# **Ansaldo STS**



## 2017 third quarter YTD results

**Analysts Conference Call** 

October 31, 2017

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## Orders & Revenues by Area – 9M 2017 vs 9M 2016

| ORDERS                  | 9M 2017 | 9M 2016 | % change |
|-------------------------|---------|---------|----------|
| Italy                   | 295     | 143     | 106%     |
| Rest of Europe          | 187     | 373     | -50%     |
| N. Africa / Middle East | 12      | 0       | n.s.     |
| Americas                | 267     | 102     | 162%     |
| Asia Pacific            | 154     | 378     | -59%     |
| TOTAL                   | 915     | 996     | -8%      |

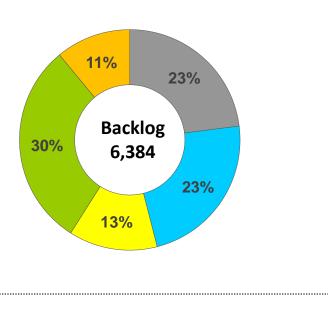
| REVENUE                 | 9M 2017 | 9M 2016 | % change |
|-------------------------|---------|---------|----------|
| Italy                   | 183     | 201     | -9%      |
| Rest of Europe          | 287     | 276     | 4%       |
| N. Africa / Middle East | 89      | 73      | 22%      |
| Americas                | 235     | 172     | 37%      |
| Asia Pacific            | 151     | 179     | -16%     |
| TOTAL                   | 945     | 901     | 5%       |

#### 9M 2017 Results - Main Orders Booked

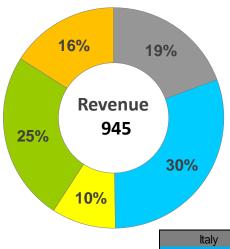
| Country         | Project Name  | Customer            | Value (M€) |
|-----------------|---|---------------------|------------|
| USA             | Baltimore Metro                                       | MTA                 | 133        |
| Italy           | Framework Agreement with RFI                          | RFI                 | 100        |
| Denmark         | Copenhagen Cityringen variation orders (included O&M) | Metroselskabet      | 81         |
| Various EU/Asia | Components  | Various             | 66         |
| Italy           | On board equipment for Caravaggio trains              | HRI                 | 63         |
| Various EU/Asia | Service & Maintenance                                 | Various             | 54         |
| Australia       | Rio Tinto variation orders                            | Rio Tinto           | 48         |
| USA             | Components  | Various             | 41         |
| Italy           | Naples Line 6 variation orders                        | Naples Municipality | 24         |
| USA             | Stanford-New Haven line signal equipment              | MNRR                | 22         |
| Australia       | On board equipment                                    | Rotem               | 20         |

# Backlog, Orders & Revenue by Geographic Area



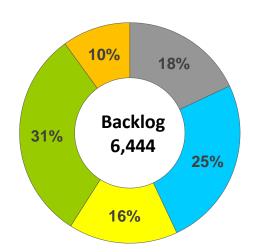




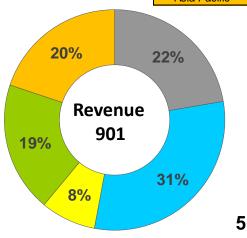












#### Q3 2017 main events - Baltimore Metro

Hitachi Ansaldo Baltimore Rail Partners, LLC, a limited liability corporation between Hitachi Rail Italy SpA and Ansaldo STS USA, Inc. (the US subsidiary of Ansaldo STS) has been awarded a \$400.5 million contract from Maryland Transit Authority (MTA) to provide a new metro fleet of railcars and a Communication Based Train Control (CBTC) system for the Baltimore Metro Subway Link.

Ansaldo STS scope of work is equivalent to \$148 million.

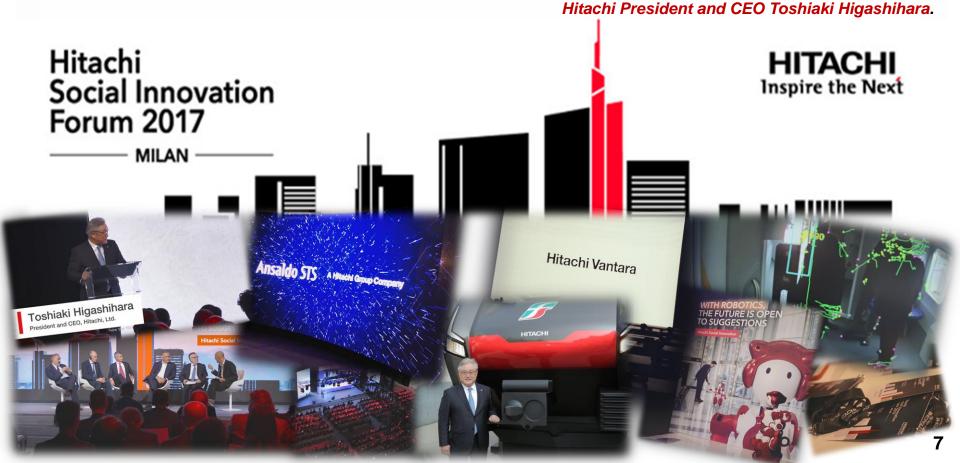
The award of the Baltimore project marks Ansaldo STS's largest win in North America and represents a significant milestone in the company's recognition as a major North American CBTC provider. The company has already successfully delivered and is delivering CBTC projects of similar caliber both in North America and globally. Ansaldo STS will integrate a new CBTC system into the existing 15.5 miles of MTA infrastructure.



### Hitachi Social Innovation Forum 2017 Milan (1/3)

For the first time in Italy on 18th October Hitachi has hosted the "Hitachi Social Innovation Forum", at the Pirelli Hangar Bicocca exhibition centre in Milan. The event has been a great opportunity to discover what Social Innovation is and how it will affect the socio-economic dynamics of Italy.

"Hitachi is striving to become an innovation partner in the IoT era, through the global rollout of Lumada, using our expertise in OT\* and IT. We believe that it is possible to create and provide digital solutions that will resolve the issues faced by customers and by Italian society. By providing solutions that combine Hitachi's digital technologies, including IoT, robotics, and artificial intelligence, with products and systems in the railway, healthcare, and industrial device fields, through Collaborative Creation with customers and local partners in Italy, we will contribute to the further development and digitalization of Italian society."



#### Hitachi Social Innovation Forum 2017 Milan (2/3)\*

"Hitachi's entered in the Italian market in 1981 with the electronic component and home appliance businesses

By providing solutions which resolve the issues that Italy is facing, such as growing medical costs, while increasing energy efficiency and productivity and improving the efficiency of public transportation, Hitachi will strive to expand the scale of its business from the current level of 1.2 billion euro to 1.5 billion euro in FY2020. Hitachi leverages on its peculiarity of combining Operational Technology (OT) and Information Technology (IT) for the creation of value through Digital Transformation. In the future, Hitachi will use Lumada along with the business platforms, experience and expertise that it has cultivated up to now to create added value from device and system data and develop digital solutions with a focus on the railway systems, energy, water, and healthcare business fields."

# Focusing Business Area Providing total solutions to resolve issues in Italy Railway Energy Water Healthcare

#### WHAT SOCIAL INNOVATION IS FOR HITACHI?

- **THINK** about the improvement that technical innovation is bringing to society, developing new solutions in the field of industry, infrastructure, transportation, healthcare and energy.
- **III** UNDERSTAND how advanced technologies can affect the development of smart cities, creating new, more dynamic business models.
- **EVALUATE** together new technological solutions that allow you to achieve optimized management of your business, moving away from traditional processes.
- **DISCOVER** how, thanks to a collaborative approach and the integration of IT and Operational Technologies, Hitachi is creating virtuous systems to drive companies, institutions, and urban centres to innovation
- Source: Hitachi Social Innovation Forum Presentation

#### Hitachi Social Innovation Forum 2017 Milan (3/3)



http://www.ansaldo-sts.com/en/news/hitachi-social-innovation-forum-2017-milan#video

Ansaldo STS, as part of the Hitachi Group, will have a preferred access to technological innovation contributing to the social sustainable transformation. Ansaldo STS, leveraging Hitachi's digital technologies, will enhance the quality of life of passengers and customers.



#### Main events after Q3 2017 – Stockholm Red Line Metro update

Ansaldo STS has recently repaid approximately SEK 417 million, including VAT and interest (EUR 45 million) to AB Storkstockholms Lokaltrafik ("SL") relating to a contract for the upgrade of the existing safety and signalling system on the Metro System Red Line portion.

Ansaldo STS was initially awarded the contract by SL on 3 November 2010. The work was expected to complete within 40 months. However, various changes in the scope of work led the parties to agree extensions of the contract in December 2013 and December 2014, as well as a new contract value of approximately SEK 1,218 million (EUR 127 million).

In response to a request from SL, in August 2017 Ansaldo STS produced a project plan and a timetable demonstrating how it intends to complete the RL2.0 stage of the project. The plan and timetable were approved as realistic and achievable by a well established international consultancy firm, as requested by SL. Despite this positive independent review, in September 2017 SL raised a claim against Ansaldo STS for a repayment of approximately SEK 417 million, including VAT and interest (EUR 45 million) by no later than 30 October 2017 on the grounds that the project plan and timetable were not realistic and robust.

In order to encourage all the needed actions to protect its rights and ensure the contractual continuity of the project, at the end of October Ansaldo STS decided to comply with the SL request "without prejudice and under protest".

#### Main events after Q3 2017 – Metro Riyadh O&M bid update

Ansaldo STS is currently bidding, as part of a consortium, for the Operation & Maintenance Services of Riyadh Metro. The client ArRiyadh Development Authority (ADA) has indicated it could award 2 to 3 O&M contracts for the metro's six lines.

The tender process is ongoing. The Ministerial Committee that will announce the Preferred Bidders will be held at the end of November.

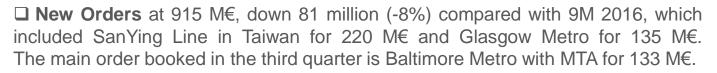
By way of background, at the end of July 2013 Ansaldo STS, operating as part of the ArRiyadh New Mobility (ANM) consortium, was awarded a contract to build the longest line of the new metropolitan system in Riyadh (Line 3, or the Red Line), which runs for 40.7km from Madina Al Munawara to Amir Saad bin Abdul Rahman Al Awal Road.

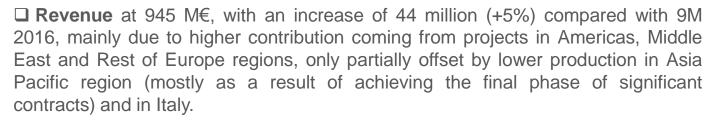
The winning consortium, organized by Ansaldo STS, is formed of Salini-Impregilo, Larsen & Toubro and Nesma for the civil works, Ansaldo STS for the technological part and Bombardier for the supply of vehicles.

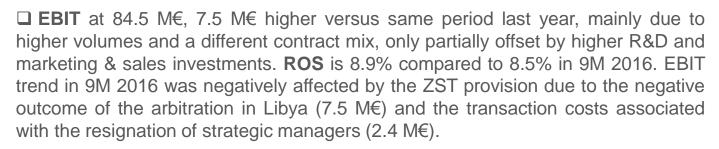
In relation to its part of the contract, Ansaldo STS is responsible for the entire technological integration of the signalling systems, ATC (Automation Train Control) and CBTC (Communication Based Train Control), the power system including the third rail, the Operational Control Centre, the telecommunications systems and the fitting out of the depots.

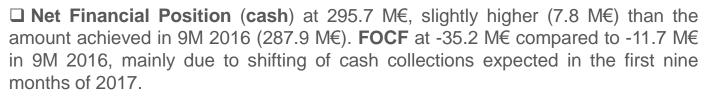
The contract was worth approximately USD 680 million for Ansaldo STS and is in the backlog (with an option for the next 10 years of maintenance).

#### 9M 2017 - Key Facts



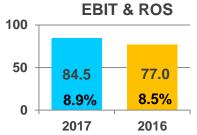


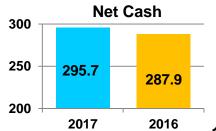












# 9M 2017 Results - Key Data

| (M€)                          | 9M 2017 | 9M 2016 | % change  |
|-------------------------------|---------|---------|-----------|
| New Orders                    | 915.5   | 996.1   | -8.1%     |
| Order Backlog                 | 6,384.5 | 6,443.5 | -0.9%     |
| Revenue                       | 945.0   | 900.6   | 4.9%      |
| EBIT                          | 84.5    | 77.0    | 9.8%      |
| ROS                           | 8.9%    | 8.5%    | 0.4 p p   |
| Tax Rate                      | 28.9%   | 34.7%   | (5.8) p p |
| Net Result                    | 61.6    | 45.8    | 34.5%     |
| Net Working Capital           | 182.9   | 132.1   | 38.5%     |
| <b>Net Financial Position</b> | (295.7) | (287.9) | 2.7%      |
| R&D                           | 28.6    | 26.9    | 6.4%      |
| Total Headcount               | 4,161   | 3,933   | 5.8%      |
| EVA                           | 32.9    | 29.7    | 10.9%     |

# 2017 main Key Data Guidance

| <i>(M€)</i>            | 2016<br>Actual | 2017<br>Guidance |
|------------------------|----------------|------------------|
| New Orders             | 1,475.8        | 1,500 - 2,000    |
| Order Backlog          | 6,488.4        | 6,500 - 7,000    |
| Revenue                | 1,327.4        | 1,350 - 1,450    |
| ROS                    | 9.6%           | 9.4% - 9.8%      |
| Net Financial Position | (338.0)        | (330) – (380)    |

Regarding the recent news on the Stockholm project it is not currently possible to ascertain what if any impact this might have on guidance for results for 2017.

**Ansaldo STS** 

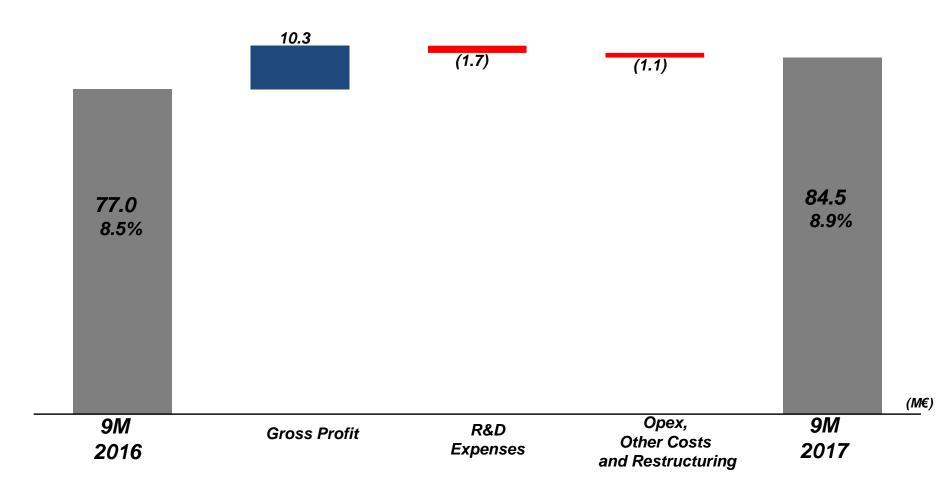
A Hitachi Group Company

THANK YOU FOR YOUR ATTENTION

Q&A.....

# Back Up

## Back Up detail - EBIT Evolution - 9M 2017 vs 9M 2016

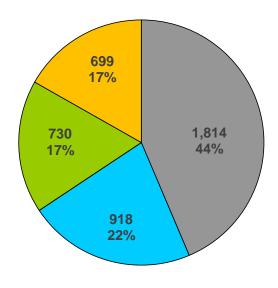


9M 2016 EBIT included the ZST provision posted in Q2 ( $\in$ 7.5m) and the accounting impacts of transactions with strategic managers who left the company in the period ( $\in$ 2.4m).

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#### Back Up detail - 9M 2017 - Total Headcount

| Country      | Main Locations                                | Headcount |
|--------------|---|-----------|
| ITALY        | Genoa, Naples,<br>Turin, Potenza,<br>Branches | 1,814     |
| FRANCE       | Les Ulis, Riom                                | 656       |
| SPAIN        | Madrid  | 175       |
| SWEDEN       | Stockholm                                     | <i>69</i> |
| OTHER EUROPE | Munich., London                               | 18        |
| USA - CANADA | Pittsburgh, Batesburg,<br>Montreal            | 730       |
| AUSTRALIA    | Perth, Brisbane                               | 259       |
| INDIA        | Bangalore                                     | 315       |
| MALAYSIA     | Kuala Lumpur                                  | <i>62</i> |
| CHINA        | Beijing                                       | <i>63</i> |



Italy
Rest of Europe
N.Africa / Mid East
Americas
Asia Pacific

#### Accounting definitions (1/3)

Renato Gallo, the Manager in charge of preparing the company's financial reports, hereby declares, pursuant to article 154-bis, paragraph 2 of the Consolidated Law on Finance, that the actual accounting information contained in this presentation corresponds to document results, books and accounting records

This Analysts Presentation contains forward-looking statements which are based on current plans and forecasts of Ansaldo STS S.p.A. Such forward-looking statements are by their nature subject to a number of risk and factors not foreseeable that could cause actual results to differ from the plans, objectives and expectations expressed in such forward-looking statements.

These such forward-looking statements speak only as of the date on which they are made, and Ansaldo STS S.p.A. undertakes no obligation to update or revise any of them, whether as a result of new information, future events or otherwise.

#### Accounting definitions (2/3)

NB: Ansaldo STS's management also assesses the performance of the group using certain indicators that are not defined by the IFRS.

The components of each indicator are described below as required by CESR/05 - 178b Communication:

**EBIT**: earnings before interest and taxes, before any adjustment. EBIT excludes gains or losses on unconsolidated equity investments and securities, as well as any gains or losses on sales of consolidated equity investments, which are classified under "financial income and expense" or "share of profits (losses) of equity-accounted investees" if related to equity-accounted investments.

Return on Sale (ROS): it is calculated as the ratio of EBIT to Revenue.

Free operating cash flow (FOCF): this indicator is the sum of cash flows generated by (used in) operating activities and cash flows generated by (used in) investing and disinvesting in property, plant and equipment, intangible assets and equity investments, net of cash flows from acquisitions and sales of equity investments which are deemed "strategic" due to their nature or importance. The FOCF is shown in the reclassified consolidated statement of cash flows.

**Economic Value Added (EVA)**: it is the difference between EBIT, net of income taxes and the cost of the average invested capital of the current and previous year measured on the base of the Weighted Average Cost of Capital (WACC).

#### Accounting definitions (3/3)

**Net Working Capital**: It is working capital less provisions for current risks and other current assets and liabilities.

**Net Financial (Position) or Debt**: The calculation model used complies with paragraph 127 of the CESR/05-054b recommendations implementing Regulation (EC) n° 809/2004.

**New Orders**: It is the sum of the contracts agreed with customers during the reporting period that meet the contractual requirements to be recorded in the orders book.

**Order Backlog**: It is the difference between new orders and revenue for the period (including the change in contract work in progress). This difference is added to the backlog for the previous year.

**Headcount**: It is the number of employees recorded in the relevant register on the reporting date.

**Research and development costs**: total expense incurred for research and development, both expensed and sold. Research expense taken to profit or loss usually relates to "general technology", i.e. aimed at gaining scientific knowledge and / or techniques applicable to various new products and / or services. Sold research expense represents that commissioned by customers and for which there is a specific sales order and it is treated exactly like an ordinary order (sales contract, profitability, invoicing, advances, etc.) in accounting and management terms.

#### Glossary (1/6)

**ACC – M:** "Apparato Centrale Computerizzato Multistazione" is a centralized interlocking system through which it is possible to manage multiple stations along the line.

**APRs:** Automatic Position Reporting System, radio based digital communications system for local, regional, or long distance.

**ATC:** Automatic Train Control, or ATC, is an integrated signaling system that guarantees the secure movement of trains. ATC integrates various subsystems positioned on-board and wayside. In addition to a full interlocking system, a complete ATC system consists of three subsystems: (i) ATP, (ii) ATO and (iii) ATS.

**ATP:** Automatic Train Protection, or ATP, is an ATC subsystem responsible for the safe operation of a signaling system. It imposes speed limits on trains, both to maintain a safe operating distance between them and to comply with safety and speed requirements. The ATP system is designed to be a fail-safe (vital) system.

**ATO**: Automatic Train Operation, or ATO, is an ATC subsystem which performs on-board, non-vital functions normally performed by a train driver, including ensuring a smooth acceleration of the train to the running speed, speed regulation and smoothly stopping the train at the proper position at station platforms or in front of stopping signals. ATO subsystems are primarily located on-board and represent one of the principal components of a driverless system. Additionally, ATO subsystems report vehicle health status to the central control offices.

**ATS**: Automatic Train Supervision, or ATS, is an ATC subsystem which operates to control trains automatically by means of ATO and ATP, in accordance with the railway timetable. This also involves a CTC system.

## Glossary (2/6)

**BALISE:** An electronic beacon or transponder placed between the rails of a railway as part of an Automatic Train Protection system.

**CBI:** Computer Based Interlocking, or CBI, is an Interlocking System (see below) where the traditional wired networks of relays are replaced by software logic running on special-purpose fail-safe control hardware. The fact that the logic is implemented by software rather than hard-wired circuitry greatly facilitates the ability to make modifications when needed by reprogramming rather than rewiring (ACC, MicroLok® and SEI/PAI-NG are the Ansaldo STS CBI interlockings).

**CBS**: Communications Based Signalling.

**CBTC:** Communication Based Train Control, or CBTC, is a system that allows for the interchangeability of different technological systems in use on various metro lines. CBTC can be understood as an attempt to create an ERTMS type standard for the mass transit industry.

**CENELEC:** European Committee for Electro technical Standardization.

**CTC:** A Centralized Traffic Control system, or CTC, monitors the status of signaling on a line or network and displays the relevant status information to a central operator, assists in the management of the line or network consistent with the timetable and exercises control to prevent small schedule disturbances from becoming traffic jams. CTC also notifies the operator of ATC equipment failures and of failures in traction power and passenger station support facilities.

CTC EVO: Evolved Centralized Traffic Control.

CTCS: Chinese Train Control System, a train control system used on railway lines in China

**DPL:** Dedicated Passenger Line.

**DTG:** Distance to Go, Wayside and on board ATP system track circuit based.

#### Glossary (3/6)

**ERSC**: Emulation Code Block, system that assure distance from trains with code in track circuits **ETCS**: The European Train Control System (ETCS) is a signaling, control and train protection system designed to replace the many legacy safety systems currently used by European railways, especially on high-speed lines.

ERSAT: latest satellite generation that interfaces and integrates the railway technology ERTMS (European Rail Traffic Management System) with the navigation and satellite positioning technology Galileo. The acronym comes from ER, for ERTMS, and SAT, indicating the satellite technology.

ERSAT EAV: project, funded with the contribution of GSA, where new localization algorithms were tested together with the ability to integrate EGNOS and Galileo in the Ansaldo STS's ERTMS solution, integrated with satellite technology and scheduled for ERSAT solution. The acronym EAV means Enabling and Validation.

**ERTMS**: The European Rail Traffic Management System, or ERTMS, was introduced by the EU in 1992 as a means of creating a uniform system of command, control and coordination of rail traffic to allow for "interoperability" throughout EU territory. The ERTMS standard exists at three levels (ERTMS 1, 2 and 3) depending on use, each distinguished by the type of wayside and on-board equipment used and the manner in which this equipment communicates relevant data.

**EUROCAB / EVC**: Onboard computer used to process ETCS information.

**GA**: Generic Application.

**GCP**: Grade Crossing Predictor, an electronic device which is connected to the rails of a railroad track and activates the crossing's warning devices (lights, bells, gates, etc.), based on a range of factors, including train speed, which minimizes waiting delays for drivers and therefore reduces the number of accidents.

#### Glossary (4/6)

**GNSS**: Global Navigation Satellite System, satellite-based global navigation system, can rely on US GPS (Global Positioning System), or Russian GLONASS (Global Navigation Satellite System), or European Galileo system under development.

**GP**: Generic Product.

**GSM-R**: Global System for Mobile Communications-Railway, an international wireless communications standard for railway communication.

**HERMES:** Automation – Supervision system used for mass transit system.

**HSL:** High Speed Line, or HSL, refers to railway lines with capacity for speeds in excess of 200 km/h (125 mph).

**ICSS:** Integrated Control & Safety System. Integrated Communication Switching System.

IETO: Integrated Electronic Train Order.

**IXL:** Interlocking System. An interlocking system is responsible for the reliable and safe movement of trains inside a station, through complex junctions and for the length of the line. The interlocking system ensures that train movement is permitted only when a route is available and the switches along this route are safely locked in their position. In all cases the interlocking allocates a track portion or a route to one train at a time, excluding all others.

**LDS:** Localization Determination System, satellite-based solution for train control system SIL 4 localization.

**LEU:** Encoder. Product that is interfaced to balise and permit it to change the telegram to be sent to the train in the intermittent ATP according to the status of the route.

**LRT:** Light Rail Transit, or LRT, refers to a form of urban rail transit that utilizes equipment and infrastructure that is typically less massive than that used for metro systems, with modern light rail vehicles usually running along the system.

## Glossary (5/6)

**MTBF:** Mean time between failures is the predicted elapsed time between inherent failures of a system during operation.

**MTBHE:** Mean Time Between Hazardous Events, estimated time between two events that can cause an hazardous event.

MT: Mass Transit.

**OCC:** Operational Control Centre, system that monitors the status of signaling on the line and the location of trains.

**OTP:** Optimizing Traffic Planner, or OTP, is a traffic management system that permits real time monitoring of the positioning of trains throughout a railway system. OTP optimizes system or network capacity by safely minimizing the time between trains, reducing operating costs. OTP is primarily designed for those markets where railway systems infrastructure is being used to full capacity.

PTC: Positive Train Control, North American freight railway implementation of CBTC.

**RBC:** Radio Block Centre. All trains automatically report their exact position and direction of travel to the RBC at regular intervals. RBC sends by radio fail safe information to the train (ATP).

**ROC**: Remote Operations Centre.

SA: Specific Application.

**SCADA:** A Supervisory Control And Data Acquisition system, or SCADA, allows for the supervision of the various subsystems at work in a railway or mass transit environment. SCADA collects information from remote installations, transfers it back to a central office, analyzes the information, takes appropriate action and displays that data on a number of operator screens.

**SCC:** Automation – Supervision system used for railways system.

**SCMT:** Sistema di Controllo della Marcia del Treno. Automatic train protection system.

#### Glossary (6/6)

**SIL:** 0, 2, 4: Safety Integrity Level (SIL) is determined for components and systems with safety functions.

**SSA**: Support System for Automatic dispatch.

SSC: Sistema Supporto Condotta, Italian train stopping system. Less sophisticated than SCMT.

STO: Semi-automated Operation Mode.

**TETRA**: Terrestrial Trunked Radio , digital data and voice communication system.

**TLC**: Telecom networking.

**TSRs**: Temporary Speed Restrictions.

TTCS: Train Conformity Check System verifies the conformity of running Rolling Stocks.

**TVM**: Transmission Voie-Machine (TVM, track-to-train transmission in English) is a form of in-cab signalling originally deployed in France and used on high-speed railway lines.

**UTO**: Grade of Automation for systems, where there is no driver in the front cabin of the train, nor accompanying staff assigned to a specific train. This can also be referred to as Unattended Train Operation, or UTO.

**VSS**: Vital Safety Server used in freight application (both as for IXL and RBC).

Our commitment to the theme of sustainable development is expressed in the countries where we operate, across five continents, through the dissemination of our corporate vision, attention to environmental, social, and promote our work through a climate of cooperation with local cultures.



In coherence with our vision this year we have joined the Global Compact, a voluntary initiative launched by the UN to spread the culture of respect for human rights, labor, environment and the fight against corruption.

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