plans launched may not be implemented as planned, may underperform or require a longer period of time	**Value** HIGH
	RISK MANAGEMENT	• Market and product analysis and prompt strategy adjustment • NWC (Net Working Capital) and FOCF (Free Operating Cash Flow) monitored by individual project • Ongoing and structured monitoring of the progress of the implementation of efficiency-improvement programmes	**Stakeholders involved** • Customers • Suppliers • Partners • Competitors
	OPPORTUNITY	• Global market that offers significant opportunities in emerging countries and countries with the highest rate of development • Optimisation of the operational structure with positive effects on competitiveness and performance	
COUNTRY RISK	**RISK**	• The policy to penetrate new markets with the highest development rate entails the risks of political, social and economic instability, incorrect assessment of local legislation (company, tax and technical), protection of intellectual property, exchange rate fluctuations and the creditworthiness of counterparties, with a negative impact on the financial position	**Value** MEDIUM
	RISK MANAGEMENT	• Country risk is assessed as part of the selection of the offers and tenders in which the group decides to participate • Contract management • Market diversification and country risk monitoring	**Stakeholders involved** • Customers • Suppliers • Partners • Competitors
	OPPORTUNITY	• Market share increase	
DEPENDENCE ON PUBLIC CUSTOMERS AND COMPLEX LONG-TERM CONTRACTS	**RISK**	• Delays, changes, revisions or cancellations of one or more long-term significant orders obtained • Assessing long-term contracts using the percentage of completion method requires the use of estimates that could be disregarded	**Value** MEDIUM
	RISK MANAGEMENT	• Structured processes for the periodic review of contract quotations and programmes • Adoption of risk management processes, both as part of the offer and project execution and life cycle management stages, constantly comparing physical and accounting progress	**Stakeholders involved** • Customers • Suppliers • Partners • Competitors
	OPPORTUNITY	• Signing of contractual variations	
THIRD PARTIES (SUBCONTRACTORS, ADDITIONAL SUPPLIERS, PARTNERS)	**RISK**	• The non-compliance with the contractual conditions by subcontractors or additional suppliers may harm customers' relationships and, without prejudice to possible compensation through the right of recourse against subcontractors or additional suppliers, the financial position • The assessment and selection of partners, subcontractors and additional suppliers, above all in new markets, may be inadequate and have a negative impact on competitiveness and performance	**Value** MEDIUM
	RISK MANAGEMENT	• Right of recourse against the non-compliant related company • Risk management processes and request, where applicable, of specific guarantees and back-to-back conditions • Subcontractors' and additional suppliers' vetting and eligibility processes • Collaboration with partners already known and of proven reliability • Definition, signing and management of adequate contractual and grouping clauses	**Stakeholders involved** • Customers • Suppliers • Partners
	OPPORTUNITY	• Agreements with partners in new markets in order to create business opportunities • Framework and commercial agreements with new suppliers, specifically on a global level, in order to increase competitiveness and performance	

Follows: ECONOMIC AND GOVERNANCE ASPECTS

BUSINESS EFFICIENCY AND ADEQUACY OF TECHNICAL REFERENCES	**RISK**	• Development and engineering activities may be carried out without a clear understanding of requirements, specifications or efficient configuration management • Inadequate market and product references may trigger the risk of losing business opportunities and being non-compliant when executing the project	**Value** MEDIUM
	RISK MANAGEMENT	• Processes to manage requirements and configuration in order to ensure the expected quality, deadlines and efficiency levels in line with project and development management • Specific projects are underway to monitor the adequate application of internal processes to projects • During the offer stage, processes which ensure adequate interaction between engineering, which reflects customer needs, the portfolio department, which assesses the technical requirements of the market, and the development department • Definition and monitoring of the product development roadmap	**Stakeholders involved** • Customers • Suppliers • Partners
	OPPORTUNITY	• Opportunity to improve quality and cut costs with improved management of requirements and configuration	
LIABILITY TO CUSTOMERS OR THIRD PARTIES FOR NON-COMPLIANCE OF PRODUCTS SOLD	**RISK**	• Late or failed provision of the products or services covered by the contract due to their potential non-compliance with the customer's requirements	**Value** MEDIUM
	RISK MANAGEMENT	• Insurance coverage • Careful supervision of engineering and validation processes and monitoring of the returns of the year • Non-compliance risks are considered in contract quotations	**Stakeholders involved** • Customers • Suppliers • Partners
	OPPORTUNITY	• Improved product reliability parameters • Reduced insurance costs	
BUDGET PROCESSES AND PROJECT PLANNING	**RISK**	• Failure to comply with deadlines and costs, specifically with respect to complex projects, due to a lack of fully successful planning and control processes and weaknesses in project technical management.	**Value** MEDIUM
	RISK MANAGEMENT	• Defined and monitored processes to control physical and accounting progress and risk management • Clear allocation of responsibilities to the project team • Project performance reviewed by management processes • Estimates are reviewed during the offer stage and independent review by the risk management function	**Stakeholders involved** • Customers
	OPPORTUNITY	• Improving project efficiency and increasing profit margins	
ABILITY TO FINANCE A HIGH LEVEL OF CURRENT ACTIVITIES AND TO OBTAIN GUARANTEES	**RISK**	• Difficulties in obtaining adequate financial conditions for new contracts, delays and/or suspension of payments and worsening of previously agreed terms of payment • Reduced ability to obtain cost-effective guarantees	**Value** LOW
	RISK MANAGEMENT	• Commercial and contract management policies focused on financial aspects • Treasury centralised management in order to optimise cash flows • Financial stability of the contract's valuation model since the offer stage • Ongoing monitoring of working capital	**Stakeholders involved** • Customers • Suppliers • Partners
	OPPORTUNITY	• Decrease in borrowing costs • Improved terms of payment • Market expansion • New credit lines	
INFORMATION SYSTEM MANAGEMENT	**RISK**	• IT solutions that do not meet business needs or the strategy or updating of said solutions not in line with users' needs. Potential unavailability or interruption of IT services • Potential breach of network or data integration (including sensitive data or those subject to intellectual property rights), also as a result of external attacks	**Value** MEDIUM
	RISK MANAGEMENT	• IT policies base on Organizational and process change plans • Governance system based on best practices and in line with structured and monitored infrastructure and application management processes, including cyber-security aspects	**Stakeholders involved** • Customers • Suppliers
	OPPORTUNITY	• Increase in communication flows	

SOCIAL ASPECTS			
WORKERS' HEALTH AND SAFETY	RISK	• Need to define and apply a safety management model given current local regulations • Rise in the number of accidents and injuries • Need to define and guarantee specialised resources to manage health and safety aspects	**Value** HIGH
	RISK MANAGEMENT	• OHSAS 18001-compliant workplace safety management systems • Definition of systems to supervise and monitor compliance of production with local laws • Select specific resources for each project	**Stakeholders involved** • Human resources • Suppliers • Partners • Local communities
	OPPORTUNITY	• More control over activities and smaller risk of accidents and injuries • Better reputation	
HUMAN RESOURCES TRAINING AND DEVELOPMENT	RISK	• High technological content, project complexity and global market require human resources with specific training, which is often difficult to obtain on the market	**Value** HIGH
	RISK MANAGEMENT	• Human resources management policies closely related to business needs • Integrated human resources management and development system which includes periodic checks of skills and performance and implements the necessary measures to develop skills and improve the allocation of resources • Processes and measures to identify the best talents (management and technical profiles) and prepare the related development plans.	**Stakeholders involved** • Human resources
	OPPORTUNITY	• Enhancement of resources thanks to the successful application of HR policies and processes, with a positive impact on the company's performance	
ETHICAL CONTROL OF THE SUPPLY CHAIN	RISK	• Rise in fraudulent conduct, also due to the current economic situation • Underestimation of our customers' focus on sustainable purchasing and loss of competitiveness if products do not meet minimum standards requested by the market • Reputation risks and disruptions in the supply chain with clear negative impact on the company's overall working and its financial performance	**Value** MEDIUM
	RISK MANAGEMENT	• Suppliers' agreement to Ansaldo STS's code of ethics as an essential condition to signing contracts and tenders • Review of the "General contract terms" to ensure compliance by both Ansaldo STS and its suppliers with regulations about calls to tender and public sector tenders • Systematic approach to competitive sustainability to ensure customer satisfaction • Monitor and assess the sustainability level along the supply chain, preferring the more sustainable suppliers • Integrate the general supply and tender terms with sanctions clauses • Monitor the supply chain, including economic, environmental and social impacts throughout the entire medium to long-term value chain	**Stakeholders involved** • Suppliers • Local communities • Customers
	OPPORTUNITY	• More transparent business relations • Foster a "sustainable" business culture with more critical suppliers increasing their CSR standards • Guarantee the sustainability of SMEs through the responsible management of the supply chain • Cut indirect and direct costs by introducing sustainable supply chain practices	

Follows: SOCIAL ASPECTS

PROTECTION OF THE RELATIONS WITH LOCAL COMMUNITIES	**RISK**	• Technical specifications requirements that provide for a certain percentage of local supplies and labour in emerging countries where the required skills have not yet been developed or honed • Risk of negative economic, social and environmental impacts on local communities	**Value** MEDIUM
	RISK MANAGEMENT	• Involvement of local suppliers that, if appropriately assisted, can gain the necessary skills • Involve international suppliers with demonstrated experience that are committed to helping local companies • Assessment of environmental impact and monitoring • Participation in local stakeholder committees • Assistance with the promotion of communication between the local authorities and citizens • Participation in programmes to develop local communities	**Stakeholders involved** • Customers • Local communities • Suppliers • Partners
	OPPORTUNITY	• Increase in competition in the specific area • Find new competitive suppliers that can also be used in other areas benefitting competition • Improved reputation • More competitive due to development of ability to manage relations with the local communities	
LEGAL DISPUTES	**RISK**	• The complex nature of the relations with third parties, specifically with respect to international projects, and the content of the developed systems and products, as well as the risks specific to the company's business entail a significant risk of legal disputes. The settlement of disputes may be complex and require a long time, causing delays in project implementation and generating a negative effect on the company's business and financial position and results of operations.	**Value** MEDIUM
	RISK MANAGEMENT	• Monitoring of disputes and careful analysis of contractual provisions with the support of the legal department • Adoption of a prudent approach when recognising specific items under contract costs and risk provisions	**Stakeholders involved** • Customers • Suppliers • Partners
	OPPORTUNITY	• Mitigation of disputes • Reduction in potential delays in project implementation	

Piscinola-Scampia station of the line MetroCampania Nord Est

ENVIRONMENTAL ASPECTS			
ENVIRONMENTAL OBLIGATIONS	RISK	• Lack of compliance with applicable regulations due to inadequately monitored operating processes, specifically in relation to countries that do no follow high standards or exposed to specific risks • Poor assessment of the relevant obligations and of the necessary environmental procedures	**Value** HIGH
	RISK MANAGEMENT	• ISO14001-certified environmental management systems for the main Ansaldo STS group companies • Bureaucratic requirements in new markets already assessed during the offer stage with assistance, including though external consultants • Common policies and procedures in order to ensure consistent conduct across group companies, while considering specific local legislation	**Stakeholders involved** • Human resources • Customers • Suppliers • Partners • Local communities
	OPPORTUNITY	• Compliance with environmental regulations and improvement in environmental impact	
ENVIRONMENTAL IMPACT OF PRODUCTS	RISK	• Environmental impact of production processes, product composition, energy consumption and reduction or elimination of hazardous substances	**Value** HIGH
	RISK MANAGEMENT	• Special R&D projects • Partnerships with suppliers to develop components that comply with high robustness, safety and environmental standards	**Stakeholders involved** Customers Suppliers Partners Local communities
	OPPORTUNITY	• Greater ability to compete with products and solutions that best meet new market demand • Better financial returns	
DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS	RISK	• Possible negative effects on activities to be performed influenced by climate change • Risks related to changes in regulations and standards that could lead to obsolescence of part of the company's assets • Little awareness and involvement of resources in these aspects	**Value** MEDIUM
	RISK MANAGEMENT	• Analysis and valuation of the risk and vulnerability to climate change at international level • Definition of an action plan to guarantee that the improvement measures are: adopted promptly and are effective and consistent over time	**Stakeholders involved** • Human resources • Future generations • Suppliers • Local communities
	OPPORTUNITY	• Greater ability to manage climate change • Increased competitive edge: development of new products and processes with reduced GHG emissions • Improved reputation thanks to the company's ability to respond effectively to any widespread public concerns	
ENERGY CONSUMPTION	RISK	• Rise in energy consumption costs • Less able to compete	**Value** MEDIUM
	RISK MANAGEMENT	• Investments to reduce consumption checking potential profitability • Adoption of projects designed to reduce facilities' energy consumption and the use of renewable energy sources	**Stakeholders involved** • Human resources • Future generations • Suppliers • Local communities
	OPPORTUNITY	• Achieve sustainable savings increasing competitiveness • Better financial returns	
WASTE AND WASTEWATER MANAGEMENT	RISK	• Non-compliance with regulations by the company and its suppliers for projects/ activities • Changes in laws leading to risks of sanctions	**Value** MEDIUM
	RISK MANAGEMENT	• System to monitor changes in laws at an international level • Adoption of projects designed to reduce facilities' waste generation and wastewater management	**Stakeholders involved** • Human resources • Suppliers • Future generations • Local communities
	OPPORTUNITY	• Better financial returns • Better reputation	

Stakeholder engagement

For Ansaldo STSs social responsibility translates into the daily focus and care of its relations with stakeholders. It understands their needs and expectations due to the definition and implementation of specific tools for dialogue and interaction.

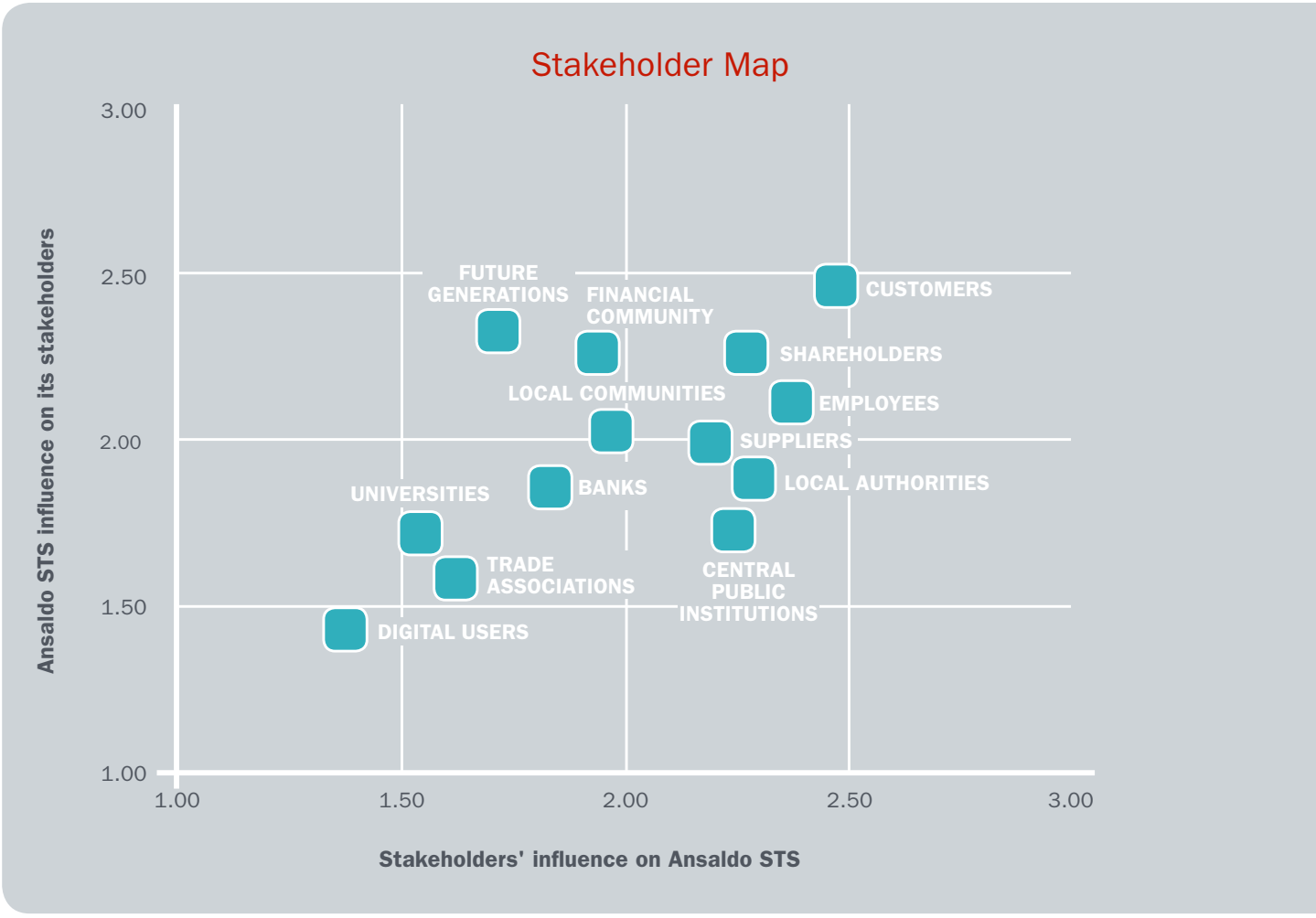
Stakeholder mapping

The objective is to give each stakeholder category a "weight" to reflect how each category influences the company's performance or is influenced by the company.

Ansaldo STS's performance is evaluated considering the three components that characterise sustainable growth:

- economic, i.e., attainment of turnover, new customers, order backlog and profitability objectives;
- social, i.e., the company's capacity to create "shared value" (not just economic) by satisfying requirements and expectations;
- environment, health and safety, i.e., meeting objectives to reduce the company's direct and indirect impact on the environment and its workers' health and safety.

The scores assigned by each member of the internal sustainability committee are reflected in the following map:



The stakeholder category perceived to be most strategic for the company, in line with its culture and values, is that of the customers, followed by shareholders and employees. The latter's influence on the company is seen to be greater than the company's influence on them. This decision reflects Ansaldo STS's culture of placing its people at the heart of its Organization, seen as essential to its success.

Suppliers, local authorities and central public institutions are slightly lower on the matrix. Once again, their influence on Ansaldo STS is seen to be greater than Ansaldo STS's influence on them.

Local communities, the financial community and future generations are more influenced by the company's operations.

Relations with stakeholders

Ansaldo STS has presented the different ways it interacts with its stakeholders in this report, distinguishing between:

- **information sessions:** one-way communication by the company to stakeholders;
- **consultation/dialogue:** when the company asks for stakeholders' opinions (e.g., through surveys, polls, focus groups, etc.) or sets up permanent discussion groups;
- **partnerships:** specific projects carried out and/or managed with stakeholders.

This description is useful to understand how to improve the interaction methods with different stakeholder categories to gradually increase the opportunities for dialogue and partnerships, and in so doing create shared value.

STAKEHOLDERS	INFORMATION SESSIONS	CONSULTATION/DIALOGUE	PARTNERSHIPS
CUSTOMERS	• Periodic project meetings • Meetings with customer senior and top management • Participation at trade fairs, conferences and opening ceremonies • Communication via the social media	• Customer satisfaction survey • Hazard workshops to test the safety of products and solutions • Open days to collect feedback from end users	• Joint venture agreements
HUMAN RESOURCES	• Communications about the company's performance, delivery of its main projects, acquisitions of new orders • Communication campaign "Share the passion, a call to action" for the Value to Action project	• Climate analyses (every two years) • Talent selection and development programmes (Knowledge Owners) • Coaching sessions for international work teams (Project team effectiveness) • Assessment of managers by groups of peers (360° for managers) • Open days for colleagues, families, the community and local institutions	• Strategic project "Values to Actions" for innovation in the management of operations, allocation of resources, commercial strategies and supplier management, in compliance with the company's values. • Co-funding of manager courses in the top 10 international business schools (50-50 project)
SUPPLIERS	• Requests for information, references, catalogues, etc.	• Requests for technical and price bids; negotiations • Online survey of sustainability issues (TenP of Global Compact Network Italy Foundation)	• Medium to long-term supply contracts
BANKS	• Invitations to participate in deals • Communication and presentation of project data	• Meetings to present projects and their details • Negotiation of terms and prices	• Partnerships for the guarantees related to the Makkah Metro (KSA) tender; partnership for the negotiation of the credit letter for the Navi Mumbai India project; partnership for the project financing related to the construction of line 4 of the Milan metro. • Lima financial closing with securitisation of the bond loan of USB 1.2 billion (PFI premium)
INVESTORS / FINANCIAL ANALYSTS	• Roadshows • Conferences • Video conferences	• Roadshows • Conferences • Video conferences	
ITALIAN AND EU PUBLIC INSTITUTIONS	• Institutional communications (internet news, press releases, etc.)	• Consultations about potential partnerships for research projects	• Joint research projects
LOCAL AUTHORITIES/ PUBLIC ADMINISTRATION	• Regular institutional communications	• Charity day	
LOCAL COMMUNITIES	• Reports on the progress of projects to the local community (together with the local institutions)	• Participation in local stakeholder committees • Customer satisfaction of rail users	• Participation in programmes to develop local communities
TRADE ASSOCIATIONS	• Institutional communications (internet news, press releases, etc.)	• Consultations about potential partnerships for research projects	• Joint research projects
MEDIUM	• Regular institutional communications	• Consultations for more details of specific issues	
DIGITAL USERS / SOCIAL NETWORK	• Regular institutional communications	• Ongoing communications and regular updates of the website	• Partnerships with social networks to develop web communications and relations

In 2015, the main engagement activities with the various categories of stakeholders were:
- the **materiality analysis;**
- **customer satisfaction surveys;**
- **personnel involvement initiatives** carried out through different projects:
  – ***"Knowledge Owners"*** programme to select and develop talent
  – ***"360° for executives"***, an assessment of each executive by a group of their peers
- **external relations activities**
- **investor relations activities**
- **research projects with Italian and EU institutions**
- **agreements and partnerships with universities**

Involvement of local communities: social and environmental impacts

Ansaldo STS's active role varies depending on the type of project and part played in handling relations with local communities, be they municipal authorities, associations of residents, users of metros and trains, companies or local labour.

It complies with the site environmental management procedures for the environmental aspects of its projects, starting with an initial analysis of the works planned, discussed and agreed with the subcontractors as well. The next stage is preparation of a monitoring plan to ensure ongoing compliance with the law and to adopt all available opportunities to limit the impact of setting up a work site. Sometimes, the customer (public sector body) defines specific characteristics of the work after assessments have been made of its impact on the environment, the society and health and safety. In this case, Ansaldo STS studies and presents the best possible solutions.

Ansaldo STS is actively involved in programmes to communicate and interact with the communities affected by its works in various ways:
- it participates in committees that represent local stakeholders;
- it promotes communication between the local authorities and citizens;
- it engages in direct communication;
- it takes part in programmes to develop local communities.

HONOLULU METRO

The Honolulu metro is a US$1.4 billion contract, the largest ever to be performed in Hawaii. It will have a positive effect on the local environment and society as Honolulu is the second most congested US city after Los Angeles. The metro will change the style and quality of life of Honolulu's residents who take an average of two to three hours a day to travel to work. Passenger transport will be rolled out in 2019 creating employment for 300 local workers.

Communication and involvement of the local community

As part of the tender qualifications, Ansaldo Honolulu (the general contractor led by Ansaldo STS of which Hitachi Rail Italy S.p.A. is a partner) developed a special communication plan to keep the local community up-to-date with the project. Moreover, since 2012, it has coordinated the communication activities with the community in collaboration with the contractor. The population's perception of the works' progress is monitored closely and the company is committed to supporting the customer in its communications.

Ansaldo Honolulu is a member of Move Oahu Forward, a local stakeholder committee whose mission is to promote initiatives that improve mobility and the quality of life, to contribute to developing the economy and future growth, safeguarding the island's unique ambience and lifestyle. This committee is convinced that the Honolulu metro project is a step in this direction.

Ansaldo Honolulu has set up a website to update the local population and authorities http://www.ansaldohonolulurail.com/

Sustainability

The Ansaldo Honolulu website has been recently improved with the inclusion of a section on sustainability, to highlight the company's focus on occupational health and safety and environmental protection, in accordance with US federal and State of Hawaii local and international regulations, and in line with Ansaldo STS's model.

Development programmes for the local community

Ansaldo Honolulu, Honolulu Authority for Rapid Transportation (HART) and the Office of Continuing Education and Workforce Development (OCEWD), part of Leeward Community College, have worked together since 2011 to provide training and enable the hiring of 300 employees to carry out operations & maintenance activities for the metro. In November 2015, Ansaldo Honolulu participated in a workshop with all the representatives of the State of Hawaii education sector (high schools, community colleges, universities) to discuss the educational path for the next generations of Hawaii residents to enable them to benefit from metro-related business opportunities. During the year, it has also participated in many jobs fairs in the State of Hawaii.

Communication and involvement of the state community

In June 2015, a delegation from Ansaldo STS and Ansaldo Honolulu met with members of the US Congress in Washington DC for the second year in a row as part of the "Hawaii on the Hill" programme organised with the support of the Chamber of Commerce of the State of Hawaii.

The meetings with congress members and federal office directors covered transport, the employment market and business relationships with Hawaii, the rest of the United States and Asia.

The Honolulu train

Delivery of the first Honolulu train cars is expected in May 2016.

LIMA METRO

Lines 2 and 4 of the Lima metro is a project worth US$ 5.658 billion and is one of the greatest works of Peru in terms of both high engineering and required technology.

Line 2 covers 35 km of underground tunnel (27 km for line 2 and 8 km for line 4), for a total of 35 stations and 2 laboratories. Total journey time is 45 minutes, a saving of approximately 90 minutes daily.

Lima will benefit from efficient and sustainable transport which will contribute to stimulating economic and social development and resolving traffic congestion.

The new line features a sophisticated driverless train system and will serve over 600,000 passengers per day.

Its construction saw the participation of leading international design, construction and management companies. Ansaldo STS is part of this group and contributed its experience in railway technology and equipment.

Communication and citizen participation

The Line 2 Lima metro Consortium, of which Ansaldo STS is a member, hired a local company to implement a social and communication management programme which includes:

- management of relationships with the community directly affected by the construction (project's area of influence);
- full communication: in the area directly affected, with the public, the authorities and the social networks. As part of this project, a website was created which provides updates on the construction of line 2 https://www.facebook.com/linea2metrolima?fref=ts
- social indicator monitoring;
- social risk surveillance and prevention, crisis management and immediate reply.

Development programmes for the local community

Throughout the construction, the project will create approximately 300 direct and 8,000 indirect jobs. Furthermore, more than 2 million people will be directly influenced and will benefit from:

- more jobs during the construction and operation stages
- travel safety
- reduced journey time
- increased productivity
- more time with the family
- more customers for companies, once the metro is fully operational
- better safety
- increased value for the entire district.

COPENHAGEN METRO – O&M and Cityringen project

This project consisted of building the metro (completed in 2010), for which Ansaldo STS was assigned the operations & maintenance component (until 2018), and construction of the new Cityringen, a 15.5 km driverless metro system with 17 stations and a surface maintenance centre. It will transport up to 240,000 passengers 24/7 starting from 2018.

The customer, Metroselskabet, analysed the economic-social, environmental and health and safety impacts before defining the metro's specific characteristics. Ansaldo STS was able to satisfy its requests thanks to its design and technological expertise and its capacity to reduce environmental impact and guarantee safety.

Involvement of the local community

Local community involvement is regulated by the contract. Ansaldo STS has appointed a PR manager who participates in meetings to coordinate communications with the employer, organises work site visits by citizens and updates the information used to for communication, especially on the web site.

Ansaldo STS participates in the following initiatives organised by Metroselskabet:

- monthly meetings with a work group comprised of the customer, other contractors (CMT, Salini), employers and trade unions. The group's key objective is to prevent and monitor all complaints or disputes about labour conditions;
- the MSURR committee, a group consisting of first aid personnel, the head of the local police and the Danish emergency management agency (Beredskabstyrelsen). The committee is in charge of all issues related to evacuations, first aid and other emergency management problems both with respect to the metro's operation and construction of the Cityringen. Its members discuss and agree on principles and procedures to ensure very high safety levels based on documented descriptions.

Development programmes for the local community

A "gentlemen's agreement" provides for the hiring of local labour (more than 200 employees) with incentives for additional hires.

Customer satisfaction

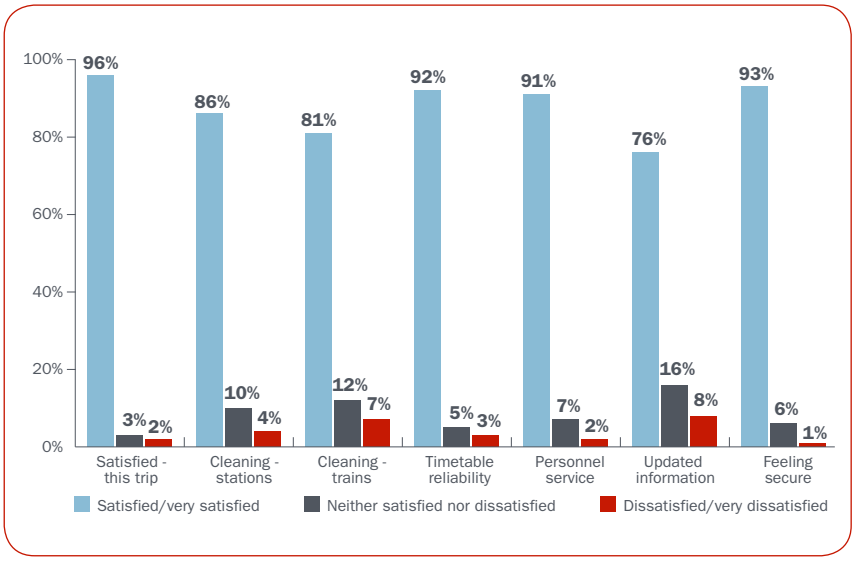
Ansaldo STS was awarded the contract to operate and maintain the Copenhagen Metro until the end of 2018. This contract was agreed in January 2010 following a European tender. The contract remuneration is indexed to service availability, punctuality and the results of customer satisfaction surveys. Customer satisfaction is indeed of vital importance to the Metro, both in terms of maintaining existing customers and attracting new ones. Accordingly, the Danish customer, Metroselskabet, and Ansaldo STS devote considerable attention to customer feedback. Various tools are used to understand Danish metro passengers' needs and expectations. They include quarterly customer satisfaction surveys.

In 2012, for the third year in a row, the Copenhagen Metro was named the world's best automated metro. This award was given at the Metrorail conference of leading experts in metro systems around the world. A key element in the selection of the awardees was the high level of control and customer satisfaction.

Since the metro was rolled out in 2002, customer satisfaction with Metroselskabet has been carefully monitored through surveys conducted by an independent entity. However, only after the M1 and M2 lines were completed, were customer satisfaction results included in the contractual agreements. Metroselskabet and Ansaldo STS continue to analyse and report on the survey results, which are published quarterly.

In 2015, passengers numbered roughly 57.2 million. Surveys were performed on a sample of approximately 5,000 users and their satisfaction is regularly monitored in accordance with the following aspects: Satisfaction with the journey, Cleanliness of the stations, Cleanliness of the trains, Timeliness, Service quality, Updating of information and Safety.

Each of these performance factors is directly assessed by passengers and then compared with specific, predefined targets. The summarised results of the 2015 survey are given below.



A royal smiley

The Danish authority for working environment assigned the Ansaldo STS team the highest score in the assessment of health and safety compliance: a royal smiley.

The authority uses smiley to assess companies' compliance with applicable provisions. The assessments are posted on the website to enable the public to monitor a company's performance. Health and safety assessments comprise four levels: red, yellow, green and royal smileys. The latter reflects the top level, for companies that have obtained an officially-recognised health and safety certificate confirming the extraordinary efforts made and the results achieved to ensure a high level of compliance.

The target was achieved thanks to the involvement and the support of the entire project team from the beginning of the project in 2012. During this period of time, Ansaldo STS's HSE management department worked hard to meet all requirements and confirm compliance with the highest environmental, health and safety standards of the Cityringen project.

Sustainability programme

Ansaldo STS draws up a sustainability programme each year, made up of the objectives to be targeted to ensure the ongoing improvement of its performance using annual reports of its commitments, surveys on the quality of its engagement with stakeholders and the aspects that emerged from the materiality analysis as a base.

INNOVATION AND THE ENVIRONMENTAL IMPACT OF PRODUCTS AND SOLUTIONS	
• Compact peripheral stations: implementation of third-generation bodies which generate savings of approximately 40% and introduce an innovation from a functional point of view.	2016
• Smart-mobility and energy efficiency: application of the results of the research projects completed in 2015, specifically in relation to eco-driving algorithms and the completion of tests of super capacitors.	2016
• Participation in Shift2Rail calls with additional proposals, progress of the projects underway and finalisation of those to be completed by 2016.	2016
• Development of railway signalling systems which use satellites for train detection and communications	2016
CUSTOMER SATISFACTION AND QUALITY IMPROVEMENT	
• Customer satisfaction: increase customer surveys on 2015 (15 surveys)	2016
• Extend the scope of application of the IRIS - International Railway Industry Standard – certification to the design and development activities of the Riom site	2016
• Extend ISO 9001 certification to the Lima site	2016
• Complete the integration of the documentation included in the CMMI (Capability Maturity Model, Integration) baseline in the Integrated Management System	2016
HUMAN RESOURCES	
• Improve recruiting activities through employer branding campaigns based on social networks	2016
• Consolidate the "Talent" project with Knowledge Owners and possibly extend it to other key parties	2016
• Improve personnel travel management	2016
• Implement measures to retain the company's key skills	2016
• Include protected worker categories	2016
• Consider the possibility of testing smart working schemes	2016
ENVIRONMENT, HEALTH AND SAFETY	
• **WORKERS' SAFETY** Reduce the injury frequency and seriousness indicators at production sites by 10% Reduce the injury frequency and seriousness indicators at offices by 10%	2016
• **ENERGY** Reduce the energy intensity performance indicator of buildings/offices by 5% [GJ/m2] Reduce the energy intensity performance indicator of buildings/production sites by 1% [GJ/m2] Increase the percentage of electrical energy obtained from renewable sources by 5%	2016
• **GREENHOUSE GASES** Reduce the GHG emission intensity indicator by 10% [tCO_2e/€million turnover]	2016
• **WASTE** Reduce the kilos of waste per hour worked at production sites by 5% Reduce the kilos of waste per hour worked at offices by 5% Increase the percentage of recycled waste at production sites by 10% Increase the percentage of recycled waste at offices by 10%	2016
SUPPLY CHAIN	
• Create global commodities that will increase the specialisation in certain technologies and will generate a global vision of the supplier base, with the possibility of improving the effects of sustainability	2016-17
• Continue the TenP project on suppliers' sustainability, analysing the output of the online survey on respect for human rights, work conditions, the environment and fight against corruption.	2016
• Extend the tests commenced in France for the automated preparation and sending of supplier rating reports to Italy	2016
• Approve the general conditions for purchasing goods and services in Italy with inclusion of sanctions clauses for non-compliance with the code of ethics	2016
• Continue the standardisation of the supply contract general conditions in Ansaldo STS's various legal entities	2016
THE MEDIA AND SUSTAINABILITY COMMUNICATIONS	
• Re-launch of "The Ansaldo STS forest never stops growing" campaign as part of the publication of the 2015 Sustainability Report	2016
• Develop accurate videos and communication on sustainability and social innovation. Some events have already been scheduled, including forums and specific initiatives.	2016
• Internal training and development of the social innovation and sustainability culture to facilitate the understanding of the commitments taken on and the activities developed at group level.	2016
COMMUNITY	
• **UNIVERSITIES** As part of the "knowledge owners" talent management project, new agreements will be signed with specific departments of Italian, French, US and Australian universities to support the company's most technically talented resources	2016
• **ITALIAN AND EUROPEAN INSTITUTIONS** Continue with the Italian and European research projects that are underway, in collaboration with universities and research bodies, to increase safety and environmental compatibility and apply for funding by coordinating new project proposals. With respect to the STARS satellite project, Ansaldo STS will continue its collaboration with UNIFE and the main GNSS research Organizations. Furthermore, Ansaldo STS will actively participate in the preparation of the pilot project for the Cagliari – San Gavino Sardinia line and the related technical/business proposal requested by RFI and Trenitalia.	2016
• **TRADE ASSOCIATIONS** Continue to play an active role in trade associations and, in particular, take initiative as part of the UNIFE sustainability committee.	2016

Reporting on commitments

Target achieved

Target partially achieved

Target postponed

IN 2014 WE SAID	IN 2015 WE DID	
INNOVATION		
• Compact hardware by roughly 35%-40%.	• The planned solution was implemented to compact the central post electronics for interlocking, ERTMS wayside application, etc.. Specifically, the solution developed for the Roy Hill project applies both the Radio Block Center and interlocking on the same machine, reducing dimensions and energy consumption by at least 40%.	
STRATEGY QUALITY AND IMPROVEMENT		
• Extend IFIS (International Railway Industry Standard) certification to the Les Ulis, Pittsburgh and Beijing sites	• IFIS (International Railway Industry Standard) certification to the Les Ulis, Pittsburgh and Beijing sites extended	
• ISO 9001 certification to the Riyadh, Ankara and Zaragoza sites extended	• ISO 9001 certification to the Riyadh, Ankara and Zaragoza sites extended	
• Include the documentation in the CMMI (Capability Maturity Model, Integration) baseline in the Integrated Management System (IMS)	• The inclusion of the documentation in the baseline CMMI (Capability Maturity Model, Integration) in the Integrated Management System is almost completed	
COMPLIANCE & ETHICS		
• Include the new predicate crime of self-laundering in the Organizational, management and control model as per Legislative decree no. 231/01	• The risk assessment for the predicate crime of self-laundering was carried out in 2015. The Model was updated in February 2016 to include such crime and other regulatory changes pertaining to 2015.	
HUMAN RESOURCES		
• Complete the Knowledge Owners programme, concluding the first stage of training and development	• In accordance with the Technical committee's decision, the Knowledge Owner programme will last two years instead of one. Consequently, the project is continuing in accordance with plans and is expected to be completed in spring 2016.	
• Complete the update of the Global Job System model	• Updating of the relevant professional families was completed, communicated and implemented.	
• Continue to use Linkedin by creating an integrated work group that can best exploit this tool's potential	• Linkedin remains extremely successful in terms of recruitment, including thanks to the regular publication of articles about HR activities by the LinkedIn Narrative Team.	
THE ENVIRONMENT, HEALTH AND SAFETY		
• Further reduce the number of accidents at work	• The number of injuries, with a number of days of temporary incapacity of more than three days, decreased from seven to five. Only one accident took place at the three production sites.	
• Adopt a web-based software programme to improve management and monitoring of environmental and safety requirements	• Ansaldo STS joined the Hitachi group, its new majority shareholder, in 2015, and this will entail the adoption of a group software solution. For this strategic reason, this target was postponed.	
• Increase the hours of training provided about the environment, health and safety, especially for issues affecting the worksites	• After the 10% increase in health and safety training hours in 2014, a training campaign was launched in 2015 which involved (and will involve in 2016) all Safety officers (Site managers, Branch managers and Office managers), all worksite employees exposed to the electricity risk (CEI 1127 – 50110) and all appointed worksite employees.	
• Pittsburgh site: continue the PITTSBURGH 2030 DISTRICT project by implementing the monitoring stage to reduce energy and water use and the production of CO_2	• In 2015, EE consumption at the Pittsburgh site decreased by 12%, while the use of water from the aqueduct was reduced by 45%. Furthermore, it reduced the distance in km of short-haul and long-haul flights by 36% and 10%, respectively. In 2016, it launched a specific campaign on environmental and health and safety issues training.	

IN 2014 WE SAID	IN 2015 WE DID	
SUPPLY CHAIN		
• Analyse the TenP project's output on supplier sustainability and define an action plan to improve sustainability	• Ansaldo STS selected a specific number of suppliers and invited them to participate in an online survey on sustainability issues, including, in particular: respect for human rights, work conditions, the environment and the fight against corruption. They will be invited again to analyse outputs and define an action plan to improve sustainability	
• Extend the tests commenced in France for the automated preparation and sending of supplier rating reports to Italy	• This activity was postponed due to the implementation of Ansaldo STS' s new Organizational structure	
• Revise and publish the general conditions for purchasing goods and services in Italy with inclusion of sanctions clauses for non-compliance with the code of ethics	• The text and the guidelines are ready for final approval and subsequent issue	
• Standardise the supply contract general conditions after assessing the current contracts in use by Ansaldo STS's legal entities and best international practices	• The standardisation of the supply contract general conditions has begun and will continue in 2016.	
THE MEDIA AND SUSTAINABILITY COMMUNICATIONS		
• Prepare the content of the sustainability communication plan with new projects when the 2014 report is published or afterwards	• "The Ansaldo STS forest never stops growing: download the 2014 sustainability report and plant your own tree" campaign was launched and promoted by external and internal communication, including social media and through updates on the company's intranet. Furthermore, a video message was prepared and sent to employees and published on Ansaldo STS's website. In this video message the CEO explained Ansaldo STS's vision of sustainability and social innovation. Also in 2015, the company supported the Global Compact Network Italy Foundation, of which it is a founding member.	
• Develop and reorganise the digital communication tools, the company's presence on the internet and dialogue with digital stakeholders	• In 2015, much time and energy was invested in strengthening digital communication by expanding the channels available to stakeholders, while synchronising them. Today, all major information is posted in real time on the main social networks.	
• Define and prepare a new plan to develop relations with foreign and Italian media	• Ansaldo STS's communication has always been aimed at advertising its skills in the relevant business segment, regularly reporting results and commitments and describing technological developments and innovation. Accordingly, Ansaldo STS remained focused on its targets including with respect to media communication.	
COMMUNITY		
• UNIVERSITIES: continue contributing to specialised training in the sector by collaborating with leading Italian and foreign universities and contributing scientifically to post-graduate master programmes	• The contribution to specialised training in the sector continued by collaborating with leading Italian and foreign universities and contributing scientifically to post-graduate master programmes	
• ITALIAN AND EUROPEAN INSTITUTIONS: continue with the Italian and European research projects that are underway to increase safety, security and environmental compatibility and apply for funding by coordinating new project proposals	• Stage 2 of the 3InSat project was carried out as part of satellite projects. This included the performance of non-intrusiveness analyses to obtain the authorisation to install platforms and perform functional and performance tests at the Sardinia Trial Site. Furthermore, functional tests were carried out successfully, covering 6500 km. Finally, the characterisation gauges of the GNSS signal for the ERSAT-EAV project were also carried out during the year.	
• TRADE ASSOCIATIONS: continue to play an active role in trade associations and, in particular, take initiative as part of the UNIFE sustainability committee	• With respect to satellite positioning, Ansaldo STS continued to coordinate the NGTC WP 7 project, contributing the quantitative analysis of the tolerable hazard rate assigned to the virtual balise reader	

Ethics and integrity

Considering its history and vocation, the Ansaldo STS Group has always based its business development on the creation of safe, efficient, reliable and environmentally-friendly railway and metro transport systems and solutions, placing its full focus on the people these systems and solutions serve, who live in increasingly complex contexts with increasingly complex lifestyles.

Code of ethics

The code of ethics clarifies the commitments and responsibilities that should guide the company's business and activities, requiring compliance by anyone involved in any way with Ansaldo STS.

The code of ethics is available on the company's web site[11]. It is a key element of the internal control system, and compliance with it enables Ansaldo STS and the group companies to prevent certain irregularities or illegal acts prohibited by the regulations of the various countries where Ansaldo STS operates, particularly Legislative decree no. 231/01 in Italy.

The code of ethics was formally adopted for the group companies by resolution of the respective boards of directors or equivalent management bodies. It was shared with all group personnel using the same methods as those applied by the parent Ansaldo STS.

In addition, a code of ethics control body was set up within each group company to promote the implementation of the code of ethics. A special information channel for the code of ethics was also created, and can be used to report any conduct that is inconsistent with the principles of the code of ethics by sending an email. The reports are sent and managed in accordance with a group procedure.

2015 events

In 2015, the code of ethics control body received reports of violations of the code related to Ansaldo STS Australia and Ansaldo STS USA. With respect to the three violation reports concerning Ansaldo STS Australia, no violations were ascertained. The control body also received two requests for interpretation of the code of ethics. The code of ethics control body of Ansaldo STS USA received two reports from some local managers concerning alleged bullying and harassment. These issues were managed by the human resources department.

Training on the code of ethics

Ansaldo STS relentlessly promotes and fosters awareness of the code of ethics and the related protocols and updates, as well as knowledge of the areas of activities in the various functions with responsibilities, hierarchical relationships, duties and training. It informs employees on the code of ethics and the related protocols first by distributing specific documentation to all employees and workers collaborating with the company in any way, and requires, when the material is delivered, that they sign a statement certifying that they have read the documentation received.

In addition, company personnel can, at any time, ask supervisors for guidance and clarifications on the content of the code of ethics, protocols and duties assigned to them. When new employees are hired and/or contracted, Ansaldo STS immediately gives them the information necessary for adequate knowledge of the code of ethics and protocols, with particular respect to those that concern them specifically.

11. http://www.ansaldo-sts.com/sites/ansaldosts.message-asp.com/files/downloadspage/asts_cod_etico_italiano.pdf

Global Compact

Once again this year, Ansaldo STS has adhered to Global Compact, a voluntary United Nations initiative to encourage respect for human rights, labour, the environment and anti-corruption set out in 10 principles. Its confirmation reiterates its commitment to considering Global Compact and its main principles an integral part of the company's strategies and culture.

HUMAN RIGHTS[12]

Ansaldo STS upholds and promotes human rights in every context in which it operates, by creating equal opportunities for its people and fair treatment for all - regardless of race, nationality, political creed, religion, gender, age, minority status, disability, sexual orientation, personal or social condition – and always respecting the dignity of each individual and each employee (code of ethics).

LABOUR[13]

Ansaldo STS offers equal opportunities, ensuring fair treatment on the basis of individual expertise and abilities and hiring people under legal employment contracts, mainly on an open-ended basis, in accordance with laws, national labour agreements, company agreements and current regulations.

Over the course of employment, training is a crucial lever to make the most of human resources and update their skills to the market context, thereby expanding upon the abilities and knowledge of each employee, in line with the company's values. Ansaldo STS also applies a policy based on the recognition of one's merits and equal opportunities. Ansaldo STS's internationalisation process has also consolidated work experience abroad, thereby enabling people to share their different experiences and foster the value of multiculturalism.

Ansaldo STS guarantees that its workers are free to join trade unions, and sees that its relationships with the unions are cooperative and friendly in which workers may report their opinions to Human Resources directly or via delegates.

Child labour

Ansaldo STS does not allow and does not tolerate employment situations that violate current regulations on child labour, women's labour and immigration. This also applies to its external contractors, suppliers and business partners.

Forced labour

Ansaldo STS carefully monitors the risk of forced labour. In addition, the company requires its contractors and sub-contractors to guarantee the same in order to contribute to the abolition of such illegal practices.

ENVIRONMENT[14]

Protecting the environment is part of Ansaldo STS's social responsibility. This is a key element in its business strategy, with the aim of promoting long-term growth in the company's value. The optimisation and development of its processes and Organizational structure are central to this strategy: the aim is to produce in the safest possible way, using the least possible quantity of resources.

Integrated management system

Ansaldo STS has implemented an integrated management system ("IMS") for the environment, safety and quality, which integrates all group processes in one single complete structure, enabling the Organization to operate as a single unit with shared objectives.

At central level, global policies and procedures have been established to ensure controlled management of processes and activities relating to safety in the workplace and environmental protection. On this basis, and where there are specific legislative requirements, each legal entity has established local guidelines to ensure compliance with the requirements applicable to its processes.

All company bodies are required to closely comply with the principles of the environmental management system, and they are actively involved in preparing and updating it. Ansaldo STS is currently completing the certification process for its sites under UNI EN ISO 14001 and OSHAS 18001 standards.

12. Ansaldo STS acts in accordance with the UN's International Bill of Human Rights (which includes the Universal Declaration of Human Rights, the International Convention on Civil and Political Rights and the International Convention on Economic, Social and Cultural Rights), the ILO's Fundamental Conventions (nos. 29, 87, 98, 100, 105, 111, 138 and 182), the Declaration on Fundamental Principles and Rights at Work, the UN's Convention on the Rights of the Child, the ILO's Conventions nos. 107 and 169 on the Rights of Indigenous and Tribal Peoples, the European Convention on Human Rights and the OECD's guidelines for multinational enterprises.
13. See: Human resources.
14. See the section on Environment, health and safety.

Development and extension of environmentally-friendly technologies
Ansaldo STS is constantly committed to providing its customers and end users (passengers and freight) with the best and safest products, using the best design methodologies and procedures and the best existing building methods and processes, in line with its commitment to reduce energy consumption and its direct and indirect impact on the environment.

Ansaldo STS also promotes technological and managerial training through partnerships with universities, specifically in terms of information communication technology, sustainability and the health and safety of transportation systems.

The Group actively participates in research projects co-financed by Italian and EU institutions on how to improve safety, energy efficiency, environmental impact, sustainable mobility and the interoperability of transport systems.

ANTI-CORRUPTION AND THE PREVENTION OF CORPORATE CRIMES

Ansaldo STS has adopted the Organizational, management and control model (the "Model") pursuant to Legislative decree no. 231/2001, which deals with, inter alia, corruption against the public administration and in the private sector. The Model has been adopted in the Group's pre-existing Italian companies (which merged into the parent in 2009) since the introduction of Legislative decree no. 231/2001.

Ansaldo STS S.p.A.'s employees are required to comply with the Model and the procedures, which specify the operating methods of the various company processes. These procedures relate, in particular, to the following:

- advisors and sales representatives;
- sponsorships, publicity campaigns and contributions to associations and bodies;
- conferral of advisory engagements and professional services;
- gifts, hospitality, facilitating payments and entertainment expenses;
- M&As (mergers and acquisitions).

These procedures have been adopted in line with the former parent Finmeccanica's initiatives to strengthen the internal control system, concerning, in particular, corruption and corporate crimes. Several audits were performed to check their actual implementation. In the event of acts of corruption (which has never occurred in the Group so far), Ansaldo STS would respond with the disciplinary sanction provided for by the Model, which also includes dismissal without notice.

The main risk areas, including direct risks and the areas that could potentially facilitate acts of corruption, subject to the requirements of the Model, are mainly the sales area, contract management, procurement, sites, administration, finance and control, HR and soft loans.

In order to ensure that all employees are completely familiar with the Model, they receive reports when it is updated. In addition, a new e-learning training programme was carried out in 2014 for nearly all company employees. Employees working in the areas at risk of these crimes being committed, along with the company's managers and junior managers sign periodic statements of compliance with the Model and, where applicable, statements describing the most significant relationships with customers and representatives of the public administration.

GLOBAL COMPACT NETWORK ITALY FOUNDATION

Global Compact Network Italy (GCNI) was founded in 2002 to contribute to the development of the "Global Pact" in Italy. In June 2013, the GCNI created the **Global Compact Network Italy Foundation**, with **Ansaldo STS as founding member and sponsor**, along with 17 other Organizations, private companies, universities and research institutes, non-profit foundations and civil society Organizations.

The Global Compact Network Italy Foundation participated, together with the CSR Manager Network and Fondazione Sodalitas, in the *public consultation on the implementation of directive 2014/95/EU of the European Parliament and Council of 22 October 2014*, implementing directive 2013/34/EU in respect of the disclosure of non-financial information and information on diversity by some companies and large-size groups. The joint contribution[15], the content of which is approved by Ansaldo STS, was sent to the Office IV – Division IV of the Treasury Department of the Ministry of the Economy and Finance.

CSR MANAGER NETWORK

Through Andrea Razeto – External Communications, Ansaldo STS participates in the CSR Manager Network, the national association that groups the professionals of the main Italian companies committed to sustainability issues. The association is a place to discuss Italian and foreign best practices and acts as a representative

15. http://www.globalcompactnetwork.org/it/news-e-eventi/notizie/1231-la-fondazione-gcni-partecipa-alla-consultazione-pubblica-sull-attuazione-della-direttiva-2014-95-ue.html

body and communicates with the world of politics, business associations, trade unions, environmental associations and other NGOs. It also promotes and tests sustainability and actively participates in national and international discussions. It is the Italian network hub for similar associations that are being set up around the world. The CSR Network is Italy's official representative in the Global Network of the World Business Council for Sustainable Development (WBCSD).

Principles of the Global Compact	Ansaldo STS
HUMAN RIGHTS	
1. Support and respect internationally proclaimed human rights within the company's respective spheres of influence 2. Ensure that they are not complicit in human rights abuses, even indirectly	• Code of ethics and training • Declaration of respect for human rights • Personnel management policy • Fair remuneration • Company climate and improvement measures • Internationalisation and multi-cultural management • Worker health and safety policy • Product liability and safety • Ethical control of the supply chain
LABOUR	
3. Uphold workers' freedom of association and the effective recognition of their right to collective bargaining 4. Eliminate all forms of forced and compulsory labour 5. Effectively abolish of child labour 6. Eliminate discrimination in respect of employment and occupation	• Code of ethics and training • Labour policy declaration • Remuneration and incentives • Fair remuneration • People Care – Employee initiatives • Personnel management, recruitment and hiring policy • Training and development • Trade unions • Company climate and improvement measures • Ethical control of the supply chain
ENVIRONMENT	
7. Support a precautionary approach to environmental challenges 8. Undertake initiatives to promote greater environmental responsibility 9. Encourage the development and diffusion of environmentally friendly technologies	• Environmental policy and management system • Environmental certification and registration • EHS training • Taking a prudent approach • Carbon management system (Scope 1, 2 and 3 emissions measurement) • Participation in the Carbon Disclosure Project • Measurement and control of environmental impact (energy consumption, greenhouse gas emissions, water resources and waste) • Commitment to improve performance • Product innovation to reduce environmental impact • Italian and EU research projects for railway transportation safety and to reduce its environmental impact
ANTI-CORRUPTION	
10. Combat corruption in all its forms, including extortion and bribery	• Code of ethics and training • Organizational, management and control model pursuant to Legislative decree no. 231/2001 • Procedural system applied by all Ansaldo STS companies

Local corporate social responsibility

The following table groups and classifies the main corporate social responsibility initiatives carried out locally by Ansaldo STS France, US and Australia.

COUNTRY	DEPARTMENT	INITIATIVE	INNOVATION	ANTI-CORRUPTION	HEALTH AND SAFETY	PRODUCT/PROCESS ENVIRONMENTAL IMPACTS	CLIMATE CHANGE	SUPPLY CHAIN SUSTAINABILITY	HUMAN RESOURCES AND COMPANY WELFARE DEVELOPMENT	STAKEHOLDER INVOLVEMENT AND FOCUS ON LOCAL COMMUNITIES	RESPECT FOR HUMAN RIGHTS
FRANCE SWEDEN SPAIN	HR	**Implementation of the annual personnel training plan** *(personal development, skill improvement, foreign languages, technologies, etc.) and enhancement and acknowledgement of experience*							✓		
FRANCE	HR	**Signing of the "Respect at work" charter**			✓						✓
FRANCE SWEDEN	HR	**Implementation of the employees' welfare training programme:** *controlling stress, conflict management, assertiveness,...*			✓				✓		
FRANCE SWEDEN	HR	**Contributions to associations.** • Preventing sexual abuse ***UNICEF, Active school, Sweeden*** • Encouraging and promoting the careers of women: ***Elles Bougent*** *http://www.ellesbougent.com/* • Access to the study for less advantaged students: ***Passeport Avenir*** *http://www.passeport-avenir.com/*					✓	✓			
FRANCE	HR	**Partnerships with local nurseries for employees' babies**							✓	✓	
FRANCE SWEDEN	HR	**Development of a collaboration with secondary schools and through forums** (information and selection)							✓	✓	
FRANCE	HSE	**GHG annual report** *(in accordance with French legislation) and* **Energy audit** *(at the Les Ulis site)*			✓	✓	✓				
FRANCE	FACILITIES	**Contribution to the Les Ulis transport plan**				✓				✓	
FRANCE	FACILITIES	**Energy savings:** *replacement of LED light bulbs at all the premises of the Riom and Les Ulis sites*				✓	✓				
FRANCE	SALES	**New multi-beam HBD production** *(produced at the Riom site)*	✓								
FRANCE SWEDEN SPAIN	EXT. COMMUNI-CATION	**Ansaldo STS Charity Day** *in favour of Unicef*									✓
SPAIN	H&S / HR	**Training about health, safety and the environment,** *in order to increase the awareness of all Ansaldo STS Spain's employees, subcontractors and workers of the Ansaldo STS-Inabensa partnership*			✓				✓		
SPAIN	HR	**All Ansaldo STS Spain's employees benefit from a medical insurance scheme paid by the company**			✓						
SPAIN	HR	**Ansaldo STS Spain signed cooperation master agreements with the most prestigious Universities** *of Madrid and another autonomous Spanish region, to offer internship programmes to university students near graduation*							✓		
SPAIN	HR	**Ansaldo STS Spain hired two people with disabilities**							✓		✓
SPAIN	H&S / HR	**Improvement of work stations in relation to specific issues of employees' health** *(special seats for the back, ergonomic footrests, portable humidifiers, etc.)*			✓						

COUNTRY	DEPARTMENT	INITIATIVE	INNOVATION	ANTI-CORRUPTION	HEALTH AND SAFETY	PRODUCT/PROCESS ENVIRONMENTAL IMPACTS	CLIMATE CHANGE	SUPPLY CHAIN SUSTAINABILITY	HUMAN RESOURCES AND COMPANY WELFARE DEVELOPMENT	STAKEHOLDER INVOLVEMENT AND FOCUS ON LOCAL COMMUNITIES	RESPECT FOR HUMAN RIGHTS
SPAIN	H&S / HR	**Psychosocial risk assessment** *to identify and resolve possible harassment issues*			✓						✓
SPAIN	H&S	**Actions for the preliminary improvement of structures and work methodologies to ensure personal safety**			✓						
SPAIN	FACILITIES	**Installation of LED lights and light switches for smaller areas** *at Ansaldo STS Spain offices and the common areas of the various buildings*				✓					
SPAIN	FACILITIES	**Improvement to the treatment of waste** *generated in offices and other workplaces (plastic, oil, metals, electronic equipment, cables, paper, etc.)*				✓					
SPAIN	PROCUREMENT	**Selection of local professionals to work at various sites**						✓			
US	HR	**Blood donation:** *the central blood bank visits the Pittsburgh site four times a year for voluntary blood donations from employees*			✓					✓	
US	HR	**Angel Giving Tree:** *employees' charity initiative in favour of 150 children in need in the area (Christmas presents)*								✓	
US	HR	**Financing RSSI - Railway Systems Suppliers Inc. scholarship programme.** *The scholarship amounts to USD2,000 per year up to four years in a row.*								✓	
US	HR	**Health and well-being initiatives.** *Every month employees are invited to a well-being initiative to promote healthy lifestyles and, in some cases, help those in need*			✓						
US	HR	**Charity Day -** *the proceeds were donated to the Red Cross of South Carolina*								✓	
US	HR	**Other charitable donations.** *Every year, Ansaldo STS's employees collect non-perishable food for the Greater Pittsburgh Area Food Bank.*								✓	
AUSTRALIA	HSE	**Health and well-being programme.** *In 2015, Ansaldo STS Australia launched a series of lessons held by a consultant to promote well-being at work*			✓				✓	✓	
AUSTRALIA	HR	**Employees' awards and bonuses.** *Ansaldo STS Australia rewards its employees for their commitment and loyalty during the annual Night of Stars loyalty awards. In 2015, 36 employees were awarded with two additional days-off paid.*							✓	✓	
AUSTRALIA	HR	**Vaccination.** *In 2015, anti-flu vaccines were offered free of charge (146 employees were vaccinated).*							✓	✓	
AUSTRALIA	HR	**The employees' assistance plan** *continued to provide all employees and their family members with free access to consultancies.*							✓	✓	
AUSTRALIA	HR	**Private health care.** *Company prices were renegotiated with the partners of the private health care fund, offering Ansaldo STS Australia's employees access to exclusive offers and competitive tariffs*							✓	✓	

INNOVATION

Innovation governance	72
Main products conceived and undergoing development	72
Product and solution safety and reliability	75
Energy efficiency and respect for the environment	76
Investment in innovation and intellectual property	79

Ansaldo STS has always devoted ongoing attention to research and development, in order to identify and create innovative technical solutions and develop products of the very highest quality, safety and environmental standards.

€ 36.9 million (+11.8%) invested in R&D directly allocated to profit or loss

77 authorised **family patents**

13 patents under evaluation

Leadership in **ERTMS satellite technologies**

WTIMS – Real time monitoring system of infrastructure and rolling stock

TCCS™ – Train Conformity Check System the multi-functional portal for the automated identification of defects on moving trains

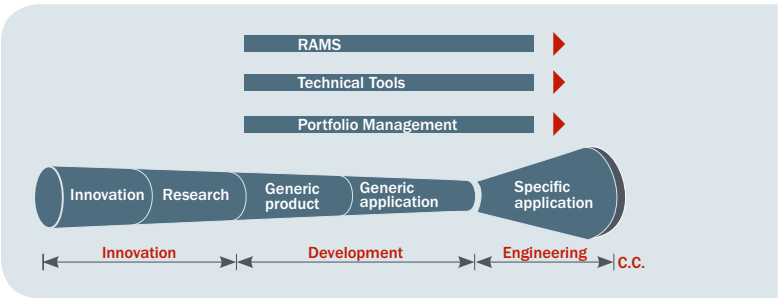
Safety and reliability of products, applications and systems. Top level (SIL4) for critical applications

Innovation and technology for **energy efficiency** and **reduced consumption of raw materials**

ECO-DESIGN - Reuse and reciclability of materials - Compliance with the REACH regulation - **Life Cycle Assessment**

Innovation governance

Ansaldo STS's innovation governance model involves all its companies and combines strategies, technologies, products, resources and markets so that research and development arises out of the excellent, distinctive expertise found within the company and the real needs of its customers. Ansaldo STS's Organizational structure ensures internal factors and external assessments are systematically integrated.



Main products conceived and undergoing development

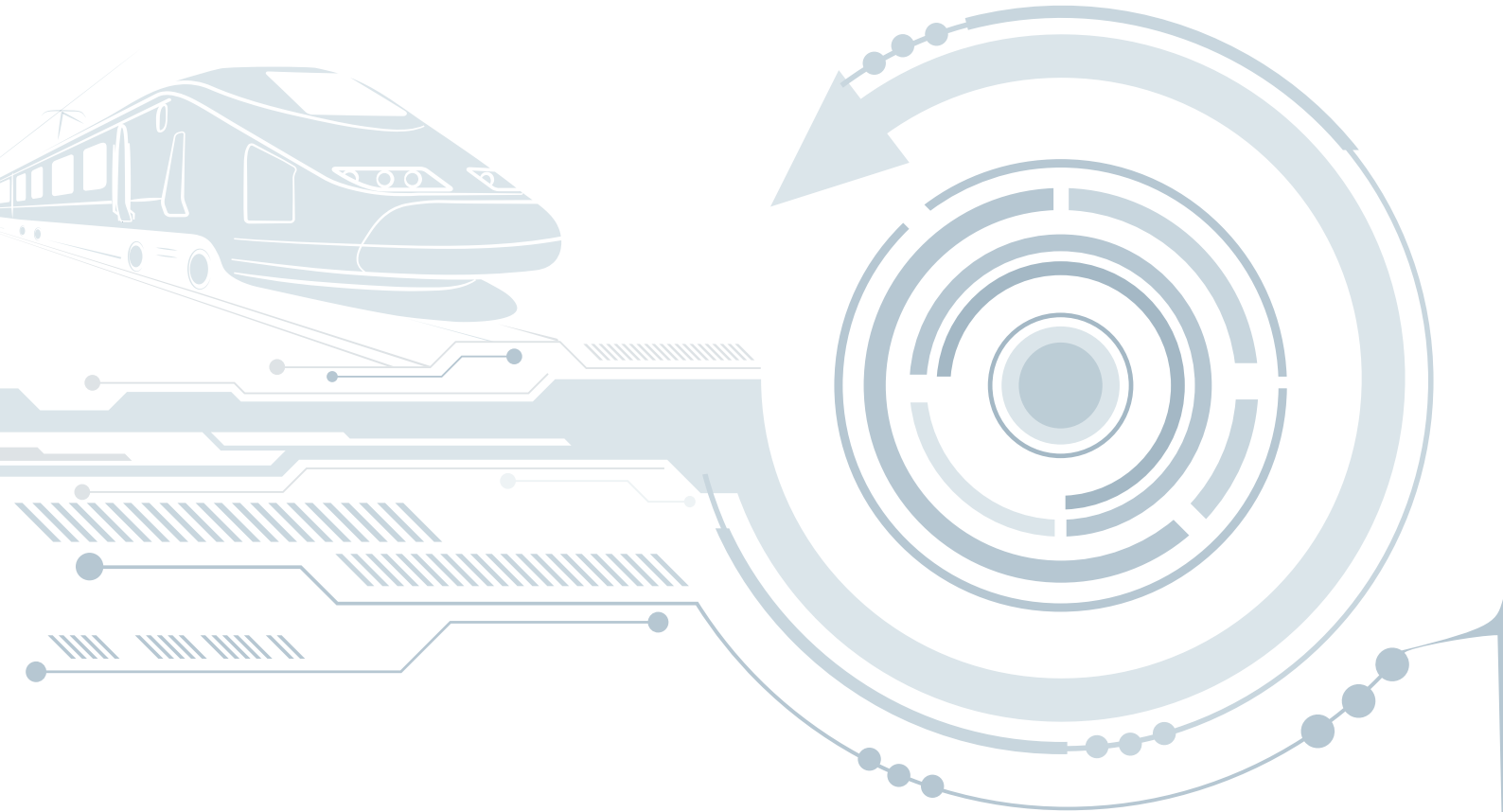
Over the years, Ansaldo STS has conceived and developed products and solutions that have pushed it to a leadership position in the Signalling Systems and Railway and Mass Transit Sectors.

OTP® - Optimizing Traffic Planner®

OTP is an innovative traffic management and railway handling system that redirects traffic in real time to increase speed and optimise vehicle movement, identifying the shortest and most efficient paths for trains. The OTP system can substantially increase network capacity, reducing operating costs at the same time.

ATC (Automatic Train Control) and ATP (Automatic Train Protection) systems

These are automatic train speed control systems in line with ERTMS (European Rail Traffic Management System) standards. They enable operators to control the safe movement of trains on railway lines, while continuously monitoring their position, maintaining safe distances and compliance with speed limits. The ATC system also includes a driverless function with various degrees of automation.



CBTC – Communication-Based Train Control

CBTC is a two-way, radio-based train distancing communications system between wayside and vehicle. It is in line with international standards (IEEE 1474.1.2.3) and offers utmost operating flexibility and complete interoperability on metro lines managed by different systems/technology operators.

Carborne controllers determine vehicle position and enforce movement within the authorised limits (LMA = limit of movement authority). Each vehicle's position is updated and reported continuously to the wayside Area Controller. The Area Controller can update each vehicle's LMA, knowing the position of the previous vehicle going in the same direction. This tool makes it possible to set a "moving block", which safely and significantly shortens the headway between two consecutive trains on the same track, increasing the transportation system's overall capacity. Communication between the control systems in the adjacent interlocking areas and carborne controllers supports safe headway maintenance and maximises line capacity.

Applications

Ansaldo STS has already installed and fully rolled out this technology on the Paris Metro Line 3 and, in China, on Lines 1 and 2 of the Chengdu Metro and on Line 1 on the Zhengzhou Metro. Ankara Metro received the Safety Assessment Approval for CBTC operation. It is currently designing and, in some cases, installing this technology on projects including the Stockholm Metro's Red Line, the Taipei Metro's Circular Line, the Milan Metro's Line 4, the Copenhagen Metro's Cityringen and the Riyadh Metro (the last two will be driverless), along with another six metro lines in China, in the cities of Shenyang, X'ian, HangZhou and Dalian.

Wayside platform

Ansaldo STS has implemented the interlocking platform known as WSP (Wayside Standard Platform), capable of managing a greater number of trackside equipment using a smaller number of basic components and integrating safety, diagnostics and traffic management functions in one single control station, poised to become the best response to the increasingly sophisticated demands of the railway and metro market.

Applications

Since the late nineties, Ansaldo STS has implemented the requirements for an "open" platform on standard protocols, such as, TVM Lyon-Marseilles (1999), ERMTS Rome-Naples (2005), Turin-Milan (2006), Milan-Bologna (2008), Zheng-Xi (2010), Madrid-Lleida (2011), Cambrian (2011), Poříčany-Kolin (2011), Haparandabanan (2013), the CBTC lines in Chengdu (2011), Shenyang (2012), the Ankara Metro (2014) and the conventional Turin-Padua lines (2014).

TRAMWAVE®

This is a power system for trams that uses an embedded ground-level power supply which only energises the part of the line being used by a tram. The system enables the protection of historic city centres, as it eliminates conventional overhead electric lines. The concept behind this innovative tram system and the excellent results achieved in the wake of testing have generated enormous interest among urban planners in countries looking for safe, ecological and low-environmental impact public transit solutions.

Applications

In November 2013, a contract was signed with the Chinese company CNR Equipment Engineering Co Ltd for the supply of 8.7 km of TramWave® double track lines to build a new tram system in the city of Zhuhai in southeast China. The contract also provides for the installation of the related reception, diagnostics and powering systems. It has made it possible for Ansaldo STS to build the first catenary-free tramway and begin the technology transfer process to the CNR/GRG joint venture, which will manufacture and sell the product in China in exchange for a lump sum and royalties for each km of line sold. In November 2014, a trial run took place along a 1 km section using a tram from the fleet as part of an international event in Zhuhai. During the year, works were completed and the trial run was extended to the line as a whole, pending the activation of the revenue service at the end of the test stage.

Satellite signalling

For the first time in railway history, Ansaldo STS has used satellites to manage safe train travel. In March 2012, Ansaldo STS signed the 3InSat contract with ESA (European Space Agency) to develop and validate new safe geo-localisation and satellite telecommunications platforms to be used for ERTMS-ETCS railway signalling systems. Ansaldo STS is the head of an industrial consortium that includes the participation of, inter alia, RFI, DB-Nets and DLR (Germany's space agency), which, together with ASI (Italy's space agency) are the greatest contributors to the European satellite navigation system, GALILEO.

Link

> See page 158 *"Research projects with Italian and EU public institutions"*

Ansaldo STS's solution constitutes a technological innovation of global importance. It will use geo-localisation satellite technology instead of conventional train localisation systems, which require electronic devices installed along the railway line, thereby reducing costs and environmental impact.

Applications

In 2014, the development phase of the satellite systems was completed and testing on the Cagliari-Olbia line started with the prototypes. During the first stage, Ansaldo STS tested the feasibility of the TLC satellite system integrated with the cellular network while the second stage, which took place in 2015, and the first two months of 2016, will be focused on testing the on-board and wayside satellite localisation equipment. The 3InSat project will be completed in February 2016. Following the successful results achieved to date, RFI and Trenitalia officially expressed their interest in applying the L2/L3 ERTMS integrated satellite solution on almost 45% of the secondary traditional network, replacing the current signalling systems.

In order to maintain its leadership position in the ERTMS satellite technology sector and to extend the existing functionalities, Ansaldo STS launched the following projects:

- the "ERTMS on Satellite – Enabling Application and Validation" project financed by the Galileo Space Agency in 2015;
- the "Satellite Technology for Advanced Railway Signalling" project financed by the GSA (European Global Navigation Satellite System Agency) which will be launched in 2016;
- the "Railway High Integrity Navigation Overlay System" project which will be launched by the GSA in 2016.

Furthermore, Ansaldo STS is party to a contract for the provision of a signalling system for freight traffic that positions rolling stock using the satellite technology, to the customer Roy Hill. The system integration tests will begin in 2016 in Roy Hill using a traction unit with IETO and On Board LDS on-board equipment, three reference stations and one VSS (IXL/RBC).

TCCS - Train Conformity Check System

TCCS is a multi-functional railway portal that automatically detects irregular conditions that affect rolling stock in transit. It is one of the company's key projects thanks to its cutting edge technology. Thanks to its sensors, the portal controls passing trains at cruise speed and overlaps the visible form, laser and infrared to detect:

- the composition of the train and models of component vehicles;
- overheated parts of the train and fire risk;
- abnormal load;
- shape compatibility.

TCCS ensures higher safety standards for the railway system, reducing the risk of accidents.

Applications

The TCCS product was developed on the multi-function portal prototype installed at Sezze (Latina), ordered by Rete Ferroviaria Italiana after its call to tender. It is currently completed and in use. In 2015, two new portals were installed in Italy (on the Milan-Genoa and La Spezia-Parma lines) to ensure the safety and protection of railway tunnels, including by obtaining the SIL4 certification under CENELEC provisions.

Product and solution safety and reliability

Ansaldo STS ensures that its products, applications and systems, which it develops and delivers are: safe, in compliance with the Italian and international laws applicable to the railway systems; reliable, pursuant to its customers' requirements and its internal quality standards.

These activities are performed on all Ansaldo STS projects in which safety and reliability are relevant, which constitute over 90% of total company activities.

Safety and reliability are achieved through hazard analysis, a structured process in line with sector standards. It begins with the identification of hazards based on previous experience, the assessment of specifications for the various processes stages and hazard workshops during which experts from Ansaldo STS and customers discuss the various issues. Potential hazards are then included in a hazard log, which is constantly updated over the life cycle of the project. For each hazard mapped, the log also includes the mitigation measures, activities to check that they were effectively implemented and an assessment of the residual hazard. The residual hazard level is assessed and accepted only if it is below the limits established by standards and customer requirements.

The main safety standards are those issued by CENELEC - European Committee for Electrotechnical Standardisation. Specifically, relevant standards are:

- CEI 50126 on RAMS applicable to railway field;
- CEI 50128 on software security;
- CEI 50129 on electronic device safety;
- CEI 50159 on railway communications security.

Recording and assessment of non-conformities and accidents to improve safety

Any non-conformities with safety specifications during the development, testing and, obviously, roll-out, is carefully analysed and recorded. In general, no conduct of this type is tolerated and requires a review and change (hardware or software) in the element that does not meet the technical specifications provided for.

In general, Ansaldo STS gathers two types of data to assess the reliability of its products: data on parts (fault charts), beginning with the assistance requests sent to the Service unit and data on systems affecting the key service parameters (frequency of trains, skipped runs, delays, etc.). Data on parts are analysed to identify the most defective parts and alternative solutions are sought to improve performance, while for data on systems, all service interruptions are analysed to determine the causes.

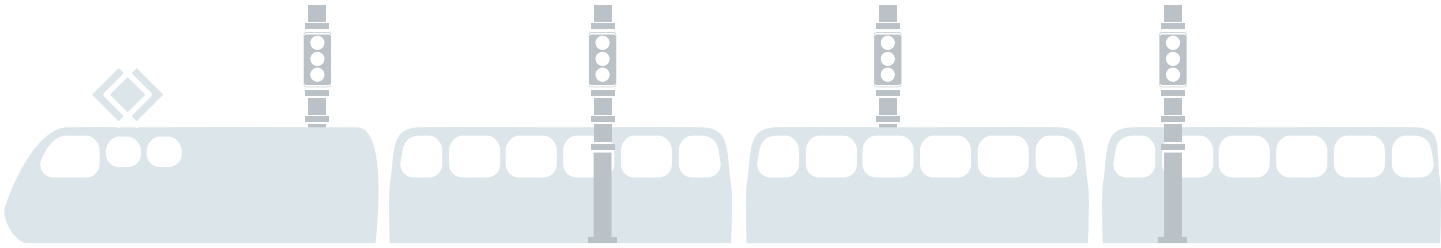
Reliability of solutions

The reliability of solutions is also due to the use of redundant platforms that provide fault tolerant configurations, i.e., those that can continue to function even when certain sections present faults. This type of approach was successfully applied in Italian high-speed

railways, where specific systems have been developed for the diagnostics and control of the electrical substations. These tools make it possible to plan "preventive maintenance" on lines, i.e., monitoring all substations and reporting when one of them is at risk of faults. In this way, greater environmental sustainability is ensured, with the resulting reduced consumption of spare parts and lower risk of service interruptions on the line due to faults.

Safer spaces for customers and end users

Ansaldo STS offers passengers safe and controlled areas by equipping network vehicles with sensors that constantly monitor railway areas. The sensors operate around the clock.



Energy efficiency and respect for the environment

Ansaldo STS's unwavering commitment to providing its customers and end users (passengers and freight) with the best products and system solutions, the use of the best design methodologies and procedures and the best existing construction methods and processes contributes to increasing safety and reducing direct and indirect impact on the environment.

Energy efficiency

Ansaldo STS's research into energy efficiency concentrates on the following macro-areas:

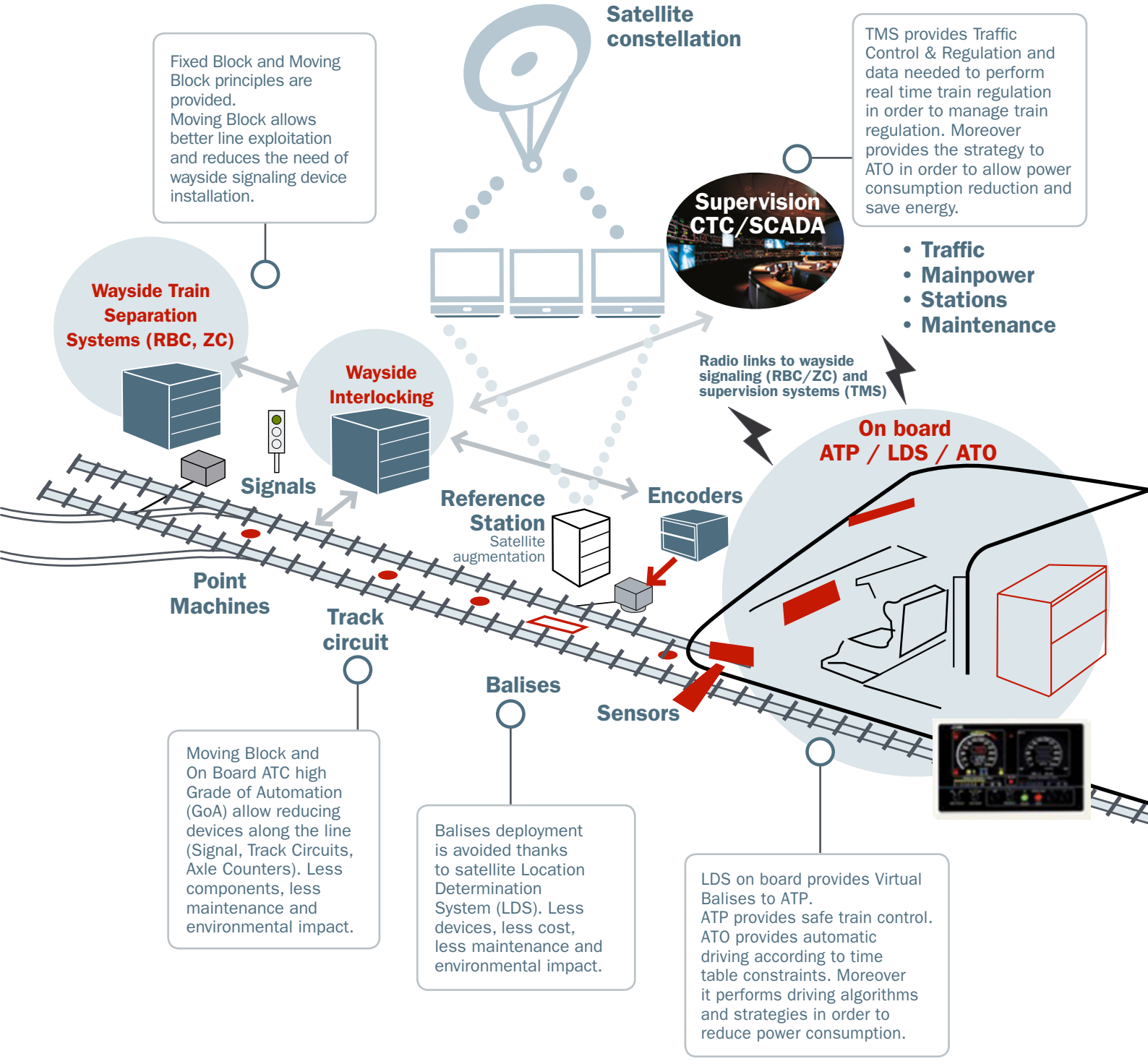
- "Assistance with the design of turnkey systems", through holistic hardware-in-the-loop simulators to provide a transport system that uses energy efficiently.
- "Operation – rail & driverless", focused on searching for the optimum speed profile, considering scheduling and driving conduct.
- "Technologies for energy savings", for ground recovery systems, geothermal heat pumps, simulators for the optimal size of supercapacitor accumulation systems.

The company develops these areas as part of the MERLIN (Management of Energy in Railway Systems), OSI - RIS (Optimal Strategy to Innovate and Reduce energy consumption In urban rail Systems) and SFERE (Sistemi FERroviari: ecosostenibilità e Risparmio Energetico) research projects.

Link

See page 158 *"Research projects with Italian and EU public institutions"*

ANSALDO STS's MEASURES TO IMPROVE THE SUSTAINABILITY OF ITS PRODUCTS AND SOLUTIONS



Two important innovations introduced by Ansaldo STS in signalling systems for train control relate to the use of public telecommunications networks and GPS - Global Positioning Satellite - technology. The use of these new control systems replaces track equipment, which required greater energy consumption. These systems will especially be used on low traffic lines in Europe, which make up about 50% of the total network length.

The company is currently standardising the new COTS (Commercial Off The Shelf) hardware platforms based on CPU with Atom (single or dual core) technology, which allow a reduction in consumption from about 250 W to about 30 W for each processing unit, nearly 90%. For example, as there are more than 250 CPU on the northbound line, the estimated energy saving is approximately 1,320 KW a day.

Reducing raw materials consumption

The use of powerful technological platforms integrating several functions in the same subsystem enables Ansaldo STS to reduce the size of equipment and their connectors, using simple and effective systems for scheduling, testing and roll-out. In addition, the search for increasingly standardised designs encourages innovation and a reduced use of components.

Specifically, over the past few years, methods to compact hardware of the central and outlying units of the railway control systems produced by Ansaldo STS were introduced and refined. They are based on both mechanical and technological solutions and allow a reduction in volumes, size, heat dissipation and waste to be eliminated of roughly 35%-40%.

Other methods to eliminate and simplify hardware included:

- the use of software from different subsystems on the same machine, such as for example, interlocking and radio block centre, usually used on separate hardware;
- the use of environmental sensors already in place as standard features on the CPUs instead of the previously used external sensor units;
- replacement of very bulky (and energy consuming) sophisticated industrial monitors with commercial equipment that meets the modern Green IT paradigms including with respect to the environmental impact of the materials used (this approach had already been implemented in the Turin-Padua northbound line and is of great interest for the revamping of the existing systems);
- centralised diagnostics (via web) rather than located in the outlying sites;
- maintenance systems based on commercial handheld devices replacing the traditional “heavy” equipment (this approach had already been implemented for the Roy Hill project);
- study and testing of embedded highly efficient innovative systems for railway applications (NEMBO research project).

Ecodesign

Partly in response to certain new contracts (e.g., the Montreal MPM-10 train control system project), Ansaldo STS is paying greater attention to studying ecodesign aspects, including to meet customers’ environmental standards, such as:

- Analysis of compliance with REACH – Registration, Evaluation and Authorisation of Chemicals (an integrated registration, evaluation, authorisation and restriction system for chemicals established in the EU);
- analysis of the re-usability and recyclability of materials;
- Life Cycle Assessment (LCA)[16]

The methodological approach entails a comparison of processes, materials and products in order to evaluate whether choices are ecologically compatible. The design stage, along with an analysis of costs and quality level, makes it possible to identify critical points in the life cycle. The analysis process is carried out using software and considering the applicable legislative requirements and UNI ISO 14040 standards[17].

There is also more focus on the choice of materials, increasingly based on their ecological compatibility, starting from the product’s design stage (e.g., resins and paints of tropicalised circuit boards).

New approaches to hardware testing make the simultaneous testing of thousands of units possible, whereas previously tests were performed on one “box”, or controller, at a time. This solution, called WSP Sim, has already been used for the Pisa system (northbound line).

The environmental management requirement for some ongoing contracts (e.g., the Copenhagen Cityringen) is to define an environmental policy to be applied during all the system implementation stages and requires preparation of an environmental impact plan, an environmental action plan, etc.. In particular, with respect to ecodesign, environmental impact considerations must be included in the project flow in line with the environmental policy. The following objectives are set:

- base the environmental management system on the DS/EN ISO 14001 standard;
- consider environmental issues when taking decisions and include them in the project characteristics;
- work to high environmental standards and improve performances as much as possible over the project term;
- use raw materials and energy efficiently, optimising their re-use and recycling to minimise waste and waste products;
- safeguard environmental values and culture;
- prevent unwanted environmental consequences and reduce the project’s environmental impact;
- make a separate, specific and measurable commitment to respect nature.

16. Life Cycle Assessment (“LCA”) is a methodology that evaluates a series of interactions that a product or service has with the environment, considering its entire life cycle, which includes pre-production (including the extraction and production of materials), production, distribution, use (including re-use and maintenance), recycling and final disposal. The LCA procedure is standardised at international level by ISO 14040 and 14044 (International Organization for Standardization).
17. The regulation describes the principles and reference framework to assess the lifecycle.

LED technology

For the last few years, Ansaldo STS has produced LED-based traffic lights at the Tito Scalo and Batesburgh sites. This innovation has a positive impact on energy consumption, the management of maintenance and the disposal of maintenance material. Suffice it to say that bulbs were normally changed every four months, while LED bulbs last at least ten years.

Specifically, the following products have been developed, produced and are already installed for various operations (such as the Turin-Padua line) in Italy alone:

- SALACC (LED signalling for electronic central management systems)
- Blue LED Signal for electronic central management systems
- Blue LED Signal for ACEI systems
- Shunting Signal LED for ACC
- Shunting Signal LED for ACEI (currently being endorsed with RFI)

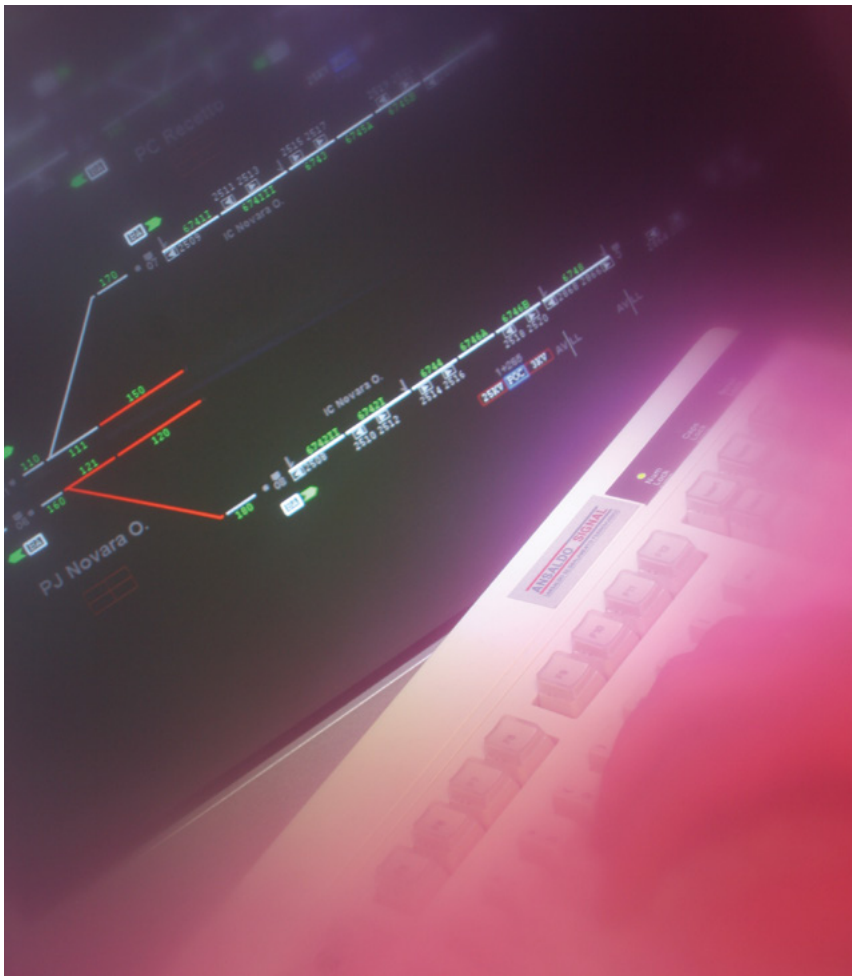
Reliable and efficient hourly traffic

The tools that Ansaldo STS has designed and produced enable operators to create more efficient timetables for trains running on railway infrastructures, establishing, in particular, which places are the best for stops, junctions and passing, and determining travel times to minimise waits and consumption. Therefore, these tools make it possible to prevent and supply pro-active measures to combat traffic caused by train delays, scheduled and non-scheduled maintenance, natural disasters and personnel shifts. This support technology is also used to significantly cut down on fuel by increasing the average speed of trains, concurrently reducing the waste of fuel for acceleration closely followed by braking due to temporary slowdowns or signals to stop.

Investment in innovation and intellectual property

In 2015, total expenditure for research and development came to €39.8 million (2014: €37.3 million), with income generated from grants of approximately €2.9 million (2014: €4.3 million).

Ansaldo STS carefully safeguards its intellectual property, requiring, inter alia, the filing of patents and the registration of trademarks. At year end, it held 77 families of patents, while 13 were under evaluation, and 44 registered trademarks.



THE ENVIROMENT, HEALTH AND SAFETY

Environmental sustainability	82
Environmental policy	83
Environmental training	84
Climate change	86
Environmental performance	90
Health and safety	100

Ansaldo STS's environmental sustainability and focus on its people's safety is a daily commitment for Ansaldo STS which it meets by adopting specific policies and encouraging ethical conduct by its collaborators and stakeholders.

Energy consumption per hour worked
production sites -17.4%

Accident rates production sites
frequency 0.27
seriousness 1.07

Accident rates office sites
frequency 0.14
seriousness 2.74

-8.3%
greenhouse gas production

Integrated management system
quality, safety and the environment

34.3%
electrical energy from renewable sources

One of the **highest scorers** in the Carbon Disclosure Project

-27.5%
total production of waste
office sites

-4.9%
electrical energy consumption

Environmental sustainability

Ansaldo STS is aware of the fact that carrying out its business in social, environmental and cultural contexts that often differ widely, requires a commitment to pursue the common goal of sustainable economic development in terms of the direct consequences that its business could have and its spheres of influence.

Ansaldo STS's guiding environmental principles are:

- compliance with ruling regulations;
- prevention of environmental damage caused by its operations;
- ensuring that its operations are sustainable;
- constantly updating monitoring tools;
- application of ongoing improvement principles;
- transparent disclosure of its environmental performance;
- encouraging its employees to adopt sustainable conduct.

In order to actively and responsibly contribute to combating the challenges posed by climate change, Ansaldo STS complies with the current regulations and also applies best practices to achieve better results, continuously improving its environmental management in an economically effective way.

To this end, it has developed an approach based on the preventive analysis of the impacts of its operations on the environment and the constant monitoring of consumption and waste during production. This approach has allowed the company to identify "environmental improvement" areas and to intervene with specific measures:

- energy efficiency, through tailored initiatives to optimise office lighting by installing low power systems and building insulation systems designed to reduce the need for heating;
- increase personnel's awareness of the issue of environmental protection, encouraging them to adopt environmentally-conscious conduct to save energy, as part of ongoing improvement.

Environmental policy

Ansaldo STS' environmental policy is based on the application of UNI EN ISO 14001:2004 requirements and those of other relevant international standards, compliance with applicable domestic and international legislation, developing a programme focused on the continuous improvement of environmental standards. The policy is shared with all Ansaldo STS personnel and all concerned parties online and via the company Intranet.

Internally, in line with its mission, Ansaldo STS involves all personnel in the reduction and control of the environmental impact of its business, by clearly defining objectives and accountability. In this way, Ansaldo STS aims to be recognised as one of the leading companies for the safeguarding and protection of the environment.

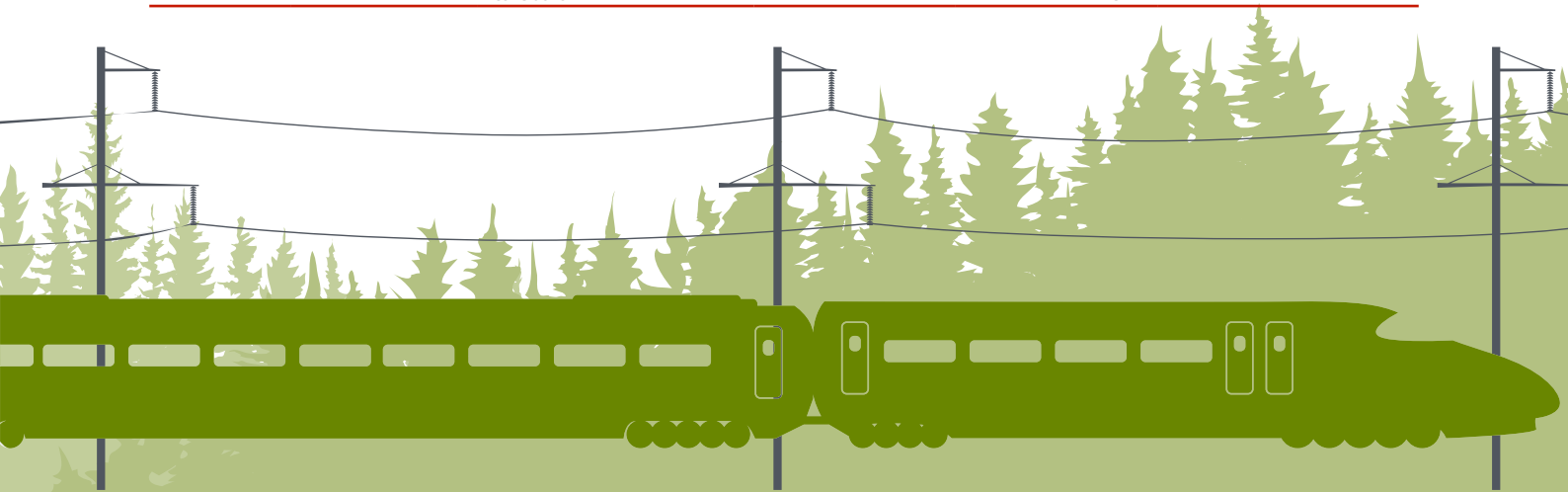
Integrated management system

Ansaldo STS has implemented an integrated management system (IMS) for the environment, safety and quality, establishing global corporate policies and procedures to ensure the controlled management of processes and activities relating to safety in the workplace and environmental protection. Subsequently each company established local environmental and safety policies, on the basis of legislative requirements and corporate policies and procedures.

At 31 December 2015, all three production sites were certified for quality (ISO 9001), health and safety (OHSAS 18001) and the environment (ISO 14001), and the Tito Scalo production site had also registered its EMAS (Eco Management and Audit Scheme). 18 office sites have quality certification and environmental, health and safety certification, as shown in the table below:

COUNTRY		NON-PRODUCTION SITES	ISO 9001	ISO 14001	OHSAS 18001
EUROPE	UNITED KINGDOM	London	•	•	•
	FRANCE	Les Ulis	•	•	•
	SPAIN	Madrid	•	•	•
	SWEDEN	Solna	•	•	•
	DENMARK	Copenhagen	•	• IN PROGRESS	• GREEN SMILE WITH CROWN
	ITALY	Genoa	•	•	
		Naples	•	•	
		Piossasco	•	•	
US		Pittsburgh	•	•	
AUSTRALIA		Brisbane	•	•	• AS/ZNS 4801:01
		Newcastle	•	•	• AS/ZNS 4801:01
		Perth	•	•	• AS/ZNS 4801:01
		Sidney	•	•	• AS/ZNS 4801:01
		Karratha	•	•	• AS/ZNS 4801:01
INDIA		Kolkata	•	•	•
		Noida	•	•	•
		Bangalore	•	•	•
CANADA		Ontario	•	•	•

COUNTRY	NON-PRODUCTION SITES	ISO 9001	ISO 14001	OHSAS 18001
US	Batesburg	•	•	•
FRANCE	Riom	•	•	•
ITALY	Tito Scalo	•	• EMAS	•



Scope of application of the environmental management system

The environmental management system that the Ansaldo STS companies have adopted is applied to the following:

- **PRODUCTION SITES** for the manufacturing of products to be used in safety, control and monitoring systems supplied by Ansaldo STS;
- **OFFICE SITES** mainly for signalling plant design; the analysis of safety, reliability and availability; laboratory testing; contract management and control; research and development; procurement; and prevention and protection;
- **WORK SITES**. where Ansaldo STS's direct activities relate to management and coordination, surveillance and control of production, commissioning, roll-out of plant and delivery to the customer. With respect to environmental issues Ansaldo STS, as a result of such activities, operates according to an environmental site management procedure, based on an initial environmental analysis of the work to be performed at the site, prepared and agreed with the subcontractors. Following initial analyses, a monitoring plan is prepared to continuously ensure legal compliance and that all opportunities are taken to limit the environmental impact that the opening of any site inevitably entails.

The environmental management system takes into account both **direct impact**, i.e., the impact of Ansaldo STS companies' operations, and **indirect impact**, i.e., impact associated with purchasing, design and product supply processes.

Environmental training

Ansaldo STS's environmental training path has been implemented with the cooperation of training needs managers (TNM). This initiative aims to identify personnel who can serve as contacts for Human Resources in the definition of specific training/development plans for operational structures, in order to facilitate understanding of the specific needs of each operational unit and make it possible to define projects that more accurately target their actual needs. TNM is distinguished by its concept of "Community", which translates into encouraging the creation of a network to reduce geographical distances.

In 2015, Ansaldo STS carried out training and information sessions to draw attention to:

- the procedures and requirements of the environmental management system;
- the significant, real or potential environmental impact of activities and the environmental benefits of improving individual performance;
- the roles and responsibilities needed to achieve compliance with the environmental policy and the procedures and requirements of the environmental management system, including preparing for emergency situations and response capacity;
- the potential consequences of not complying with the specified operating procedures.

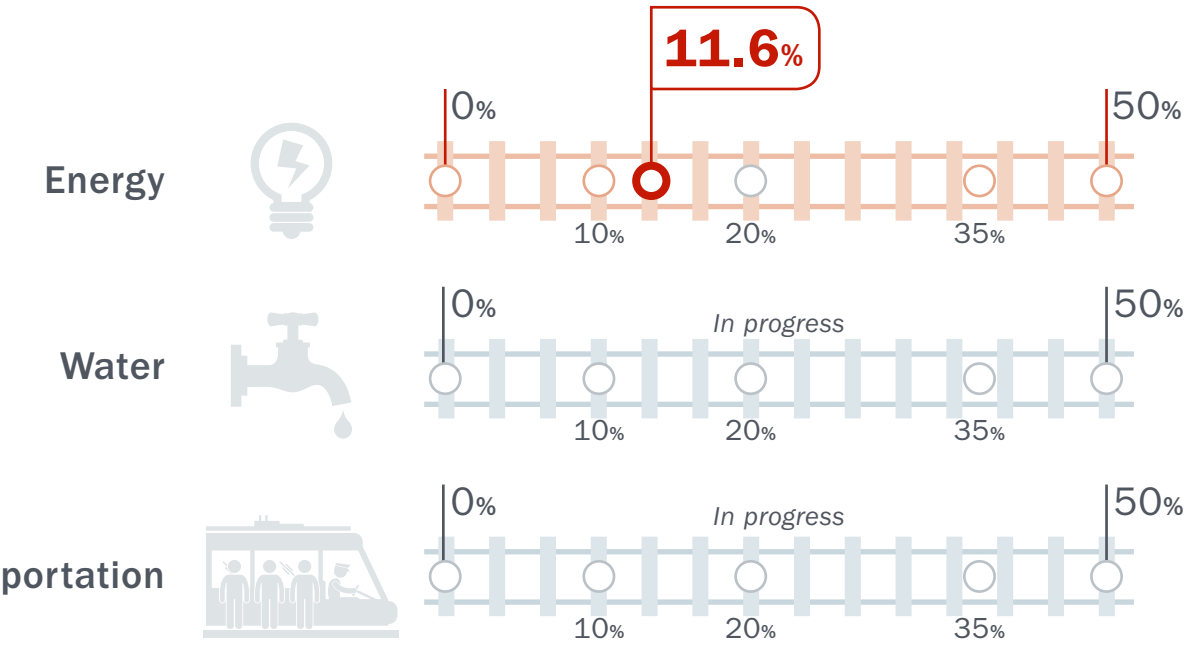
The training sessions were held by personnel competent in the relevant field. The specialised technical focus of the training demonstrates Ansaldo STS's aim of targeting, operating positions involved in duties and activities that are potentially critical in terms of the environment. With a view to focusing on maximising the efficiency of training, a total of 919 hours of training was provided during the year.

Environmental training

	2013	2014	**2015**
Total hours of environmental training	**1,494**	**2,713**	**919**

At the production sites with the highest environmental risks, the percentage of hours of environmental training compared to total training increased from 2.1% to 2.9%.

Ansaldo STS has taken part in the city of Pittsburgh's 2030 Districts Project **to halve energy use, water use and transportation CO_2 emissions by 2030.**



As part of the project Pittsburgh conducts the following to assist companies to scale back their impact on the environment:

- two-monthly meetings with partners to decide solution strategies;
- training sessions for company personnel;
- calculation and measurement of partners' data using a reporting platform.

Mainline Botswana Safeworking

Climate change

Ansaldo STS sees climate change as an opportunity. As part of this approach, it analyses the potential impact of its strategic climate change decisions in the short, medium and long-term, in order to find opportunities to develop the business, improve its efficiency and to identify the related risks.

The company is committed to progressively reducing GHG emissions in all of its processes. Its activities and initiatives to combat climate change are part of the environmental management system that Ansaldo STS has established at a global level, developing a carbon management strategy based on the following principles:

- **global approach:** the development of mechanisms that encompass the commitment of all Ansaldo STS sites;
- **reasonable and feasible long-term objectives:** the establishment of a clear and realistic vision of the steps to be taken;
- **support for the development of technologies:** developing advanced technological solutions.

This strategy focuses mainly on three spheres of influence:

- in-house activities and direct emissions from its sites (Scope 1 emissions);
- electrical energy suppliers and their operating emissions due to Ansaldo STS's activities (Scope 2 emissions);
- Ansaldo STS's supply chain and the emissions resulting from the production and delivery of goods and services (Scope 3 emissions).

Carbon Management System

Since 2011, Ansaldo STS has implemented and renewed its commitment to reduce the greenhouse gas (GHG) emissions produced directly and indirectly in the performance of its activities by applying the carbon management system (CMS), a system that enables it to monitor the carbon emission improvement process. This entails a planning, implementation and measurement process for emission reduction goals. An efficient carbon management policy will enable the company to reduce emissions, decrease consumption and reduce energy costs, thereby improving its bottom line, with the possibility of investing the savings.

The CMS has been developed in line with the relevant international standards. This system enables the company to perform:

- analyses of actual emissions produced;
- monitoring and reporting on emissions by type (Scope 1, Scope 2 and Scope 3);
- comparisons between historical data and forward-looking analyses;
- an assessment of the impact of products, in terms of emissions over their entire life cycle;
- economic/environmental analyses in relation to current regulations on emission reduction to determine assets' potential value-at-risk;
- the measurement of the effectiveness of emission reduction projects;
- communication on Ansaldo STS's emission reduction performance to the concerned parties, media, investors, rating agencies and other organisations.

Activities carried out to reduce the direct and indirect production of GHG

Within its organisation, Ansaldo STS has appointed a Carbon Manager, an Energy Manager and a Water Manager responsible for providing information and carrying out activities and projects with respect to energy savings at all company operating sites.

Travel Policy

Ansaldo STS's initiatives to improve employee travel include optimising travel paths, using carpooling and car sharing and promoting the use of public transportation and more sustainable means through its travel policy.

One of the effects of the travel policy can be measured by the considerable reduction in long-haul air travel.

Employees' travel - distance

	2014	**2015**
Short-haul flights [km]	16,544,435	18,388,450
Long-haul flights [km]	32,432,536	28,938,809
Road trips [km]	6,525,112	5,848,083
TOTAL [km]	**55,502,083**	**53,175,341**

Freight transport - distance

	2014	**2015**
By road [km]	1,896,000	773,000
By plane - short haul flights [km]	688,634	720,000
By plane - long haul flights [km]	1,597,815	1,750,000
By sea [km]	196,571	74,387
TOTAL [km]	**4,379,020**	**3,317,387**

Energy efficiency

Over the years, Ansaldo STS has implemented energy efficiency projects that have contributed to reducing energy consumption by nearly 20% Below are examples of steps taken by Ansaldo STS to reduce energy consumption:

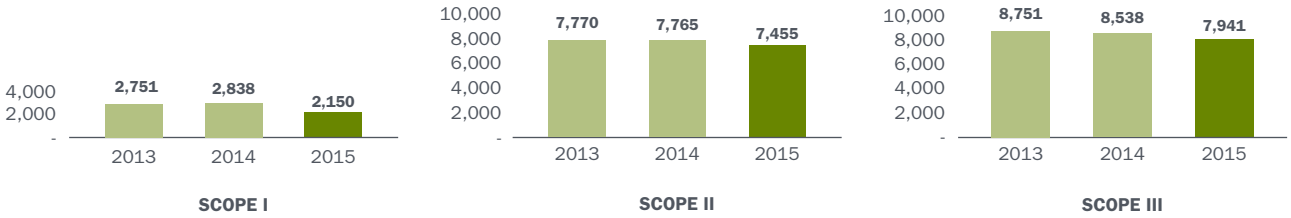
- installation of energy-efficient lighting systems and related electrical systems;
- increase in the energy efficiency of air conditioning and air treatment systems;
- elimination of or reduction in the use of transformers and air compressors;
- revision of the automated building management system to turn the lighting system and air conditioning on later in the morning and off earlier in the evening;
- improvement in the data centre's energy efficiency;
- affixing of signs to remind personnel about energy saving projects, such as turning off lights, laptop computers and devices that consume energy;
- reduction in the number of vehicles used by the company;
- reduction in the total volume of waste sent to landfills by encouraging the use of low impact substances promoting the reduction, recovery and recycling of waste.

Results

In the last three years, Co_2 production has gone from 19,272 tonnes in 2013 to 17,546.1 tonnes in 2015, recording an overall reduction of 1,725.9 tonnes (-9%).

	2013				2014				**2015**			
GHG	CO_2 (t)	CH_4 (tCO_2e)	N_2O (tCO_2e)	CO_2e (t)	CO_2 (t)	CH_4 (tCO_2e)	N_2O (tCO_2e)	CO_2e (t)	**CO_2 (t)**	**CH_4 (tCO_2e)**	**N_2O (tCO_2e)**	**CO_2e (t)**
SCOPE 1	2,741.3	6.2	3.8	**2,751.3**	2,826.0	6.9	4.9	**2,837.8**	2,140.9	6.7	2.2	**2,149.8**
SCOPE 2	7,743.2	3.1	23.7	**7,770.0**	7,739.2	3.0	23.3	**7,765.5**	7,432.3	3.7	18.9	**7,454.9**
SCOPE 3	8,262.9	480.2	7.6	**8,750.7**	8,107.8	423.7	6.7	**8,538.2**	6,914.9	1,024.9	1.5	**7,941.4**
TOTAL	**18,747.4**	**489.5**	**35.1**	**19,272.0**	**18,673.0**	**433.6**	**34.9**	**19,141.5**	**16,488.2**	**1,035.3**	**22.6**	**17,546.1**

Scope (tCO_2/e)



The following table details GHG emissions trend in the 2014-15 biennium in all its components:

	2014				**2015**				
GHG	**CO_2 (tons)**	**CH_4 (tons)**	**N_2O (tons)**	**CO_2e (tCO_2e)**	**CO_2 (tons)**	**CH_4 (tons)**	**N_2O (tons)**	**CO_2e (tCO_2e)**	**Var. %**
Stationary combustion of natural gas, fuel oil and GPL to produce heat and energy	1,217.75	0.11	0.00	**1,220.97**	1,546.60	0.16	0.00	**1,551.48**	+27.1%
Mobile combustion: Fuel oil for cars, lorries and forklifts	1,608.22	0.22	0.02	**1,616.83**	594.33	0.08	0.01	**597.92**	-63.0%
TOTAL SCOPE I	**2,825.97**	**0.33**	**0.02**	**2,837.80**	**2,140.93**	**0.24**	**0.01**	**2,149.40**	**-24.3%**
Electrical energy consumption	7,739.15	0.14	0.08	**7,765.43**	7,432.30	0.13	0.07	**7,454.88**	-4.0%
TOTAL SCOPE II	**7,739.15**	**0.14**	**0.08**	**7,765.43**	**7,432.30**	**0.13**	**0.07**	**7,454.88**	**-4.0%**
Employee flights (short and long haul)	5,275.85	0.00	0.00	**5,275.85**	5,059.26	0.00	0.00	**5,059.26**	-4.1%
Company cars (short and long-term lease)	1,502.12	0.00	0.01	**1,504.00**	1,099.25	0.01	0.01	**1,100.84**	-26.8%
Freight transport (by roads, sea and air)	1,007.78	0.03	0.02	**1,013.26**	450.74	0.01	0.00	**451.02**	-55.5%
Total materials consumption (paper, cardboard packaging, iron,steel and fuel)	314.53	10.38	0.00	**532.43**	298.09	6.04	0.00	**467.16**	-12.3%
Waste (Incinerated, disposed and recycled)	7.50	9.76	0.00	**212.66**	7.60	30.55	0.00	**863.12**	305.9%
TOTAL SCOPE III	**8,107.78**	**20.17**	**0.03**	**8,538.20**	**6,914.94**	**36.61**	**0.01**	**7,941.39**	**-7.0%**
TOTAL SCOPE I, II, III	**18,672.90**	**20.65**	**0.11**	**19,141.43**	**16,488.2**	**37.0**	**0.1**	**17,546.06**	**-8.3%**

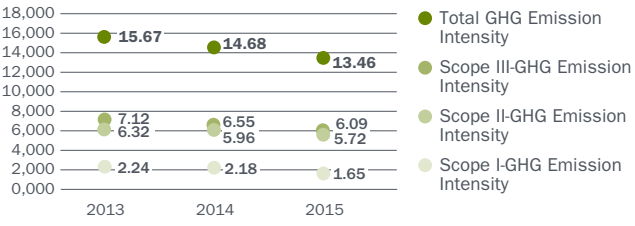
Scope I. In absolute terms, Scope I emissions reduced by 688 tonnes of CO_2e (- 24.2%) from 2014, as a combined effect of an increase, of 331 tonnes, of emissions from stationary combustion (notably, due to natural gas for heat production) and a significant reduction, of 1,019 tonnes, of emissions from mobile combustion (notably, due to fuel for cars and trucks).

Scope II. In absolute terms, Scope II emissions reduced by 311 tonnes of CO_2e (- 4.0%) from 2014 due to a 6.6% decrease of electrical energy consumption in the office sites and a 1.5% decrease in the production sites.

Scope III. Scope III emissions, covered in reporting, have recorded an overall reduction too: in absolute terms, indirect emissions reduced by 597 tonnes of CO_2e (-7.0 %) from 2014. This result was achieved thanks to the company Travel Policy that has helped to reduce emissions related to employees flights by 217 tonnes of CO_2e (-4.1 %), and emissions related to company cars by 403 tonnes of CO_2e (-26.8 %). The optimization of freight transport by road, sea and air contributed to a reduction of 562 tonnes of CO_2e (-4.1%) and the reduction of the use of materials led to a reduction of 65 tonnes of CO_2e (-12.3 %). On the other side, waste related emissions increased to 650 tonnes of CO_2e emissions due to a significant increase in the production of non-hazardous waste disposed in the Batesburg site in the USA.

The following chart shows the trend of GHG Emission Intensity, which measures the tonnes of GHG emissions by each €1 million of turnover.

GHG Emission Intesity Total e Scope I, II, e III
(tCO_2e/mln€ di fatturato)



GHG Emission Intensity (direct and indirect) KPI shows a 8.3% reduction from 2014 to 2015, from 14.68 tonnes of CO_2 by each €1 million of turnover recorded in 2014 to 13,46 tonnes recorded in 2015. Such result is due to above mentioned emissions decrease and an increase in the turnover. The reduction is even greater if compared to 2013 (-14.1%).

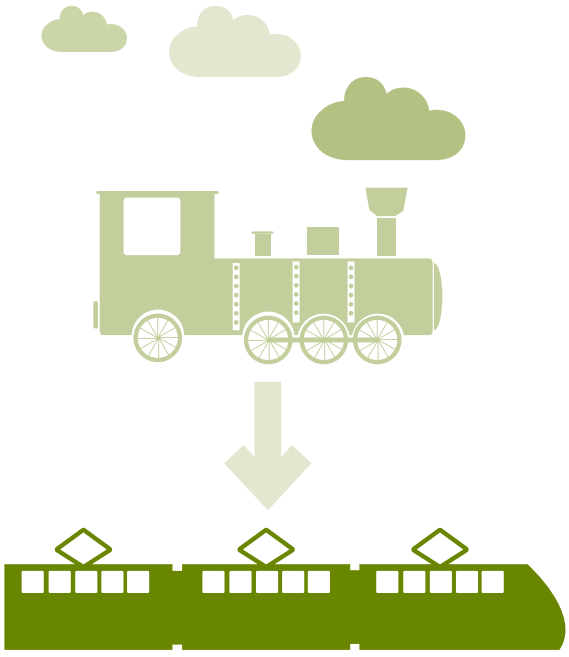
The same consideration applies to each single Scope considered in the GHG Emission Intensity calculation:

- Scope I emissions (direct combustion of fossil fuels from the organisation's sources) reduced by 24.3%;
- Scope II emissions (electrical energy used by the organisation) reduced by 4%;
- Scope III emissions (from sources not owned by the organisation, related to the transport of people and goods, consumption of raw materials and waste disposal) reduced by 7%.

Carbon Disclosure Project (CDP)

The significance of the issue of climate change for Ansaldo STS is confirmed through its updated materiality analysis and its completion of the Investor Carbon Disclosure Project questionnaire for the fifth consecutive year.

Consolidating the carbon management strategy entails defining a total emission reduction target. The CDP Italy 100 Climate Change Report for 2015, prepared by First Carbon Solutions, includes a detailed analysis of Italy's largest listed companies (in terms of stock market capitalisation) on the basis of two parameters: the quality of the information they use for transparent emissions disclosures and the quality of their climate change management performance. In 2015 Ansaldo STS scored 94 out of 100 in terms of disclosures and received a performance grade of C, with A being the best possible grade, improving its position compared to 2014 and ranking among the highest scoring companies. It is the third best participating company in the transporation industry.



Environmental performance

The scope of the report considered to process environmental, health and safety performance comprises the 16 sites of group companies (Pittsburgh, Genoa, Brisbane, Les Ulis, Bangalore, Solna, Batesburg, Naples, Karratha, Riom, Kolkata, Kuala Lumpur, Piossasco, Noida, Tito Scalo and Perth) that present significant environmental aspects: they are either sites where production is carried out or are non-production sites (offices) with more than ten employees. They employ 94% of the group's total employees.

PRODUCTION SITES

These are sites in **Tito Scalo**, Italy, **Riom**, France and **Batesburg**, US, where electro-mechanical parts and electronic devices are produced to be used in railway safety, control and monitoring systems. Site activities mainly consist of mechanical processing, the treatment of metallic and non-metallic materials, thermal treatments, superficial treatments and applying glue and resins.

Activities important from an environmental viewpoint are mainly painting, welding, moulding and cleaning circuits (electronic cards) using solvent.

	Total area	Plants, storage andwarehouses		Dirt car parks and roads		Green areas		Runways of airfields		Employees	Hours worked
	m²	m²	%	m²	%	m²	%	m²	%	NO.	NO.
TITO SCALO	**40,000**	8,400	21%	7,600	19%	24,000	60%	-	-	**125**	**233,416**
RIOM	**17,000**	5,610	33%	510	3%	9,690	57%	1,700	10%	**134**	**239,917**
BATESBURG	**146,330**	19,023	13%	45,362	31%	81,945	56%	-	-	**162**	**272,162**
Total	**203,330**	**33,033**	**16%**	**53,472**	**26%**	**115,635**	**57%**	**1,700**	**-**	**421**	**745,495**

The three production sites cover a total surface area of 203,330 square metres. Employees number 421 (+5.3% on 2014) and worked a total of 745,495 hours in 2015 (+18.9% on 2014). The Batesburg and Tito sites are located in areas that are included in the list of contaminated sites of national interest.

OFFICE SITES

Activities performed at the 13 administrative sites mainly consist of signalling plant design, the analysis of safety, reliability and availability, laboratory testing, contract management and control, research and development, procurement, and prevention and protection.

In geographical terms, the location of office sites are:

- three in Italy: Genoa, Piossasco (Turin) and Naples;
- two in Europe: Les Ulis (France) and Solna - Stockholm (Sweden);
- one in the US: Pittsburgh;
- seven in the Asia Pacific: Brisbane, Perth and Karratha (Australia); Kuala Lumpur (Malaysia); Bangalore, Noida and Kolkata (India).

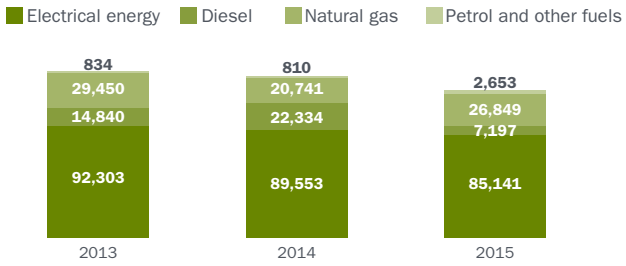
Non-production sites cover a total surface area of 147,407 square metres, with 2,833 workers (-11% on 2014), for a total number of hours worked in 2015 of 5,807,027 (-8.7%).

None of the 16 Ansaldo STS sites are subject to the IPPO (Integrated Pollution Prevention and Control) directive.

Energy consumption

Energy consumption is an environmental aspect that is assessed and measured at all Ansaldo STS offices and production sites when the environmental aspects of work sites and the construction of civil and technological works are analysed.

Total Energy Consumption (GJ)



To meet its production and operating requirements in 2015, the group consumed a total of 121,841.5 GJ of energy (-8.6% compared to 2014). This consumption can be broken down as follows: electricity from the grid: 69.9%; natural gas: 22.0%; fuel oil to produce energy and for fuel vehicle traction: 5.9%; petrol and other fuels: 2.2%.

Total energy consumption cuts were due to the 4.9% reduction in the consumption of electricity and the 67.8% decrease in fuel oil (particularly for vehicle traction). On the other hand, the consumption of natural gas was up by 29.4% due to the increase in consumption at non-production sites, and the consumption of petrol more than tripled as the US site in Pittsburgh used cars rather than aeroplanes for short-haul journeys.

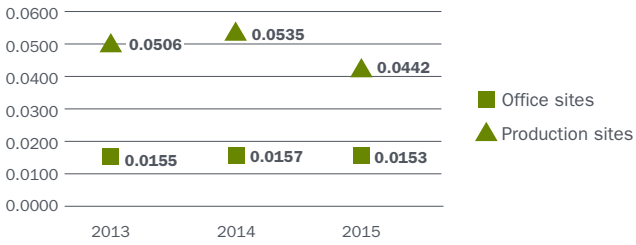
In absolute terms, 72.9% of total energy consumption is due to the 13 office sites and 27.1% to the three production sites.

At these three production sites, energy consumption was down 1.7% on 2014, due to the drop in consumption in natural gas (-4.0%) and electrical energy (-1.5%), while the consumption of petrol and other fuels rose (+2.7%).

The office sites showed a decrease in energy consumption (-11.0%) due to the reduction in consumption of electrical energy (-6.6%) and fuel oil (-67.9%), while the consumption of natural gas (+37.1%) and consumption of petrol and other fuels rose five-fold due to the aforementioned policy at the Pittsburgh site to reduce the use of short-haul flights.

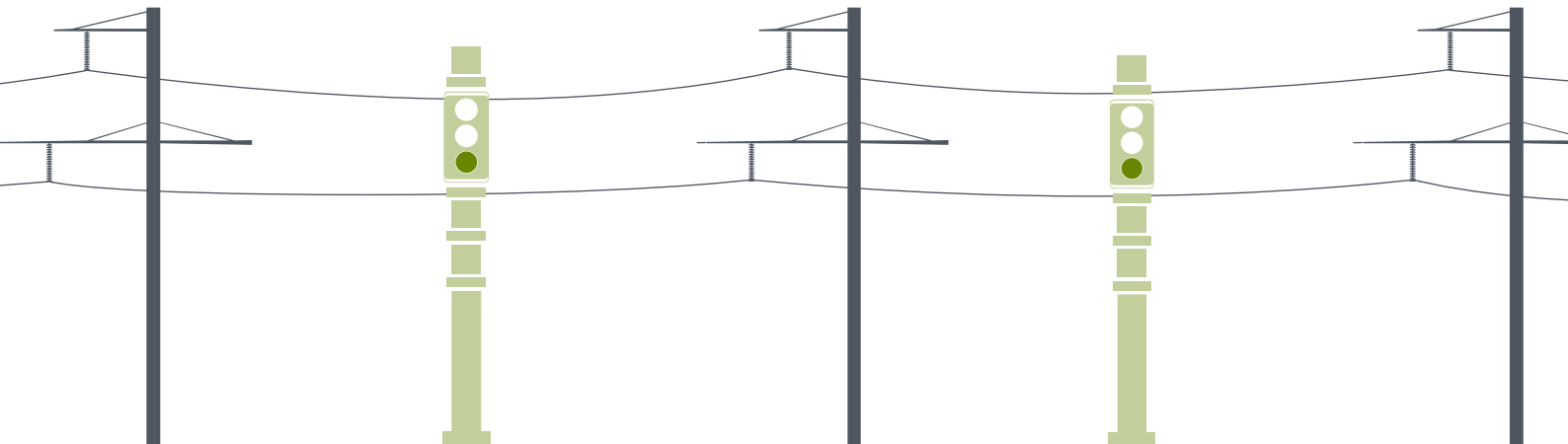
ENERGY INTENSITY

Total energy consumption by hour worked (GJ/hours)



In 2015, the **Energy indicator** showed a substantial reduction at **production sites** (-17.3%) due to the combined effect of the increase in hours worked (+18.9%) and the decrease in consumption (-1.7%). The indicator showed as stable for the **office sites**: both consumption (-11.0%) and hours worked (-8.7%) were down.

	PRODUCTION SITES			OFFICE SITES		
	2013	2014	**2015**	2013	2014	**2015**
Electrical energy (GJ)	28,488.2	29,261.2	28,834.3	63,814.4	60,291.8	56,307.0
Natural gas (GJ)	4,434.6	3,867.3	3,711.2	25,015.4	16,874.1	23,138.2
Petrol and other fuels (GJ)	368.9	379.5	389.7	465.4	430.6	2,263.7
Fuel oil (GJ)	42.6	42.9	42.9	14,796.7	22,291.4	7,154.5
TOTAL (GJ)	**33,334.2**	**33,550.9**	**32,978.11**	**104,091.9**	**99,887.9**	**88,863.4**



Energy efficiency

Ansaldo STS is currently implementing a project to reduce its energy use at its Italian sites in Genoa, Piossasco (Turin), Naples and Tito Scalo (Potenza) by 20% by 2015. The project was launched in 2010 with an analysis of energy consumption (electrical energy and gas for heating) over recent years and a future projection that showed an increase. As a result, the need arose to contain and reduce consumption and, consequently, reduce GHG emissions (CO2 in particular).

The types of steps to be taken as part of this project provide, for the Piossasco site, the replacement of much of the energy infrastructure which is obsolete (pipes, valves, lighting, etc.), while for the Genoa, Tito and Naples sites, the approach will focus more on rationalising consumption (less lighting in offices, including when personnel are not present, turning off PCs and displays when they are not in use, etc.) on the basis of actual needs, with the replacement of certain plant with energy-saving oriented systems only where they are obsolete.

The consumption of electrical energy decreased from 2013 to 2015 (-3.8%).

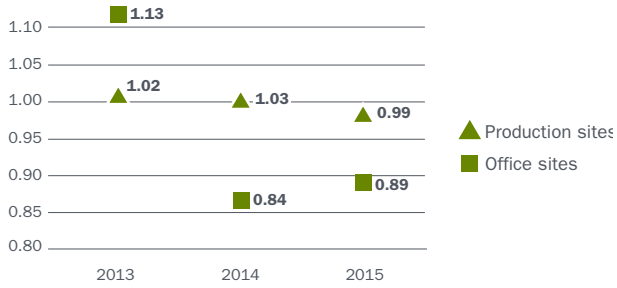
ITALIAN SITES – EE CONSUMPTION (KWh)	2013	2014	**2015**
Tito Scalo	1,852,732	1,859,586	1,600,479
Piossasco	1,644,649	1,403,437	1,604,048
Genoa	3,205,524	3,078,189	2,814,047
Naples	2,181,167	1,842,270	1,915,463
TOTAL	**8,884,072**	**8,183,482**	**7,934,037**

The consumption of natural gas also fluctuated due to differences in winter temperatures in the past five years.

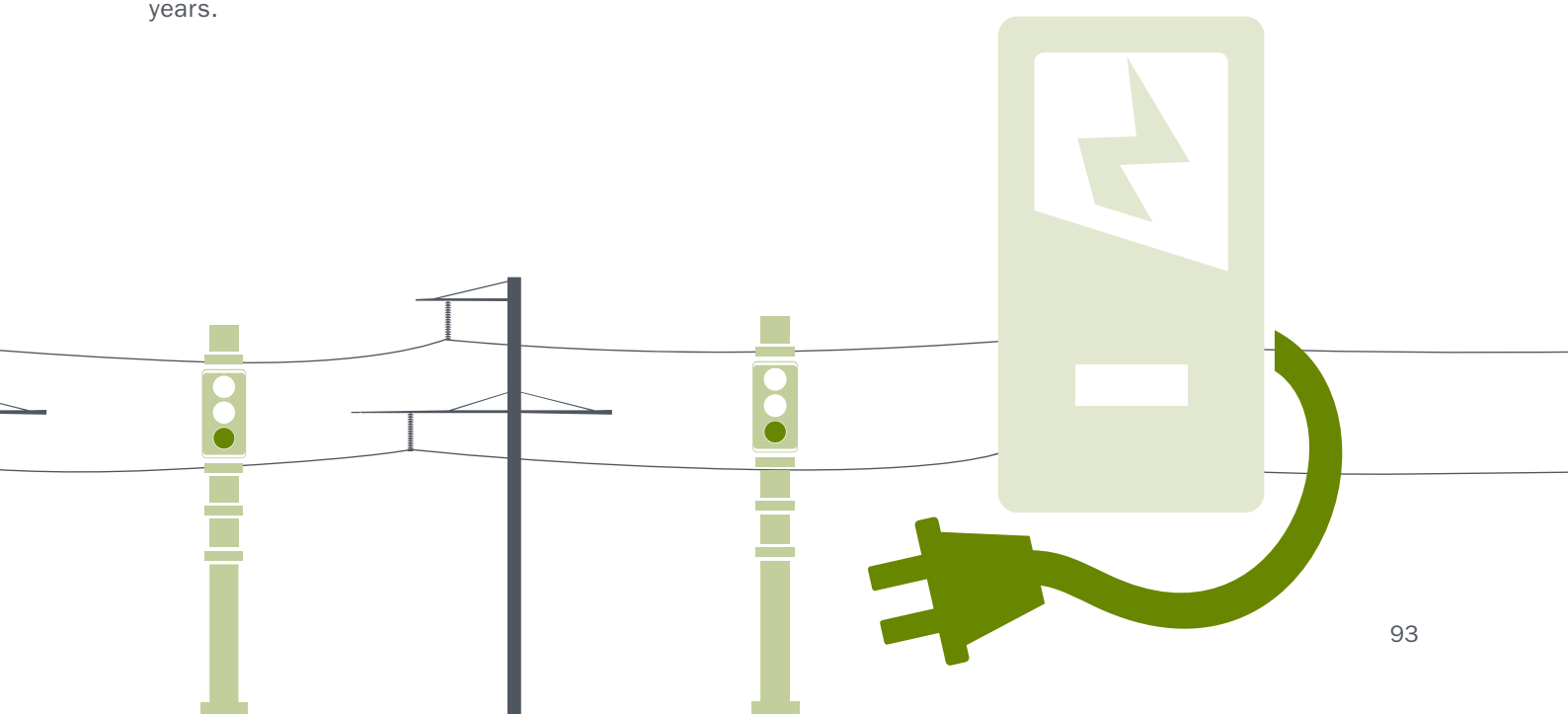
Within the overall reporting scope, the energy intensity of buildings indicator, calculated on the consumption of electricity and natural gas for heating, showed a reduction at production sites, due to the lower consumption of electrical energy (-1.5%) and natural gas (-4.0%), and an increase at the office sites due the rise in the consumption of natural gas (+37.1%), which offset the reduction in electrical energy consumption (-6.6%).

Both the Genoa and Solna office sites use district heating.

KPI - ENERGY INTENSITY OF BUILDINGS (GJ/sqm)



OTHER ENERGY SOURCES USED	2013	2014	**2015**
District heating (kWh)	**881,791**	**822,118**	**671,544**
Genoa	673,333	622,222	517,000
Solna	208,458	199,896	154,544



Renewable energies

ELECTRICAL ENERGY FROM RENEWABLE RESOURCES (KWh)	2013	2014	**2015**
Energy from renewable sources (all four Italian office sites + the Swedish office site in Solna since 2014)	8,884,072	8,331,906	8,101,030
% renewable sources of total	**34.6%**	**33.5%**	**34.3%**

Ansaldo STS again acquired electrical energy consumption certificates for its Italian sites under the Renewable Energy Certificate System (RECS) in 2015. These certificates represent 1 MWh, and attest to the use of energy from renewable sources, which include, as defined by EU directive no. 2009/28: wind, solar, aerothermal, geothermal, ocean, hydraulic, waste-to-energy, landfill gas, residual gas from purification processes and biogas.

By acquiring and subsequently cancelling the certificates (the latter entails the withdrawal of the certificate from the market), Ansaldo STS demonstrates its commitment to environmental sustainability through its willingness to pay the positive difference with the price of electricity from conventional sources.

Since 2014, the Solna site has adopted an energy source mix that is totally renewable (wind power, hydro-electric and waste-to-energy).

Consumption of materials

Ansaldo STS is aware of the contribution that each company can give to safeguarding the world's resources by adopting policies to reduce the intensive use of raw materials, an objective promulgated by the OECD Council and in the sustainability strategies of many nations.

MATERIALS	2013	2014	**2015**
Iron and steel [t]	105.23	0	0
Copper [t]	22.68	22.68	15.32
Lubricant oil [t]	0.05	1.85	1.58
Paper / cardboard packaging used [t]	59.19	62.27	32.41
Paper [t]	84.46	97.38	88.74

The search for increasingly standardised designs and innovation has led to a reduction in the consumption of raw materials directly and indirectly through a reduced use of components. The use of powerful technological platforms integrating several functions in the same subsystem enable Ansaldo STS to reduce the size of equipment and their connectors, using simple and effective systems for scheduling, testing and roll-out.

Link

> See page 78 *"Reducing raw materials consumption" and "Ecodesign"*

Atmospheric emissions

Atmospheric emissions mainly relate to the production sites and only some of the sites (Les Ulis – France, Pittsburgh – US, Naples and Piossasco – Italy).

In 2015, there was a reduction in atmospheric emissions at production sites due to lower consumption of natural gas as thermal plants were working, in contrast to other sites where an increase was recorded (particularly at the Piossasco site).

ATMOSPHERIC EMISSIONS – PRODUCTION SITES	2013	2014	2015[18]
NOx (Kg)	221.73	193.37	185.75
CO (Kg)	110.87	96.68	92.86
VOC - Volatile organic compounds (Kg)	1,021.53	63.2	0.00[19]
Volatile inorganic compounds (Kg)	0.10	0.10	0.10
Heavy metals (Pb, Hg, Cd, Cr, As, Co, Ni)(Kg)	0.10	0.10	0.10
Particulates (Kg)	1.70	1.60	1.60

ATMOSPHERIC EMISSIONS - OFFICE SITES	2013	2014	2015
SO_2 (Kg)	157.28	179.24	175.91
NOx (Kg)	1,495.86	1,123.01	1,464.30
CO (Kg)	642.10	440.90	599.93

The Tito Scalo site monitors emissions of volatile organic compounds, volatile inorganic compounds and heavy metals derived from their production processes. CO and NOx emissions mainly derive from thermal energy plant equipped with effective filters to reduce pollutants. The emissions are measured directly in the chimneys.

Data on particulates relate to the Tito Scalo site and concern emissions from the production and handling of goods. The reduced welding of circuit boards, which are now purchased already completed, has led to a decrease.

Water management

The sustainable management of site water where it is withdrawn, used and disposed of encourages the maintenance and improvement of water use efficiency, ensuring less waste and reduced environmental impact. Ansaldo STS manages water resources with particular attention and over the years has conducted a number of water-saving initiatives. These include the installation of photocell faucets in Italy, projects to recover rainwater at the Riom site (France) and projects to replace the cooling towers with dry systems.

Ansaldo STS's "Water management guidelines" are applied to all companies with the aim of defining the methods to be followed by the group's Italian companies for the sustainable management of water at office and production sites.

Ansaldo STS's water procurement sources include aqueducts and water tables where water is drawn through wells.

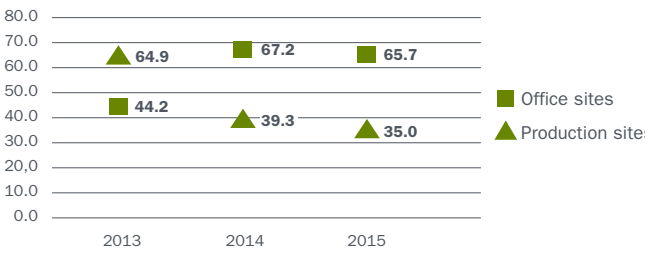
	PRODUCTION SITES			OFFICE SITES		
WITHDRAWAL OF WATER	2013	2014	**2015**	2013	2014	**2015**
Water drawn from aqueducts (m3/year)	24,715	15,732	14,726	113,125	171,617	160,942
Water drawn from wells (m3/year)	-	-	-	41,854	42,007	41,906
Other sources of procurement (m3/year)	-	-	-	83	92	132
TOTAL	**24,715**	**15,732**	**14,726**	**155,063**	**213,716**	**202,979**

18. 2015 emissions data have been estimated based on the consumption of natural gas and fuel oil to produce thermal energy using the rates in an analysis of 2014 data.
19. Estimated on the basis of 2014 data and the ratio of hours worked in 2015 compared to the hours worked in 2014 at the Tito Scalo site (1.0693).

The use of water is mainly for civil purposes. Water consumption at the Tito Scalo (Italy), Riom (France) and Batesburg (US) sites is very low. These sites reduced their withdrawal of water substantially (-40.4%) from 2013 to 2015, as the Tito Scalo plant cut the amount of industrial water it used for fire drills and irrigation of green areas. The amount of water used for production decreased because electrical circuit cards are no longer rinsed. Water withdrawal at office sites has also decreased on 2014 (-5.0%).

The water consumption per employee indicator shows a reduction of 10.9% at the production sites despite the increase in employees, while the office sites show a -2.2% decrease as consumptions were reduced less than proportionately to the reduction in the number of employees.

KPI - Consumption of water per employee (m3)



The wastewater produced at the sites can be classified, on the basis of its use upstream from disposal, as domestic (or similar) and industrial. All Ansaldo STS sites produce wastewater that can be exclusively classified as domestic or similar, except for the Tito site. All the domestic or similar wastewater is discharged into the sewers. The Naples site uses an organic wastewater treatment system. The sites use authorised disposal points: the Batesburg and the Tito Scalo sites' points are monitored.

	PRODUCTION SITES			OFFICE SITES		
WASTEWATER	2013	2014	**2015**	2013	2014	**2015**
Volume of domestic or similar wastewater (m3/year)	12,198	8,863	11,007	109,181	126,918	118,483
Volume of industrial wastewater (m3/year)	12,517	2,518	1,400	-	-	-
TOTAL	**24,715**	**11,381**	**12,407**	**109,181**	**126,918**	**118,483**

Industrial wastewater, produced only at the Tito Scalo site, decreased due to favourable weather conditions that allowed a large reduction in consumption. The rinsing water is discharged directly into a consortium sewer while the first rinse water is collected in an external tank and eliminated as waste.

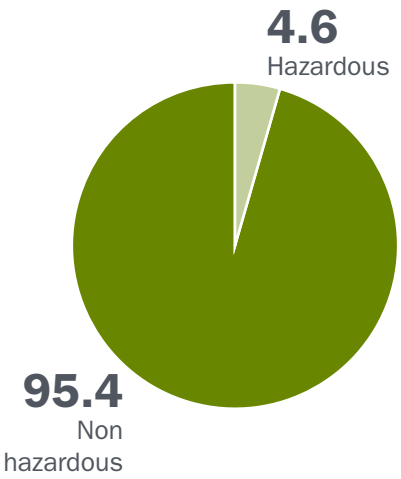
Waste production and management

The production of waste is an environmental aspect that is assessed and measured at all Ansaldo STS sites, and when the environmental aspects of work sites and the construction of civil and technological works are analysed.

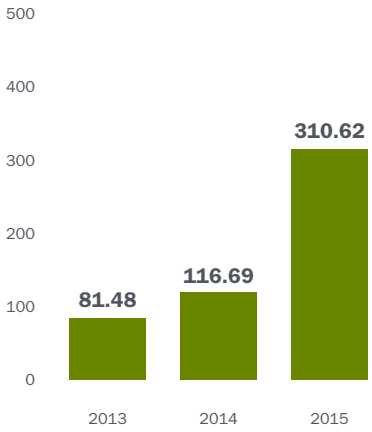
Ansaldo STS's policy is to reinforce prevention and the re-use, recycling and recovery of waste. All its sites have waste collection areas based on the type of waste and site layout. External specialist companies collect and process the hazardous and non-hazardous waste.

	PRODUCTION SITES			OFFICE SITES		
WASTE PRODUCTION	2013	2014	**2015**	2013	2014	**2015**
Hazardous (t)	**7.65**	**14.56**	**14.50**	**12.41**	**21.45**	**14.72**
% recovered	24%	22%	29%	97%	98%	28%
% disposed of	76%	78%	71%	3%	2%	72%
Non-hazardous (t)	**73.84**	**102.13**	**296.12**	**396.50**	**421.44**	**306.43**
% recovered	76%	96%	33%	57%	47%	55%
% disposed of	24%	4%	67%	43%	53%	45%
TOTAL WASTE (t)	**81.48**	**116.69**	**310.62**	**408.91**	**442.89**	**321.16**
% recovered	71%	87%	33%	58%	50%	54%
% disposed of	29%	13%	67%	42%	50%	46%

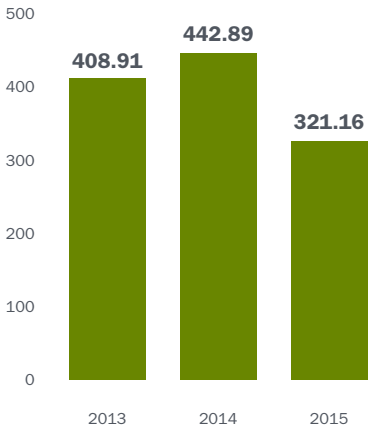
2015 - TYPE OF WASTE (%)



PRODUCTION SITES - TOTAL WASTE (t)



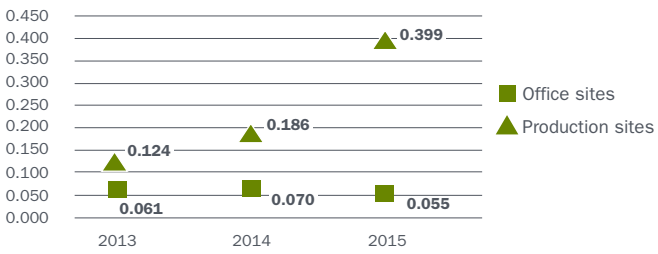
OFFICE SITES - TOTAL WASTE (t)



Production sites – Total waste production increased in 2015 due to the growth in non-hazardous waste, mainly at the US Batesburg site. As all waste was disposed of, a spike in the amount of disposed waste compared to recovered waste occurred. On the other hand, the proportion of hazardous waste compared to recovered waste is in line with 2014, with an increase recorded in the amount recovered.

Office sites – The total quantity of hazardous and non-hazardous waste produced decreased in 2015. The percentage of hazardous waste that was disposed of grew due to the hazardous waste produced for the first time at the site in Noida (India), which was completely disposed of. On the other hand, the recovered amount of non-hazardous waste increased.

KPI - Kg. of waste produced per hour worked



Kilograms of waste produced per hour worked grew at the production sites due to the aforementioned increase in non-hazardous waste at the Batesburg site (despite the rise in the number of hours worked) while the sites saw an overall decrease in total waste produced, with a the decrease in hours worked.

Domestic urban waste produced and recycled

	2013	2014	**2015**
Total domestic/urban waste (t)	**490.96**	**606.57**	**571.80**
Total recycled paper [t]	138.44	151.03	109.74
Total recycled plastic [t]	0.03	5.87	5.33
Total recycled wood [t]	36.29	33.73	17.95
Total recycled metal [t]	88.09	77.30	80.33
Total recycled glass [t]	0.01	0.15	0.11
Other recycled domestic/urban waste [t]	12.92	111.61	172.84
Total recycled waste (t)	**275.77**	**379.69**	**386.29**
% RECYCLED	**56%**	**63%**	**68%**

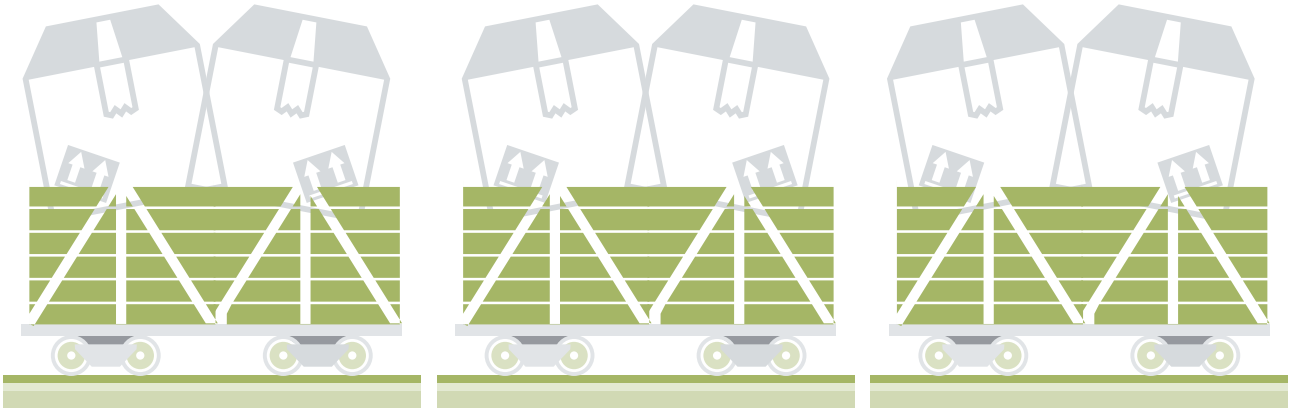
Packaging

Ansaldo STS uses various mixes of packaging: plastic, cardboard and wood (crates).

Mixed packaging	2013	2014	**2015**
Quantities of mixed packaging [t]	12.56	10.42	10.60

All packagings in mixed materials are completely recycled. Part of the plastic, cardboard and wood packagings was reused to package similar products as Ansaldo STS has introduced a specific policy for this, especially for the central warehouses at the Piossasco and Tito Scalo sites.

Packaging material	**% of material that is reused**	**% of material that is recovered as waste**	**% of material for other use**
Plastic	5%	95%	-
Cardboard	10%	90%	-
Wood	15%	65%	20%



Hazardous materials

There are no hazardous materials pursuant to Legislative decree no. 344/99 and subsequent modifications and integrations at Ansaldo STS's sites.

Substances harmful to the ozone layer are present at the Piossasco site (0.13 tonnes) and the Batesburg site (0.09 tonnes). In 2015, the Riom production site used 4.14 tonnes of raw materials classified as R40 (possible irreversible effects), 0.07 tonnes of raw materials classified as R50 (highly toxic for water organisms), 0.01 tonnes of raw materials classified as R51 (toxic for water organisms), 0.07 tonnes of raw materials classified as R52 (harmful to water organisms) and 0.14 tonnes of raw materials classified as R53 (can provoke long-term negative effects on water habitats).

The Les Ulis office site and the Batesburg production site have materials containing compact asbestos (roofs and old pipes for steam and water, respectively). Their state of conservation was checked at the Batesburg production site in 2014.

Reclamation

In May 2012, the DHEC (Department of Health and Environmental Control) sent to Ansaldo STS, Batesburg site, the approval of the work plan developed by a specialized consulting firm, which set out a proposal for the characterization of soil and groundwater closed to the factory. The Work approved plan anticipated:

- the installation of 8 permanent wells for sampling;
- A soil sampling campaign and subsoil in the perimeter area to the plant Ansaldo STS;
- Gas - surveys in groundwater to check the concentration of VOCs in the production of the plant.

In December 2014 was signed the Voluntary Clean Up, a contract between the SCDHEC (South Carolina Department of Health and Environmental Control) and Ansaldo STS USA in which Ansaldo STS is committed to implementing the activities (such as the drafting of the Focused feasibility Study, the Long Term Groundwater Monitoring Plan, the health and Safety Plan and Written progress reports) aimed at continuous improvement and constant coordination with the SCDHEC, considering all the possible remedies that can be implemented in a cost relationships and impacts on environment, health and regular work activities. ERM (Environmental Resources Management), on behalf of Ansaldo STS USA, has provided the presentation of the SBB (Focused Feasibility Plan, in accordance with the Voluntary Cleanup, regulations and guidelines in the environmental field). In the document, after a detailed background of remediation activities previously carried out, an analysis is made of the possible alternatives and the criteria according to which it will opt for the most suitable choice (Overall protection of human health and the environment, long term effectiveness and performance, short term effectiveness, compliance with regulatory requirements, reduction of toxicity, mobility or volume, possible implementations, cost, state acceptance). The FFS was presented to SCDHEC and a first meeting was made on March 31, 2015. Additional sampling for detailing the nature of the contaminants in both surface water sediments have been requested and regularly carried out (late 2015 and early 2016). The SBB has therefore been revised with all the data required for monitoring and evaluating the alternatives that can be implemented on a cost-benefit analysis and submissive attention of SCDHEC June 2016. It will be up to SCDHEC the final decision on the plan to implement.

Noise

Noise levels at all Ansaldo STS sites are observed and exterior and interior noises are monitored at the frequencies provided for by current legislation to ensure compliance with applicable thresholds. When Ansaldo STS is the main contractor, during coordination and security activities, it can ask subcontractors for updates on the performance of measurements to check that the thresholds are not exceeded.

Non-conformities and environmental complaints

In 2015, Ansaldo STS recorded 12 environmental incidents at the Karratha site (spillages that were gathered, bagged and disposed of in a local waste disposal plant, without requiring notification to an external authority), one at the Genoa site and one at the Tito Scalo site. These incidents had no substantial adverse impact on the environment and no hazardous substances were involved.

The Enviroment, Health and Safety (EHS) audits performed during the year are described in the next table:

2015 – EHS audits	PRODUCTION SITES	OFFICE SITES	TOTAL
No. of in-house environmental audits (first part)	3	14	**17**
No. of external environment audits (second and third part)	3	14	**17**
No. of in-house health and safety audits (first part)	6	25	**31**
No. of external health and safety audits (second and third part)	3	12	**15**

There were no environmental complaints from outside the company. There were no violations of environmental standards detected by external control bodies and there were no environmentally critical system faults.

Health and safety

Ansaldo STS has defined a management system integrating all its processes in one central structure. This enables the organisation to operate as a single unit with shared objectives and the global application of health and safety standards.

Ansaldo STS's health and safety management system enables it to define the process operating methods used to achieve compliance with the ligislative requirements and verify adequacy and compliance.

The health and safety policy

Ansaldo STS's health and safety in the workplace policy is based on the application of the requirements of relevant standards, namely OHSAS 18001:2007, and other international standards, in compliance with national and international regulations. Ansaldo STS develops a plan focused on continuously improving health and safety standards.

Ansaldo STS undertakes to:

- ensure and maintain a safe and healthy workplace environment and prevent injuries, illnesses or damage to the health of employees, suppliers, customers and visitors;
- extend OHSAS 18001 certification to all Ansaldo STS sites, continuously improving the effectiveness of the health and safety in the workplace management system;
- continuously improve the aforementioned management systems' performance, not only with respect to the prevention of injuries and work-related illnesses, but also in terms of more general employeewellbeing;
- adopt risk assessment criteria for all dangers relating to work activities which, in compliance with national and international legislation, also consider best practices;
- increase the training and updating of all employees in order to make them more aware of the risks related to their activities;
- continue developing activities to spread a culture of safety with all suppliers and concerned parties.

This policy is shared with all Ansaldo STS personnel and all concerned parties nd via Internet Company web site and the Intranet.

Training

The company promotes shares and consolidates a culture of health and safety through training to increase employees' awareness of risks and encourage responsible conduct.

Accordingly, Ansaldo STS promotes training and updating activities to develop the experise of its personnel's expertise, as personnel can affect health and safety in the workplace through their activities. Overall, at the sites specified in this analysis, 10,417 hours of safety training were provided in 2015, accounting for 15.5% of total training hours.

	PRODUCTION SITES			OFFICE SITES		
TRAINING IN HEALTH AND SAFETY	2013	2014	**2015**	2013	2014	**2015**
Total hours of health and safety training	2,492	2,644	2,293	24,094	31,858	8,124
Total hours of training	6,148	10,024	6,906	76,129	77,946	60,232
Health and safety training as % of the total	41%	26%	33,2%	32%	41%	13.5%

2014 data, especially for the office sites, are considerably higher because the company implemented an ambitious training plan in Italy during that year, in collaboration with Fondimpresa.

Health and safety performance

As stated in its policy, Ansaldo STS considers safeguarding health and preventing any kind of work-related accident, injury or illness as a key value.

Health and safety performance indicators are monitored and analysed over time, and used to set objectives by breaking them down by risk factor and location.

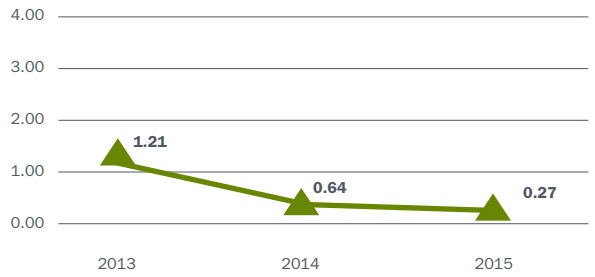
Safety is therefore a strategic must for Ansaldo STS with all workers contributing every day to ensure safety for end users.

Overall, in 2015, there were five injuries (entailing incapacity to work for more than three days), four at the office sites and one at the production sites (excluding injuries in transit).

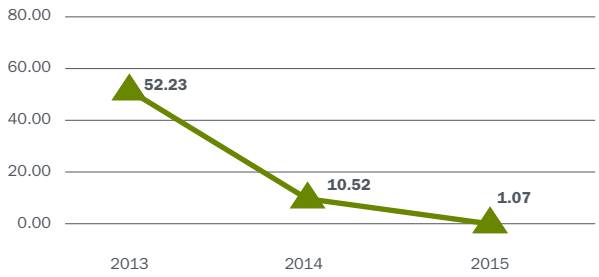
There was a total of 83.5 days of temporary incapacity due to injuries, including 79.5 at office sites and four at the production sites.

Injury frequency and seriousness indicators are reported below.

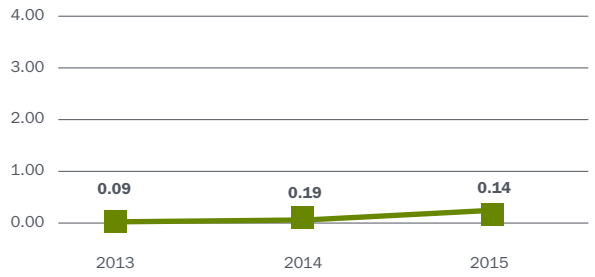
Accident frequency rate - PRODUCTION SITES



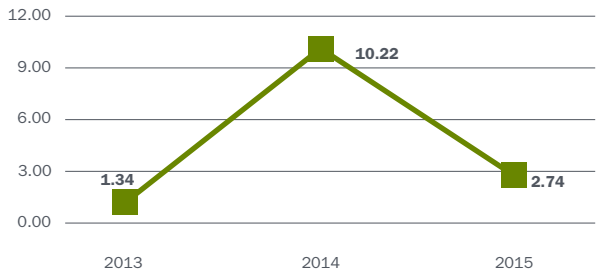
Accident seriousness rate - PRODUCTION SITES



Accident frequency rate - OFFICE SITES



Accident seriousness rate - OFFICE SITES



The office sites saw a further decrease in the frequency rate due to the smaller number of injuries (from six to four) and the considerable decrease in their seriousness, following the substantial reduction in the number of days lost (-274.5).

The production sites also recorded a decrease in the frequency rate due to the growth in the number of hours worked (with only one injury) and their seriousness, following the reduction in the number of days lost (from 33 to four).

The data therefore show low injury frequency and seriousness rates. In order to acquire information that is helpful in improving performance, in accordance with the health and safety policy, Ansaldo STS also tracks near misses (accidents without consequences that arise out of undesired or unexpected situations that could have put people at risk), in order to gather and analyse data and information and identify potential solutions in advance.

Main initiatives:

- implementation of the procedure to manage accidents and near misses at global level: Ansaldo STS has created a procedure to provide information on how to correctly manage events entailing injuries, accidents and near misses. This procedure is a valid prevention and information management tool for statistical purposes, to identify the causes of an accident and meet legal requirements relating to health, safety and hygiene in the workplace.
- implementation of quarterly EHS reporting to monitor and gather main information on the performance of activities carried out in relation to the application of SGS/SGA. These reports are prepared by all EHS officers at work sites;
- safety meetings for all main sites.

Health and safety committee

Ansaldo STS also holds meetings pursuant to article 35 of Legislative decree no. 81/08, in which the employer (or a representative), the Prevention and Protection Service Manager, Doctor, Safety Officer and Workers' Safety Representative participate. These meetings are called at least once a year and represent 100% of employees of the Italian group companies to which Legislative decree no. 81/08 applies.

Safety at worksites managed by Ansaldo STS S.p.A.

Ansaldo STS S.p.A. asks its subcontractors for information about the number of injuries involving their employees in the worksites (excluding injuries in transit) and the number of days of temporary incapacity. The 2014 and 2015 data are as follows:

INJURIES SUBCONTRACTORS WORKSITES	NO. OF WORKSITES	No. of total injuries of subcontractors' employees	Total no. of days of temporary incapacity
2014	32	4	87
2015	60	16	326

Prize Health and Safety

Ansaldo STS won the Best Practice Award at the third conference organized by AICQ prize (Italian Association of Quality Control) with the implementation of the best practice: ***Safety and Security Instruction for Traveler*** (Florence, June 10, 2015).

Costs and investments for the environment, health and safety

In 2015, Ansaldo STS incurred environmental costs to treat and dispose of wastewater, to recover and dispose of waste and for environmental reclamation work.

EHS investments mainly related to air-conditioning systems and heat insulation.

Environmental costs

(in Euros)	2013	2014	**2015**
Total cost for the treatment and disposal of domestic and similar wastewater	21,239	21,843	23,340
Total cost for the treatment and disposal of industrial wastewater	5,758	5,070	8,762
TOTAL WASTEWATER COSTS	**26,997**	**26,913**	**32,102**
Costs to produce, treat, recovery and dispose of toxic and non-toxic waste	74,537	89,696	104,733
Waste production taxes	266,977	262,362	268,417
TOTAL WASTE COSTS	**341,514**	**352,058**	**373,150**
Environmental reclamation costs	248,168	79,603	67,356
Costs to reclaim equipment containing CFC/HFC and functional clean-up	0	20,000	25,000
TOTAL RECLAMATION COSTS	**248,168**	**99,603**	**92,356**
TOTAL ENVIRONMENTAL COSTS	**616,679**	**478,574**	**497,608**

Safety and environment investments

(in Euros)	2013	2014	**2015**
Investments in the environment, health and safety	925,570	339,681	550,716

OUR PEOPLE

Human resource management policy	106
Recruitment and hiring	111
Training and development	113
Remuneration and incentive systems	122
People Care	126
Trade unions	134
In-house communications	137

Our people are essential to successfully compete in the market: honesty, loyalty, aptitude, professionalism and technical preparation are aspects in which Ansaldo STS invests and which it requires from its employees so that they can achieve their personal and the company's growth objectives.

94.8% of total open-ended contracts

95% of employees in the competency assessment and development plan

€322 million
Economic value distributed to employees (+1.6%)

Global Job System
the competence management system for all employees, with performance assessment

78,222
total hours of training (average of 20.7 per employee)

People Care
listening, motivation, multi-cultural environment, growth and development programmes, benefits, fair remuneration

"50-50" funding of 50% of an executive course at one of the top ten business schools in the world

Knowledge Owners
talent selection and development

The ***emotional intelligence*** training module launched for key resources

Human resource management policy

Ansaldo STS offers equal opportunities beginning with the recruitment process, ensuring equal treatment considering individual skills and abilities.

Over the course of employment, Ansaldo STS undertakes to create and maintain the necessary conditions to further expand upon employees' abilities and expertise on an equal opportunity basis, through a policy based on the recognition of merits and equal opportunities and the provision of specific refresher and specialisation courses. This is why employees are required to cultivate and draw on new expertise, abilities and knowledge, while managers and function heads must devote the utmost attention to enhancing and developing the professionalism of their workers.

In the pursuit of company objectives, workers must be aware that ethics are of immense value to the company and accordingly, no conduct is tolerated that, although it may appear in the abstract to benefit Ansaldo STS, is in violation of the law, current regulations, the organisational, management and control model or the code of ethics.

Headcount

At year end, Ansaldo STS's headcount is 3,772, as follows[20]:

	2015				2014			
REGION	**MEN**	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
Central and Eastern Europe and the Middle East	1,268	287	**1,555**	41.2%	1,225	265	**1,490**	39.2%
Western Europe	653	169	**822**	21.8%	629	163	**792**	20.8%
The Americas	488	184	**672**	17.8%	521	191	**712**	18.7%
Asia Pacific	558	98	**656**	17.4%	619	117	**736**	19.4%
China	41	26	**67**	1.8%	42	27	**69**	1.8%
TOTAL	**3,008**	**764**	**3,772**	**100.0%**	**3,036**	**763**	**3,799**	**100.0%**

Compared to 2014, there was a slight net decrease in the number of employees, with the total down 27 (-28 men and +1 woman), equal to 0.7 % of the workforce at the start of the year. This was the result of the increases in the number of employees in Central and Eastern Europe and the Middle East (+65) and Western Europe (+30), offset by the decreases in the Asia Pacific (-80), the Americas (-40) and China (-2).

The total percentage of women making up the workforce is 20.3%, showing slight growth (+0.2%).

	2015				2014			
CONTRACT TYPES	**MEN**	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
Employees with open-ended contracts	2,840	735	**3,575**	94.8%	2,823	719	**3,542**	93.2%
Employees with fixed-term contracts	168	29	**197**	5.2%	213	44	**257**	6.8%
TOTAL	**3,008**	**764**	**3,772**	**100.0%**	**3,036**	**763**	**3,799**	**100.0%**

The percentage of employees working under open-ended contracts is 94.8%, up 1.6%, demonstrates the importance that Ansaldo STS pplaces on the provision of steady employment.

	2015				2014			
OTHER CONTRACT TYPES[21]	**MEN**	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
Temporary staff	13	8	**21**	21.6%	40	19	**59**	31.1%
Contract workers	5	0	**5**	5.2%	46	0	**46**	24.2%
Work experience	30	16	**46**	47.4%	12	13	**25**	13.2%
Other types	19	6	**25**	25.8%	37	23	**60**	31.6%
TOTAL	**67**	**30**	**97**	**100.0%**	**135**	**55**	**190**	**100.0%**

The decrease in the use of other contract types (-93 employees) was due to the reduction in temporary staff (-38), contract workers (-41) and other contract types (-35), offset by the increase in work experience trainees (+21).

20. The regions are defined as follows:
    - **Central and Eastern Europe and the Middle East:** Italy and Italian branches (Denmark, Turkey, Greece, Taiwan, United Arab Emirates, Saudi Arabia and Peru) and Germany
    - **Western Europe:** France and the South Korean branch, UK, Spain and Sweden
    - **America:** US and Canada
    - **Asia Pacific:** Australia, Malaysia, India and Botswana
    - **China:** China and Hong Kong
21. This information is given in accordance with an approach that more closely corresponds with Italian and European legislation. Information on non-European countries has been adjusted for classification in the same types considering contractual similarities.

The breakdown of the group's workers by professional level is as follows:

	2015				2014			
CATEGORIES	**MEN**	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
Managers	78	5	**83**	2.2%	79	8	**87**	2.3%
Junior managers	381	73	**454**	12.0%	348	63	**411**	10.8%
White collars	2,337	617	**2,954**	78.4%	2,327	626	**2,953**	77.7%
Blue collars	212	69	**281**	7.4%	282	66	**348**	9.2%
TOTAL	**3,008**	**764**	**3,772**	**100.0%**	**3,036**	**763**	**3,799**	**100.0%**

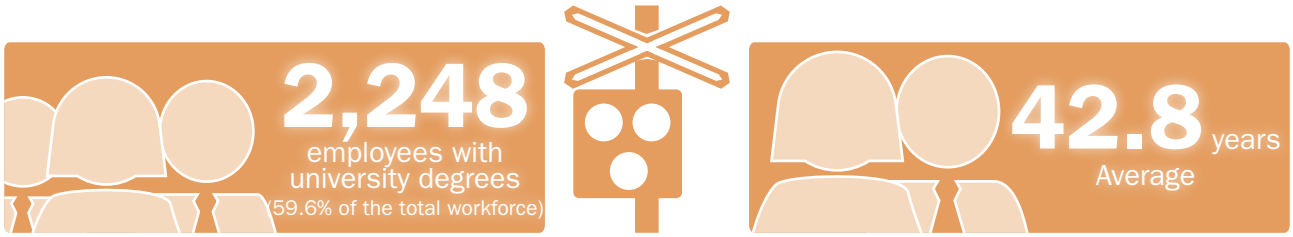
The breakdown of the various categories shows a 1.2% increase in junior managers and a 0.6% increase in white collars, while the blue collar category decreased by 1.8%.

Analysis by gender highlights a decrease in the percentage of women managers (from 9.2% to 6.0%) and an increase in the percentage of women blue collars (from 19.0% to 24.6%) and junior managers (from 15.3% to 16.1%)

The breakdown of the group's workers by education level is as follows:

	2015				2014			
DEGREE/DIPLOMA[22]	**MEN**	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
Technical high school	826	129	**955**	25.3%	854	48	**902**	23.7%
Other high school	249	178	**427**	11.3%	196	192	**388**	10.2%
Technical graduates	1,519	207	**1,726**	45.8%	1,542	252	**1,794**	47.2%
Other graduates	302	220	**522**	13.8%	331	230	**561**	14.8%
Other education	112	30	**142**	3.8%	113	41	**154**	4.1%
TOTAL	**3,008**	**764**	**3,772**	**100.0%**	**3,036**	**763**	**3,799**	**100.0%**

In terms of absolute value and by percentage, growth can be seen in the number of technical graduates (+53 employees, +1.6%, mainly due to the rise in the number of women, +81) and non-technical graduates (+39 employees, +1.1%) while employees with high school and lower diplomas are down (-119 employees).



22. The relevant framework, compared with Italy's, is: Technical Graduates – university graduates with technical degrees (mainly engineering,); Other Graduates – university graduates with non-technical degrees (humanities, for example); Technical High School – high school graduates with technical studies (electrical studies, for example); Other High School – high school graduates with non-technical studies (classical studies, for example); Other education – not finished high school (middle school degrees, for example).

The average overall age is 42.8 years (42.9 for men and 42.3 for women), slightly increased on 2014 (+0.6 years). The prior year comparison shows a decrease in the number of employees under the age of 35 (-72 employees), an increase in those aged 36 to 45 (+41 employees) and those 50 and up (+71 employees). On the other hand, employees in the 46 to 50 year age bracket are down (-67 employees).

	2015				2014			
AGE	**MEN**	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
< 30	235	61	**296**	7.8%	281	69	**350**	9.2%
30-35	565	148	**713**	18.9%	594	137	**731**	19.2%
36-40	561	149	**710**	18.8%	527	156	**683**	18.0%
41-45	391	119	**510**	13.5%	387	109	**496**	13.1%
46-50	324	78	**402**	10.6%	378	91	**469**	12.3%
>50	932	209	**1,141**	30.2%	869	201	**1,070**	28.2%
TOTAL	**3,008**	**764**	**3,772**	**100.0%**	**3,036**	**763**	**3,799**	**100.0%**

An analysis by gender shows that the steady trend in women employees compared to the men led to a rise in their percentage of the total, especially for the under 45 years of age brackets.

The breakdown of the group's workers by seniority is as follows:

	2015				2014			
COMPANY SENIORITY	**MEN**	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
< 5 years	854	219	**1,073**	28.4%	887	225	**1,112**	29.3%
5-10 years	864	216	**1,080**	28.6%	942	241	**1,183**	31.1%
11-15 years	533	150	**683**	18.1%	442	114	**556**	14.6%
16-20 years	143	30	**173**	4.6%	139	30	**169**	4.4%
20-25 years	123	42	**165**	4.4%	146	52	**198**	5.2%
> 25 years	491	107	**598**	15.9%	480	101	**581**	15.3%
TOTAL	**3,008**	**764**	**3,772**	**100.0%**	**3,036**	**763**	**3,799**	**100.0%**

The average seniority has grown slightly from 12.2 to 12.4 years (for women, it has gone from 11.8 to 12.1 years and for men, from 12.2 to 12.5). The percentage of employees who have been working in the group for 11 to 15 years has grown (+3.5%).

Ansaldo STS grants part-time positions, provided that they are compatible with technical and organisational requirements. In this respect, in 2015, there was decrease of 68 employees holding part-time positions, mainly in the Asia Pacific.

PART-TIME out of total employees by geographical area	2015				2014			
	MEN	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
Central and Eastern Europe and the Middle East	0	30	**30**	1.9%	0	30	**30**	2.0%
Western Europe	10	45	**55**	6.7%	12	41	**53**	6.7%
The Americas	3	6	**9**	1.3%	4	6	**10**	1.4%
Asia Pacific	1	4	**5**	0.8%	48	25	**73**	9.9%
China	0	0	**0**	0.0%	0	0	**0**	0.0%
TOTAL	**14**	**85**	**99**	**2.6%**	**64**	**102**	**166**	**4.4%**

The table below provides a breakdown of employees by function:

	2015				2014			
FUNCTION	**MEN**	**WOMEN**	**Total**	**% of total**	MEN	WOMEN	Total	% of total
OPERATIONS	2,244	446	**2,690**	71.3%	2,277	458	**2,735**	72.0%
RAILWAYS	340	87	**427**	11.3%	287	71	**358**	9.4%
FREIGHT	35	13	**48**	1.3%	38	17	**55**	1.4%
RAMS	157	47	**204**	5.4%	175	45	**220**	5.8%
INNOVATION	21	10	**31**	0.8%	20	9	**29**	0.8%
Other	211	161	**372**	9.9%	239	163	**402**	10.6%
TOTAL	**3,008**	**764**	**3,772**	**100.0%**	**3,036**	**763**	**3,799**	**100.0%**

In particular, compared to 2014, the number of employees in the Railway function grew by 1.9%.

The following tables illustrate the employee turnover rate within the group:

		BALANCE 2014		**Increases**		**Decreases**		**BALANCE 2015**		
TURNOVER	TOTAL 2014	MEN	WOMEN	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**TOTAL 2015**
Central and Eastern Europe and the Middle East	**1,490**	1,225	265	93	31	50	9	1,268	287	**1,555**
Western Europe	**792**	629	163	48	18	24	12	653	169	**822**
The Americas	**712**	521	191	26	11	59	18	488	184	**672**
Asia Pacific	**736**	619	117	64	18	125	37	558	98	**656**
China	**69**	42	27	4	0	5	1	41	26	**67**
TOTAL	**3,799**	**3,036**	**763**	**235**	**78**	**263**	**77**	**3,008**	**764**	**3,772**

	BALANCE % 2014		**Increases[23]%**		**Decreases[24]%**		**BALANCE % 2015**	
TURNOVER %	MEN	WOMEN	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**
Central and Eastern Europe and the Middle East	82.2%	17.8%	7.6%	11.7%	4.1%	3.4%	81.5%	18.5%
Western Europe	79.4%	20.6%	7.6%	11.0%	3.8%	7.4%	79.4%	20.6%
The Americas	73.0%	27.0%	5.0%	5.8%	11.3%	9.4%	72.6%	27.4%
Asia Pacific	84.1%	15.9%	10.3%	15.4%	20.2%	31.6%	85.1%	14.9%
China	60.9%	39.1%	9.5%	0.0%	11.9%	3.7%	61.2%	38.8%
TOTAL	**79.9%**	**20.1%**	**7.7%**	**10.2%**	**8.7%**	**10.1%**	**79.7%**	**20.3%**

		BALANCE 2014		**Increases**		**Decreases**		**BALANCE 2015**		
TURNOVER BY AGE BRACKET	TOTAL 2014	MEN	WOMEN	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**TOTAL 2015**
< 30	537	426	111	76	25	46	14	456	122	578
30-50	2,406	1,912	494	144	44	161	45	1895	493	2,388
>50	856	698	158	15	9	56	18	657	149	806
TOTAL	**3,799**	**3,036**	**763**	**235**	**78**	**263**	**77**	**3,008**	**764**	**3,772**

23. (Incoming in 2015/opening headcount) x 100.
24. (Outgoing in 2015/closing headcount) x 100.

Recruitment and hiring

Several years ago, Ansaldo STS introduced sophisticated IT tools to its global recruitment process so that each recruiter had a single database of CVs gathered from a variety of sources. This made it possible to increasingly minimise the use of employment agencies and head hunters.

An agreement the company signed in 2014 with LinkedIn enabled it to improve talent acquisition strategies and achieve positive results both in terms of CVs received, applications considered and in terms of employer branding. Using the LinkedIn licence, Ansaldo STS has continued to renew and promote the company image by publishing news, information and commentary on a regular basis.

In addition to continuously updating the company profile and publishing news on the development of the company business (handled by the External Affairs Office), a new line of editorial content has been published on LinkedIn in 2015. This content is managed on an integrated basis by the LinkedIn Narrative Team, consisting of several HR personnel from around the world. The aim of this project, a form of corporate story-telling, is to spread the company culture and awareness of projects to make the most of the people working for Ansaldo STS at global level, while also attracting potential candidates.

The number of Ansaldo STS followers on LinkedIn increased from 46,698 in January 2015 to 53,951 in December 2015, showing growth of over 16%. Another significant figure is the First Degrees Connection which analyses the number of links that Ansaldo STS employees have made with other people outside their company: this figure rose from 194,979 in January 2015 to 242,532 in December 2015, showing growth of 25%.

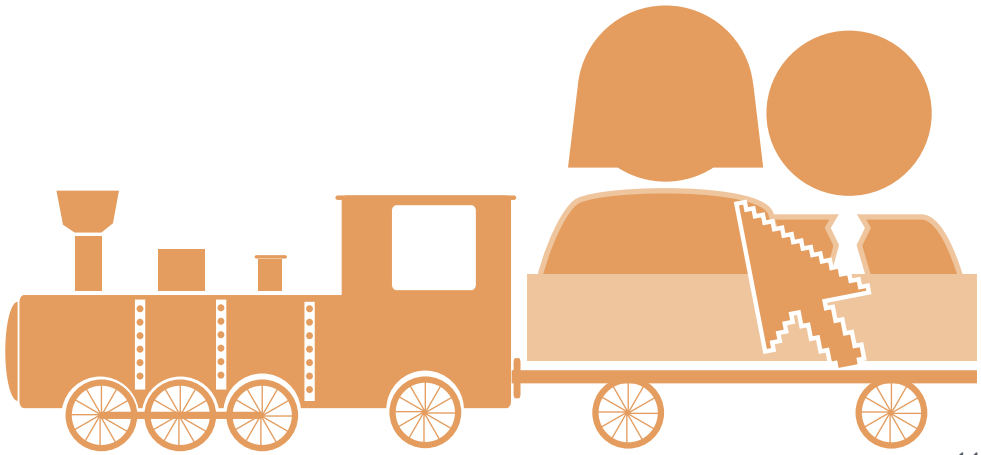
LinkedIn offers two advantages to the company: access to millions of profiles and selection of the best candidates, building up an increasingly extensive and specialised database, as well as allowing potential candidates to learn about the company, its business and organisational culture.

The direct connection between LinkedIn and Team Management System (TMS) the internal tool used to coordinate the selection process at global level, means the company can automatically publish details about open positions in real time and access a wide network of candidates and CVs.

This gives the recruiters greater freedom and faster access to candidates. They can gain a greater understanding of and monitor specific user targets, narrowing their selection criteria. In 2015, thanks to the connection between LinkedIn and TMS, the recruitment database gathered over 23,000 CVs, setting an unprecedented record in the management of job candidates for Ansaldo STS.

Universities, with which Ansaldo STS has forged many partnerships, continue to be a preferential channel for the recruitment and selection of personnel.

Given the international nature of the company's activities and business, personnel, including senior management, are hired on the basis of the specific skills required for the role, regardless of where they are based. Moreover, when projects require many years of maintenance after their roll-out (operation & maintenance), Ansaldo STS prefers to hire local technicians and staff and may seek to hire an entirely local team.



Throughout the entire group, the following new contracts were signed in 2015: three managers, four junior managers, 279 white collars and 27 blue collars.

	2015			2014		
HIRING	**MEN**	**WOMEN**	**Total**	MEN	WOMEN	Total
Managers	2	1	**3**	7	0	**7**
Junior managers	3	1	**4**	2	1	**3**
White collars	210	69	**279**	165	53	**218**
Blue collars	20	7	**27**	15	12	**27**
TOTAL	**235**	**78**	**313**	**189**	**66**	**255**

The following table illustrates the number of new hires by gender, area of geographical origin and age:

HIRING 2015	**Central and Eastern Europe and the Middle East**		**Western Europe**		**The Americas**		**Asia Pacific**		**China**		**TOTAL**	
	MEN	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**
< 30	34	11	19	8	4	1	19	5	0	0	76	25
30 – 39	55	20	20	6	8	2	23	7	2	0	108	35
40 – 49	4	0	6	2	8	2	16	5	2	0	36	9
> 50	0	0	3	2	6	6	6	1	0	0	15	9
TOTAL	**93**	**31**	**48**	**18**	**26**	**11**	**64**	**18**	**4**	**0**	**235**	**78**

Training and development

Market scenarios, which have significantly changed in the past two years, have led to Ansaldo STS facing commercial, technological and managerial challenges that require organisational and management measures capable of refocusing the company culture, adjusting its professional system and updating expertise.

In this context, professional, managerial and specialised training is, and will continue to be, an increasingly crucial lever in the development of human resources. These objectives have been met by pursuing the continuous improvement of training quality standards.

The underlying approach is the translation of the company's strategic targets into consistent operating methodologies, through the development of core skills on one hand (which are necessary to monitor work activities) and, on the other hand, by emphasising the development of compliance with distinctive ethics from a managerial standpoint.

Training is developed through projects in four main areas:
- regulatory;
- language;
- managerial;
- technical/specialised

Ansaldo STS also offers specific training courses to certain groups of employees, such as senior managers, developing junior managers, technical experts or young individuals with talent, ensuring paths that will help them develop in their career or expand upon the skills needed to meet the responsibilities of their job.

In 2015, a total of 78,222 hours of training were provided, broken down by training category as follows:

% HOURS OF TRAINING BY TYPE	2015	2014
Technical/specialist training	38.9%	24.1%
EHS, Quality, Ethical aspects	18.6%	22.4%
Managerial training	12.5%	20.0%
Mandatory/institutional training	4.6%	19.9%
Language training	16.9%	12.1%
Refresher training	8.5%	1.5%

These types of training include different targets, especially in the areas of regulatory compliance and specific updates for both the general company and individual functions, in order to develop specialised expertise.

Underscoring the important role that technical/specialist training plays for the group, in line with its mission of significant growth, this type of training grew by over 9,000 hours compared with 2014. There was also an increase in the amount of time devoted to language training (2,600 more hours).

Average annual hours of training by employee category are shown below:

AVERAGE HOURS OF TRAINING PER YEAR	2015		2014	
	MEN	WOMEN	MEN	WOMEN
Managers	9.7	37.6	9.9	10.0
Junior managers	19.6	15.3	32.7	21.7
White collars	22.6	19.8	22.3	21.8
Blue collars	12.1	15.4	22.3	13.1
Average hours per year per employee	**20.7**		**23.2**	

Average hours by region and gender in 2015 are illustrated below:

AVERAGE HOURS OF TRAINING PER YEAR BY GENDER AND REGION	Central and Eastern Europe and the Middle East		Western Europe		The Americas		Asia Pacific		China		TOTAL	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
2015	**17.3**	**10.9**	**28.1**	**27.1**	**22.1**	**19.1**	**20.0**	**26.3**	**33.4**	**31.7**	**21.1**	**19.3**
2014	29.0	22.9	31.6	23.6	14.9	14.1	15.1	14.9	17.3	16.3	**24.1**	**19.4**

The company invested €1.7million in training in 2015.

INVESTMENT IN TRAINING (in Euros)	2015					
	Central and Eastern Europe and the Middle East	Western Europe	The Americas	Asia Pacific	China	TOTAL
Technical-specialist training	109,250	193,071	299,455	100,252	0	702,028
Managerial training	332,904	88,665	48,391	39,047	1,904	510,911
Language training	91,809	94,962	4,270	1,460	0	192,501
Refresher training	24,838	17,777	52,666	69,287	0	164,568
HSE, Quality, Ethical aspect	8,727	56,619	12,194	45,825	0	123,365
Mandatory/institutional training	397	43,908		6,115	0	50,420
TOTAL	**567,925**	**495,002**	**416,976**	**263,849**	**1,904**	**1,745,656**

Ansaldo STS also offers specific training courses to certain groups of employees, such as senior managers, growing junior managers, technical experts or young people with talent, ensuring paths that will help them develop in their career or expand upon the skills needed to meet the responsibilities of their job.

“50-50” project

The guiding principles of this project are self-help and self-engagement, promoted by the slogan “If you bet on yourself, we back you!”. Anyone who wants to improve their managerial skills may attend a one-week executive course at one of the top ten international business schools (as per the Financial Times ranking, namely, Harvard BS, Columbia University, Stanford, London BS, Insead, etc.).

Participants are required to pay for half of the course fee and to use their holidays to attend, while the company covers the remaining 50% as well as travel and accommodation. This initiative, used in very advanced contexts, hinges on self-development and employees’ willingness to pledge their personal resources (financial and time) to grow professionally. Ansaldo STS rewards this attitude by paying the participants the 50% of the fees if they show that their performance has improved as a result of the course within one year.

Eight people applied to participate in this project in 2014 and 18 applied in 2015, mainly employees from the talent pool.

2015 Global job system update

Ongoing maintenance and updating of the Global Job System (GJS) is a key element in the strategic alignment of business targets and distinctive core competencies. In line with the Values to Actions (V2A) Key Roles initiatives, focused on strengthening the managerial and technical competencies of the project key roles, in 2015 the GJS model updating project was completed sand GJS models were updated for the following professional families: Project Management, Engineering & Commissioning, Development, Supply Planning, Operation & Maintenance, Construction, Health-Safety & Environment, Facility Management, Logistics, Administration, Finance & Control and Investor Relations & External Communication. All employees were informed about the updating of the models in a series of meetings organised by the individual professional families, and the new models have been published on the company Intranet and implemented in the IT systems (SAP/ SABA).

Knowledge owners programme

The Knowledge Owners (KO) programme was launched in 2014 as the second part of the Ansaldo STS talent development model.

In addition to identifying candidates with high managerial potential, the company also selected employees with expertise and technical experience that are of particular importance to it.

The recruitment process was based on a bottom-up nomination, leading to the identification of 80 knowledge owners, who were then assessed by a technical commission for their: distinctive skills, seniority, involvement in strategic or critical technological projects, publications, patents, participation at conventions and technical conferences as speakers.

In 2015, K.O. programme activities intensified, working towards the conclusive stage planned for spring 2016.

A technical committee has been asked to achieve the two main goals: a technical issue, which consists of resolving an issue related to K.O.'s projects and know-how, making it possible to overcome a series of technical obstacles while raising the company's competitive level; and a transfer issue, which relates to the company's aim of transferring the core business know-how currently found in a small group of resources: the K.O.s.

The K.O. training and development programme launched in 2014 and completed in 2015 covered the following areas:

- Knowledge management and knowledge investment (in which knowledge is a factor for production and innovation);
- Change management and innovation (knowledge transfer);
- Learning from experience and knowledge sharing.

Knowledge owners were also given the opportunity to take an additional course entitled "Train the trainers" with the aim of teaching them techniques for classroom organisation, from how to prepare materials to be distributed to trainees to how to evaluate the effectiveness of a course after it had been completed. This course is not offered exclusively to knowledge owners, but is also available to those who, at various levels, act as spokespeople or teachers with the Academy and in general for Ansaldo STS.

The aim is to create a community of practice in which technical experts can share their experience and actively collaborate in the transfer and building of Ansaldo STS's knowledge and know-how.

The dynamic sharing of knowledge and ideas, not only among K.O.'s but also between those benefiting from their know-how through scheduled courses, has helped create a genuine community of excellence

To this end, the K.O.'s may use a special platform created for them, called TRIBES, in which they can share teaching materials for courses, leading to specific discussions in a forum set up for this purpose. Given the high potential for this tool's development - not only for project participants, but for the company as well - the objective for 2016 is to give all company employees access to it with three different security levels.

Talent Project

In accordance with the talent training plan, a large number of people participated in talent training activities. In 2015 the emotional intelligence training module to explore the factors of emotional intelligence that apply to the group's working environment was launched. These include:

Self-awareness: the ability to recognise and understand one's mood, feelings and compulsions, including their effect on other people.

Self-control: the ability to control and redirect destructive impulses and feelings, such as the ability to not pass judgement and to think before acting.

Motivation: working passionately for reasons that go beyond money or status; the tendency to strive for objectives consistently and enthusiastically.

Empathy: the ability to understand others' emotional state and to treat people differently according to their emotional reactions.

Social skills: the ability to manage relationships and network successfully; the ability to identify commonalities and forge interpersonal relationships.

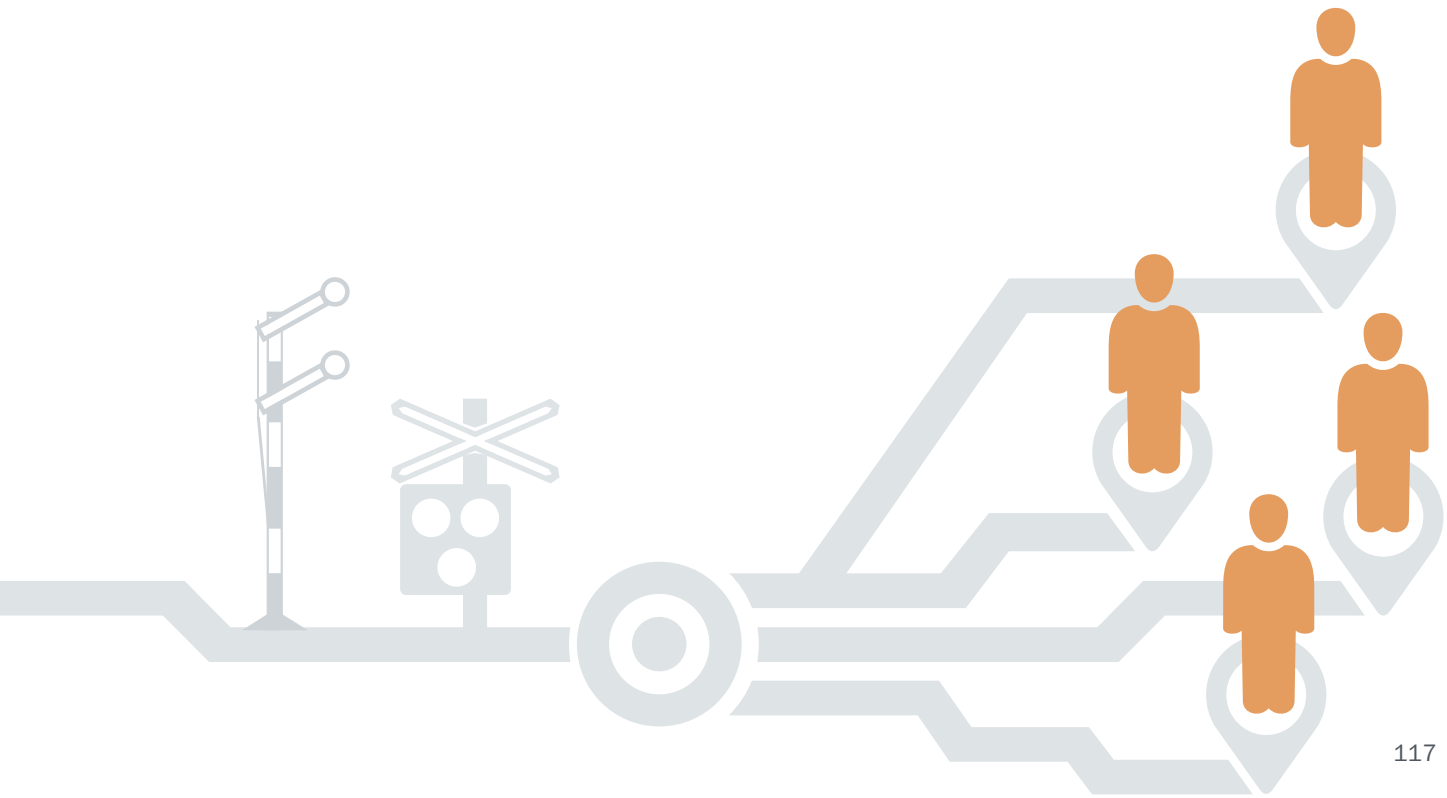
Between 2015 and the first few days of 2016, the group finalised the micro detail of the "Financial Accounting and Value Creation" course, which has already been included in the training for key resources.

Consequently, beginning in March 2016, the first edition of this course will commence in Italy, France, Australia and the US.

IRIS certification

At the end of 2015, Ansaldo STS successfully completed its first campaign to apply for and receive certification in accordance with the International Railway Industry Standard ("IRIS") at several of its sites, promoting the company's high quality level in terms of supplies and services.

Support training in the classroom or through e-learning enabled Ansaldo STS to inform personnel of the standard's general requirements. There was ad hoc training at the Pittsburgh and Les Ulis sites during the year.



Performance assessment

Performance assessment is a key tool in managing the development of human resources. Ansaldo STS has implemented a global, structured and consistent process at international level called Performance Development Plan (PDP), which it launched in 2010, and which provides for the assignment of performance and development targets and their assessment for all Ansaldo STS personnel. The entire process is managed online, which significantly reduces the use of printed paper, and consists of three phases:

- phase 1 - planning: relates to the formalised assignment of targets linked to business and/or individual performance indicators and professional development indicators;
- phase 2 - coaching: involves the continuous monitoring of performance by the employee's direct supervisor and mentor;
- phase 3 - review: the final assessment phase in which all the employee's assessments are combined (self-assessment, direct supervisor's assessment and those of other people selected from within the organisation for a more comprehensive vision of individual performance).

Over the past five years, this process has been extended to all group companies and has been consolidated in terms of management and development practices. The process now covers over 95% of the company's headcount, a significant result, as it lays a sound foundation for a more objective and structured definition of the development paths and ways in which to reward all Ansaldo STS employees around the world. In particular, after the integration of the global job system, implemented in 2012, PDP became an even more complete development tool, as the assessment of abilities and skills performed concurrently with the performance assessment, makes it possible to define individual targets and growth paths that are effectively in line with expectations for the position.

Career progress, the identification of talent and compensation are tied to the integrated performance/ability assessment system so that merit is the true enabler of professional development.

In 2012, the PDP was also introduced into the executive assessment process. There are some 90 executives around the world who, in addition to having been assigned challenging performance targets in connection with business priorities for the current year, managed through the MBO incentive process, have been set position-holding targets taken from the roles and mandates outlined for each managerial position.

In 2014, in line with the company's management development strategy, the 360° assessment process was introduced for executives with respect to certain abilities considered crucial for the leadership style of Ansaldo STS's managers. All executives participating in the

programme were able to receive feedback from managers, peers and direct colleagues and to identify in a structured way their strengths and areas for improvement.

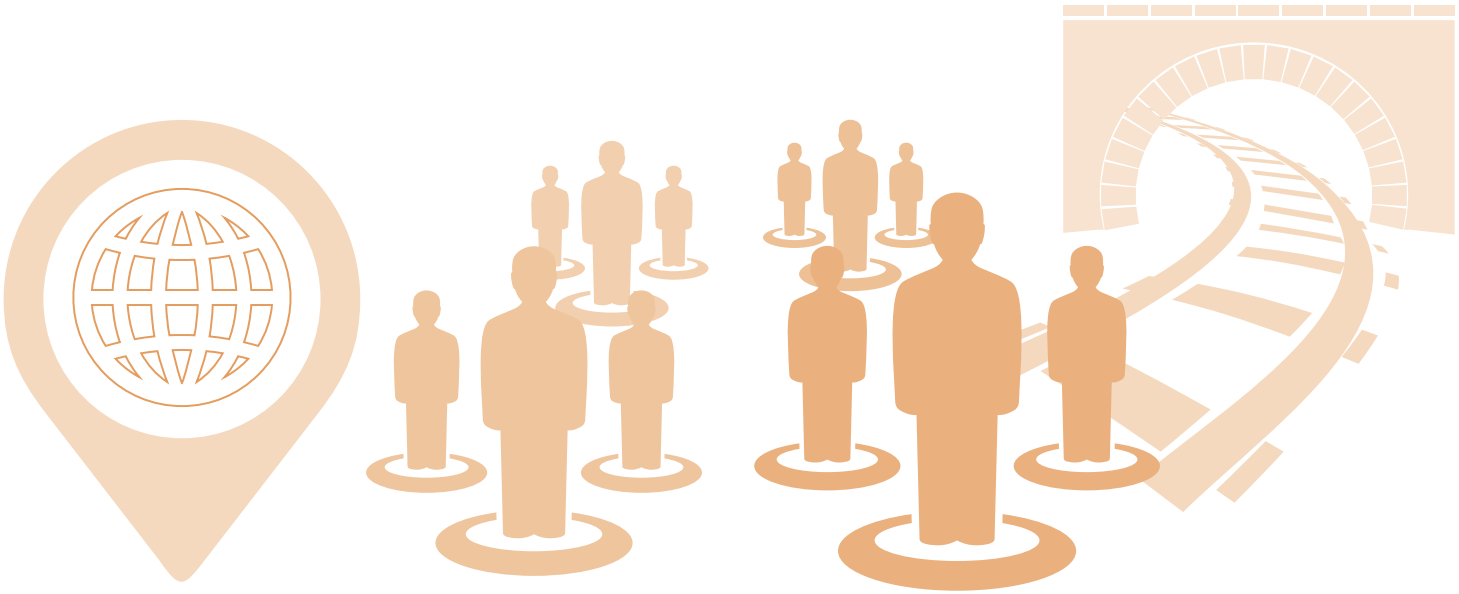
The use of this more structured, challenging approach in the assessment of managers is considered one of the tools to strengthen a managerial culture more focused on putting into practice the soft skills that the company values, such as team spirit, people management skills, change management skills and international cooperation. By including managers in the PDP-based assessment and development process, the system is now consistent throughout all levels of the organisation.

In 2015, the 360° process was improved further with respect to the IT system, and it was also extended to talents and middle managers worldwide. In addition, another three specific competencies were added, for a total of seven key competencies on which managers, peers and teams assessed employees. During the year, 480 Ansaldo STS resources around the world participated in this project and were given the chance to identify the development objectives of the 2015 PDP plan in a more structured manner.

Over the past two years and in line with the empowerment programmes, the PDP has been fine-tuned further so that as well as the functional heads being assessed project managers (PMs) and project engineers (PEs) are also. These employees were given the task of managing their team's output and defining, monitoring and assessing project objectives. This strong commitment asked of the project teams (PMs and PEs) is designed to enhance the independence, effectiveness and leadership of these key teams.

Project managers were required to participate in the annual PDP process to improve the effectiveness of their teams. Their role was to assign objectives to each member of their team and assess them on it. This strong commitment allowed:

- all team members to be more responsibly engaged in attaining the project objectives;
- the more consistent matching of functional objectives with the project objectives, thanks to the approach shared by the project managers and unit heads;
- the teams to be more closely involved in the shared objectives.



Internationalisation and multiculturalism

A global company such as Ansaldo STS must constantly maintain a high level of internationalisation and encourage its personnel to adopt a multi-cultural approach, and in 2015 the management process for international personnel assignments was consolidated.

The number of people involved in training sessions on internationalisation and multi-culturalism rose by 5% in 2015 to 603.

Ansaldo STS has strengthened its presence in the geographical areas already considered strategic, such as Denmark and Turkey, and has opened a new establishment in Peru. The number of employees abroad is shown in the following table:

	2015	
Original region	**Workforce abroad**	**Destination countries**
Central and Eastern Europe and the Middle East	52	8 (Peru), 10 (Denmark), 1 (Russia), 5 (Australia), 9 (Turkey), 2 (UAE), 3 (Taiwan), 3 (India), 3 (Saudi Arabia), 3 (US), 3 (France), 3 (Greece), 2 (Sweden)
Western Europe	7	1 (UAE), 1 (Taiwan), 1 (Sweden), 1 (Turkey), 1 (Peru), 2 (Morocco)
The Americas	3	1 (Denmark), 1 (Korea), 1 (Peru)
Asia Pacific	2	1 (France), 1 (Italy)
China	2	2 (Italy)
TOTAL	**66**	

The permanent presence of non-local personnel in certain group companies reflects the internationalisation process that Ansaldo STS is pursuing.

	2014		
Region	**Local personnel**	**Non-local personnel**	**Total non-local personnel**
Central and Eastern Europe and the Middle East	**1,506**	Albania 2, Argentina 1, Bosnia 1, Canada 1, Colombia 3, Ecuador 1 , Egitto 4, Francia 2, Germania 1, Grecia 1, India 4, Irlanda 1, Giordania 3, Libano 1, Lituania 1, Malesia 1, Moldavia 1, Marocco 1, Pakistan 4, Romania 3, Spagna 3, Sudan 1, Svezia 1, Siria 1, Taiwan 1, Tunisia 2, Emirati Arabi Uniti 1, Gran Bretagna 1, Yemen 1	**49**
Western Europe	**771**	Algeria 2, America 1, Belgio 2, Camerun 3, China 6, Congo 1, Danimarca 1, Gabon 1, Germania 1, Guinea 1, Italia 9, Costa D'Avorio 1, Corea 2, Libano 2, Marocco 4, Portogallo 5, Russia 2, Romania 1, Senegal 1, Sud Africa 1, Spagna 1, Tunisia 2, Turchia 1	**51**
The Americas	**610**	Bielorussia 1, Gran Bretagna 2, Canada 1, Cina 4, Francia 2, Grecia 1, India 5, Irlanda 1, Italia 12, Kazakistan 1, Corea 3, Malesia 1, Messico 2, Moldavia 1, Pakistan 1, Russia 3, Samoa 1, Ucraina 19, Venezuela 1	**62**
Asia Pacific	**580**	America 1, Cina 3, Colombia 1, Germania 3, Francia 4, Giamaica 1, Iran 2, Irlanda 4, Italia 17, Kenia 1, Nepal 1, Pakistan 3, Filippine 4, Singapore 1, Sud Africa 2, Srilanka 5, Taiwan 1, Tailandia 3, Gran Bretagna 17, Vietnam 1, Zimbabwe 1	**76**
China	**64**	Italia 1, Francia 1, Malaysia 1	**3**
TOTAL	**3,531**		**241**

Some of the changes introduced in recent years, such as those aimed at personnel development and engagement abroad, were immediately considered in the updates of the group's international mobility guidebook. The updating process also entailed substantially improving strictly "specialised" issues, such as tax neutralisation policies and compensation & benefits for ex-patriot employees.

The international mobility process is increasingly geared towards integration, in which, depending on the relevant issues, other HR personnel and external experts are involved.

In this respect, some of the steps taken in recent years and reinforced in 2015, include:

- preliminary ad hoc meetings;
- special assessments and training, including in the new language;
- constant monitoring of immigration issues, which are always arising around the world and differ widely from one country to the next to provide the best support to both seconded employees and directly hired or relocated employees as they begin their experience abroad;
- the use of IT, assessment and training tools to encourage greater awareness of multi-culturalism and assist the overcoming of any cultural/conduct barriers, while respecting each person's values (home and host);
- focus on governing the integration process in the various countries, beginning with the management of job opportunities on a global scale;
- a system that monitors connections between development of personnel and international experiences, particularly recurring or long-term mobility experiences;
- commitment to governing the relationship between performance during an international experience and remuneration policies, with the use of performance-based bonuses;
- focus on repatriation and retention;
- the development of constructive relationships between HR specialists to support the internationalisation process, thereby strengthening the establishment of an HR International Mobility Team;
- the maintenance of operating tools to support both the use of the company Intranet, to share information and company practices, and the disclosure of internal communications using advanced, widespread computer and video-telephone technologies;
- continuing integrated activities with Health & Safety and Security to ensure safe work conditions abroad;
- ongoing cooperation with the Administration department with respect to taxes and accounting.

Remuneration and incentive systems

Ansaldo STS manages labour relations with its employees in compliance with legislation in the various countries in which it operates. Below is a brief summary of the main legislation/regulations.

ITALY

Employment is governed by the Constitution, Italian Civil Code and special laws, as well as by the national labour agreements and EU laws. Ansaldo STS applies the national labour agreement for the metal-mechanic industry and the national labour agreement for managers of companies that produce goods and services, which establish minimum standard remunerative/regulatory terms for all contractual categories. In addition, Ansaldo STS applies supplementary company agreements (excluding managers), which it agrees with the trade unions. These agreements provide for more favourable terms for employees.

UNITED STATES

There are no national labour agreements governing employment. Each employee individually negotiates the terms of employment. However, there are supervisory and protection bodies:

- Equal Employment Opportunity Commission (EEOCis the federal commission ensures equal opportunities in labour (no discrimination on the basis of religion, sex, age, disability, etc.);
- Fair Labor Standard Act (FLSA) is a federal act that sets the standard for child labour, overtime and minimum wages. These aspects are also governed by each individual state, in accordance with their specific requirements. All labour regulations are reported to employees by posters hung in visible areas.

FRANCE

There are national labour agreements with trade unions (“Convention Collective”) and agreements at company level. The “Convention Collective” establishes minimum wages for each category and the main terms of employment (responsibility levels, trial periods, required notice, etc.). The employment terms set forth in individual contracts may be more favourable to employees but not less favourable than those defined under general labour legislation. In addition, French law requires annual negotiations with the trade unions on remuneration, contractual terms, equal opportunities with respect to gender, the disabled, training and development. French law also enforces respect for human rights, equal opportunities, child labour restrictions, freedom of association and the protection of privacy.

SPAIN

Spain also has national labour agreements with trade unions that are applicable to all workers at national level and at regional level as well. The employment terms set forth in individual contracts may be more favourable to employees but not less favourable than those defined under general labour legislation. Spanish law is particularly specific with respect to that already established by the national constitution in terms of equal opportunities and non-discrimination in the workplace, freedom of association, trade union representation, the protection against child labour and maternity benefits, with specific benefits for working mothers.

AUSTRALIA

Remuneration and incentives are governed by national employment standards (NES) relating to minimum wages, work hours and general terms of employment. Employees whose work is assessed using the global job system and who receive Hay grades below 12 are remunerated in line with the national labour agreement. This agreement, which was ratified by the Italian labour court, provides for annual wage adjustments when they are negotiated (currently 4%). In the second half of 2012, a new company agreement (2013-2015) was negotiated with the trade unions.

This agreement will introduce a new remuneration and classification system based on abilities and in line with the master agreement for national industry. In addition to that provided for by the agreement, remuneration will be increased on the basis of individual performance defined in the annual revision process.

INDIA, MALAYSIA, BOTSWANA

All employment agreements are individual. However, the above procedures provide for the application of minimum standards at group level in these countries. Accordingly, tools such as market benchmarks and salary reviews are also applied in these countries, using the same criteria as that for Australia. Ansaldo STS therefore ensures its employees receive remuneration and benefits that are comparable with those offered by the best companies in these countries.

CHINA

There are no national labour agreements. Each employee individually negotiates the terms of employment. In China, there is the Labour Law of the People's Republic of China and the Constitution of the PR of China, which ensure the freedom of association, equal opportunities, etc.. In October 2011, the Chinese government published new labour market regulations which will also apply to foreigners working in China (including, for example, the introduction of social security contributions).

Fair remuneration

Ansaldo STS manages employment relationships with its employees in accordance with the laws in place in the various countries where it operates. It also periodically weights the most significant positions in the organisation with the support of a company specialised in this field and compares the remuneration of the employees holding such positions on a weighted basis, against the market benchmarks. If the remuneration is not in line with the market (and, obviously, if the employees have received positive performance assessments), their remuneration is adjusted.

Ansaldo STS can establish higher levels of remuneration than general market brackets for positions that are particularly critical and important or to limit the risk of employees leaving the company, with a resulting loss of expertise.

Since 2013, in addition to the periodic assessments of positions, Ansaldo STS has extended the weighting to lower levels of its organisation as well, using the results of the GJS project, which involved approximately 3,000 of the company's personnel. This made it possible to create a tool useful in the global assessment of the consistency between the responsibilities and remuneration, without distinguishing by country, sex, culture, etc., in accordance with the company's values, which protect and promote the equal treatment of people.

The following table illustrates gross average remuneration of the Ansaldo STS group broken down by category and gender:

	Central and Eastern Europe and the Middle East (€'000)		Western Europe (€'000)		The Americas (US$'000)		Asia Pacific (AUS$'000)		China (Renminbi thousands)	
2015	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**
Managers	122	86	110	0	189	140	213	0	0	0
Junior managers	55	52	83	69	119	116	166	135	610	440
White collars	38	36	48	44	92	73	118	88	375	248
Blue collars	28	28	25	23	44	37	90	61	0	0

The following table illustrates the ratio of women's gross average remuneration compared to men's, broken down by category and region:

	Central and Eastern Europe and the Middle East	Western Europe	The Americas	Asia Pacific	China
2015	**MEN/WOMEN**	**MEN/WOMEN**	**MEN/WOMEN**	**MEN/WOMEN**	**MEN/WOMEN**
Managers	70%	0%	0%	0%	0%
Junior managers	95%	83%	97%	81%	72%
White collars	95%	92%	79%	75%	66%
Blue collars	100%	92%	85%	68%	0%

The following table illustrates the ratio of the highest paid employees' remuneration to the median remuneration of all other employees in the different regions:

HIGHEST REMUNERATION AS A RATIO TO MEDIAN REMUNERATION	2015	2014
Central and Eastern Europe and the Middle East	7.3	5.2
Western Europe	2.9	4.1
The Americas	3.4	3.4
Asia Pacific	2.1	2.4
China	2.9	3.0

The ratio of entry-level remuneration and the minimum legal remuneration for women and men is shown in the following table:

RATIO OF ENTRY-LEVEL REMUNERATION AND THE MINIMUM LEGAL REMUNERATION	2015	2014
Central and Eastern Europe and the Middle East	1.1	1.1
Western Europe (FRANCE)	1.0	1.0
The Americas	1.8	1.8
Asia Pacific	1.0	1.0
China	1.0	1.0

Performance-based incentive systems

Performance-based incentive systems are mainly linked to the management by objectives (MBO) process or specific performance indicators (KPI) for strategic projects entailing bonuses upon their successful conclusion. Managers, certain junior managers in key positions for the business and strategic project team personnel are included in these programmes. The bonuses, which are calculated as a percentage of gross annual remuneration, vary depending on the responsibilities held.

Over the past few years, in keeping with company strategies, the MBO programme has been integrated within one single system that is increasingly electronic with the production of less paper.

In accordance with regulations for listed companies, Ansaldo STS has a remuneration committee set up by resolution of the company's Board of Directors. It meets regularly and the Head of Human Resources participates in the meetings. The committee's activities include:

- proposing the financial/regulatory package for the CEO and key managers. To this end, the committee relies on market studies performed by specialised companies which provide appropriate benchmarking;
- evaluating the CEO's proposals on general remuneration and incentive criteria for company management.

The committee has also analysed and approved a document, which is usually updated each year, prepared by Human Resources, positioning all company management in a performance/potential matrix in order to consider, for the purposes of determining remuneration, whether the person can be replaced, appointed to other positions, etc.

Fixed and variable incentive systems are therefore defined in line with the position held, considering the specific position and the individual manager's positioning in this matrix. Similar assessments are performed for people who are eligible for the stock grant plan (medium/long-term plan).

The following table compares the number of managers included in the incentive system at the end of 2015:

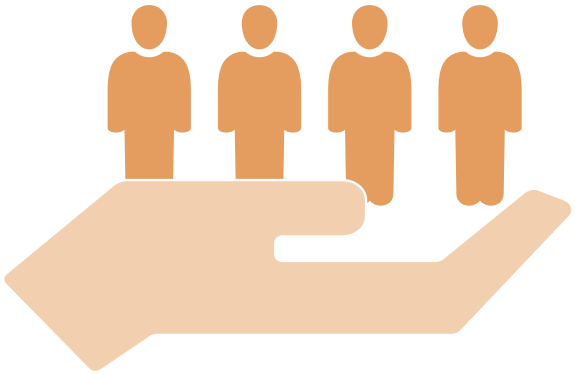
	Central and Eastern Europe and the Middle East		Western Europe		The Americas		Asia Pacific		China	
2015	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**
STOCK GRANTS	27	1	4	0	3	0	3	0	0	0
CASH (long-term)	4	0	0	0	0	0	0	0	0	0

People Care

The “People Care” concept is an extensive one for Ansaldo STS and applies to employees’ well-being as both professionals and individuals. The basic concept is linked to the “Total Reward” strategy, based on tangibles and intangibles, to improve personal satisfaction. It is no coincidence that “People” is one of the company’s five values in its identity: people are at the very heart of the organisation, and this demonstrates the company’s focus on making the work place an environment where they can gain experience, develop competencies, forge relationships and find motivation continuously.

Ansaldo STS’s focus on people can be first seen in the way it guarantees a comfortable and motivational work environment by actively supporting, through its corporate processes, relationships between managers and employees and relationships between colleagues. Furthermore, there are various support services available in different countries for employees and, in some cases, their families as well.

Flexible schedules, agreements with entertainment and sports centres, benefits like health insurance, family open days, employee scholarships and celebrations of successful projects are some of the tools used.



Employee initiatives

Ansaldo STS follows an extensive policy to manage initiatives that support employees. This policy includes a series of benefits allocated and used on the basis of an employee's professional position and the social and cultural customs in their respective countries. Below is a list and brief description of the main benefits and initiatives supporting employees under the company's policy.

Company health insurance

Ansaldo STS Italy offers its employees a supplementary health insurance. These policies cover a wide range of medical needs (e.g. specialist examinations, hospitalisation, medical services, etc.) and vary according to each employee's professional position (senior and junior managers, white and blue collars have different limits of indemnity). Employees may decide whether to take out these additional policies. Should they decide to do so, a monthly contribution is withheld from their payslips to cover part of the cost, while the company bears the residual amount. France has a supplementary health insurance scheme which cover employees and their family, which is mandatory by a company agreement.

Ansaldo STS Australia has established Corporate Membership with Medibank Private and RT Health (a fund created in Australia to specifically support the Transportation Industry, enabling Ansaldo STS Australia employees to access a top class, comprehensive Health fund at very competitive rates in addition to a range of special benefits on joining, including waiver of waiting periods and gift vouchers.

Company accident insurance

Ansaldo STS Italy offers its employees insurance for work and non-work related accidents under an accident insurance policy covering accidents both in the workplace and outside the workplace, for all employees, seven days a week, 24 hours a day. The cost of this policy, which covers all employees, is fully covered by the company. The same policy is offered in France, Australia and China to all white collars. It is not offered in the US, as this kind of cover is included in the company life insurance policy.

Salary continuance insurance

Ansaldo STS Australia offers employees who work more than 15 hours per week salary continuance insurance. The policy provides for the assignment of 75% of their income for a maximum of two years if the employee is unable to work due to illness or injury.

Health checks

Ansaldo STS Italy offers managers the chance to have an annual medical check-up with the full cost covered by the company. In China, these check-ups are offered to all employees, while there is no such benefit for employees in Australia, France or the US. In Spain, annual medical check-ups are legally required for all employees.

International travel insurance, e.g.: Europe Ass

In Italy, France, Australia and the US, Ansaldo STS offers an accident insurance policy covering any accidents or first aid and medical care (as well as luggage and personal item coverage) to employees working abroad (either on a business trip or under secondment). The costs of this policy are fully covered by the company. Ansaldo STS China has also begun offering this policy.

Life insurance

Ansaldo STS offers its employees a life insurance policy and fully covers the costs of this policy. This policy is offered to Ansaldo STS managers in Italy and Spain, and to managers and all full-time employees in the US (company life insurance, accidental death & dismemberment & LTD insurance). It is also offered to all employees in France who share the cost with the company.

Company cars

Ansaldo STS offers employees company cars (with a policy that is similar to a lease). The car may also be used for personal reasons, i.e. it may be used by employees, as well as by their family members or close friends, after notifying the company. Employees pay a monthly contribution and the company pays the remaining amount. In Italy, the company has signed an agreement so that all employees can purchase the company cars when they are replaced at advantageous prices. Company cars may be assigned to managers and junior managers with high profiles in Italy and Spain, and to Ansaldo STS managers in the US. They are also offered in France and China. In Australia, company cars are assigned to employees as a tool of trade when the vehicle is necessary for the fulfilment of the employee's duties. Managers and executives are rewarded with a car allowance to assist them with the maintenance of their personal transport.

Company housing

Ansaldo STS offers housing to employees seconded in the medium to long-term. The cost of the housing is fully covered by the company.

Fuel allowance

Ansaldo STS offers employees a fuel allowance up to an annual limit, which may be used for car refuelling. The company covers the cost of this benefit, which may be assigned to managers in Italy. It is also offered in France but not in Australia, Spain, the US or China.

Professional membership allowance

Ansaldo STS offers its employees the possibility to join professional associations (e.g. the register of engineers) and fully covers registration costs. This benefit is offered to Ansaldo STS Italy managers, all US and Australian employees, but not Ansaldo STS France (where the benefits are granted on a case-by-case basis). In China, the company refunds engineers and managers for the registration costs if they have been approved by HR. In Italy, the company is carrying out a project with the order of engineers to organise training courses at its sites so employees can earn the credits needed for registration.

Corporate credit cards

Ansaldo STS Italy offers employees the possibility to obtain corporate credit cards linked to the employee's bank account at special terms agreed by Ansaldo STS and the bank. The credit cards available to Ansaldo STS employees are Visa and American Express. The costs of Visa cards are fully covered by the company, whereas employees contribute to a small portion of the costs charged by American Express. Ansaldo STS also offers its Italian employees the possibility to open current accounts under special terms with selected banks. Furthermore, bank branches and ATMs are located at some of the main offices of Ansaldo STS, making it easier and more efficient for employees to make use of main banking services. These arrangements are also in place in the US, but not China. In Spain, France and Australia, credit cards are linked to the employees' bank accounts and only offered to people who travel frequently for work to cover expense notes.

Travel Tracker: travel safe

Ansaldo STS's expansion in markets and its current organisational model require the presence of its personnel in many different countries, which often present challenging safety conditions and weak healthcare and welfare systems. To mitigate critical issues arising from travel and relocation abroadAnsaldo STS is implementing a system at all sites to ensure adequate protection from outside events. In this context, in order to prevent and remedy any issues, the company is equipped with a tool called the "Travel Tracker (TT)", provided by International SOS, which makes it possible to track planned travel in real time. As soon as an employee confirms his or her travel booking through the Ansaldo STS travel agency, International SOS gathers the information and enables company personnel responsible for this activity to quickly identify those employees in areas with high health and safety risks. International SOS, working in collaboration with Ansaldo STS, manages this database. Additional TT services include:

- Personal Travel Locator (PTL): personnel travelling for business can input their own and their family members' travel plans which have not been booked using the company travel agency or while they are on long-term secondment and the travel details are automatically uploaded to the TT database.
- Automated Travel Advisory (ATA): when tickets are booked for the selected destinations, in accordance with parameters established by Ansaldo STS, travellers receive an automated travel advisory on the destination country via e-mail, containing information on public and personal safety, health conditions, driving, vaccinations and illnesses, food and water recommendations, local culture and conduct in the workplace, holidays and demographics.

Furthermore, employees may register with International SOS (www.internationalsos.com), a service that provides alerts on countries of interest selected at the time of registration. The International SOS Alarm Centre Paris, a call centre, is available for any reason.

Ansaldo STS Italy employees have set up recreation centres, referred to as "CRAL". These are a form of free association of workers and are structured as separate entities from the company. Employees who join the CRALs pay a fee deducted from their payslip. CRAL members may participate in a number of activities (sports or other) and take advantage of discounts at partnering shops (bookshops, opticians, etc.). No such agreements are in place in France, the US or Australia.

Canteen and break area service

Ansaldo STS Italy, France and US provide a canteen service at all main offices (e.g.: Genoa, Pittsburgh, Les Ulis, Tito, etc.). In Italy, employees contribute to the canteen costs through deductions in payslips, whereas in the other countries, they pay directly when using the canteen services. This service is provided under special terms which are regulated by agreements between Ansaldo STS and the companies that operate the canteens.

Recreation centres

Ansaldo STS Italy employees have set up recreation centres, referred to as "CRAL". These are a form of free association for workers and are structured as separate entities from the company. Employees who join the CRALs pay a fee deducted from their payslip. The company also makes a contribution.

CRAL members may participate in a number of activities (sports or other) and take advantage of discounts at partnering shops (bookshops, opticians, etc.). No such agreements are in place in France, the US or Australia.

Pension plan

Ansaldo STS manages pension plans with its employees in accordance with the laws in place in the various countries where it operates. Changes in defined benefit plans and post-employment benefits are shown below:

	Post-employment benefits	Defined benefit plans
Value at 31 December 2014	**20,120**	**14,555**
Cost (of the service and interest)	613	934
Contributions paid	(2,258)	(176)
Other changes	-	6
Actuarial gains recognised in equity	(527)	(112)
Value at 31 December 2015[25]	**17,948**	**15,207**

The average term of post-employment benefits is 12 years while that of the other defined benefits is 18 years.

ITALY

In Italy, Ansaldo STS offers its employees a pension fund through the "Cometa" Fund, the National Supplementary Pension Fund for workers in the "Metal-mechanical and plant installation industry", set up to provide workers in this industry with greater pension coverage than that offered by the mandatory social security plan. When they join the Cometa fund, workers sign the application form and create an individual position, transferring employees' leaving entitlement, an individual entitlement required by Legislative decree no. 252/2005, to which the employer is required to add a contribution under the aforementioned decree. When they retire, employees may choose how to receive the Cometa annuity:

- immediate life annuity: i.e., immediate payment of a life annuity for the policyholder's entire life;
- immediate certain annuity and life annuity: i.e., immediate payment of certain annuity for five or ten years, followed by a life annuity until death;
- immediate reversible annuity: i.e., immediate payment of a life annuity until death, subsequently reversible (60% or 100%) to another person until death.

AUSTRALIA

In Australia, the pension fund is referred to as superannuation, a sum of money set aside during the life of an employee, from the beginning of employment, to cover the future pension. Ansaldo STS pays contributions to the pension funds on behalf of its employees calculated as a percentage of annual fixed remuneration defined by the Australian Taxation Office. The company makes pension fund payments directly to the providers selected by employees. The percentage has increased since July 2014 from 9.25% to 9.5%. Employees are encouraged to increase the contributions to their pension funds, including with incentives in the form of government grants. Temporary residents who have left Australia may request payment of their superannuation.

INDIA

Pension fund: contributions to the pension fund are equal to 12% of the base remuneration of the employee to which a further 12% must be added, paid by Ansaldo STS. These contributions are deposited in the employees' account with the relevant pension fund and returned to the employee upon retirement, through monthly pension payments, plus accrued interest. The 15% of employees' base remuneration is deposited with the Life Insurance Corporation of India through the Superannuation Trust Fund.

MALAYSIA

In Malaysia, pension plans are offered through an employee pension fund (EPF) set up with employees'

25. The main actuarial assumptions used are as follows. post-employment benefits - discount rate 1.89%, turnover rate 2.09% - 5.69%, defined benefit plans - discount rate 1.9%, salary increase rate 2.5%, turnover rate 0.91% - 3.26%.

contributions deducted from their monthly remuneration (at least 11%) and the employer's contributions (at least 12%). Both portions are accrued over the term of service of each employee. This system was not affected by the introduction of the minimum retirement age, because workers can contribute until the maximum age of 70. Even foreigners working in Malaysia may contribute to the fund on a voluntary basis, but the employer's minimum obligation is for only 5 Renminbi per month, unless it decides otherwise. In this respect, foreigners may revoke their entire contribution upon termination of employment and their return to their home country.

SPAIN

In Spain, all employees have a supplementary pension fund called "Plan de Previsión Social Empresarial" (PPSE), which is the same as normal pension funds and is subject to Spanish law. This is an important social benefit and reflects the company's decision to take care of its employees. Contributions to the PPSE are paid by the company only and not by employees. The amount of the contributions is established in a way that ensures a minimum contribution for all employees, also considering each employee's base remuneration. For example, in 2012, the annual contribution paid by Ansaldo STS Spain to the PPSE was equal to €44,362.

FRANCE

France has various pension systems depending on the classification of workers in the national labour agreement. There is nothing specific for Ansaldo STS France. In the French system, pension benefits are funded directly with the contributions of the employees and employers through basic systems (CNAVTS) and complementary combinations (AGIRC ARCCO).

US

Ansaldo STS USA offers a retirement benefit plan for which workers are directly responsible for managing their investments in the plan. Ansaldo STS does not have a segregated account to guarantee the related funds. For each employee, 2% is deducted from remuneration regardless of whether they contribute to any of the pension funds. Furthermore, if the employees defer any payments, Ansaldo STS pays 100% of the first US$250 and 50% of the subsequent 6% of the deferral.

CHINA

Ansaldo STS offers its employees in China pension plan benefits through the central government's National Social Security Fund (NSSF), whereby employees pay contributions (maximum of 8% of the limit set by the government), as well as the company (maximum of 20% of the limit set by the government). Both contributions are deposited in the social security fund of each registered employee and accumulate on a monthly basis.

This system is also used for foreigners legally eligible to work in China since January 2014. Foreign employees are required to contribute to the pension plan if they are taxpayers in China. Furthermore, foreign workers may withdraw their contributions when they leave the country. However, the employee's portion may be withdrawn if the contribution was paid less than ten years earlier and if the foreign worker has not yet reached the retirement age (60 years for men and 55 for women).

Protected worker categories

The policies for the inclusion of disabled people in the headcount fall within the framework of a programme defined at European level with respect to social inclusion policies. In Italy, the integration of disabled citizens or citizens belonging to protected categories is subject to Law no. 68 of 12 March 1999, which first recognised the dignity and social value of the disabled by effectively including them in the labour market. Having abandoned the concept of the "mandatory" hiring practices that were provided for by the previous law (Law no. 482/1968), Law no. 68/99 introduced the key concept of "targeted" employment, defined in article 2 as "a set of technical and support tools which make it possible to adequately assess disabled people in their work abilities and to recruit them for the most suitable position, by analysing positions, forms of support, positive actions and solutions to issues related to environments, tools and interpersonal relations in the daily place of work and contact".

Compliance with the provisions of Law no. 68/99 entails the obligation for companies to hire a specific percentage determined in the same law of personnel in protected worker categories. In Italy, in particular, the percentage of disabled workers required by law for Ansaldo STS S.p.A. is 7%. In 2015, Ansaldo STS reached agreements with the labour centres for the hiring of people in protected worker categories.

The group expects to hire disabled workers in 2016.

	Central and Western Europe and the Middle East		Western Europe	
2015*	**MEN**	**WOMEN**	**MEN**	**WOMEN**
People with disabilities	48	18	4	7
% of total workforce	3.79%	6.27%	0.61%	4.14%

* This figure is not available for Asia Pacific, and Ansaldo STS has not hired any disabled people in China. Information on the disabled cannot be gathered in the US.

Parental leave

Ansaldo STS acknowledges the need for its employees to balance family life with their work commitments and offers flexible hours and part-time to parents with children under 13 or family members with disabilities. Ansaldo STS also grants parental leave in accordance with Italian law.

In 2015, 42 employees used parental leave (38 women and four men) and 33 returned from parental leave (30 women and three man), compared to 51 (43 women and eight men), who had taken parental leave in the previous year.

	Central and Eastern Europe and the Middle East		Western Europe		The Americas		Asia Pacific		China		TOTAL	
2015 - PARENTAL LEAVE	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**
No. of employees entitled to parental leave	1,268	287	653	169	462	173	350	65	41	26	**2,774**	**720**
No. of employees who took parental leave	1	30	36	21	0	3	3	4	0	1	**40**	**59**
No. of employees who returned to work after their period of leave	0	24	35	12	0	3	3	3	0	0	**38**	**42**
No. of employees who returned to work after parental leave and who were still employed 12 months after returning to work	0	16	38	18	0	2	1	1	0	0	**39**	**37**

2014 - PARENTAL LEAVE	Central and Eastern Europe and the Middle East		Western Europe		The Americas		Asia Pacific		China		TOTAL	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
No. of employees who have the right to parental leave	1,225	265	629	163	488	168	414	80	40	27	**2,796**	**703**
No. of employees who took parental leave	1	28	43	22	1	4	3	9	3	2	**51**	**65**
No. of employees who returned to work after their period of leave	0	16	39	19	1	3	3	4	3	1	**46**	**43**
No. of employees who returned to work after parental leave and who were still employed 12 months after returning to work	0	16	25	14	1	3	0	1	0	0	**26**	**34**

The return rate and the rate of people who, 12 months after they returned were still employees (job maintenance rate) are shown in the table above:

RATES	Central and Eastern Europe and the Middle East		Western Europe		The Americas		Asia Pacific		China		Total	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
Return rate	-	80%	97%	57%	-	100%	100%	75%	-	-	**95%**	**71%**
Job maintenance rate	-	100%	97%	95%	-	67%	33%	25%	-	-	**14%**	**79%**

Trade unions

The relaxed relationship that Ansaldo STS maintains with its employees is reflected in an extremely low rate of trade union disputes. This context often leads to the resolution of any issues with employees internally, with scarce recourse to intervention by trade unions, which, in any case, act in an environment of general cooperation. The only strikes declared have been due to general political/trade union issues, which have nothing to do with the company.

ITALY

Ansaldo STS's system for trade unions is based on two levels of participation, given the fact that the company has various operating sites scattered throughout Italy and abroad:

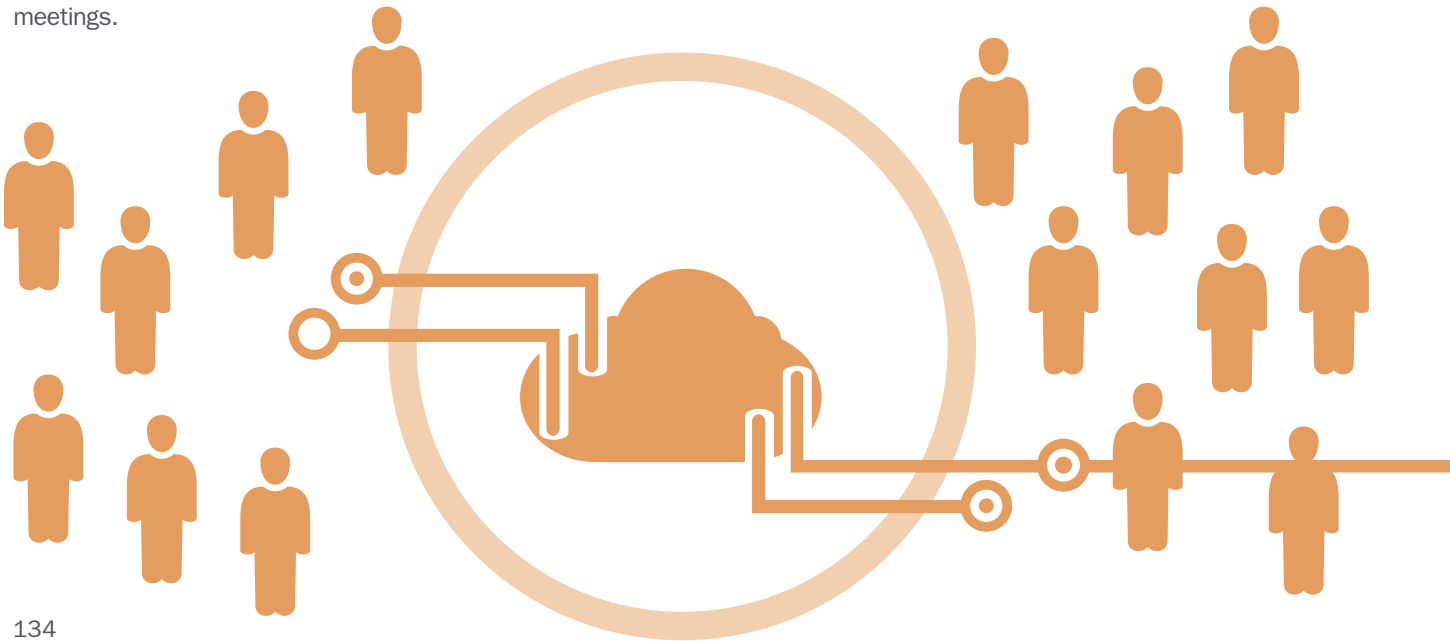
1. STRATEGIC OBSERVATION

In order to analyse the market scenario and the competitive positioning of the business areas of Ansaldo STS, a strategic observatory has been established, made up of six members selected by the trade unions (three national secretaries and three national coordination members), along with the company's top management. The observatory meets annually (usually within the first quarter), and within the context of its activities, company management provides appropriate information on company strategies, the main organisational changes and the trend in employment. The observatory may also meet at the request of one of the members if, during the year, any significant changes occur with respect to the issues discussed in the annual meetings.

2. NATIONAL COORDINATION

The national coordination for the FIM, FIOM and UILM trade unions at the local representation units was established to ensure the trade unions are adequately informed of issues relating to technological, organisational and production changes, horizontal mobility, investment and employment programmes, professional training projects and production decentralisation policies. The national coordination, which entails the participation of a maximum of 15 trade union representatives in the local representation units of the different company offices, is a party at national level for the negotiation of integrative level 2 contracts and any restructuring or reorganisation processes. Finally, a trade union relationship system is in place with the individual local trade union representation units at the production sites, for specific issues pertaining to the individual sites.

In Italy, data on trade unions may be gathered from the trade union dues deducted from payslips. There is no such deduction abroad and therefore Ansaldo STS is not able to record any specific data. Ansaldo STS employees have joined the following trade unions: FIOM-CGIL (with nine union delegates), FIM-CISL (with eight union delegates), UILM-UIL (with four union delegates) and Metalmeccanici (no delegates). In December 2015, the percentage of workers who had joined a trade union was just under 33.1% of the total headcount, while 100% of the trade union members can be broken down as follows: FIOM: 45.9%, FIM: 25.4%, UILM: 28.7%.



SPAIN

Trade unions relationships at Ansaldo STS Spain are calm and friendly. To express their opinions, workers may contact, either directly or through the personnel delegates, Human Resources, thereby enriching the direct relationship between the company and its employees. The system of trade union relationships at Ansaldo STS Spain is based on the following:

- **STRATEGIC LINES** - information on corporate trends, organisational changes and, in short, company procedures and policies are provided by Ansaldo STS and consequently adopted and applied also in Spain;
- **NATIONAL COORDINATION** - the structure of Ansaldo STS Spain includes personnel delegates who represent the CC.OO and UGT trade unions (which are the largest trade unions in Spain). In Spain, the trade union meetings are held very often with all personnel representatives to reach general agreements.

FRANCE

Each month, in France, personnel delegates may present individual or collective issues to their employers, in relation to the application of the law, regulations and collective agreements. Employees may also, either individually or with the assistance of delegates, submit their requests directly to Human Resources. The French trade union system is defined by specific and extensive regulations, the key points of which are the following:

- staff representatives are elected every three years by employees. Their role is to manage individual or collective complaints related to remuneration, work conditions, the application of the labour law, health and safety;
- monthly meetings with employers who are required to respond to all requests;
- a works council is elected every three years by employees. It is informed and consulted on issues related to the organisation (new organisations, new technologies, etc.), employment (staff, temporary workers, subcontracts, work-loads, etc.), company strategies, business and related results, training, health and safety;
- monthly meetings with the legal representative of the company;
- committees on training, welfare benefits, etc.;
- trade union delegates are appointed by the trade unions. Their job is to represent the trade unions, organising within the company and negotiating company agreements.

AUSTRALIA

Relationships with trade unions in Australia were extremely positive in the last year, with substantial discussion in preparation of the new national three-year agreement.

A key result of this process has been greater communication with employees, generating more feedback and participation in improvements, in a positive environment in which expectations are listened to.

There were no disputes with trade unions, strikes or complaints to the labour court during the year. Ansaldo STS's ongoing commitment to involving its employees through active communication and discussion mechanisms is expected to prevent these issues from arising in the future as well.

Personnel covered by national labour agreements

The total number of employees covered by national labour agreements, where this type of trade union negotiation is applicable, is shown below:

	Central and Eastern Europe and the Middle East		Western Europe		Asia Pacific	
2015	**MEN**	**WOMEN**	**MEN**	**WOMEN**	**MEN**	**WOMEN**
Managers	55	4	11	-	0	-
Junior managers	270	49	59	11	0	0
White collars	905	228	500	135	0	0
Blue collars	38	6	67	22	13	0
TOTAL	**1,268**	**287**	**637**	**168**	**13**	**0**

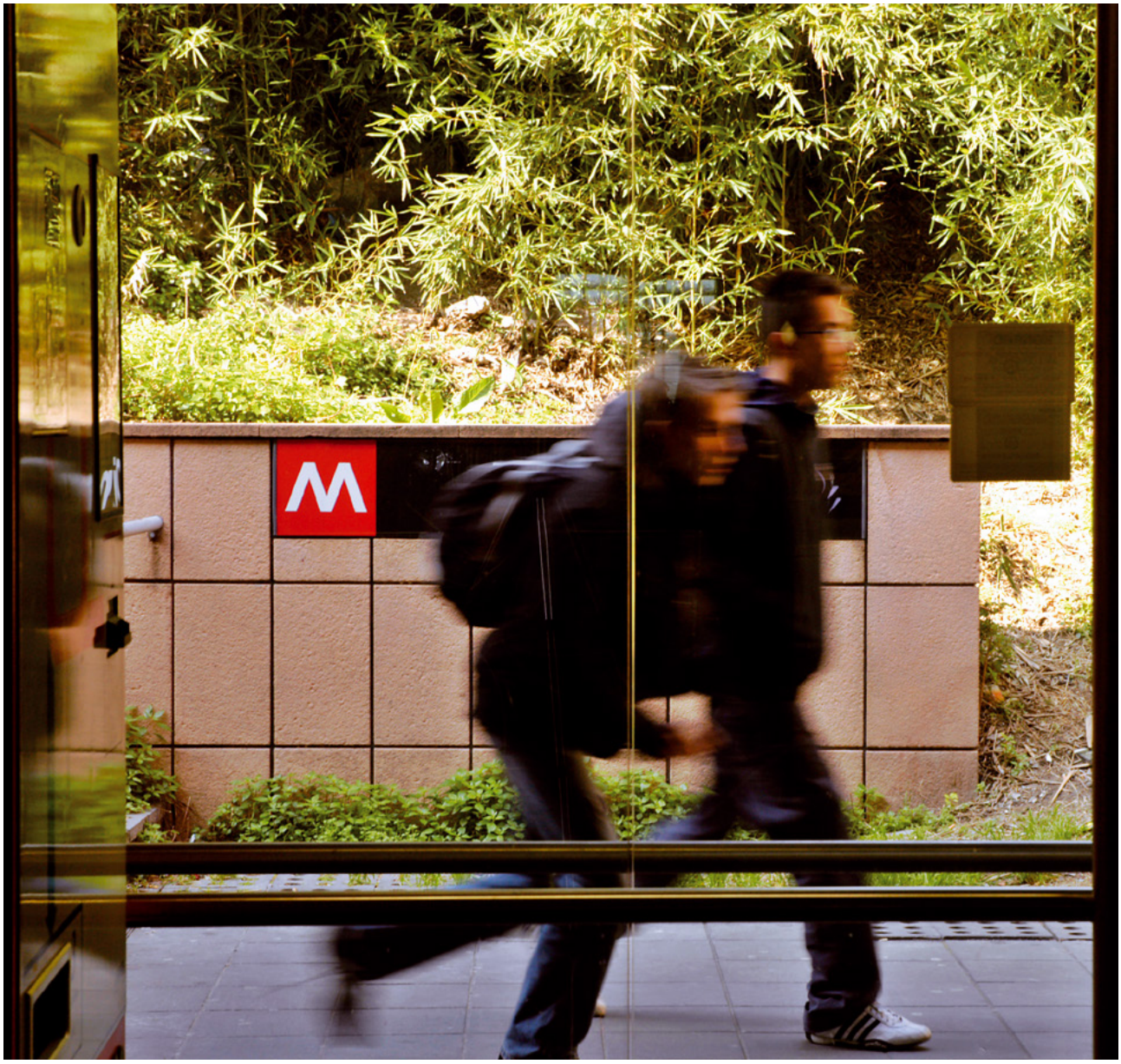
The percentage of employees covered by national labour agreements in Central and Eastern Europe and the Middle East is 100%, while in Western Europe it is 98%. The percentage is minimal in the Asia Pacific due to Ansaldo STS's ongoing efforts to invest in a fair work environment with respect to the market. The data are not meaningful for the Americas and China as there are no national labour agreements in these areas.

Types of agreements

At group level, Ansaldo STS has reached formal agreements with the trade unions in the various countries concerned, as shown in the table. In Central Europe and Western Europe, the agreements relate to, inter alia, work hours, remuneration and health and safety conditions in the workplace. In Australia, the types of agreements are negotiated with the unions, while in Malaysia, there are no formal agreements and employees must only comply with the Employment Act of 1955 (which establishes that the number of hours worked may not exceed 48) and specific Acts enacted by the government with respect to health and safety.

Prior notice in the event of organisational changes

The adjustment of the organisational structure, along with the operating procedures that support it, is an ongoing and continuously evolving process that meets the similarly ongoing and continuously evolving scenario in markets where Ansaldo STS operates. In the event of particularly significant organisational changes, specific communications initiatives target broad categories of employees to explain the reasons for the changes. Furthermore, in Italy, the currently applicable national labour agreement provides for a specific meeting to inform the trade unions of decisions that have a material impact on labour organisation. A similar procedure is provided for in France, requiring a mandatory document to be sent to the work council explaining the reasons for the organisational change, followed by a meeting with work council representatives no later than 15 days after the document is sent.



In-house communications

In 2015, in-house communications mainly focused on continuously updating employees on Ansaldo STS's main strategic and business projects.

To this end in-house communications continued to ensure that employees were informed about the performance and results of the strategic Value to Actions (V2A) business transformation project. This project, launched in 2014 and completed in December 2015, is directly promoted by the CEO.

An international Charity Day was held on 15 October 2015 as part of this strategic V2A transformation project. It involved all ASTS sites around the world and saw a high rate of participation. Employees generously donated substantial funds to charities and non-profit associations.

During the year, official communications about the company's performance, delivery of its main projects, acquisition of new orders, etc. continued to be made using the main traditional communication tools (e-mail, Intranet, in-house screens, meetings with management, etc.).

In 2015, in-house communications also entailed updating employees on the Hitachi Rail Italy Investments acquisition of Ansaldo STS.

For this purpose, the CEO sent emails to all group employees around the world, articles and videos were published on the Intranet and town hall meetings were organised in Italy and France, with the participation of Ansaldo STS and Hitachi Group top management.

Ansaldo STS'ss transformation also required an initial rebranding process, with the replacement of the Finmeccanica Group's logo/corporate image with the Hitachi Group's. Employees were notified of this change through specific, targeted in-house communication campaigns (email, the Intranet, replacement of logos on employee badges, signs and internal documentation) to ensure disclosure and the timely implementation of all measures necessitated by the transfer to the new shareholder, Hitachi.

Complaints

Ansaldo STS has a limited number of pending disputes that are managed through the courts, as it resolves conflicts daily, meaning that most complaints are settled without involving the labour courts.

	2015				
COMPLAINTS	**Central and Eastern Europe & the Middle East**	**Western Europe & North Africa**	**The Americas**	**Asia Pacific**	**China**
Total number of formal complaints concerning work practices, of which:	2	4	0	9	0
reported in 2015	*2*	*3*	*0*	*9*	*0*
resolved in 2015	*1*	*3*	*0*	*8*	*0*
Number of complaints reported before 2015 and resolved in 2015	1	0	0	1	0

SUPPLY CHAIN

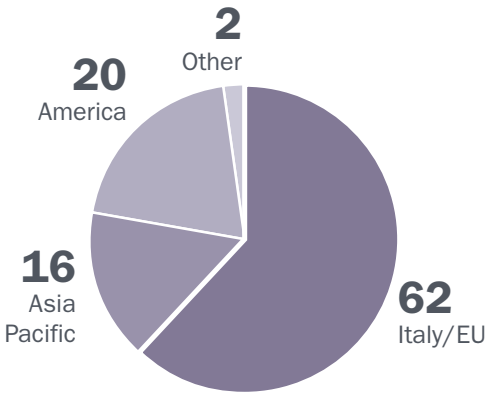
Types of purchases and suppliers	140
Supply chain sustainability policy	142
Vetting and eligibility of suppliers	143
Contractual tools	145

Ansaldo STS has drawn up new criteria to assess and monitor its suppliers and to define a new action plan to assist them improve their sustainability given the increasing importance of the supply chain's social and environmental aspects.

3,017 active suppliers in 2015

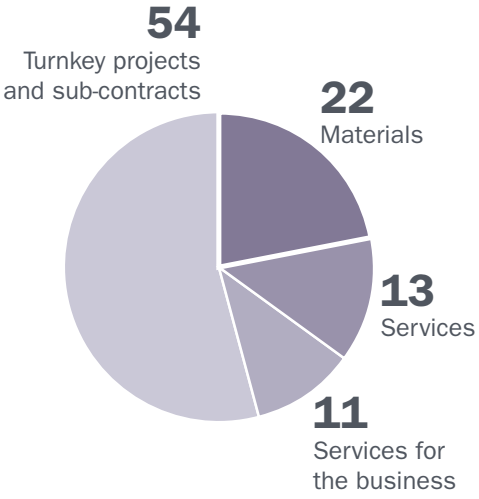
€ 870.2 million ordered in 2015

GEOGRAPHICAL BREAKDOWN OF ORDERS (%)



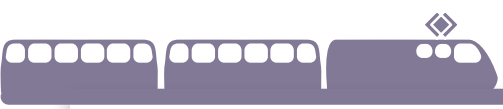
Estimated remuneration of **€ 470 million** for supply chain labour

TYPES OF SUPPLIES (%)



Interdisciplinary qualification process coordinated by Supplier Qualification & Monitoring, which involves the technical office, Procurement, Quality and the Health Safety and Environmental function

Qualification questionaire integrated with HSE aspects adoption of ISO 14001 and OHSAS 18001 management systems; application of REACH/ROHS/RAEE; regulations data on accidents, non conformities, training and emergencies



170 new qualified suppliers

75 audits in 2015 on strategic suppliers

Types of purchases and suppliers

Ansaldo STS considers the supply chain management process a critical factor for the success of its business. Strategic procurement management requires a broad vision of the process along the entire value chain, from the definition of product specifications and service to delivery. Ansaldo STS's management method is inter-functional and provides for the involvement and approval of all bodies concerned by the overall logistics.

Given that it designs, builds and operates transportation and signalling systems for railway and urban rail transport, Ansaldo STS's supplies include:

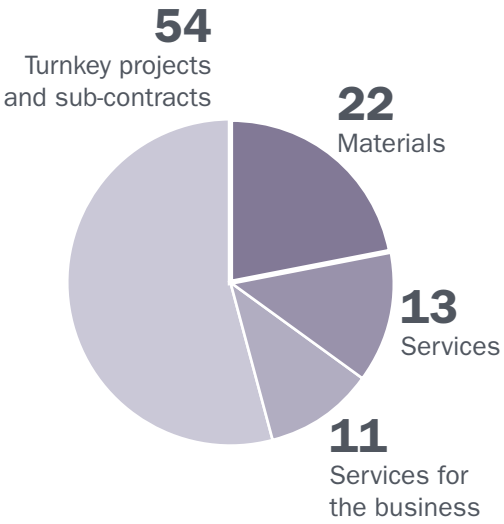
- **Materials** – purchase of electronic cards, mechanical and plastic parts, wayside equipment, cables, racks, cabins, industrial PCs, on-board equipment and electromechanical components.
- **Services** – facility management and HSE, payroll services, professional and ICT services, logistics services and travel.
- **Business services** – engineering and development services and RAMS activities (reliability, maintenance, availability and security).
- **Turnkey projects and subcontracts** – the award of a turnkey contact relates to systems that interact with the rest of the technologies for the specific contract such as: installation systems, telecommunications systems, auxiliary braking systems, power supply and systems, supervision and control systems, depots for equipment, signalling systems, rails and civil works.

2015 orders by supplier on a geographical basis were as follows:

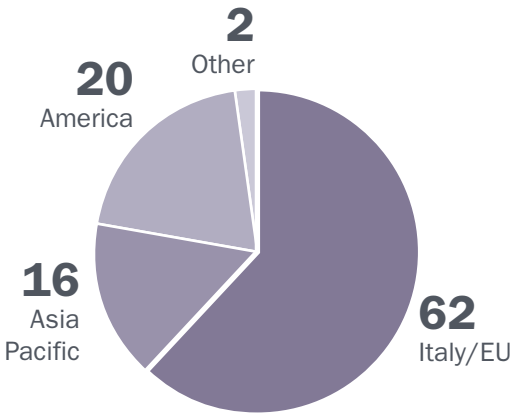
2015 ORDER[26] BY GEOGRAPHICAL BASE (in euros)	**Italy/EU[27]**	**Asia Pacific[28]**	**The Americas[29]**	**Other**	**TOTAL**
Materials	118,923,908	19,359,009	47,970,189	8,059,080	194,312,187
Services	61,472,367	30,022,485	14,454,887	2,475,045	108,424,784
Business services	82,800,421	5,195,180	8,668,458	11,651	96,675,710
Turnkey projects and subcontracts	280,560,682	81,476,153	103,859,503	4,862,226	470,758,564
TOTAL	**543,757,378**	**136,052,827**	**174,953,037**	**15,408,002**	**870,171,244**

26. Intragroup orders were excluded.
27. Mainly Italy and France; followed by Spain, Sweden, Germany, UK, Belgium, Switzerland and Denmark.
28. Mainly Australia and India; followed by Malaysia and China.
29. Mainly US; followed by Canada and Brazil.

TYPES OF SUPPLIES (%)



GEOGRAPHICAL BREAKDOWN OF ORDERS (%)



The number of active suppliers in 2015 decreased from 3,072 to 3,017. They are analysed by geographical area and order size below:

- 56.4% are European suppliers;
- 23% are suppliers in Asia Pacific;
- 19.5% are suppliers in North/South America;
- 1.1% suppliers based in other areas.

2015 NO. OF SUPPLIERS GEOGRAPHICAL BASE ORDER SIZE	No. of TOTAL SUPPLIERS	No. of suppliers BIG (supplies > €200k)	No. of suppliers MEDIUM (€30K < supplies < €200k)	No. of suppliers SMALL (supplies < €30k)
Europe	**1,701**	301	457	943
Asia Pacific	**696**	79	151	466
The Americas	**587**	60	127	400
Other	**33**	6	6	21
TOTAL	**3,017**	**446**	**741**	**1,830**

The economic benefit of working with Ansaldo STS can be measured by considering its suppliers' workforces. Accordingly, the following should be considered:

- 24% of Ansaldo STS's orders are for high labour-intensive services (100%);
- 54% of its orders are for turnkey contracts and subcontracts which have an average labour intensity factor of 50%;
- 22% refers to supplies of materials with a medium labour intensity factor of 20%;

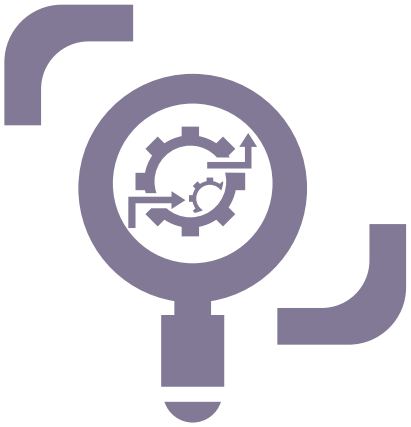
Therefore, the labour intensity factor of Ansaldo STS's orders is roughly 55.4%: about €480 million paid to suppliers is to cover their labour costs.

Supply chain sustainability policy

Ansaldo STS has conducted an initial mapping of its supply chain with respect to compliance with Environmental, Social and Governance (ESG) criteria. Indeed, the standard purchase order model includes general supply conditions, compliance with the code of ethics and, when vetting new suppliers, Ansaldo STS gathers information on their compliance with quality, hygiene, health and safety in the workplace standards and their environmental policies, by requiring ISO 9001, ISO 14001 and OHSAS 18001 certification (see Vetting and eligibility of suppliers). Ansaldo STS applies these characteristics as preferential requisites and they are considered in the supplier's eligibility score.

The mapping showed:

SUPPLIER MAPPING	2015	2014
Number of suppliers in the register by direct and indirect product types (2010-2015)	**17,059**	**16,112**
Total active suppliers (with orders issued in 2015)	**2,983**	**3,072**
Number of suppliers covering 80% of the value of 2015 orders	**192**	**203**
Qualified suppliers in 2015 (Classes A and B)	**166**	**198**
of which:		
ISO 14001 certified suppliers	**13**	**30**
OHSAS 18001 certified suppliers	**7**	**17**



Mapping is the first step in the definition of the specific sustainability policy for the supply chain. The main guidelines of this policy will be:

- audit activities on site suppliers, including a review of sustainability performance, with technical controls on products for suppliers of materials;
- collaboration between Ansaldo STS and suppliers in product design;
- activities to inform suppliers about sustainability issues;
- the extension of annual monitoring activities to suppliers classified in the A category.

Monitoring of social and environmental impact

In 2014, Ansaldo STS was involved in testing TenP - the sustainable supply chain self-assessment platform, designed by the Global Compact Network Italy Foundation (of which Ansaldo STS is a founding member) to assist member companies to collect information on their suppliers' sustainable performance. The intention is to identify common solutions to improve the supply chain's sustainability.

As part of this project, Ansaldo STS selected an accredited number of suppliers which it invited to complete an online survey about sustainability issues such as respect for human rights, labour conditions, the environment and anti-corruption.

In 2016 and 2017, it will analyse the feedback of this survey and define an action plan to improve sustainability.

Vetting and eligibility of suppliers

Supplier vetting and the process for the purchase of assets, goods and services are carried out in accordance with the principles of the code of ethics and internal quality procedures, as well as in accordance with current environmental, health and safety regulations. In the management of relationships with suppliers and sub-contractors, as for all business and financial dealings of any kind, Ansaldo STS requires its counterparties to conduct themselves in accordance with the principles of loyalty, fairness, transparency, efficiency and legal compliance.

To this end, suppliers and sub-contractors are vetted on the basis of objective, transparent and documentable evaluation criteria, in accordance with the principles of the code of ethics and all procedures provided for by specific protocols, in writing and in line with the current hierarchical structure.

A new Supplier Qualification & Monitoring Unit, part of the Quality Assurance function coordinates supplier qualification. In addition, Ansaldo STS has specified that the qualification process is interdisciplinary and based on opinions of several units involved therein: the technical, procurement, quality and EHS units.

Ansaldo STS revised the supplier questionnaire (FOR 019), introducing specific questions about the environment and safety, directly involving the EHS unit in supplier qualification and defining a list of “sensitive” goods, where the latter unit’s involvement is mandatory.

The questionnaire’s update covered the following EHS aspects:

- introduction of a safety management system compliant with the BS OHSAS 18001 standard;
- introduction of an environmental management system compliant with the UNI EN ISO 14001:2007 standard;
- introduction of sustainability procedures/programmes;
- application of the legislative requirements to comply with the REACH/ROHS/RAEE regulations;
- collection of data about accidents, non-compliance, training and emergencies.

As Ansaldo STS has always operated in emerging countries, it prefers large companies that preferably have the quality, environmental and safety certificates when vetting and qualifying suppliers.

Suppliers and service providers

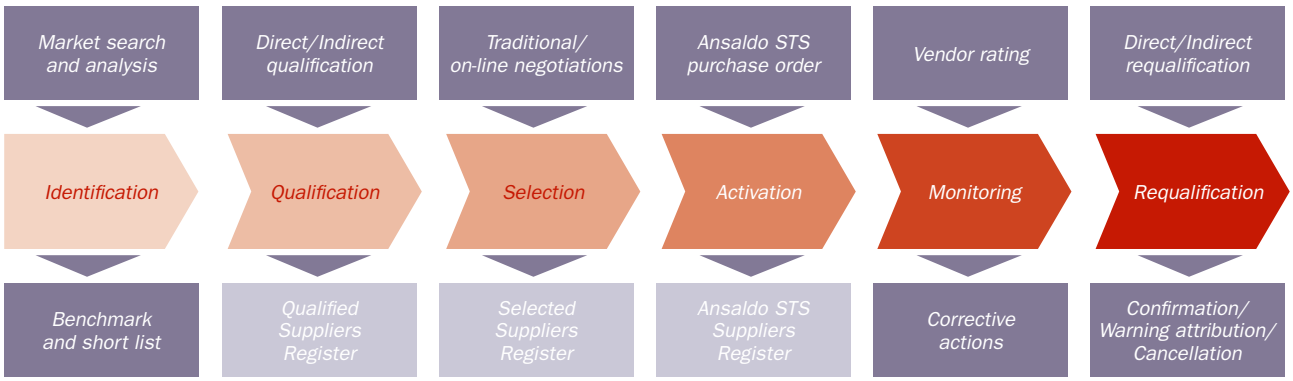
Relationships are based on the correct management of supplies in terms of quality, cost-effectiveness, ability to meet delivery times and compliance with the requirements for goods purchased. Ansaldo STS's objective with suppliers of business-critical materials, such as electronic cards and racks and cabinets, is to sign medium to long-term agreements so that they can act as genuine partners in the supply chain.

Packages/subcontracts

Purchasing a package refers to the assignment of a turnkey plant that will correctly integrate with all other technology comprising the entire project. In this case, the assignee is not considered a mere supplier, but a bona fide partner, and must inevitably form an integral part of all stages in the performance of the entire project. Therefore, these contractors work alongside all Ansaldo STS's bodies (PM, Engineering, Quality, Logistics and Construction) throughout the entire process and, for correctness and transparency purposes, they are updated on the progress of the other technologies, any critical issues with respect to the project, and are invited to the meetings held with other contractors and the end customer.

The vetting process

The supplier vetting and assessment process entails the following stages, in accordance with the procedures established for the management of this process.



Ansaldo STS's Procurement function vets potential suppliers of materials, service providers and, in particular, suppliers of packages/ subcontractors, with the support of other company functions (Engineering, Administration and Finance, Legal Affairs, Quality, EHS and Construction). Throughout the entire assessment process, Ansaldo STS verifies that suppliers meet requirements in order to approve them and include them in the list of eligible suppliers for specific goods categories and, thus, that may be used for the issue of purchase orders. Depending on the importance of the product types, the assessment methods used range from a simple analysis of the documents requested of and received from the supplier to the preparation of assessment reports following an inspection of the supplier's site. The following functions may request the inspection:

- the Procurement function, for a more reliable assessment of strategic suppliers;
- other functions when they do not have enough information;
- the Quality function when the assessment of the supplier's organisational system, quality management system or overall capabilities is not sufficient considering the type and importance of supply. The assessment team examines the various business areas depending on the type of purchase (materials, services, packages, etc.), on the basis of the required processes (design, supply, assembly, etc.) and, finally, on the basis of their importance.

Eligibility criteria

Drawing on the technical and specialised expertise of the concerned company bodies, the Supplier Qualification and Monitoring function assembles the assessments of potential suppliers prepared by the functions involved in the qualification process according to highly detailed requirements that fall under the following categories:

- financial situation and results;
- management, sales and logistics organisation;
- production potential and technical expertise;
- whether it has quality management systems certified by accredited bodies, giving priority to companies with the International Railway Industry Standard (IRIS) certification;
- whether it has environmental management systems and health and safety management systems certified by accredited bodies;
- its willingness to be inspected;
- whether it has been endorsed by the Italian Railway Network (RFI) or other bodies;
- the identification and traceability of production lots.

Since 2012, the part of the eligibility process entailing the gathering of the above subset of information has been extended to the bidding procedure as well, with the subsequent advantage of reducing the time needed to complete the process once the supplier has been selected.

With a view to continuous improvement, two new key aspects have been introduced into the eligibility process. The first relates to the fine-tuning of the process, while the second is organisational in nature.

Approximatrely 75 audits were performed in 2015 on the most important qualified suppliers and approximately 170 new suppliers were qualified.

Contractual tools

Ansaldo STS uses various supporting contracts, depending on the goods and services purchased from a given supplier.

For the product categories relating to basic services, such as ICT (Information & Communication Technology), the supply of energy, global services and logistics (outsourcing of warehouses and transport contracts), Ansaldo STS will continue to use framework agreements defined at Finmeccanica group level (Finmeccanica Group Services) for most of 2015.

For standard materials and services, all initiatives favouring long-term arrangements are preferred (framework agreements, partnerships, memoranda of understanding, etc.) with vetted suppliers, and periodic controls on the suppliers' processes are performed, in addition to scrupulous checks of supplies to monitor suppliers' ethical conduct, adequacy, reliability and timeliness.

For specific materials and services for projects, Ansaldo STS uses purchase orders. The standard order includes a summary of the general supply terms, legal requirements – with specific reference to the protection of workers and the protection of personal data – and a notice of compliance with the code of ethics.

The order includes a description of the characteristics and requirements, quantities and delivery times for the materials and services, and may also refer to specific documents clarifying the technical specifications for more complex devices.

For turnkey packages and contracts, Ansaldo STS agrees ad hoc contracts whereby the contractors undertake, through their organisation, using the necessary means and with management at their own risk, the construction of the relevant plant or service.

Furthermore, all contractual documentation is attached to the contract. This documentation normally consists of the main contract (that agreed by Ansaldo STS with the customer), the technical documents defining the scope of the work in detail, detailed project plans, Ansaldo STS's code of ethics and legally-required documents (safety and coordination plan and facsimile of workers' protection statements), etc.

Monitoring

Suppliers are constantly monitored through contacts between them and the Ansaldo STS functions with which they operate (Procurement, PM, Engineering, Quality and Supply Chain Quality, Logistics and Construction). At least once a year, personnel working with suppliers participate in a vendor rating process that takes into account the suppliers' conduct and performance vis-à-vis the supplies ordered, in order to update the suppliers' assessment and establish whether they will remain in the list of Ansaldo STS suppliers. Scores are given in four main areas: Quality, Timeliness, Flexibility and Charges. This monitoring system is applied to suppliers of strategic materials only on a continuous basis, and the results are assessed each quarter. The parameters considered are:

- Price (calculated as the variation in the cost of the product);
- Quality (calculated as the percentage of faults);
- On-time delivery.

The global performance of suppliers remained high, with only 10 suppliers receiving unsatisfactory ratings.

V2A-New Road project

In 2015, Ansaldo STS continued striving for the technical and commercial optimisation of external costs, carrying forward the interfunctional V2A-New Road project, launched in 2014. A few macro categories of costs were considered strategic as part of this project.

For each macro category, international and interfunctional teams were identified to evaluate and implement specific ways of increasing efficiency in the medium and long-term.
The performance level achieved is in line with targets.

Responsible litigation management

In general, litigation between Ansaldo STS and its suppliers/ contractors may involve breaches of contract by the aforesaid counterparties, relating to either any framework agreements for work/supplies or to Ansaldo STS's individual orders with such parties. Although it is difficult to completely prevent disputes, Ansaldo STS endeavours to periodically improve the content of its general terms and conditions and, whenever possible, to standardise sub-supplies. In the scope of this improvement, and in collaboration with the Procurement and Supply Chain functions, the general contractual terms are currently being revised to ensure Ansaldo STS's compliance with contracting and public supply regulations.

Given the development of th activities abroad, Ansaldo STS tends to include arbitration clauses in the related contracts, in order to prevent any evasive conduct by suppliers (supported by the governing law which, in these cases, is almost always the local law), and avoid any discrepancies between the main contract with the customer and the subcontracts, which could give rise to procedural difficulties in recovering the amounts due. In addition to ensuring the impartiality of the proceedings in multicultural environments, the use of arbitration ensures, as a general rule, a considerable reduction in the time required to settle disputes and allows the company to restore, in the short term, business relationships with the counterparty, which are fundamental for the company's growth and sound functioning.

COMMUNITY

Media affairs	150
Ansaldo STS and the community	155
Research projects with Italian and EU public institutions	158
Partnerships with universities: technological and managerial training	163
Trade associations	165

Ansaldo STS promotes society's scientific, cultural and social progress by actively taking part in research projects with national and EU institutions on ICT and the sustainability of transportation systems. It also encourages technological and managerial training through partnerships with universities.

Founding member of Shift2Rail
Public/private European partnership to manage and coordinate railway research

12 European research projects
8 Italian research projects
in signalling, safety, infrastructure monitoring and energy efficiency

Participation in the **technological districts** in Liguria (SIIT) and Campania (DATTILO) and the TOPIN workshop for innovative opto-electronic technologies

27 events
trade fairs, conferences, launches and conventions

Participation in the **Embedded and INSIST university/company networks of excellence** on ICT, Energy and Transport

1st in Italy
in the KWB Webranking Industry

Master agreements and partnerships with the universities of Genoa, Turin, Rome, Milan, Paris, Dresden, Madrid and Basilicata

Member of **UNIFE committees for sustainability and communication**

LinkedIn: growth in followers from **10,000** to **53,700** at the end of 2015

Media affairs

The main purpose of external communications is customer communications and, more generally, market communications, in order to contribute to the creation of value, improving the way in which the Ansaldo STS brand is perceived by the many professionals who participate in decision-making that affects investments and the main operating activities.

Institutional communications target the top management of major national railway companies and the public administrations of urban areas interested in transportation solutions, the operating units of customers responsible for performing contracts, the technical/contractual supervisory bodies appointed by customers or required by local legislation, professional associations in the sector and opinion makers.

The objective of technical/business communication is to inform the various professionals that are most involved in qualification with customers, design, implementation, commissioning, approval, after-sales service, staff training and workers' safety at the sites.

It pursues these objectives by creating a work community that can adjust its response to the market in terms of timing and procedures, by participating in trade fairs, by appearing in specialised publications with institutional and product advertisements, along with articles detailing certain aspects, company publicity on the website, the publication of leaflets and broadcasting of videos for sales and marketing, training of customers' staff and workers' safety at the sites.

In the year, Ansaldo STS prepared a tailored procedure to update its commercial documentation, brochures, presentations and advertising materials. Its primary objective was to align the external view of the company, its organisation and products to the changes and innovation that have characterised it in this last period. Accordingly, it prepared and revised (in several languages, including Chinese) about 20 new documents/brochures, circulated its institutional presentation and created a new company profile.

The company promoted its presence at trade fairs through communication with a wide range of initiatives: a special advertising campaign, new information material, new demos of its products and development of interest groups on the social media.

Trade fairs are not only occasions for communication with the market, its institutions and representatives but are also used to showcase Ansaldo STS's products.

Again in 2015, the company sought to use trade fairs and institutional communications as a showcase, devoting particular attention and emphasis to its products, directly displaying signalling components and presenting demos on integrated solutions and launching new products.

A year of events and contact with our stakeholders

For Ansaldo STS, trade fairs, like all conferences and sponsorships, are one of the most important occasions for company communications and specific sector communications, as they constitute a privileged place for exhibitioners and stakeholders (customers) to meet. For the purposes of careful preliminary planning, the External Communication and Strategy and Marketing offices establish objectives and, accordingly, the relevant markets. This is one of the many situations demonstrating Ansaldo STS's dedication to the market and products. It also provides the opportunity to clarify targets, a key step in establishing the communication strategy and method to be implemented throughout the entire year.

In 2015, Ansaldo STS focused specifically on organising tours of its sites and projects to give stakeholders the chance to see the work first hand.

MONTH	EVENT	LOCATION
January	Queensland delegation tour	Genoa/Milan/Bologna
March	Eurasia Rail	Istanbul
	Middle East Rail	Dubai
	ASSTRA/National Tram System Convention	Rome
	IRSE Technical Assembly	Victoria (AUS)
April	Thai delegation (SRT) tour	Florence – Pistoia
May	Inauguration of the Garibaldi-SanSiro Line 5 in Milan	Milan
	2020 Italy Cluster Transport Meeting	Bologna
	Inauguration of the Municipio Station on Line 1 in Naples	Naples
	"Regional and local public transport network planning, operation and management: a comparison of European experiences"	Genoa (at universities)
June	IRSE International Convention	Brisbane (AUS)
	SMRT & KRRI tour	Paris - Rome - Milan
	IHHA International Heavy Haul Association Conferences	Perth
	UNIFE – General Assembly	Bucharest
September	Workshop on Technological Innovation (for top managers of the Indian railways)	Genoa
	Italy-Balkans Railway Forum	Trieste
October	National Transport Public Meetings	Lyon
	Railway Interchange (RSSI)	Minneapolis (US)
	Elmia Nordic Rail	Jokoping (Sweden)
	Event Charity	All Ansaldo STS sites
November	CBTC World Congress	Copenhagen
	Town Hall	Genoa
	Town Hall	Naples
	AUS Rail Plus	Melbourne
December	Town Hall	Les Ulis
	AICQ – Railway transport convention	Florence

Rebranding as a social opportunity

The company began a full-scale rebranding project on 2 November 2015, with the transfer of 40% of Ansaldo STS shares from Finmeccanica to the Hitachi Group. In addition to changing the brand, the new ownership also enabled the company to launch a series of charity projects.

All the gadgets and stationery that bore the old Ansaldo STS logo were organised into product categories according to their use and donated to various non-profit organisations throughout Italy. This project prevented the waste of material and also sent items like notepads and pens to small towns in the third world.

The Media

Ansaldo STS develops its relationships with the media by focusing utmost attention on the quality of information, which must always meet requirements of transparency, timeliness, truthfulness, complete ease of use and widespread distribution. These characteristics enable Ansaldo STS to base its communications on the constant symmetry of information to all media outlets, also considering the fact that the company is listed on the stock market. Relationships with journalists are managed at several levels: from the highest, with directors and deputy directors of publications, to middle range, with head editors and senior editors, to writers. Indeed, relationships must be forged across the board for constant support with respect to issues relating to Ansaldo STS's business.
In its communication activities, Ansaldo STS mainly targets sector leaders:

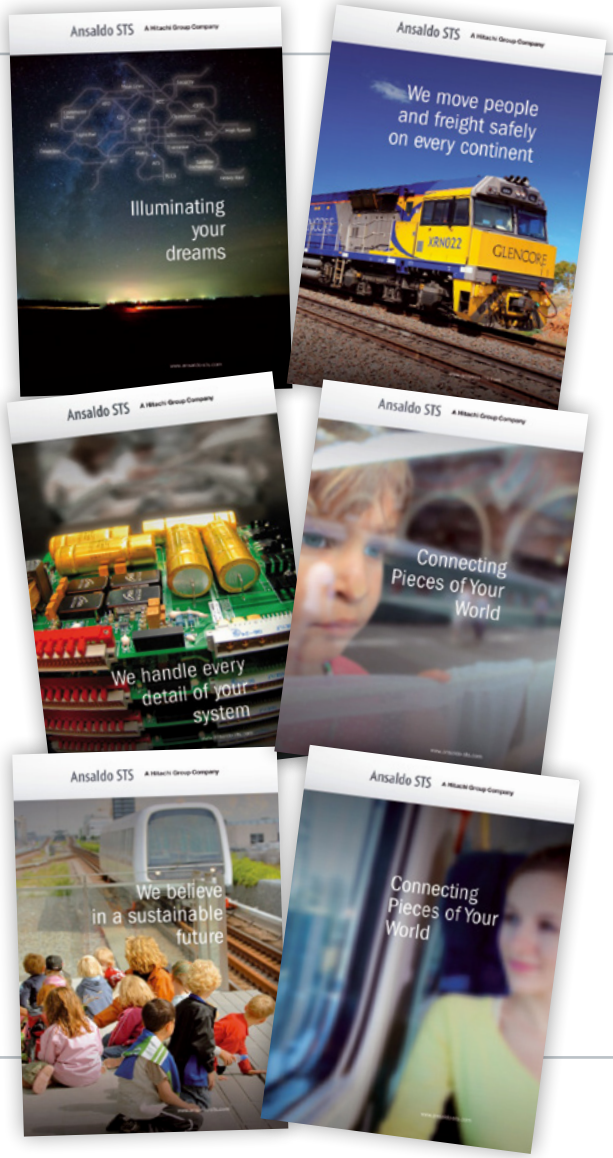
- national press agencies that handle general news (e.g., ANSA, ADN-Kronos and AGI) and national press agencies specialised in business news (e.g., Radiocor, Mf Dow Jones and Reuters), as well as the international press specialised in business news (Reuters International, Dow Jones and Bloomberg);
- dailies (e.g., Il Sole 24 Ore, MF, Italy Oggi, Repubblica, Secolo XIX, Messagero, Il Mattino and others);
- periodicals (e.g., Milano Finanza, Corriere Economia, Repubblica Affari&Finanza, Il Mondo and The Economist);
- the radio (Radio 24);
- television (Class CNBC);
- online media;
- blogs, such as letters to investors and similar posts.

It enjoys ongoing and fruitful relationships with local business and general media outlets in which it has sites (particularly Genoa and Naples) or where it carries out projects, such as Rome, Milan and Brescia.

Advertising campaigns

In 2015, the analysis and evaluation conducted in 2014 were used to identify the main trade publications by geographical area. In this way, relationships with major international publications in the railway transport/signalling sector were reconsidered and forged, including Railway Gazette International, International Railway Journal and Eurailmag. This analysis led to a more accurate definition of the advertising plan in coordination with the trade fair activities and electronic communications.

In addition to the social highlights that were widely publicised in previous years, in 2015, the advertising campaign was developed as another way of recognising and showcasing Ansaldo STS technologies, with a focus on product details in production and the new freight business segment. The company also renewed the advertising campaign with the preparation and circulation of new advertising, as well as updating its trademark adverts.



Price sensitive communications to the market

All Ansaldo STS information that can be defined as price sensitive (i.e., that could materially affect the share's price on the stock market and that is disclosed via Borsa Italiana's NIS - Network Information System) is subject to a standard procedure, revised again in 2015, that requires the company's External Communication function, in charge of press releases, to work closely with the Investor Relations function and the legal function and the internal communications. The company issued 38 press releases in 2015. Ultimate authorisation for the issue of press releases always lies with the CEO and CFO.

Digital communications

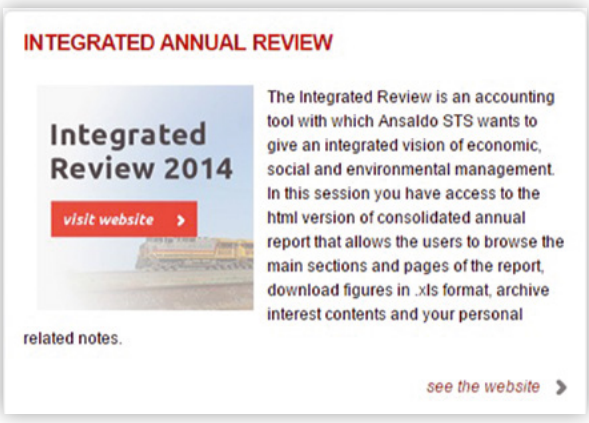
The company website

Customer communications take many shapes and cover many channels. The External Communications function aims to always be on time and take advantage of opportunities: to arrive on time and in the right way, when and where the strategy requires, to meet the target customer's informational needs, in addition to those of other potential stakeholders, such as partners or suppliers. In 2015, the company made increasing use of the digital media channel, less used in the past, and continued to update its website and also using the social media and institutional sites.

In 2015, Ansaldo STS maintained an excellent position in WebRanking's independent valuation, leading the Italian industrial sector for the third consecutive year. Overall, considering all the Italian sectors with an average score of 40.5 points, Ansaldo STS scored 62.8, taking 11th place.

Integrated Review

The second edition of the Integrated Review was given a new graphical layout in 2015 for the report on the previous year. This is a step forward in the direction of an integrated view of business, social and environmental management and a new tool for the public demonstrating how sustainability is an integral part of Ansaldo STS's day-to-day work, and an increasingly key element for pursuing dialogue with stakeholders, so they have adequate tools to read about and understand the company.



Social Media Communications

In 2015, new initiatives were kicked off to develop currently existing digital communication channels, improve their content and format and communication functions, as well as facilitate dialogue outside the company.

In the same year, contact was made with the Wikipedia editors to keep the pages on the company and its business updated in both Italian and English. Communications channels were developed and updated via social media, in line with the sector approach and creating more ongoing interactive communications with the general public.

The success garnered by the investments in communications and content can be seen by the development of the LinkedIn platform, where the company's followers have grown from roughly 10,000 at the start of 2014 to over 53,700 at year end. This reflects Ansaldo STS's professional activities and communications, which an increasingly number of sector users wishes to access.

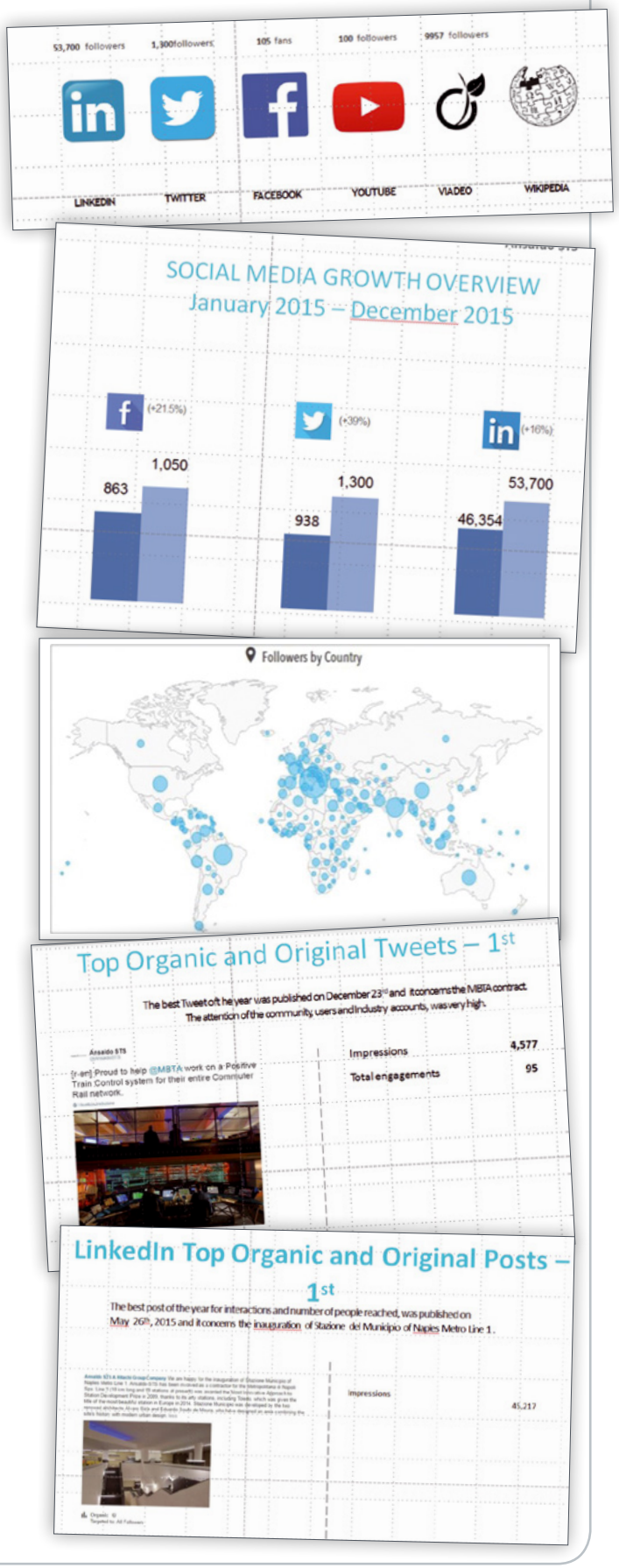
Company events, commercial successes and exhibitions are regularly presented to the public's great interest.

In 2015, the company invested significant time and energy in strengthening electronic communications by expanding the channels available to stakeholders and synchronising them. Today we can affirm that all key information is reported in real time on the major social networks.

On the other hand, a quantitative analysis has clearly shown that Ansaldo STS's social profiles are increasingly more numerous, while a qualitative analysis shows that the distribution of LinkedIn followers is truly global.

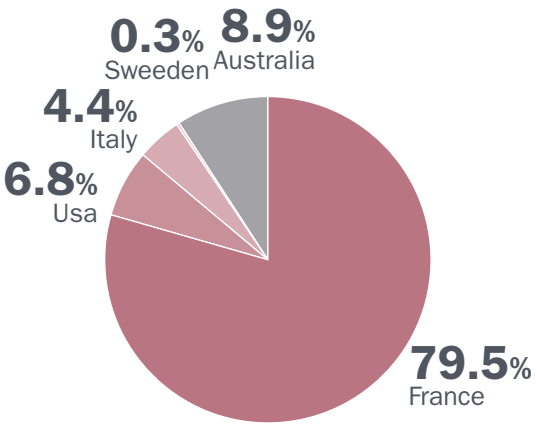
In 2015, there were nearly 200 organic and original tweets, 63 organic and original posts on LinkedIn, with an increase in Facebook posts as well.

The big surprise for LinkedIn is that, of the 53,700 followers, 2,700 are company employees, which is to say that roughly 77% employees are followers, fully reflecting the sound results of Ansaldo STS's efforts to improve values in general and team spirit specifically.



Ansaldo STS and the community

Each year sees Ansaldo STS committed to various charitable events, investments in the community and sponsorships. In 2015, total donations and sponsorships amounted to roughly €804 thousand, as shown below by geographical segment:



SPONSORSHIPS AND DONATIONS PROCEDURE

Ansaldo STS has a procedure for sponsorships, advertising initiatives and contributions to associations and bodies that sets out the general principles, scope of application, roles and responsibilities for making decisions and the costs incurred for sponsorships and donations.
It checks the party that receives the sponsorship or advertising fee or is given the grant to ensure that they will be able to carry out the related project, there are no conflicts of interest, no convictions for crimes and that the party does not reside in a tax haven.

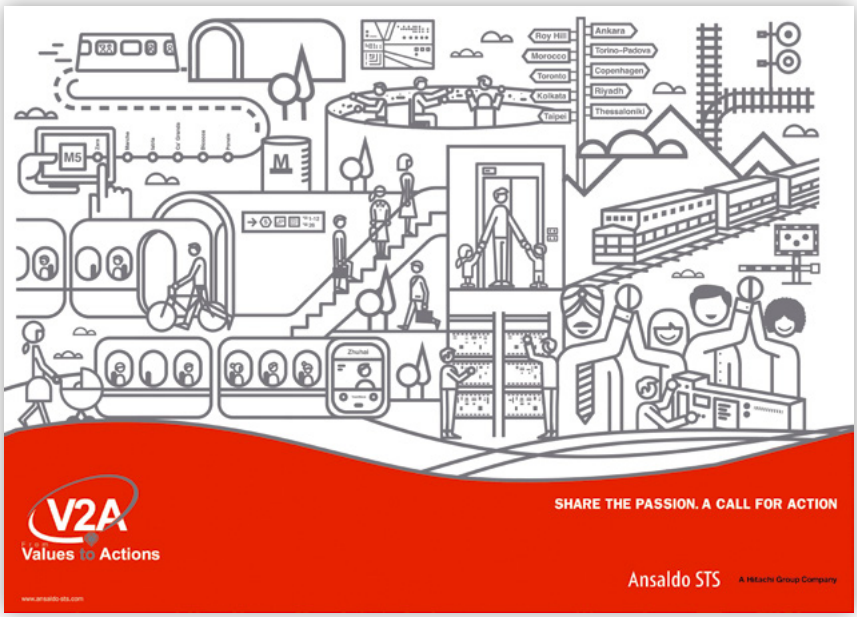
Donations alone totalled €61,816 and related to education and young people's development, health and social welfare, as well as art and culture.

Charity day

Charity day was held on 15 October 2015, as part of the strategic V2A transformation programme promoted directly by the CEO Stefano Siragusa.

This initiative, which involved all sites around the world, was positively received and Ansaldo STS employees generously raised over €12,000 for charities, including UNICEF, Save The Children and ActionAid.

All employees received V2A t-shirts and could choose to make a donation. Efficiency in business and in social initiatives has always been Ansaldo STS's hallmarks.



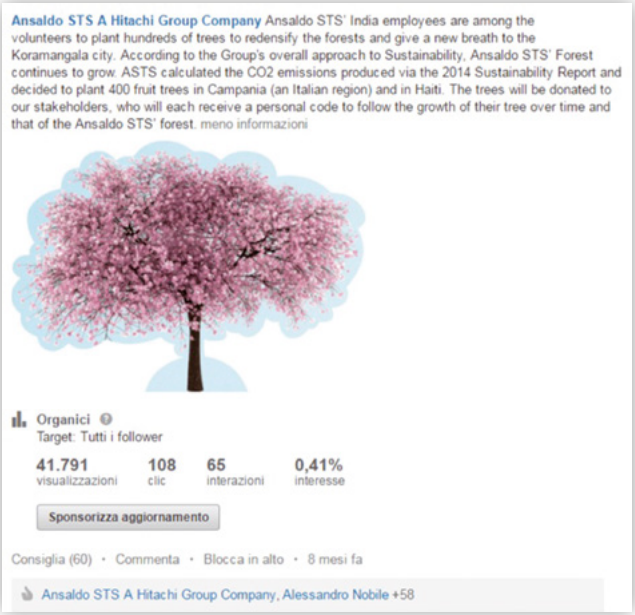
The 2014 sustainability report

Ansaldo STS has always been committed to creating value for its customers, shareholders, workers and the community in which it lives: this spirit has always, and will always, guide its management team.

With the 2014 sustainability report, the company has once again expressed its commitment to making the world a better place for future generations.

Indeed, Ansaldo STS estimated the CO_2 emissions produced by reporting and preparing the 2014 sustainability report and to offset them decided to plant 400 trees in Campania (via a Libera Terra cooperative at the foot of Mount Vesuvius) and Haiti (as part of a project with the AVSI Foundation in the Chantal South Department). The trees were assigned to those who downloaded the report on the Ansaldo STS website.

Each tree was photographed and ge-olocalised, so it is always visible online. Users can see where “their” tree was planted and watch it grow over time.



This campaign was talked about and promoted widely on Ansaldo STS’s social network pages.

TREEDOM: VESUVIUS MISSION REPORT

At Villa Medicea di Ottaviano, where the trees financed by Ansaldo STS were planted, at the entrance of the Mount Vesuvius National park, a garden is being created for children and adults alike, with a playground and panels explaining the project. The trees were planted by the disabled, recovered drug addicts and former detainees, but the volunteers who, each summer, are gathered by the Coop cooperative for the Campi di Libera Terra project did most of the work.

The land was prepared for the trees. Ansaldo STS’s trees that have already been planted are grafted, without leaves or flowers, and so they have not been geo-referenced or photographed. They are healthy and are one and a half years old (1-1.5 metres tall). The tress will be photographed in June and the users who had them planted can receive emails with pictures of their healthy, living, leafy tree.

TREEDOM: HAITI MISSION REPORT

Haiti's current environmental deterioration is severe due to the historic and economic exploitation of its various resources, specially its forests. According to national data (2003), estimated forest cover is roughly 1.8% of Haiti's entire surface area, corresponding to 49,608 hectares. Between 1990 and 2000, forest cover diminished by an estimated 7,000 hectares per year, with an average deforestation rate of 5.7%. In particular, from 1990 to 1995, the estimated loss in absolute terms was 16%, with an average deforestation rate of approximately 3.5%.

One of the main causes of this deforestation rate is illegal logging to produce coal for use in construction. This type of cutting significantly reduces biodiversity and hydro-geological stability.

The Macaya Park Treedom project has a positive economic and social impact for 20 social organisations with 3,600 beneficiaries, while also constituting a source of alternative income to illegal logging. The main objective is to prevent soil erosion and begin a recovery in production in disadvantaged areas.

The reforestation project, in which Ansaldo STS participated, planted 25,000 saplings (70% fruit trees and 30% forest trees), which were germinated in local nurseries and then planted. 600 farmers were involved in this project. They and their families – for a total of around 3,600 people – have already reaped the benefits of the increase in production.

The project also involved civil society and farming organisations: high school students received training in environmental protection and deforestation. The aim of the project was mainly productive. Density varies from 200 to 500 plants per hectare.

The earthquake forced some 511,000 people out of their homes in Port-au-Prince to the countryside, 40,000 of whom are now in the rural area of Les Cayes. Because of this, the project's contribution after the earthquake created development opportunities for life in the rural areas by sharing know-how and technologies to improve natural resources and the life of residents.

Research projects with Italian and EU public institutions

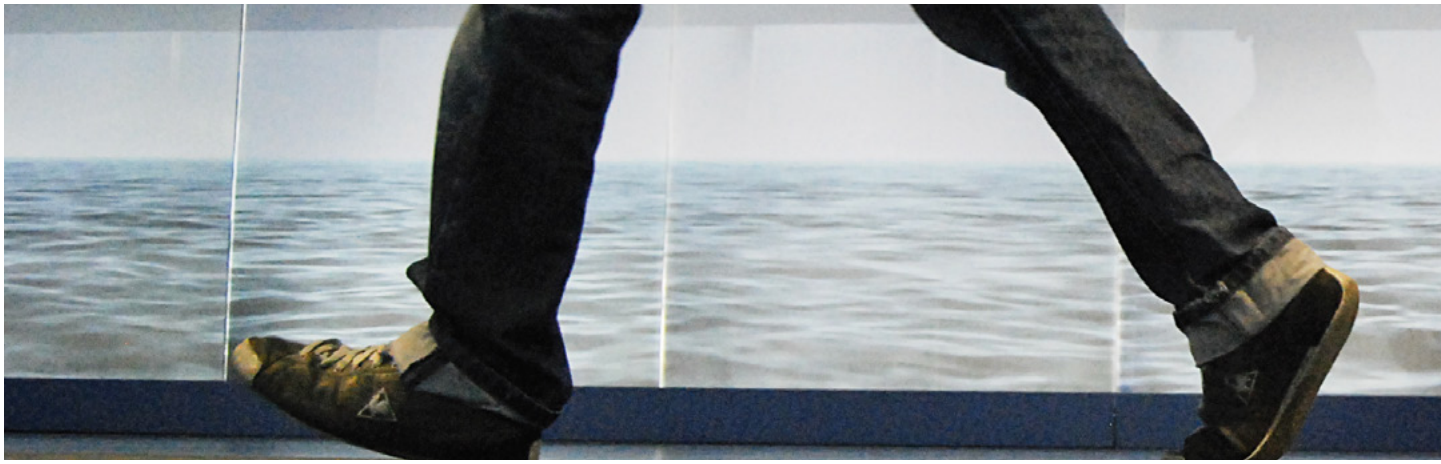
Ansaldo STS participates in research projects funded by the European Commission, the Ministry of Education, Universities and Research, the Ministry for Economic Development and the Ministry of the Environment.

2015 will see the launch of the "Shift2Rail Joint Undertaking (S2R JU)", a public-private partnership for the management and coordination of research in the rail sector. Ansaldo STS is one of the joint undertaking's founding members.

European research projects

In 2015, Ansaldo STS was involved in the following projects that receive European funding for satellite signalling:

- 3InSat (Train Integrated Safety Satellite System), financed by the European Space Agency (ESA) to develop a satellite localisation system and integrate it with ERTMS railway signalling. 2015 saw the completion of the satellite localisation system's integration with the ERTMS railway signalling system and the use of the IP-based telecommunications networks, such as the public operator networks, satellite network and TETRA network. The project was successfully completed in February 2016.
- ERSAT EAV (ERTMS ON SATELLITE – ENABLING APPLICATION & VALIDATION), a project financed by the GSA Agency to verify the suitability of EGNSS and, specifically, EGNOS and the new Galileo services for ERTMS European railway signalling and, in particular, for safe wayside localisation (SIL4), indicating a possible way forward for adoption of satellite technology in the above-mentioned railway standard.
- SBS (feasibility study on space-based services for railway signalling services), financed by the European Space Agency (ESA) to prepare a specific demonstration project to be built in a subsequent stage. Specific focus was paid to the proof of concept, which should demonstrate that the signalling system functions with satellite technologies, and the recommendations for the inclusion of satellite technologies in the signalling system specifications, included in the technical specifications for interoperability (TSI).
- STARS, a project financed by the GSA Agency and coordinated by UNIFE with partners in the railway and satellite communities. It is a contribution to the future development of EGNSS in safe railway applications. The project covers three main aspects: 1) Processing data and characterising the railway environment with a measurement campaign;



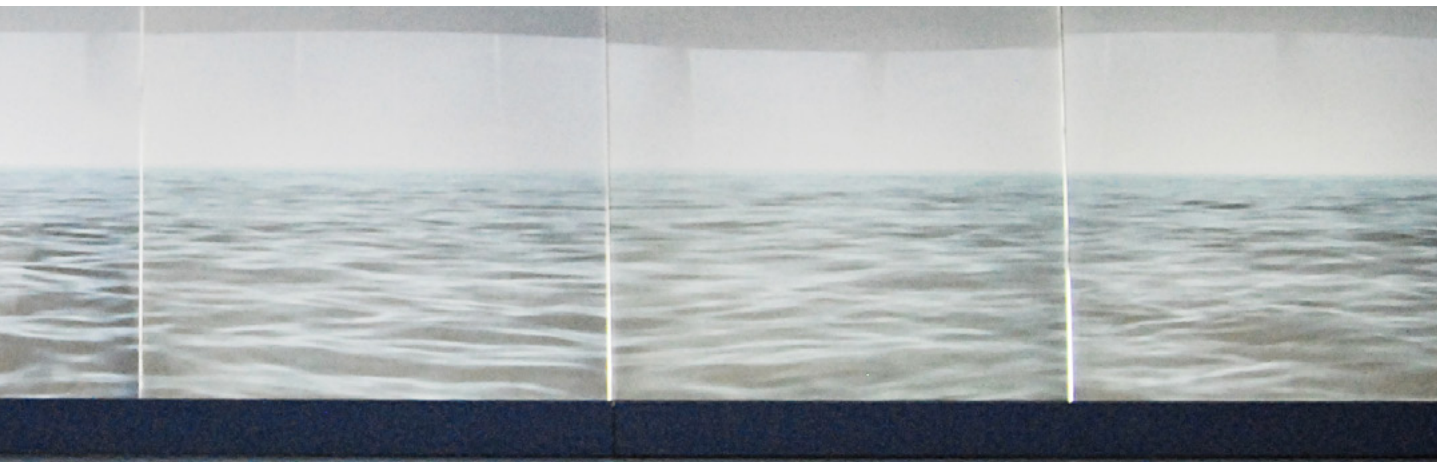
2) EGNSS performance assessment in the railway environment with the determination of applicable requirements for the positioning system and necessary developments in ERTMS/ETCS services and functions; 3) Quantifying the economic benefits and specifications of a possible implementation roadmap in the EGNSS application for the railways.

- RHINOS (Railway High Integrity Navigation Overlay System), a project financed by the GSA Agency to define a common GNSS interface to be used around the world for railway applications by applying a high-integrity navigation layer to the GNSS infrastructure, originally created for aviation applications. RHINOS will see the involvement of Stanford University as an international partner, the US partner for GPS research and one of the main players in EU-US cooperation in the field of GPS-GALILEO standardisation.

Other projects are underway in Europe relating to the macro-themes of safety, diagnostic monitoring of infrastructures, new integrated architectures, innovation for the future of sustainable rail transport and ERTMS.

- CRYSTAL (CRitical sYSTem engineering AcceLeration), to make the developments achieved in the CESAR project funded by the same JTU continuous. The general idea is to arrive at technological solutions that automate the development, inspection and validation of embedded safety systems.
- MANTIS (Management of critical knowledge to support maintenance decision making), with the aim of expanding knowledge of the decision-making process in system maintenance. In the railway sector, guaranteeing high service availability is crucial during system operation.
- CAPACITY4RAIL (Increasing capacity for rail networks through enhanced infrastructure and optimized operations), to create technological solutions that make maintaining and building railway infrastructure more efficient and less expensive and define the solutions that make their operation more efficient and capable of effectively responding to outside threats, extreme weather conditions in particular.
- IN2RAIL (Innovative Intelligent RAIL), to lay the foundation for the Shif2Rail Joint Undertaking - of which Ansaldo STS is co-founder with another seven organisations - to obtain a resilient, high-capacity and cost-effective European railway network by designing key components that make the most of the innovation in the 2nd and 3rd Shift2Rail Innovation Programs (IP).
- FOSTER RAIL (Future Of Surface Transport Research Rail), to make research and innovation in European industries more effective by improving cooperation between stakeholders and more adequately defining research and innovation needs.
- NGTC (Next Generation Train Control), to develop future railway and metro traffic control systems. In particular, activities will consist of creating the specifications to describe the new functions needed for the definition of architecture and interface for each of the fields of application.
- CEF (support for ERTMS implementation), part of the European ERTMS global development project to maintain specifications, speed up advancement to subsequent versions (Baseline 3), improve interoperability and cut inspection and certification costs, eliminate GSM-R interference and develop future railway telecommunication systems.

Furthermore, the following energy efficiency projects, named MERLIN and OSIRIS were completed in 2015.



Project MERLIN

This project's primary objectives were:

- characterisation of railway networks and the main elements that influence energy consumption (principally main line);
- identification of energy efficiency indicators to be used to directly compare network performances;
- definition of a global energy consumption map for the identification of the main requirements for energy optimisation;
- definition of a reference architecture for the systems that include an interface with the supervision and control systems as well (e.g., the signalling system).

Other objectives achieved in project MERLIN were:

- definition of a reference architecture and its subsystems for the intelligent management of energy in the railway systems (energy dispatch) to be used to take financial decisions and to manage energy in real time;
- identification of reference scenarios used as benchmarks to study solutions to be defined as part of the project and the subsequent validation of the technologies and strategies identified.

Ansaldo STS is in charge of coordinating the study and energy characterisation of the components that affect railway network consumption, definition of the global energy consumption map and definition of the reference architecture to which the optimised energy management systems will be applied (including an interface with the energy management systems and the supervision subsystems.

The OSIRIS project

The main objectives of the OSIRIS project were:

- definition of benchmarks for the energy consumption of urban rail systems (LRV, trams and metros) and energy efficiency indicators for standard operating cycles;
- development of a holistic model suitably interfaced with multi-train simulation tools and for the global modelling of energy flows and consumption in the urban rail system;
- performance of electrical, thermal and mechanical simulations;
- checking the effects of introducing specific new technologies and operating strategies for the future reduction of consumption by the urban rail system;
- demonstration and validation of the studied technologies and strategies on a series of real demonstration scenarios that include LRV, metro and tram systems.

The main innovations of the OSIRIS project relate to:

- vehicles: technologies for traction, braking and operation controls; energy accumulation systems based on Li-ion batteries; auxiliary service intelligent control systems; development of innovative converters;
- Infrastructure: reversible substations, ground storage of energy; low consumption ancillary services, design criteria for low consumption substations; heat pumps to reduce consumption by the HVAC systems.
- Operation support technologies: specification of optimised ventilation systems for metros; assessment of the effects of optimised driving; feasibility of a real-time system for efficient energy management (smart-grid energy management).
- Tool: holistic models to measure the energy consumption of urban rail systems, including thermal aspects.

As part of this project, Ansaldo STS is coordinating the study of the systems and energy saving strategies for the infrastructure. It was involved in the electro-mechanical and thermal simulations and the design/testing of innovative solutions using technologies to recover braking energy and use geothermal sources of energy.

Finally, Ansaldo STS participated with a number of different bids (currently being evaluated) in response to European H2020 Shift2Rail JU calls for multi-modal transport, advanced signalling and automation systems, intelligent systems for maintenance, automation and sustainability in freight transport.

Italian research projects

With respect to national research, Ansaldo STS participates in the Liguria Region's "Technologically Integrated Intelligent Systems" district, with other Finmeccanica companies in the region, and in DATTILO (High-Tech Transport and Logistics District) and the TOPIN laboratory (Innovative Optical-electronic Technologies) in Campania. In addition, Ansaldo STS participates in the 'Embedded' and 'INSIST' university/company networks for excellence, which concern themselves with ICT, energy and transport issues.

In 2015, it completed the following projects in relation to PON (national operating programme) tenders:

- SICURFER, to develop and test technologies for railway infrastructure monitoring to improve safety and security levels through the production, testing and integration of diagnostic units (wayside and on-board). The information obtained from these units is collected, analysed and integrated and used as support to take decisions about how to improve the rail system's maintenance.
- VERO (Virtual Engineering for Railways and Automotive) to support the construction of simulators for the optimal dimensioning of signalling systems. The project was launched in the last few months of 2013, carried out in 2014 and completed in the first half of 2015.
- DIGITAL PATTERN, in which an IT environment was created to support the design and production of systems and parts for road and rail transportation. In particular, Ansaldo STS specified, developed and tested a simulation environment to support the rail and metro system project.
- SFERE, to study the benefits of using supercapacitors installed on the ground.

Project SFERE

The objective of Project SFERE (Rail systems: eco-sustainability and energy savings), funded by the Ministry of Education, Universities and Research, is to create an energy storage system with supercapacitors for railway systems. This system comprises storage units placed on board the trains and in the wayside subsystem. They are monitored constantly using suitable measurement instruments and are coordinated and managed using software that also coordinates the actions of the protection bodies to avoid dangerous situations.

As part of Project SFERE, Ansaldo STS is engaged in the activities for the study and testing of the ground storage system and integration with the on-board storage system so as to build the most suitably sized units for their optimum management.

The following projects will continue in 2016:

- OPTOFER, to create a public/private workshop for the equipment and technologies needed to design, produce, lay and inspect optical fibre sensors and new sub-micrometric photonic devices to measure: deformations, temperature, vibrations, humidity, electrical and magnetic fields and pollutants (chemical, physical and biological), with applications in structural monitoring, environmental monitoring and water monitoring, the detection of under-water noise, the size of radio-active waves and radio-active environments, biomedical tools, musical instruments, microwave photonics, etc.
- FERSAT, the result of the need to modernise and strengthen regional and local railway lines by leveraging new localisation satellite and wireless telecommunications technologies to increase transport capacity, safety and significant reduce the costs of operating the railway network. The technological innovation introduced enhances the regional and local railway lines whose current operation and maintenance costs have stalled investments and, accordingly the update of current technologies, although demand for local transport is constantly growing.
- NEMBO, to develop new technologies and methodologies in the scope of development, testing and validation processes for embedded systems, particular for the fail-safe systems used for railway signalling. The project's development entails the application of modelling techniques, while testing and validation activities will focus on on-site activities for line bodies.
- MODISTA, to develop innovative solutions for the performance of experimental acceptance testing and the monitoring of components and systems on real lines, especially with the use of low-traffic lines. The main aim of this project is to develop and demonstrate innovative technological solutions in the monitoring of lines and vehicles in transit, in order to boost safety and security levels, optimise maintenance and improve energy efficiency. In particular, in 2015, energy harvesting systems were experimented with to feed the monitoring devices on board the freight carriages.

REGIONAL GROUPING FOR RAIL TRANSPORT

Ansaldo STS, Confindustria Genoa and the Liguria Region's "Technologically Integrated Intelligent Systems" district (SIIT) have joined forces to promote development of a regional technological grouping for rail transport, involving SMEs, universities and the CRN (Consiglio Nazionale delle Ricerche, National Research Council). Their aim is to present research topics pertinent to the Horizon 2020 programme and especially the European multinational Shift2Rail project to the Department of Economic Development of the Liguria Region to be included in the next programming schedule.

Partnerships with universities: technological and managerial training

Ansaldo STS continued its relationship with Italian and foreign universities and training schools also in 2015 in order to contribute to the students' theoretical and practical knowledges and to offer traineeships, scholarships and other opportunities for young motivated and enterprising people.

In the 2013-2014 academic year, along with the Ferrovie dello Stato group (Italian railways), AnsaldoBreda, Roma Metropolitane, Bombardier Transportation Italy S.p.A. and Almaviva, Ansaldo STS participated in the Level II University Master programme in Infrastructural and Railway System Engineering with the La Sapienza University of Rome. The aim of the master programme was to train top level engineers in the rail transportation sector.

As part of development of the networks of excellence that link companies, universities and research centres, Ansaldo STS has funded three scholarships for the Embedded System in Critical Domains Project (technologies and methods to develop embedded systems in critical domains for time and safety (tender of 29 March 2014).

In line with previous years, the company is part of the project to reform the technical high schools (ITS) defined by Finmeccanica and the Ministry of Education in the memorandum of understanding signed in November 2009. This project provides for the involvement of Finmeccanica group companies in the set-up of foundations in their regions to manage two-year post-high school technical training programmes. The end objective is to provide young people finishing technical high schools with more specialised training to meet the rising demand from companies for highly qualified experts. In 2013, the first course was completed with lectures given by 25 Ansaldo STS employees and 10 young high school leavers were given job experience at the company. A second training course commenced in 2014 for another 19 students, some of whom have received specific training and have worked as trainees at the Naples site in 2015 and early 2015.

Ansaldo STS is a member of the Genoa-based Institute of Advanced Studies in Information Technology and Communication (ISICT). ISICT is a consortium set up by the University of Genoa and companies, institutions and bodies of the Liguria region. Its purpose is to promote high level training in the field of Information and Communication Technology. Ansaldo STS participates in the institute's projects as part of the decision-making bodies and by collaborating in the training of Italian and foreign students by providing teachers who are extremely qualified in technological subjects. Each year, the company invites the students to visit it and see how the organisation works, its ongoing projects and technologies used. In addition to the lunch for everyone, Ansaldo STS offered the ISICT students the opportunity to prepare their theses at the company in 2015. Its aim is to provide the students with more opportunities to gain practical experience and an insider view of the world of work. At the same time, this creates added value for the organisation as it benefits from these activities which contribute to its ongoing technical improvement.

Furthermore, Ansaldo STS organises annual conferences on cyber security, in collaboration with the Engineering department of the University of Genoa, particularly for students and businesses in the area. Ansaldo STS also participates in workshops with students who have completed high school or who are graduating from university, held by the university in concert with leading companies in the region. During these workshops, the company listens to young university students' needs and aspirations and then presents, together with the various participating companies, specific details on their companies. This is an opportunity for the students to prove themselves and to obtain information about potential employment opportunities, especially in Ansaldo STS's sector.

Agreements with universities

Ansaldo STS has framework agreements in place with the Italian Universities of Genoa, Turin, Rome and Basilicata, relating to a number of three-year PhD partnership programmes, annual or two-year research contracts as well as numerous theses and internships. The company also has a framework agreement with the German University of Dresden, specialised in railway signalling and is also developing partnerships with the Universities of Rome and Milan.

In 2014, these agreements enabled the company to organise ad hoc seminars at the University of Genoa and other Italian and foreign universities. The seminars offer two opportunities to the company as they provide training to students through the availability of its technical and other staff and also contribute to highlighting the importance of specific courses for business development and the evolution of the transport sector.

Company managers participated at the meetings, mainly held in the Electrical engineering, Mechanical engineering and Transport faculties presenting various engineering issues that are of great interest to Ansaldo STS, such as electric traction. The company increasingly promotes the use of this type of seminars, with the shared aim of offering training to young resources and presenting issues directly applicable to the projects in which the company is involved.

Ansaldo STS promotes initiatives and projects with the international universities in countries strategic for its future, aimed at building professionally fruitful and long-term relationships. An example of this commitment is the US, where Ansaldo STS has pursued important training initiatives, including:

- participating in several academic career fairs;
- participating in the Computer Science Day at the University of Pittsburgh;
- promoting meetings and interviews with students at local university campuses;
- promoting job offers and internships through universities;
- participating at university fairs, alumni reunions, specific workshops;
- targeted work experience and on-the-job training.

In 2014, Ansaldo STS sponsored 20 internships for university students, future engineers, in France. These internships provide an ideal opportunity for students to discover international railway signalling, urban rail on-board/wayside signalling applications and traffic management. Ansaldo STS has also continued its partnerships with prestigious French university research centres and business schools, including the Centrale Paris University (where the company participates in specific project management courses) and ESTACA (Ecole Supérieure des Techniques Aéronautiques et de Construction Automobile, a prestigious French engineering high school), where it assists the school prepare specific rail signalling courses.

The company is also one of the industrial partners of the Railway and Guided Transport System master degree courses offered by Ecole des Ponts and ENSIAME, accredited by the Universities Conference.

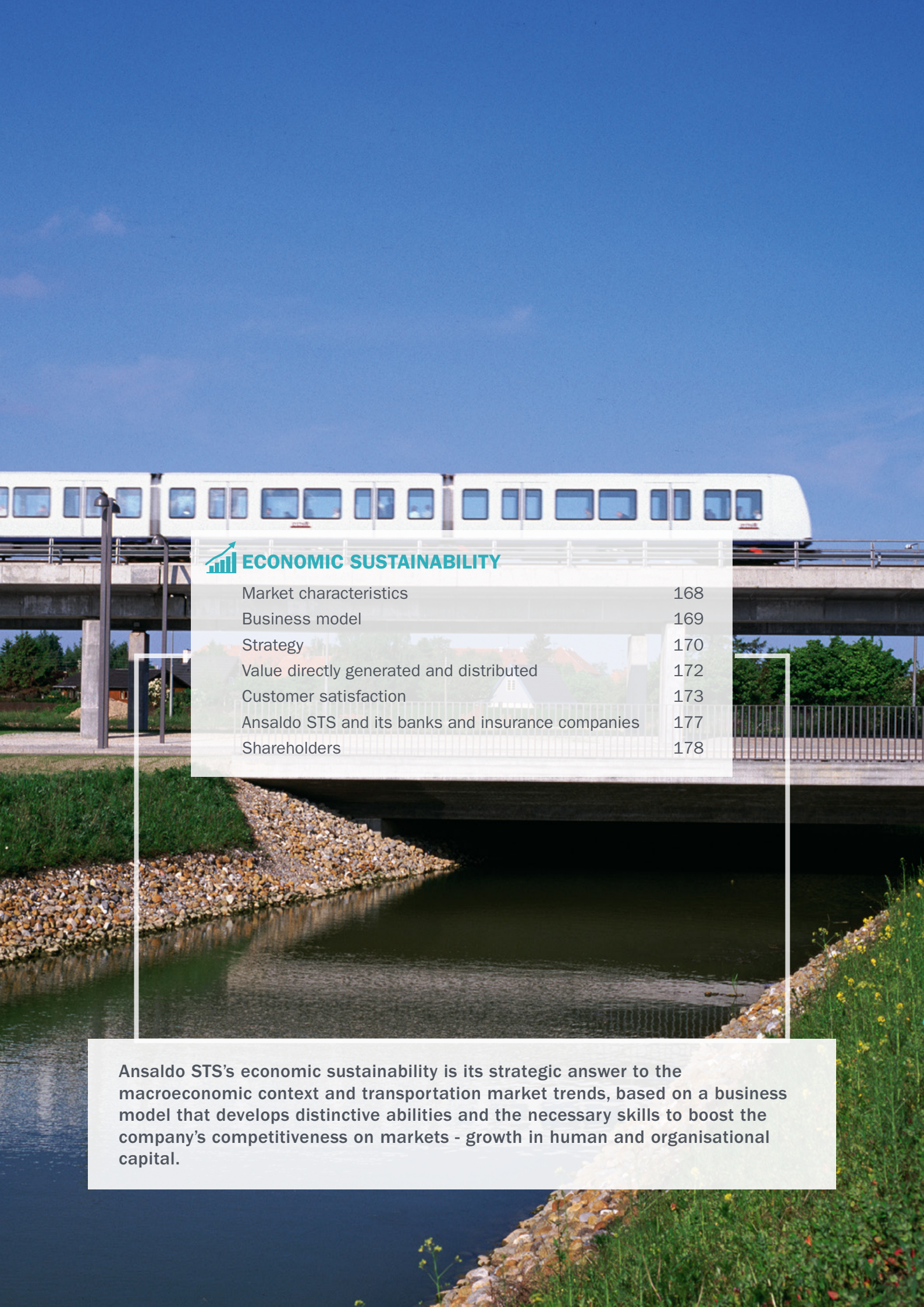
Trade associations

Ansaldo STS actively participates in UNIFE projects (association of European railway builders), UNISIG (association of European railway signalling companies) and UITP (international public transportation association), ANIE (National Federation of Electrotechnical and Electronic Companies), AICQ (Italian Association for a Quality Culture), the Italian partner of EFQM (European Foundation for Quality Management), Cosila (consortium for safety in the workplace) and Unione degli Industriali/ Confindustria (Industrialists' Union/Italy's main organisation representing Italian manufacturing and service companies), in Naples and Genoa, specifically.

In the scope of UNIFE, Ansaldo STS collaborates to, among other things, promote the extension of the use of railway transportation through the implementation of technological standards (ERTMS and TSI) and by proposing European research projects to improve safety, energy efficiency and environmental protection in the field of railway transportation. Specifically, with this project, proposed by the railway JTI SHIFT2RAIL, ASTS aims to reduce emissions, for a modal shift in transportation, in line with that indicated in the transportation white book published by the EU Commission.

Furthermore, also as part of UNIFE, Ansaldo STS sits on the Sustainable Transport Committee, which aims to define a common, consistent and effective consensus in the railway industry with respect to environmental issues and, particularly, energy efficiency (reliable standards to measure energy consumption), the evaluation of the life cycle as one of the main criteria in the decision-making process, eco-procurement and noise- and emission-reduction.

Art Station Toledo of the Metro Naples line 1



ECONOMIC SUSTAINABILITY

Market characteristics	168
Business model	169
Strategy	170
Value directly generated and distributed	172
Customer satisfaction	173
Ansaldo STS and its banks and insurance companies	177
Shareholders	178

Ansaldo STS's economic sustainability is its strategic answer to the macroeconomic context and transportation market trends, based on a business model that develops distinctive abilities and the necessary skills to boost the company's competitiveness on markets - growth in human and organisational capital.

Revenue +13% from € 1,230 million to € 1,384 million (2013*-2015)

EBIT +16% **ROS** from 9.5% to 9.8% (2013*-2015)

Net profit +24% from € 75 million to € 93 million (2013*-2015)

EVA +21% from € 54 million to € 66 million (2013-2015)

Order portfolio +15% from € 5,567 million to € 6,410 million (2013*-2015)

Net financial debt

+38% from €245 million to €339 million (2013*-2015)

Share performance +26% from € 7.85 to € 9.87 (2013*-2015)

V2A programme: **Lean** (cost optimisation), **New Road** (purchase cost reduction), **Top Line** (new market opportunities)

Customer Satisfaction: a system of customer monitoring, control, reporting and discussion tools

Project Lifecycle Management processes to control operating risks

€ 1,354 million (+4.8%) Value distributed to stakeholders

* Restated Figures following the application of IFRS11 governing joint arrangements qualified as joint ventures, which are consolidated with the equity method as of 1 January 2014 (date of implementation by the Ansaldo STS Group). The 2013 figures have been updated to ensure a consistent comparison of the data compared.

Market characteristics

Economic sustainability is therefore increasingly tied to social and environmental aspects, both at company level and in terms of market scenarios. Ansaldo STS has evaluated the repercussions on transportation systems that macrotrends involving variables related to the environment, health and safety, demographic growth and economic development in emerging countries and the result is that the global transportation market will shift ever more towards rail transport that is safe, efficient and capable of meeting growing environmental concerns.

THE MARKET AND ANSALDO STS'S POSITION

The market and its evolution

Ansaldo STS's market remains sound and shows global growth rates of around 2% to 3% per annum. The key market drivers remain positive: growth in global trade and growing traffic, urbanisation, environmental concerns, expanding emerging markets, infrastructures and intermodal transport. In part due to urbanisation trends, emerging markets are growing faster than highly industrialised nations, increasing their relative weight. However, there are also sound growth opportunities to be found in the United States and Australia as well as the signalling segment. The result of these trends is a reduction in Western Europe's weight.

Ansaldo STS's position

Ansaldo STS boasts solid roots in industrialised countries' markets and it is well positioned in emerging markets. It can meet global demand thanks to its demonstrated skills and expertise in delivering on time and according to budget.

Traditional and emerging technologies

ERTMS, CBTC and driverless technologies are becoming global standards. Focus is now shifting to the technological innovations destined to dominate the market in the next few years, GNSSS (Global Navigation Satellite System), used in remote areas with low traffic and that are difficult to reach..

Ansaldo STS's position

Ansaldo STS's product portfolio includes traditional technologies and innovative, high-tech transportation solutions.

Price pressure

Competition pressure continues to intensify between the world's leading players, triggering a significant reduction in unit prices, mainly in the signalling sector, where Ansaldo STS responds with both innovation and product differentiation, continuously striving to improve its efficiency and effectiveness by creating specific plans.

Ansaldo STS's position

Ansaldo STS has built its business model around customers, ensuring product flexibility and maintaining competitive prices by standardising products and implementing efficiency-boosting projects.

Business model

Ansaldo STS's abilities and organisation fully meet the need to innovate in order to boost transportation efficiency and safety and reduce the environmental impact.

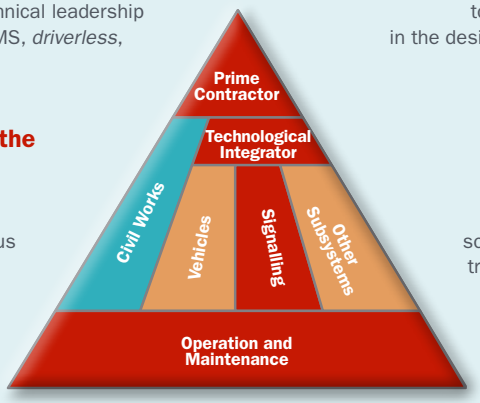
Ansaldo STS is, indeed, a company that operates on a global market. It boasts great flexibility in meeting international demand and is open to new markets. It carries out research and development for transportation solutions that focus in particular on the environment and safety. It facilitates the standardisation of solutions, while also developing the ability to create customised products for different customer needs. It has the necessary financial soundness to meet future challenges, lead innovation and make the most of growth opportunities by promoting new projects. Ansaldo STS's business model is customer based, and enables it to forge fruitful, long-lasting relationships at global level.

ANSALDO STS' BUSINESS MODEL

Technological *leadership* in terms of safety and the environment
Ansaldo STS offers integrated solutions based on technological leadership in terms of safety and the environment and holds a predominant technical leadership position in certain market segments (ERTMS, *driverless*, mass transit, HSL, etc.).

Solid roots and growth wherever the demand is
Long-standing technological leader in the western world, growth in emerging market economies, investments in *R&D*, continuous monitoring of deadlines and budget.

Serving the customer's future needs
Ansaldo STS can meet the new requirements of markets, such as driverless freight transportation, the introduction and integration of extremely safe technology that guarantees operating efficiency.

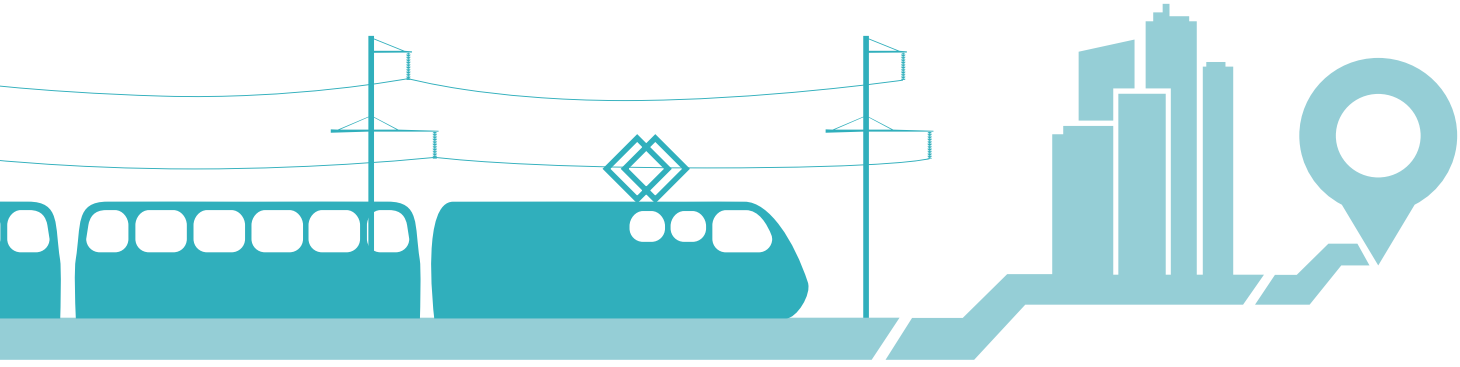


Global organisation
3,772 professionals offer global research, expertise, experience, know-how and best practices wherever the market needs them.

No dependence on rolling stock supplies - only privileged *partnerships*
Ansaldo STS is capable of aligning its solutions to any rolling stock supplier and is flexible in the design and creation of the selected solution.

A partner throughout the customer's entire value chain
Ansaldo STS is leader in the supply of cutting-edge integrated transportation solutions by combining traditional and non-traditional technologies and *operation and maintenance* services.

Financial support to customers
Ansaldo STS can leverage its sound net financial position and innovate its profitability model by introducing pay/per use formulas on long-term contracts and optimising the *total cost of ownership* for its key customers.



Strategy

Ansaldo STS is committed to maintaining and developing a series of distinctive abilities and expertise that create value and guarantee long-lasting company growth over time. This commitment can be seen in the company's three strategic trajectories:

1. **Selectivity:** focus on markets where it has a strong competitive position. Ansaldo STS's growth is the result of a continuous process beginning with its awareness of its positioning and competitive edge, the identification of market opportunities in relation to its competitive levers and their translation into action plans. This process has led to the definition of strategic markets – the domestic market and the areas in which the company has a significant, recognised presence, as well as markets presenting growth opportunities, by focussing on large projects with low overheads.

2. **Innovation:** focus on innovation as a lever to gain competitive edge for long-term growth.

   Ansaldo STS's innovation strategy to increase turnover is based on improving the products it currently offers customers and differentiating its product portfolio to expand the offer, extending its business model by offering complementary services that meet its customers' specific needs (management and maintenance activities) and meeting the specific needs of customers given their particular geographical situations (complex areas with low traffic volumes), offering cutting-edge satellite technology solutions.

3. **Flexibility and efficiency:** maintain its competitive edge by optimising the business model with a focus on the flexibility of the offer and operating efficiency.

   Efficiency is one of the strategic levers in which Ansaldo STS invests to bolster its competitive position and ensure excellence in the performance of activities. To pursue these aims, it has launched an improvement programme that covers all company areas and exploits the opportunities arising from its global organisation.

   In order to ensure the implementation of all efficiency initiatives, and, in general, all strategic initiatives, Ansaldo STS has developed an **Action Implementation** Monitoring (AIM) system. Through AIM, the following have been defined:
   - the definition process for action and monitoring plans;
   - the governance rules to ensure the frequency of review meetings focused on initiatives and the identification of any corrective action in the event of critical areas;
   - tools to support management of the initiatives.

   The contribution that Ansaldo STS expects of AIM is:
   - completeness: having a consistent, updated picture of all initiatives underway;
   - consistency: doing what has been proposed and following up on it until implementation;
   - initiatives explicitly linked to company plans.

The V2A project

V2A stands for "Values to Actions", the company's most important strategic change programme set up at the start of 2014. It strategically links the company's values to its improvement and transformation project. This project's aim is to make Ansaldo STS more efficient and effective and, hence, more competitive on the market, thanks to the launch of important, innovative and challenging changes in how the company manages its operations and allocates its resources, how it manages suppliers and its commercial strategy without neglecting its values, its background and its people.

V2A is broken down into three macro workstreams.

The Lean workstream has the goal of identifying ways to optimise internal costs and includes some of the entire Programme's most complex and challenging initiatives, aimed at simplifying the delivery process by slashing waste. The initiatives rolled out target identifying areas with potential for improvement in order to boost product quality, cut internal costs and speed up delivery times. Hundreds of people from all over the world are already on-board the V2A Lean activities and the Value Stream Mapping (VSM) tool has been used to analyse the processes for all main signalling and system integration technologies. The team has quantified the level of waste (roughly 20-30% on average) and identified ways to improve operating methods to eliminate (or significantly cut down) identified wastage. The improvement proposals were put together in a "Lean Catalogue". In 2014 and 2015, the Lean catalogue ideas were progressively applied to all projects and, in the meantime, the catalogue was expanded upon. In the scope of this workstream, specific focus was given to streamlining the staffing for projects and optimising the use of all company resources. Ansaldo STS's Lean Methodology is a bona fide cultural revolution in how company activities and processes are managed and requires the entire company workforce to change their mentality. In 2014 and 2015, the workstream identified gross internal cost cutting of over €60 million for the entire life cycle.

The **New Road** workstream is the natural development and continuation of other supplier optimisation projects aimed at cutting overall external purchase costs. The project selected certain cost macro-categories considered strategic. Detailed specific possibilities to create efficiency were identified for each macro-category of costs, with their implementation expected to generate results in the medium and long term. Procurement optimisation tools range from more commercial mechanisms like finding suppliers in non-traditional countries or combining the purchases of several projects to negotiate discounts, to more technical tools. Various department areas on a global scale are involved in the project, promoting and strengthening best practices in external cost management throughout the entire organisation. The gross results of this project for 2014 and 2015 show more than €120 million in greater efficiency for the entire life cycle.

The aim of the **Top Line** workstream is to find new market opportunities that ensure sound margins and relatively short life cycles (from the order to revenue generation) compared to traditional projects. In 2014 and 2015, the focus was mainly on components and services and in the same period, the workstream identified gross improvement potential of over €30 million covering the entire life cycle.

Specific communication campaigns targeting the entire workforce have supported the V2A project, spreading awareness of Ansaldo STS's new modus operandi. The main slogan was "Share the passion, a call for action!", inciting all employees to take part in the company's transformation through their own professional contribution.

Value directly generated and distributed

Ansaldo STS recognises the importance of balancing the distribution of value generated by its activities to stakeholders, the value that they have directly or indirectly contributed to generating.

By analysing distributed economic value, Ansaldo STS studies the flow of resources directed towards its employees, suppliers, service providers, lenders, the public administration and the communities in which it is present.

ECONOMIC VALUE DIRECTLY GENERATED AND DISTRIBUTED (€/000)	2015	2014
Economic value generated	**1,438,285**	**1,365,239**
Revenue	1,383,837	1,303,508
Other revenue	18,284	27,964
Financial income	36,164	33,767
Profit from non-current assets held for sale	0	0
Value distributed	**1,354,077**	**1,292,352**
Operating costs (procurement, services and investments)	907,841	855,582
Employee remuneration	321,676	316,522
Shareholder remuneration	30,000	28,800
Lender remuneration	46,369	42,768
Public administration remuneration	47,429	47,607
Donations and sponsorshiops	762	1,073
Economic value withheld	**84,208**	**72,887**
Depreciation, amortisation, impairment losses and adjustments	21,172	20,993
Self-financing	63,036	51,894

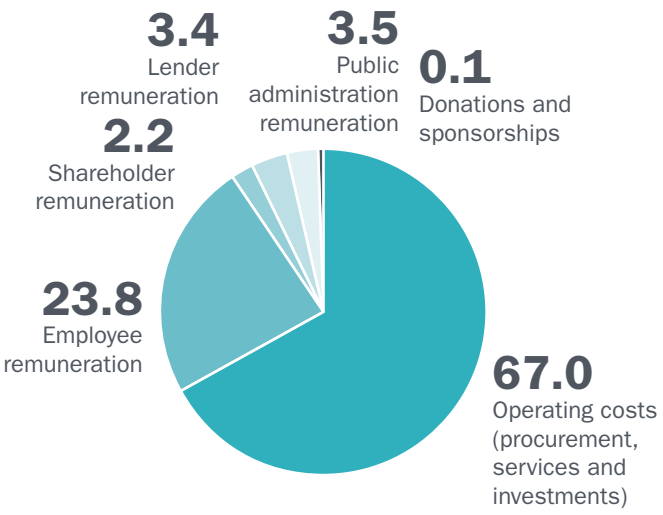
The value generated by the Group reached approximately €1.44 billion, up 5.4% on 2014.

The value withheld by the company amounts to €84.2 million, and mainly consists of amortisation, depreciation, impairment losses and accruals to provisions for risks, along with the self-financing that was generated.

€1.35 billion was distributed among the following stakeholders:

- the largest amount, or roughly €907.8 million, relates to costs incurred to purchase materials (suppliers), services (contractors and sub-contractors) and other goods;
- approximately €321.7 million to employees, mainly for wages, salaries, social security and pension contributions and defined contribution plans;
- approximately €47.4 million to the tax authorities and other local bodies for direct and indirect taxes;
- €46.4 million to lenders for interest and commissions, financial expense and operating exchange rate differences;
- €30.0 million to shareholders in the form of dividends[30];
- €0.8 million to the community in the form of gifts, donations and sponsorships (with or without publicity).

2015 - ECONOMIC VALUE DISTRIBUTED (%)



30. The most indicative data for the distribution of value would have been dividends on the profit for 2014. However, this figure was not available before the shareholders' approval of the Sustainability Report. Indeed, at the same meeting, the shareholders are to approve the dividend to be distributed on the profit for 2014. Accordingly, we deem it appropriate to publish equity distributions in the year.

Customer satisfaction

Customer satisfaction is central to Ansaldo STS's strategy: the ability to understand customers' needs and expectations and meet them is the top value on which it bases its company culture. In general, each customer has a contact at Ansaldo STS, a specific Project Manager overseeing its contract.

The Project Manager is responsible for ensuring the customer is satisfied, responding to any issues that might arise over the course of the contract.

The organisation of proposal activities and project management is fundamental to carrying out a project that meets the quality requirements of the products and services offered and in order to provide them according to deadline and budget restrictions. To this end, project management is a vital tool in protecting the interests of Ansaldo STS's stakeholders, including shareholders, who are mainly focused on the results of the business, and its customers, who want to receive top quality responses according to established schedules in line with the transportation needs of a city or the community at large.

In this area, the most significant development in market dynamics in recent years has entailed the progressive shift from the provision of products and technologies to customers' demand for transportation solutions that efficiently meet the needs of local and national institutions. This new type of offer requires an ability to work alongside customers, who are increasingly less frequently considered buyers and ever more partners, in the management of a project throughout its entire life cycle, taking action, if necessary, in project financing initiatives as well, and thereby with private sources of funding, and consequent involvement in not only the design and construction, but the subsequent management and maintenance of solutions as well.

Ansaldo STS operates with customers mainly consisting of public institutions on long-term projects. It is therefore affected by a myriad of external factors such as the macroeconomic scenario and the consequent availability of sources of financing and the need to operate, especially in terms of urban public transportation projects in city centres with many interferences that could impact the steady performance completion of a project and influence the quality of life of the local communities.

Clearly, in a context such as this, project management skills and processes are essential for the achievement of the pre-determined objectives and to ensure sustainability with stakeholders. To this end, it is necessary to identify and monitor any uncertainties typical of the business and, more in general, to manage risks. Ansaldo STS has implemented appropriate life cycle management and risk assessment procedures to monitor project performance by regularly comparing physical and accounting progress and consequently identifying any discrepancies using earned value techniques, with the resulting identification of appropriate action plans aimed at maintaining the objectives of the project.

The risk assessment process provides for the identification of all significant risks already at the bidding stage and their monitoring throughout the entire life cycle of the project, in order to immediately identify potential mitigation actions to be taken. Furthermore, in accordance with international best practices, Ansaldo STS directly collaborates, when required, with customers to manage risks together, thereby minimising their impact, not only in terms of risks for Ansaldo STS, but for the end customer as well, and, accordingly, for all stakeholders. In this respect, Ansaldo STS has created standard procedures that it uses for integrated risk management with end customers.

Art Station Metro Naples line 1

Control of project operational risks

To mitigate risks relating to the quality, deadlines and costs of a project, Ansaldo STS:

- adopts risk management processes, both during the bidding and project performance stages, to minimise the consequences of negative events and maximise the impact of positive events, through constant monitoring of risks and opportunities;
- adopts project life cycle management processes based on the constant comparison of physical progress with accounting progress, in addition to periodic independent stage review processes for certain projects;
- clearly assigns responsibilities to the project manager and project controller;
- provides for managerial review of project performance (periodic reviews at the various levels of managerial responsibility) and review processes of estimates during bidding;
- provides for an independent review of projects by the risk management function;
- exerts constantly control, including through suitable performance indicators that measure efficiency and effectiveness and assess the company's maturity in the risk management process;
- identifies, for each project, specific risk mitigation, opportunity and contingency actions.

Additional action is planned to improve the efficiency and effectiveness of control processes and to harmonise these processes, in line with existing best practices.

Customer satisfaction

A specific team handles Customer Satisfaction ("CS") activities. The team is made of the managers of the various functions: Strategy, Quality & Improvement, Business Unit Railways & Mass Transit and Freight, RAMS (Reliability, Availability and Maintainability & Safety) and Operations.

Customer Satisfaction activities consist of various stages and are carried out using different tools to accurately monitor customer satisfaction level and the progress of projects until their completion. These tools include:

- **Customer Satisfaction Monthly Meetings:** monthly meetings via videoconferencing, to discuss CS activities and reach decisions on the steps to be taken.
- **Customer Satisfaction Monthly Reports:** quarterly reports prepared with the support of the business unit managers on critical projects. To date, 22 critical projects have been mapped. The Project Manager is responsible for reporting on critical points (in terms of planning, quality and costs) and the related mitigation action. A statistical analysis on the development of these critical points is attached to the report.
- **Customer Satisfaction Survey:** a series of one-on-one interviews with top representatives of a sample of customers. This survey begins with a letter signed by the CEO of Ansaldo STS sent to the customer's CEO. It is carried out using a specific questionnaire attached to the letter to the customer. Since the end of 2012, 18 interviews have been conducted (Spain railways, Swedish railways [twice], British railways, Italian railways, French railways, Hyundai-Rotem [twice], Aurizon, Sydney Trains, Calibre Rail, Insigma [twice] and customers of the Taipei, Washington, Copenhagen and Stockholm metros [twice]). Customer feedback is sent after any corrective action has been defined and performed following an evaluation of the questionnaires received.
- **Post Commissioning Reports:** reports included in the methodology defined by the Customer Satisfaction team for the RAM - Reliability, Availability and Maintainability – analysis of certain large projects.

- **Complaints Management**, the Project Managers are responsible for recording customers' complains, which are sent each quarter to the Customer Satisfaction Coordinator, until the complaint is resolved. The Customer Satisfaction Team checks and records all information and, twice a year, prepares a global analysis. This analysis is used as the basis to calculate the "customer complaint" KPI.
- **Customer Satisfaction of Project Teams,** customer satisfaction is evaluated for each key project considering the following main aspects: contract value, project duration/delay, service quality and product quality. The Regional BU managers gather the results of these surveys from the Project Managers. Finally, the CS Team checks the global results and their consistency with expectations.
- **Customer Satisfaction Reports:** reports prepared half-yearly by the Customer Satisfaction Leader. These reports summarise CS activities in the period (CS of the Project Teams, complaints analysis and focus on various projects) and are sent to the company's senior management. They are included in the Management Review.

Based on the Customer Satisfaction Survey and direct interviews with customers in 2015, the average scores comparing Ansaldo STS products with competitors (the range of scores goes from 1, extremely unsatisfied, to 10, extremely satisfied) are given below).

Ansaldo STS products from a technical point of view	**7.5**
Best competitor products technically	7.0
Ansaldo STS products cost/value	**6.6**
Best competitor cost/value	6.2

Responsible litigation management

Disputes between Ansaldo STS and its customers are mainly "physiological" in nature, i.e., they mainly relate to financial claims made by Ansaldo STS in the form of retentions for extra costs incurred within the context of works carried out in the performance of projects. If not included in subsequent amendments or riders or defined on amicable terms, the claims submitted from time to time can lead to cases brought before courts or arbitration panels specified in the contract. The number of such cases is always below a physiological average of contracts underway.

Nevertheless, Ansaldo STS often tends to reach settlement agreements, considering:

- settlement to be a normal instrument to resolve disputes arising for retentions, and it is also being used in the preliminary stages of ordinary cases as well pending legislation (Legislative decree no. 28/2010) that provides for mediation to seek settlement upon the claimant's initiative;
- settlements represent an excellent way to improve relations with the customers involved in the relevant disputes, and provide value added, where, as is the case of Ansaldo STS, the customer is usually perceived as a privileged partner with which significant long-term relationships must be established.

To this end, litigation management, as illustrated above, cannot be separated from the principle of considering customers' economic and business interests in the current political and economic situation. Therefore, the approach adopted by Ansaldo STS is aimed at ensuring success not only in court, but also credit recovery in the short term, which may include conventional debt restructuring agreements with its customers.

Currently, Ansaldo STS S.p.A. is involved in nine civil, administrative court and arbitration cases (as either claimant or respondent).

Litigation involving significant amounts is monitored quarterly in accordance with current procedures, and the flow of communications in place ensures that new updates are immediately known and the related information is reported in order to meet company requirements. With respect to the subsidiaries, in both the Railways & Mass Transit and Freight business units, there is no litigation or risks so material that they merit specific note.

The company is involved in one criminal case arising from a claim dated 4 March 2013 following the partial collapse of a building at Via Riviera di Chiaia 72 – Naples, which, allegedly could have been caused by work in progress to build the Arco Mirelli station of the Naples Metro Line 6. The company holds the work concession for this project, assigned to it by the Naples municipal authorities.

The alleged crimes currently remain those confirmed when the two respondents pursuant to articles 676 and 434 of the Italian Criminal Code were sent to trial, respectively: "Destruction of buildings or other constructions" and "Collapse of constructions or disasters due to negligence".

Only one preliminary hearing was held in 2015, during which the list of witnesses was lodged. The subsequent hearings scheduled for 2016 should only involve discussion.

With regard to civil legal proceedings related to the collapse of the building, to date, there are a total of 12 pending disputes, including four for preventive technical assessment, two for damage as per article 1172 of the Italian Civil Code and two claims for damages.

Proceedings are currently underway regarding alleged damage caused by the collapse of the building in Riviera di Chiaia, 72 and an agreement has been reached to rebuild the building, obtaining authorisation for reimbursement for the works from the insurance companies.

Also in collaboration with the insurance companies, the company is gradually reaching agreements for the compensation for damage to the third parties affected by the collapse. This would facilitate the overall management of the claim and avoid a large number of civil appearances in the scope of the criminal proceedings underway.

The company does not yet have a clear idea of the amount of damages that may be awarded upon conclusion of the different negotiations underway with the damaged parties.

Ansaldo STS and its banks and insurance companies

Ansaldo STS aims to create true partnerships with leading banks in order to optimise the support it receives in its business activities which are developing in ever more far flung countries which thus pose difficulties and unique aspects in relation to financing and banking.

This means the company needs a reliable bank, preferably with a local branch abroad, in order to support the various stages of the operating process, from assessing bids for tenders to setting up local branches to finalise one or more projects acquired.

Thus, Ansaldo STS's strategy is rooted in good, well-established relations with banks. It uses a multi-product approach in order to avoid amassing specific businesses at one bank, while simultaneously achieving cost efficiency.

Ansaldo STS has relationships with leading global banks: Intesa Sanpaolo, UniCredit, CitiGroup, ING, Credit Agricole, BNP Paribas, JP Morgan Chase, HSBC, Nordea, Saudi British bank, Riyad bank, Sumitomo and Bank of Tokyo. Its "prime" bank transactions relate to (current and non-current) borrowings, investments, bank guarantees, bonds, project financing, documentary credits, treasury transactions, treasury management (liquidity, payment and collection management) and financial consultancy.

Securities and bonds - types and amounts

Ansaldo STS negotiated a set amount of credit lines in order to support its bond and guarantee requirements, which are useful for facilitating business growth. The lack of the ability to obtain guarantees could prevent contracts from being clinched with customers.

In 2015 alone, the company negotiated and obtained additional endorsement credit of €365 million, including a line with Sumitomo and Bank of Tokyo amounting to €330 million.

Over 60% of guarantees issued for group companies are indirect, thus through banks, in favour of the beneficiary. Advance payment bonds are the guarantee instrument of choice as they enable a purchaser to be reimbursed advance payments on contracts or orders should the supplier breach the contract.

Guarantees amount for Ansaldo STS SpA to approximately €3.765 billion at 31 December 2015.

The main issuers were:

- 26 banks (35% of the guarantee amounts were used);
- 15 insurance companies (10% of the guarantee amounts were used).

Shareholders

Ansaldo STS is listed on the FTSE mid-cap and Star segments of the Italian Stock Exchange for top companies that meet specific, binding requirements: high levels of transparency and disclosure, excellent liquidity (35% minimum free float) and corporate governance in line with international standards.

Ansaldo STS's corporate governance system is designed to maximise value for shareholders, monitor business risks and achieve transparency with the market balancing the interests of all its shareholders, especially its small ones.

Share capital and dividends

Ansaldo STS's subscribed and paid-in share capital amounts to €100,000,000 at 31 December 2015, consisting of 200,000,000 ordinary shares with a unit value of €0.50. No other categories of shares or financial instruments convertible into or exchangeable with shares have been issued.

During their extraordinary meeting on 23 April 2010, the shareholders approved a share capital increase through a bonus issue of €50,000,000, to be carried out using the entire reserve for capital injections of €47,679 thousand and the reserve for goodwill arising on merger for the residual €2,321 thousand, issuing 100 million new ordinary shares with a nominal amount of €0.50 each. The share capital increase was to be carried out by 31 December 2014 in five annual instalments of €10,000,000 each, consisting of 20,000,000 newly issued ordinary shares. On 14 July 2014, the fifth and last instalment was issued.

The shares issued in each instalment are distributed with an allotment ratio for newly issued shares calculated on the basis of outstanding share capital at the date each individual instalment is issued.

A correct interpretation of the type of transaction has been given in each announcement, also so as to meet the relevant legal requirements, with considerable emphasis on the methods of the share capital increase and explanations to shareholders/investors, also verifying that the media and other entities have correctly presented the type of transaction.

Investor	No. of shares	% held
HITACHI RAIL ITALY INVESTMENTS	80,131,081	40.066
UBS	12,826,677	6.413
OLD MUTUAL PLC	5,941,981	2.970
AMBER CAPITAL	4,762,795	2.381
OVERALL LONG POSITIONS		
PAUL E. SINGER	10,398,213	5.199
(direct or indirect partner of the limited partnerships Elliott International, LP Elliott Associates, LP and The Liverpool Limited Partnership)		

Earnings per share and dividend

The company distributed dividends for the first time in 2007 after its stock market listing on 29 March 2006.

In relation to 2015, the company will propose a dividend of roughly €36 million to the shareholders' meeting in 2016, corresponding to €0.18 for each of the dividend-bearing shares.

(in Euros)	**2015**	2014	2013
Basic and diluted EPS	0.47	0.43	0.40**
Dividend per share	0.18*	0.15	0.144**

* As proposed to the shareholders.
** Recalculated following the bonus issue of 14 July 2014.

Investor Relations

Ansaldo STS's main objective is to maintain ongoing dialogue with the Italian and international financial community, providing sensitive information to the market in a timely and transparent manner and ensuring the correct valuation of the company, in line with its business model, strategies and targets.

This is why the Investor Relations function reporting directly to the Chief Financial Officer constantly meets with the financial community to gain an understanding of its information needs and to support top management in communication decisions.

Various surveys with counterparties confirmed the overall positive opinion of the Investor Relations team's work, acknowledged as the company's main point of contact with the financial community.

The function is also admired for its excellent know-how of the market and the company's business model and strengths/weaknesses, shared by the function head during meetings. The Investor Relations function is also known for its pro-active and willing approach and the quality of the information generated.

Financial analysts are seen as important stakeholders, vital for understanding the company set-up, the business and the strategies adopted by management.

Total actual coverage went from 13 investment banks in 2014 to 10 in 2015, mainly following the 24 February 2015 announcement that Finmeccanica would sell its 40% shareholding to Hitachi and the latter would then launch a mandatory public tender for Ansaldo STS shares.

Some investment banks provide periodic sector research and

competitor analyses, which the Investor Relations function gathers, studies and distributes internally, together with the official market disclosures.

On a quarterly basis before the financial results are issued, the Investor Relations department requests brokers assigned to the company's share for their latest forecasts on the company's key results indicators.

The company then calculates the averages and sends this consensus request back to the individual brokers, who can compare it with their own forecasts.

This is an accurate update of sell-side analysts' perception, which is discussed and considered by management.

This underscores the attention that Ansaldo STS devotes to considering financial communications as a two-way street, in which it is important to gather the market's perception and suggestions, as well as disclosing information.

With regard to communication activities, the annual plan is used to program and develop Investor Relations activities. The aim is to spread and communicate the company's market analyses, policies and strategies.

Though its resources and the quality of its intrinsic activities remained the same, in 2014, the Investor Relations function took on the monitoring and analysis of the market and the competition, in order to support management.

In addition to the usual daily focus on "rumours" and major market news and weekly news reporting (IR NEWS), the department periodically distributes in-depth analyses and updates on the performance of competitors, markets and main business sector analyses.

Transparency and accuracy of information

The Investor Relations function also pursues its mission by ensuring total transparency of communications and offering the market all the necessary information for investors to base their decisions on complete, correct and timely information. Accordingly, all the company's communications entail absolute compliance with legislative and regulatory provisions, but are comprehensible, thorough and offer consistent disclosure to all investors. Communications about Ansaldo STS outside the company are made exclusively by functions appointed for this purpose and in accordance with the company procedures aimed at ensuring the truthfulness and correct disclosure of such information.

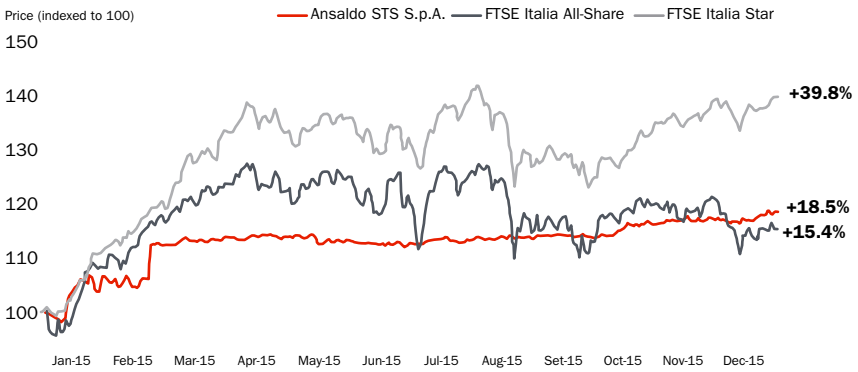
Share performance and analysts' rating

From 31 December 2014 to 31 December 2015, the share price rose from €8.33 to €9.87, gaining 18.5%.

The share's peak for the period and overall company record of €9.90 was recorded on 28 December 2015, while its low of €8.19 was recorded on 9 January 2015.

An average 1,308,883 shares were traded daily in the period, compared to 1,038,047 shares traded in the previous year. In the period considered, the FTSE Italy All Share index and the FTSE Italy STAR index gained 15.4% and 39.8%, respectively.

On 21 December 2015, following the ordinary revision of the FTSE MIB index (for the 40 largest caps), Borsa Italiana, the company that manages the Italian Stock Exchange, announced that it would exclude Ansaldo STS from the index. Accordingly, the Ansaldo STS share is now traded on the FTSE Italy Star and FTSE Italy Mid Cap indices.



Methodological notes

Ansaldo STS' 2015 Sustainability Report, that reached its 7th edition, has been prepared in accordance with the "G4 Sustainability Reporting Guidelines" issued in 2013 by GRI – Global Reporting Initiative, using the "core" reporting option.

Document contents have been defined according with the following principles:

Stakeholder Inclusiveness – Various activities of stakeholders engagement were carried out, as described in *Stakeholder engagement* chapter.

Sustainability context – In the introductory paragraph "The sustainability of Ansaldo STS", in the "Sustainability governance" and in the "Innovation" chapters we have tried to give a clear definition of the sustainability framework defined by the Group and on how it is integrated within the business. Further, without losing an overall view, we have tried to describe local initiatives, reporting the features of the different markets (see *Our people* chapter).

Materiality – Ansaldo STS' Internal Sustainability Committee carried out an update of the analysis of materiality broadening the involvement of certain parties of the following stakeholders categories: suppliers, banks and customers. The opinions expressed by the new stakeholders have been added to those of the stakeholders involved in the previous two years and weighed according to the prioritization assigned by the Group's management.

Completeness - The report has been designed to give stakeholders a complete picture of Ansaldo STS' activities. The scope of the report refers to the Group, as indicated in the 2015 Annual Report. The issues relating to the environment, health and safety refer to subsidiaries' sites that are considered material, i.e., those with more than 10 employees (see *Environmental Performance* chapter). In the Asia Pacific region, where the Group operates through a joint venture holding of 40%. Personnel-related data has been established considering the percentage owned by the Group (consolidated using the equity method).

Balance – In describing the outcomes of Ansaldo STS' activities, we have sought to reflect both the positive and negative aspects to give a balanced view of overall performance.

Comparability – To enable stakeholders to analyse changes in the Group's performance, the Sustainability Report includes comparative data of the two-year period 2014-2015. In some cases, in order to better describe the performance trend, the data of the three-year period 2013-2015 were exposed. Income statement figures, expressed in Euros, have been translated at the exchange rates indicated in the 2015 consolidated financial statements. The scope of the data is always indicated (in the text or in a note), along with changes compared to previous years.

Accuracy – Results and financial information refer directly to the 2015 Consolidated Financial Statements.

Environmental, health and safety data and information come from certified management systems (ISO 14001 and OHSAS 18001). Social and personnel data have been mainly extracted from Ansaldo STS' operating systems.The boundary of social and personnel data matches the one of the Consolidated Financial Statement at December 31, 2015. Any further restictions are indicated in this document.

The boundary of environmental data and information has been defined on the basis of the significance of the Ansaldo STS S.p.A, subsidiary companies and JVs' plants and offices. These sites have been identified on the basis of the following parameters:

- number of employees (sites with more than 10 employees as of 31 December 2015);
- significance of environmental impacts.

Any further restictions are indicated in this document. The conversion rates used for the calculation of GHG emissions are those defined by the Greenhouse Gas Protocol.

Timeliness – The Sustainability Report is prepared annually. To best meet the informational needs of stakeholders, where material, events that occurred after year end are also reported.

Clarity – The report has been structured to make the information easily identifiable by stakeholders (using icons for different sections and a navigation system). The 2015 Sustainability Report opens with the sustainability pillars and the letter from the CEO e General Manager, and includes eight sections: *Company profile; Sustainability governance; Innovation; Environment, health and safety; Our people; Supply chain; Public relations; Economic performance. This document ends with the Content Index and the Report of the independent auditors on the Sustainability Report.* The level of detail of information has been defined on the basis of the analysis results of materiality and in order to make the report comprehensible, accessible and usable by the various stakeholders. The document refers to the Group's website for certain matters, indicating the relevant web page address.
The Sustainability Report will be distributed in a "dynamic" PDF format, a short version with highlights and a video.

Reliability – The 2015 Sustainability Report has been approved by the board of directors on November 3, 2016 and subjected to limited assurance by independent experts (KPMG S.p.A.) in accordance with the criteria included in the principle "International Standard on Assurance Engagements 3000 (revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000 - revised") defined by the International Auditing and Assurance Standard Board. KPMG was involved in the various stages of the reporting process in order to facilitate its review, in a constructive climate of collaboration.

GRI Content Index

The following table contains all specific references to the disclosure provided in the Sustainability Report, in accordance with the GRI-G4 Sustainability Reporting Guidelines.

KPMG S.p.A. reviewed the Sustainability Report, as a whole, of the Ansaldo STS Group at 31 December 2015, in accordance with ISAE 3000 (Revised). For additional information about the scope of the review and the procedures carried out by the indipendent auditors, please refer to the "Indipendent auditors' report" on the Sustainability Report. The information summarised in the GRI Content Index is included in the scope of the review. No other information was reviewed.

General standard disclosures		Cross-reference Direct answer	Omission / Reason / Explanation
Strategy and Analysis			
G4-1	Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	p.6	
G4-2	Provide a description of key impacts, risks, and opportunities.	p.46-47; p.48-53	
Organizational Profile			
G4-3	Report the name of the organization.	p.1	
G4-4	Report the primary brands, products, and services.	p.17-23; p. 72-79	
G4-5	Report the location of the organization's headquarters.	Back cover	
G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	p.22-23; p.90-91	
G4-7	Report the nature of ownership and legal form.	p.178	
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	p.18-21; 27-28; p.30-31	
G4-9	Report the scale of the organization, including: total number of employees; total number of operations; net sales (for private sector organizations) or net revenues (for public sector organizations); total capitalization broken down in terms of debt and equity (for private sector organizations); quantity of products or services provided	p.11; p.22; p.26-28; p.81; p.105; p.108; p.139; p.149; p.167; p.178	
G4-10	a. Report the total number of employees by employment contract and gender; permanent employees by employment type and gender; total workforce by employees and supervised workers and by gender; total workforce by region and gender; whether a substantial portion of the organization's work is performed by workers who are legally recognized as selfemployed, or by individuals other than employees or supervised workers, including employees and supervised employees ofcontractors; significant variations in employment numbers.	Nearly all employees are full-time. The company undertakes to provide in the next report a breakdown by Region and gender of full-time employees.	
G4-11	Report the percentage of total employees covered by collective bargaining agreements.	p.135-136	
G4-12	Describe the organization's supply chain.	p.140-146	
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	p.26; p.178	
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.	Regarding the assessment and management of inherent risks to its activities, the Group adopting a "precautionary" approach expressed in the definition of roles and responsibilities, in the periodic and continuous repetition of the process of identification and risk assessment, the continuous monitoring on internal control system, the segregation of roles and subject to adequate authorization processes and traceability of decisions	
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	p.65-67	
G4-16	List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: holds a position on the governance body; participates in projects or committees; provides substantive funding beyond routine membership due; views membership as strategic	p.165	
Identified Material Aspects and Boundaries			
G4-17	List all entities included in the organization's consolidated financial statements or equivalent documents. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	Methodological Note; p. 22-23	

General standard disclosures		Cross-reference Direct answer	Omission / Reason / Explanation
G4-18	Explain the process for defining the report content and the Aspect Boundaries. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	Methodological Note; p.46-47	
G4-19	List all the material Aspects identified in the process for defining report content.	Methodological Note; p.48-53	
G4-20	For each material Aspect, report the Aspect Boundary within the organization	p.48-53	
G4-21	For each material Aspect, report the Aspect Boundary outside the organization	p.48-53	
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements	There were no limitations and variations which may significantly affect comparability between periods. any limitations are from time to time indicated inside the document.	
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	There were no limitations and variations which may significantly affect comparability between periods. any limitations are from time to time indicated inside the document.	
Stakeholder Engagement			
G4-24	Provide a list of stakeholder groups engaged by the organization.	p.56	
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	p.54-60	
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	p.54-60; p.115-119; p.150; p.158-162; p.163-164; p.180-181	
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	p.46-47; p.60; p.174-175	
Report Profile			
G4-28	Reporting period (such as fiscal or calendar year) for information provided.	December 31, 2015	
G4-29	Date of most recent previous report (if any).	The Sustainability Report at 31 December 2014 was published in the month of May 2015	
G4-30	Reporting cycle (such as annual, biennial).	Annual	
G4-31	Provide the contact point for questions regarding the report or its contents.	(p.196)	
G4-32	a. Report the 'in accordance' option the organization has chosen; the GRI Content Index for the chosen option (see tables below); the reference to the External Assurance Report, if the report has been externally assured.	Methodological Note and Content Index	
G4-33	Report the organization's policy and current practice with regard to seeking external assurance for the report; If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided; the relationship between the organization and the assurance providers; whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.	Methodological Note; Indipendent Auditors' report on the Sustainability Report (p.194-195);	
Governance			
G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	p. 32-40	
G4-35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	p.44-45	
G4-51	Report the remuneration policies for the highest governance body and senior executives	p.37	
G4-52	Report the process for determining remuneration.	p.37; p.125	
G4-54	Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.	p.124	

General standard disclosures		Cross-reference Direct answer	Omission / Reason / Explanation
G4-55	Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.	p.124	
Ethics and Integrity			
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	p.12-13; p.64-65	
G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	p.34; p.45; p.40; p.134. *Reports to the supervisory body; Reports to the code of ethics control body at the legal entities; Reports to the Secretary of the board of directors (who presents the claims sent to managers by employees during board of directors' meetings) Directors' report on the corporate governance system and the implementation of the code of conduct for listed companies*	
G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	p.40	
SPECIFIC STANDARD DISCLOSURES			
CATEGORY: ECONOMIC			
Aspect: economic performance			
DMA		p.168-171	
G4-EC1	Direct economic value generated and distributed	p.172	
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	p.53; p.86.	
G4-EC3	Coverage of the organization's defined benefit plan obligations	p.130	
G4-EC4	Financial assistance received from government	p.79	
Aspect: market presence			
DMA		p.124. *Ansaldo STS assesses the worldwide consistency of responsibilities and remuneration, without distinguishing between countries, gender, culture, etc., in accordance with the company's values, which protect and promote the equality of all people in all ways. This is why salaries cannot be lower than local minimums, even for newlyhired employees*	
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	p.124	
Aspect: indirect economic impacts			
DMA		*Ansaldo STS tends to procure materials, services and labour mostly on local markets, also with the aim to contribute to the development of local economies*	
G4-EC7	Development and impact of infrastructure investments and services supported	p.57-60; p.141	
G4-EC8	Significant indirect economic impacts, including the extent of impacts	p.57-60. *Ansaldo STS' business generates a positive economic impact outside the company given its use of local employees in construction and O&M and its use of local suppliers. Local labour and local suppliers are often provided for (in specified percentages) by the contractual specifications: in this case, Ansaldo STS contributes to the development of the necessary skills.*	
Aspect: procurement practices			
DMA		*Ansaldo STS tends to procure materials, services and labour mostly on local markets, also with the aim to contribute to the development of local economies (e.g.: Honolulu Metro or Copenhagen Metro).*	
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	*When the project provides for several years of O&M, nearly 100% of personnel is local.*	

General standard disclosures		Cross-reference Direct answer	Omission / Reason / Explanation
CATEGORY: ENVIRONMENTAL			
Aspect: materials			
DMA		p.78; p.94; p.98	
G4-EN1	Materials used by weight or volume	p.94. *Most of the raw materials used in production by Ansaldo STS Group companies are not recycled as the finished product must meet high quality and safety standards, required by legislation*	
G4-EN2	Percentage of materials used that are recycled input materials	p.78; p.98. *Most of the raw materials used in production by group companies are not recycled as the finished product must meet high quality and safety standards, required by legislation*	
Aspect: energy			
DMA		p.53;	
G4-EN3	Energy consumption within the organization	p.92. *Ansaldo STS Group does not use direct renewable energy sources.*	
G4-EN4	Energy consumption outside of the organization	p.92. *It is not currently possible to identify the amount of primary fuel consumed in generating electrical energy. The consumption of fuel in generating electrical energy can be inferred from the energy mix of the countries where Ansaldo Group operates.*	
G4-EN5	Energy intensity	p.92	
G4-EN6	Reduction of energy consumption	p.62; p.87	
G4-EN7	Reductions in energy requirements of products and services	p.76-77; p.158-162	
Aspect: water			
DMA		p.95	
G4-EN8	Total water withdrawal by source	p.95	
G4-EN10	Percentage and total volume of water recycled and reused	*In general, Ansaldo STS does not have processes or production cycles that reuse water.*	
Aspect: biodiversity			
DMA		p.47	
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	*The two sites are near protected areas:* • *Les Ulis (France) – total area of 20,000 square metres – 40% offices – 30% roads and car parks – 30% green areas – activities: administration, sales, electronic system testing (ISO 14001). The protected area covers 3,000 m3 in the Bois del Gellesche http://www.essonne.fr/fileadmin/patrimoine_naturel/sites-naturels/Villebon-sur-Yvette-Foret_du_Bois_des_Gelles.pdf* • *Tito Scalo (Pz) – total area of 40,000 square metres – 21% plant, warehouses and offices – 19% roads and car parks – 60% green areas – activities: manual and automated welding of circuit boards and occasional painting of the same (ISO 14001 and EMAS). It is 3 km from the WWF Pantano di Pignola Natural Regional Reserve, a Site of Community Importance (SCI) and a Special Protected Area (SPA) (SIC-ZPS IT9210142) in Pignola (Piacenza). It is also a RAMSAR area (http://www.wwf.it/oasi/basilicata/pantano_di_pignola/). The immateriality of the site's activity with respect to biodiversity is due to the fact that the only biodiversity indicator in the site EMAS is: number of employees based on surface area.*	
G4-EN13	Habitats protected or restored	p.98-99	
Aspect: emissions			
DMA		p. 53; p.86-87	
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	p.88-89	
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	p.88-89	
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	p.88-89	
G4-EN18	Greenhouse gas (GHG) emissions intensity	p.89	

General standard disclosures	Cross-reference Direct answer	Omission / Reason / Explanation
G4-EN19 Reduction of greenhouse gas (GHG) emissions	p. 62; p.87. *Initiatives mainly related to: reduction in consumption and increase in energy efficiency, people mobility.*	
G4-EN20 Emissions of ozone-depleting substances (ODS)	p.98. *Ansaldo STS does not emit ozone depleting substances.*	
G4-EN21 NOX, SOX, and other significant air emissions	p. 95	
Aspect: effluents and waste		
DMA	p.53; p.95-98;	
G4-EN22 Total water discharge by quality and destination	p.95-96	
G4-EN23 Total weight of waste by type and disposal method	p.96-98	
G4-EN24 Total number and volume of significant spills	p.99. *In 2015 no significant spill was not detected*	
G4-EN25 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	p.96-98. *Hazardous waste is treated by external specialised agencies that pick it up directly from the company.*	
Aspect: products and services		
DMA	p.53; p.76-77	
G4-EN27 Extent of impact mitigation of environmental impacts of products and services	p.76-77	
G4-EN28 Percentage of products sold and their packaging materials that are reclaimed by category	p.98	
Aspect: compliance		
DMA	p.52	
G4-EN29 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	p.99. *During 2015 there were no fines and non-monetary sanctions for non-compliance with environmental laws and regulations*	
Aspect: transport		
DMA	p.87	
G4-EN30 Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	p.87; p.88. *The energy used to transport goods and people comes from diesel, petrol and jet fuel. People are transported using cars and aeroplanes. Goods are transported mainly by road, ship and air.*	
Aspect: overall		
DMA	p.103	
G4-EN31 Total environmental protection expenditures and investments by type	p.103. *Ansaldo STS undertakes to provide investment breakdown by type in the next report.*	
Aspect: supplier environmental assessmentori		
DMA	p.51;p.142	
G4-EN32 Percentage of new suppliers that were screened using environmental criteria	p.142	
G4-EN33 Significant actual and potential negative environmental impacts in the supply chain and actions taken	*During 2015 there were no significant actual and potential negative environmental impacts in the supply chain*	
Aspect: environmental grievance mechanisms		
DMA	p.99	
G4-EN34 Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	p.99	
CATEGORY: SOCIAL		
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK		
Aspect: employment		
DMA	p.106; p.126; p.132	
G4-LA1 Total number and rates of new employee hires and employee turnover by age group, gender and region	p.110	
G4-LA2 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	p.126-129.*The reported benefits refer to employees working under both open-ended and fixed-term contracts, and not include company credit cards*	
G4-LA3 Return to work and retention rates after parental leave, by gender	p.132	
Aspect: labor/management relations		
DMA	p.136	
G4-LA4 Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	p.136	

General standard disclosures		Cross-reference Direct answer	Omission / Reason / Explanation
Aspect: occupational health and safety			
DMA		p.51; p.100	
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and saftey programs	p.102	
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	p.101. *There were no fatalities in 2013-2014. The following formulae were used to calculate injury indicators:* • *Frequency rate = Number of injuries (excluding those on the way to and from work) / Total hours worked X 200,000* • Seriousness rate = Number of days of temporary incapacity / Total hours worked X 200,000	
G4-LA8	Health and safety topics covered in formal agreements with trade unions	p.136. *In most countries in which Ansaldo STS operates, national labour agreements govern workers' health and safety. In Italy, these aspects are included in the national labour agreement. The aspects covered by such agreements relate, inter alia, to the following:* • *occupational health and safety risk assessment;* • *prevention and management of emergencies;* • *environmental protection;* • *monitoring of anti-injury data;* • *proposing new initiatives to update workers on any specific risks and/ or issues relating to site environmental impacts*	
Aspect: training and education			
DMA		p.51; p.113	
G4-LA9	Average hours of training per year per employee by gender, and by employee category	p.113	
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	p.113	
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	p.118	
Aspect: diversity and equal opportunity			
DMA		p.65; p.106; p.132	
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	p.33; p.107-110; p.132	
Aspect: equal remuneration for women and men			
DMA		p.124	
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	p.124	
Aspect: supplier assessment for labor practices			
DMA		p.142-143	
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	p.142	
G4-LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	*During 2015 there were no significant actual and potential negative impacts for labor practices in the supply chain*	
Aspect: labor practices grievance mechanisms			
DMA		p.137	
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	p.137	
SUB-CATEGORY: HUMAN RIGHTS			
Aspect: investment			
DMA		Ethical Code (p.10)	

General standard disclosures		Cross-reference Direct answer	Omission / Reason / Explanation
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Ethical Code (p.10). *The final evaluation of Ansaldo STS partners considers the code of ethics, in which the company undertakes to abstain from dealings with entities that violate human rights protection and labour regulations and laws. The code of ethics is part of the contractual documentation. Ansaldo STS does not currently perform human rights assessments. By 2016, it will complete the integration of its general terms for supply agreements with clauses providing for sanctions in the event of code of ethics violations*	
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	p.64; p.113	
Aspect: non-discrimination			
DMA		p.65; p.67; p.120	
G4-HR3	Total number of incidents of discrimination and corrective actions taken	*No discrimination was noted*	
Aspect: freedom of association and collective bargaining			
DMA		p.65; p.134-6; p.142;	
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	*Ansaldo STS has not identified suppliers that violate workers' association rights.*	
Aspect: child labor			
DMA		p.142-143	
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	*Ansaldo STS does not have suppliers or activities believed to present risk of child labour.*	
Aspect: forced or compulsory labor			
DMA		p.142-143	
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	*Ansaldo STS does not have suppliers or activities believed to present risk of forced labour.*	
Aspect: security practices			
DMA		p.64; p.113	
G4-HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	*Training on human rights at Ansaldo STS is based on knowledge of the content of the code of ethics, which involves the entire Group. When new employees are hired and/or new freelancers begin to collaborate, Ansaldo STS immediately provides the necessary information to give them sufficient knowledge of the code of ethics and protocols, with particular regard to those relating to specific skills.*	
Aspect: indigenous rights			
DMA		p.52; p.57	
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	*During 2015 there were no violations involving rights of indigenous peoples*	
Aspect: assessment			
DMA		p.52; p.64-65	
G4-HR9	Total number of incidents of violations involving rights of indigenous peoples and actions taken	*Ansaldo STS does not currently perform specific assessments of the impact on human rights, but it complies with legal provisions and national and international regulations in this respect.*	
Aspect: supplier human rights assessment			
DMA		p.51; p.142	
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	p.142	
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	*Ansaldo STS in 2015 has not identified significant actual and potential negative human rights impacts in the supply chain*	

General standard disclosures		Cross-reference Direct answer	Omission / Reason / Explanation
Aspect: human rights grievance mechanisms			
DMA		p.64	
G4-HR12	Percentage of new suppliers that were screened using human rights criteria	*There were no complaints relating to a lack of respect for human rights by outside stakeholders or internally through reports to the code of ethics control bodies in each group company (sent to specific email addresses).*	
SUB-CATEGORY: SOCIETY			
Aspect: local communities			
DMA		p.4; p.47; p.52	
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	p.57-60; p.155-157; p.162-164.	
G4-SO2	Operations with significant actual and potential negative impacts on local communities	p.57-60; p.155-157; p.162-164. *With the extension of the application of the code of ethics to all group companies, all internal divisions at risk are monitored.*	
Aspect: anti-corruption			
DMA		p.40; p.48; p.66	
G4-SO3	Total number and percentage of operations asessed for risks related to corruption and the significant risks identified	p.40; p.66; p.156.*Ansaldo STS undertakes to provide data in the next report on the percentage of managers and other non-manager employees operating in activities considered to be at risk who have received training in this respect.*	
G4-SO4	Communication and training on anti-corruption policies and procedures	p.64; p.66	
G4-SO5	Confirmed incidents of corruption and actions taken	p.64	
Aspect: public policy			
DMA		Ethical Code (p.10)	
G4-SO6	Total value of political contributions by country and recipient/ beneficiary	*"The company does not provide any direct or indirect contributions of any kind to political parties, movements, committees or organisations or their representatives or candidates, except for those due under specific provisions of law" (Code of ethics, page 10)*	
Aspect: anti-competitive behavior			
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	*There were no incidents in this respect.*	
Aspect: compliance			
DMA		p.52	
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	*There were no monetary or non-monetary sanctions due to non-compliance with laws or regulations in 2015*	
Aspect: supplier assessment for impacts on society			
DMA		p. 142	
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	p. 142	
Aspect: grievance mechanisms for impacts on society			
DMA		p.52	
G4-S11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	*There were no grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms in 2015*	
SUB-CATEGORY: PRODUCT RESPONSIBILITY			
Aspect: customer health and safety			
DMA		p.50; p.75-76	
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	p.75-76. *There is a methodology in place to control safety risks, and it is in line with regulations and standards (which are "labelled" on the product) applicable to all products and systems.*	

General standard disclosures		Cross-reference Direct answer	Omission / Reason / Explanation
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	p.75-76. *There were no accidents, consisting of deaths, injuries or damage to infrastructures due to defects in products supplied by Ansaldo STS. None of the minor non-conformities noted internally or by customer complaints entailed sanctions or measures.*	
Aspect: product and service labeling			
DMA		p.50; p.75-76	
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	p.75-76.*There is a methodology in place to control safety risks, and it is in line with regulations and standards (which are "labelled" on the product) applicable to all products and systems.*	
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	p.75-76. *There were no accidents, consisting of deaths, injuries or damage to infrastructures due to defects in products supplied by Ansaldo STS. None of the minor non-conformities noted internally or by customer complaints entailed sanctions or measures.*	
G4-PR5	Results of surveys measuring customer satisfactioni	p.60; p.174-175	
Aspect: customer privacy			
DMA		p.50	
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	There were no complaints	
Aspect: compliance			
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	*Ansaldo STS has not received any sanctions for non-compliance with laws or regulations*	

KPMG S.p.A.
Revisione e organizzazione contabile
Via Francesco Caracciolo, 17
80122 NAPOLI NA
Telefono + 39 081 660785
Email it-fmauditaly@kpmg.it
PEC kpmgspa@pec.kpmg.it

(Translation from the Italian original which remains the definitive version)

Independent auditors' report on the sustainability report

To the board of directors of
Ansaldo STS S.p.A.

We have carried out a limited assurance engagement of the 2015 sustainability report of the Ansaldo STS Group (the "Group").

Directors' responsibility for the sustainability report

The parent's directors are responsible for the preparation of the sustainability report in accordance with the "G4 Sustainability Reporting Guidelines", issued in 2013 by GRI – Global Reporting Initiative, that are detailed in the "Methodological note" section of the sustainability report, as well as for that part of internal controls that they consider necessary for the preparation of a sustainability report that is free from material misstatement, including due to fraud or unintentional conduct or events. They are also responsible for defining the Group's objectives regarding its sustainability performance, the reporting of the achieved results and the identification of the stakeholders and the significant matters to report.

Auditors' responsibility

Our responsibility is to issue this report based on our procedures. We carried out our work in accordance with the criteria established by "International Standard on Assurance Engagements 3000 (revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000)", issued by the International Auditing and Assurance Standards Board (IAASB) applicable to limited assurance engagements. This standard requires that we comply with applicable ethical requirements, including independence requirements, and that we plan and perform the engagement to obtain limited assurance about whether the report is free from material misstatement. These procedures include inquiries, primarily of persons responsible for the preparation of information presented in the sustainability report, documental analyses, recalculations and other evidence gathering procedures, as appropriate.

KPMG S.p.A. è una società per azioni di diritto italiano e fa parte del network KPMG di entità indipendenti affiliate a KPMG International Cooperative ("KPMG International"), entità di diritto svizzero

Ancona Aosta Bari Bergamo
Bologna Bolzano Brescia
Catania Como Firenze Genova
Lecce Milano Napoli Novara
Padova Palermo Parma Perugia
Pescara Roma Torino Treviso
Trieste Varese Verona

Società per azioni
Capitale sociale
Euro 6.525.000,00 i.v.
Registro Imprese Milano e
Codice Fiscale N. 00709600159
R.E.A. Milano N. 512867
Partita IVA 00709600159
VAT number IT00709600159
Sede legale: Via Vittor Pisani, 25
20124 Milano MI ITALIA

The procedures we performed on the sustainability report aimed at checking that its content and quality complied with the "G4 Sustainability Reporting Guidelines" and may be summarised as follows:

— comparing the information and data presented in the "Value directly generated and distributed" section of the sustainability report to the corresponding financial information and data included in the Group's consolidated financial statements as at and for the year ended 31 December 2015, on which we issued our report dated 17 March 2016 pursuant to articles 14 and 16 of Legislative decree no. 39 of 27 January 2010;

— holding interviews aimed at analysing the governance system and the process for managing the sustainable development issues relating to the Group's strategy and activities;

— analysing the reporting of significant matters process, specifically how these matters are identified and prioritised for the each stakeholder category and how the process outcome is validated internally;

— analysing how the processes underlying the generation, recording and management of quantitative data included in the sustainability report operate. In particular, we have performed the following:

  - interviews and discussions with management personnel of Ansaldo STS S.p.A. to gather information on the IT, accounting and reporting systems used in preparing the sustainability report, and on the processes and internal control procedures used to gather, combine, process and transmit data and information to the office that prepares the sustainability report;

  - sample-based analysis of documentation supporting the preparation of the sustainability report to confirm the existence and adequacy of processes and that the internal controls correctly manage data and information in relation to the objectives described in the sustainability report;

— analysing the compliance and overall consistency of the qualitative information included in the sustainability report with the guidelines referred to herein in the "Directors' responsibility for the sustainability report" paragraph;

— analysing the stakeholder involvement process, in terms of methods used, by reading the minutes of the meetings or any other information available about the salient features identified;

— obtaining the representation letter signed by the legal representative of Ansaldo STS S.p.A. on the compliance of the sustainability report with the guidelines indicated in the "Directors' responsibility for the sustainability report" paragraph and on the reliability and completeness of the information and data contained therein.

As required by the "G4 Sustainability Reporting Guidelines", the data and information covered by our procedures are set out in the "GRI Content Index" table of the sustainability report.

A limited assurance engagement is less in scope than a reasonable assurance engagement carried out in accordance with ISAE 3000, and, therefore, it does not offer assurance that we have become aware of all significant matters and events that would be identified during a reasonable assurance engagement.

Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the 2015 sustainability report of the Ansaldo STS Group has not been prepared, in all material respects, in accordance with the "G4 Sustainability Reporting Guidelines", issued in 2013 by GRI – Global Reporting Initiative, that are detailed in the "Methodological note" section of the sustainability report.

Naples, 3 November 2016

KPMG S.p.A.

(signed on the original)

Marco Maffei
Director of Audit

For information on the Sustainability Report, please contact:

Registered Office: Via Paolo Mantovani, 5
16151 Genoa - Italy

E-mail: andrea.razeto@ansaldo-sts.com

External Communication Department:
Tel. no. +39 010 655 2068 - Fax no. +39 010 655 2055

This Sustainability Report has been prepared
with the contribution and coordination of

Andrea Razeto
Vice President External Communication
Ansaldo STS External Communications Dept.

and

Ulderico Zona
Sr Vice President HSE & Facility Management,
Supply Planning, Construction & Maintenance

Alfredo Tommasone
HSE Coordinator - Major Entity Italy HSE Manager
Ansaldo STS HSE & Facility Management Dept.

The 2015 Sustainability Report is available online at:
www.ansaldo-sts.com

Advisors on procedures and reporting:
Studio Badalotti per il Bilancio Sociale S.r.l.

Strategic concept, Graphic design and Realisation:
MERCURIO GP
www.mercuriogp.eu

Respecting the environment, Ansaldo STS has printed this Sustainability Report on paper produced from responsibly managed forests, according to FSC® criteria (Forest Stewardship Council®)

Printed in October 2016

Ansaldo STS A Hitachi Group Company

ANSALDO STS S.p.A.
Registered Office:
16151 Genoa
Via Paolo Mantovani, 3 - 5
Paid-in Share Capital Euro 100,000,000
R.E.A. n. 421689
Register of Enterprises of Genoa
Tax Code 01371160662

www.ansaldo-sts.com

A Hitachi Group Company