



## First six months 2018 results

Analysts Conference Call

July 31, 2018

## Agenda and contents

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	Page
1. A new organisation coming from the recent SBO	3 - 9
2. Orders and recent performance by Region	10 - 16
3. Recent Key Events	17 - 19
4. Financials	20 - 23
5. Q&A session	24
6. Accounting definitions	25 - 28
7. Glossary of rail terminology abbreviations	29 - 35

# 1. A new organisation coming from the recent Strategic Business Overview – Road map

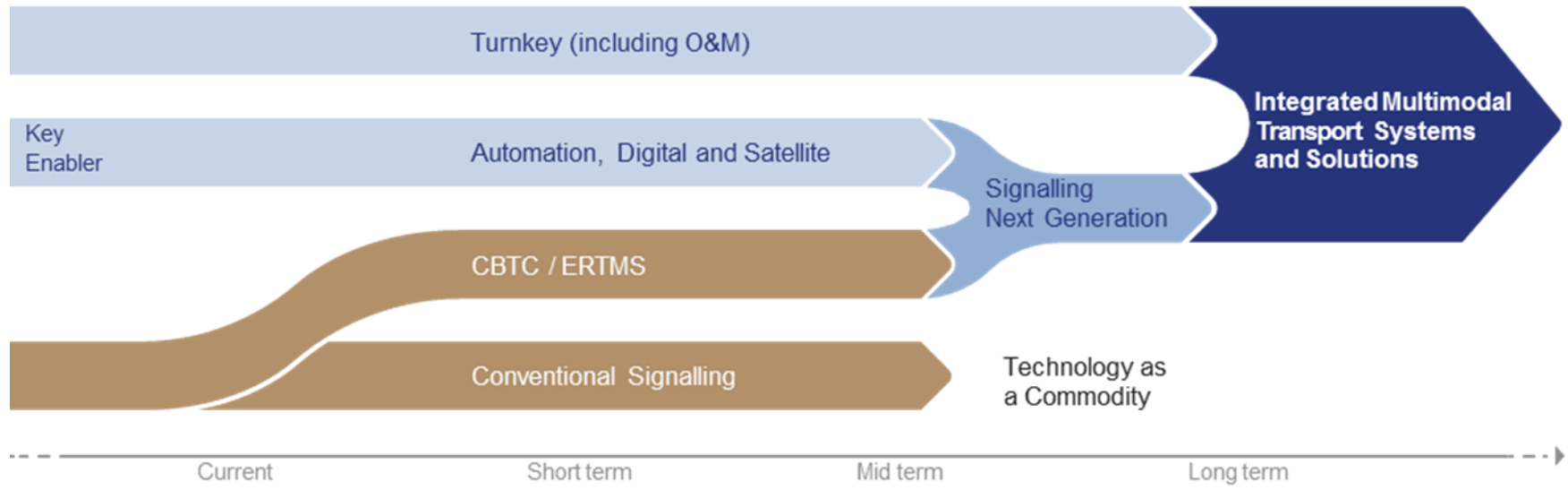
## Strategic Business Overview

- **A new overview.** The Strategic Business Overview is a structured analysis including the Ansaldo STS vision on the future railway business, the Company's ambition and the roadmap to achieve the targets. Key factors to address have been slower market growth, changing competition and new future trends.
- **Flat market.** The addressable market for Rail Signalling and Turnkey systems is worth around €15 Bn/year, with future growth slightly below the expectations because of the global economic environment.
- **Potential.** Against this flat background Ansaldo STS has the potential to exceed the market on the basis of its favourable geographic and business mix.
- **Projects.** We shall put projects at the centre of our business. Whilst strengthening our domestic markets there are four areas in particular of future focus.

## Future focus areas

- **Turnkey projects** accessing PPP financing are expected to become increasingly relevant.
- **O&M for Turnkey** is expected to grow faster than the average market.
- **Technology** – ERTMS, CBTC will be differentiators.
- **Enablers** – automation, digital, satellite, Hitachi technologies.

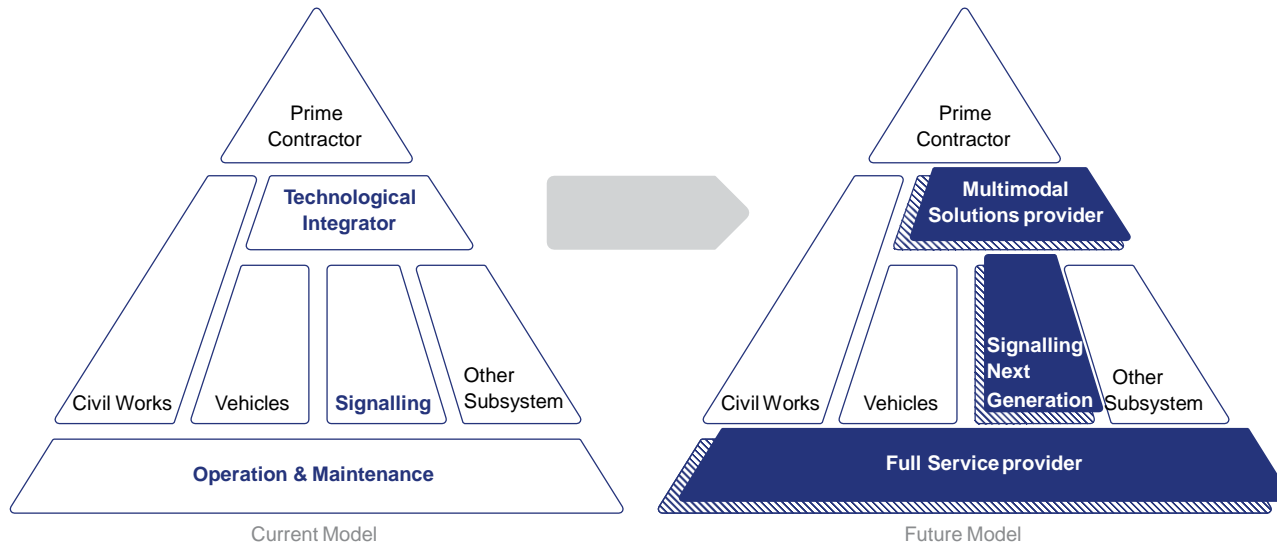
## ASTS vision for the future



- **Signalling Next Generation:** ASTS will continue to invest in advanced **CBTC/ERTMS** standards, which are replacing conventional Signalling technologies, becoming a commodity.
- **Automation, Digital and (potentially) Satellite** as new enablers for the future Business Model.
- **Integrated multimodal transport systems and solutions:** future Signalling systems will focus on the integration of current Signalling technologies with non-conventional /advanced technologies.
- ASTS will leverage its strengths in **systems integration** and **Turnkey management** to provide solutions for multimodal operators serving end-to-end mobility requirements.

**Future business as provider of integrated multimodal transport systems and solutions**

## Ansaldo STS Operating Model evolution



- The Ansaldo STS target is to keep growing to meet market demand. We expect to evolve our operating model in line with our vision for the future as well as to benefit from being part of Hitachi Group.
- The current operating model is well established and suited to our current business requirements. With the change in focus on new technologies and capabilities, we plan to develop additional specific competences and adapt our way of doing business to the evolving transportation and mobility trends.
- These changes will affect key elements of the current operating model: 1) **Technological integrator enhancement**; 2) **Signalling evolving to Next Generation**; and 3) **Evolution of O&M**.

### ASTS strategic imperatives

#### I Organic Growth

- Leverage current positioning by **geographies and line of business** to outperform the market

#### II Non-Organic Growth

- Explore selective **JV and M&A** by markets and technology

#### III Organisational Alignments

- Investigate possible adaptation of the **operating model** in line with the Business requirements

#### IV Effectiveness and Efficiency

- **Platforms optimization** and **future technologies**
- Keep on working on **efficiency programs**

### Organisational requirements

#### ASTS organisational model to support...

- ... the transition from "**technology** company" to "**project company**"
- ... leveraging the **global product portfolio**

#### ...with a new structure for...

- ... a strengthened **regional approach** to strategic & opportunistic markets
- ... exploitation of the **O&M** business opportunities
- ... effectiveness, efficiency and **delivery synchronisation** through integrated technology and global supply chain
- ... accelerated adoption to (digital) **innovation** leveraging the external ecosystem

## Organisational Improvements

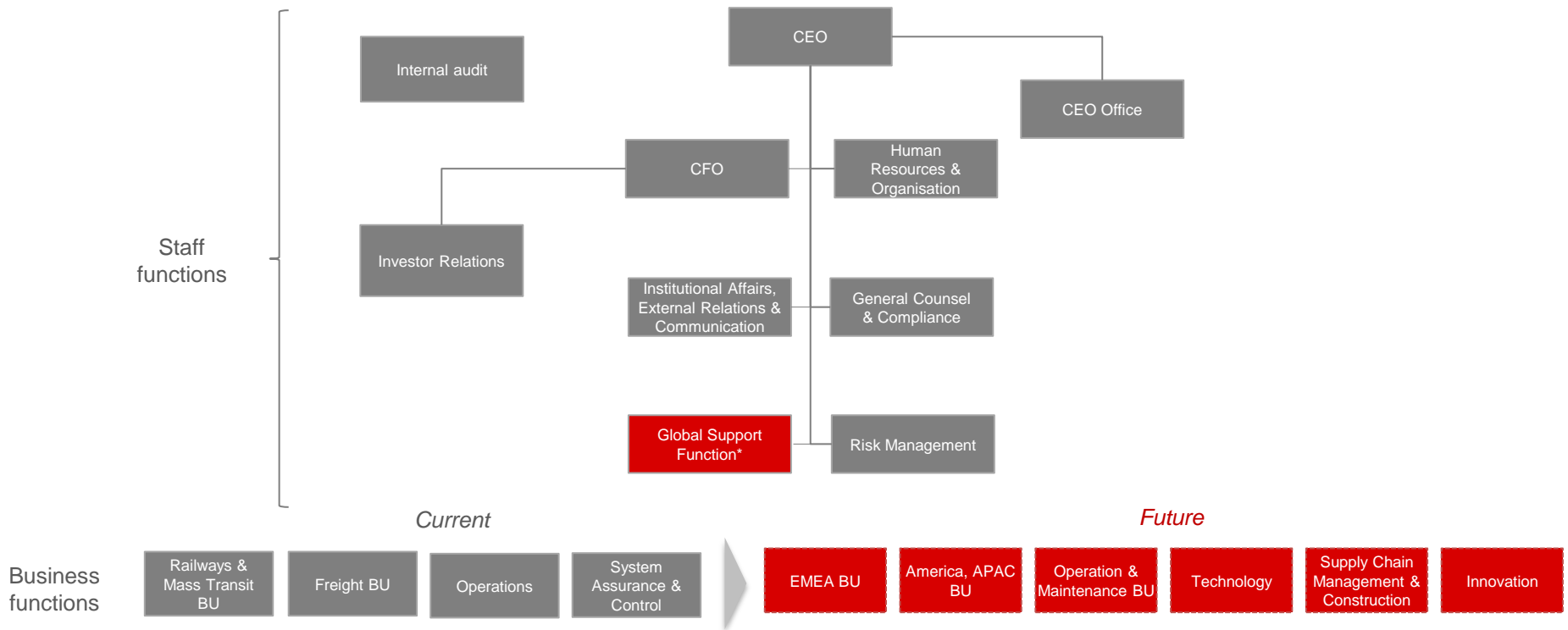
Following the Strategic Business Overview, there will be organisational improvements in several areas which are expected to lead to a more balanced structure. The key review areas are:

<b>Two Regional Business Units</b>	<ul style="list-style-type: none"><li>• Europe, Middle East &amp; Africa (<b>EMEA</b>) and Americas &amp; Asia-Pacific (<b>Americas &amp; APAC</b>)</li></ul>
<b>New Business Unit Operation &amp; Maintenance (O&amp;M)</b>	<ul style="list-style-type: none"><li>• Dedicated unit to support our evolution towards a "Full Service Provider"</li></ul>
<b>Integrated Technology Function</b>	<ul style="list-style-type: none"><li>• Integration of our global capabilities in Engineering, Product Development and Product/System Verification &amp; Validation</li></ul>
<b>Global Supply Chain &amp; Construction Unit</b>	<ul style="list-style-type: none"><li>• Specialized global management responsibility on group level</li></ul>
<b>New Innovation Unit</b>	<ul style="list-style-type: none"><li>• Dedicated structure that will focus on bundling and developing our innovation capabilities and offerings</li></ul>
<b>Global Support Function for Technical Compliance and IT</b>	<ul style="list-style-type: none"><li>• Combined management responsibility for HSE, Quality, Certification and IT capabilities</li></ul>



## Organisational Structure Changes

This organisational evolution is a key enabler for our growth strategy and has been approved by the ASTS Board of Directors. We intend to implement the changes incrementally with the first changes becoming effective in the fourth quarter of 2018. We endeavour to have the future organisation fully established in the first half of 2019.

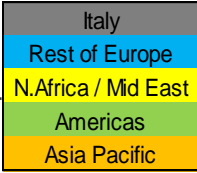
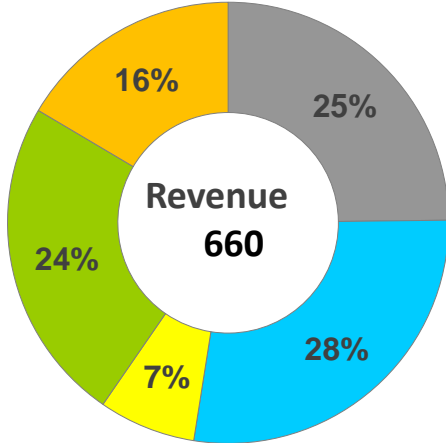
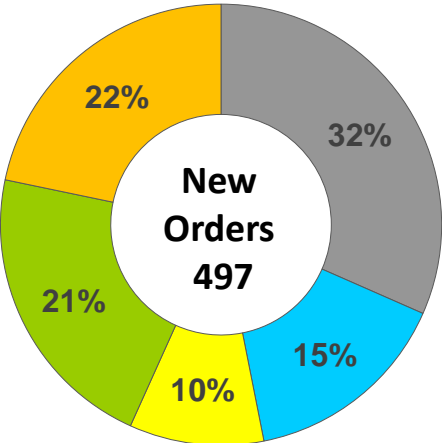
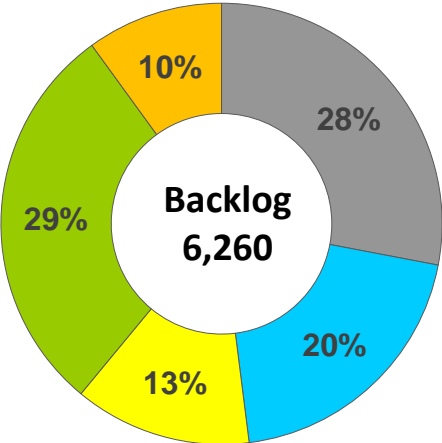


\*HSE, Facility Management, Physical Security, IT and Continuous improvement, Quality and Certification Unit

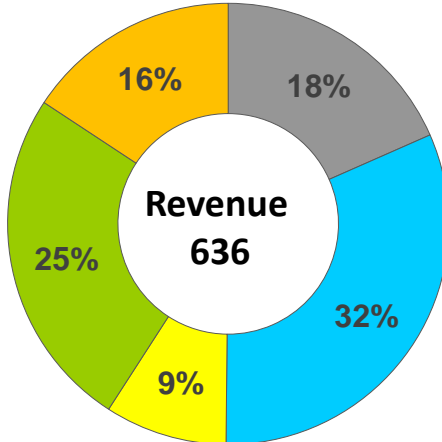
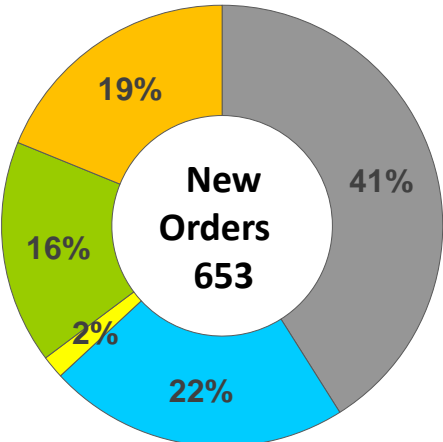
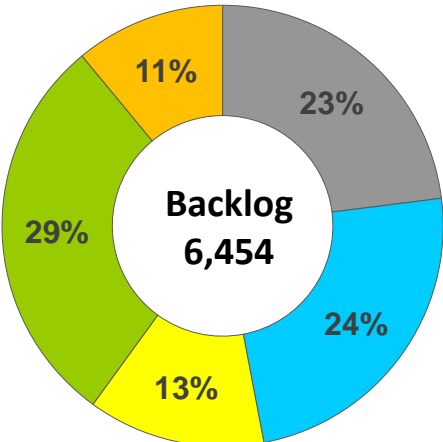
## 2. Orders and recent performance by region

# Backlog, Orders & Revenue by Geographic Area

6M - 2018



6M - 2017



## Orders & Revenues by Area – 6M 2018 vs 6M 2017

<b>ORDERS</b>	<b>6M 2018</b>	<b>6M 2017</b>	<b>% change</b>
Italy	157	268	-41%
Rest of Europe	76	144	-47%
N. Africa / Middle East	49	11	345%
Americas	107	107	0%
Asia Pacific	108	123	-12%
<b>TOTAL</b>	<b>497</b>	<b>653</b>	<b>-24%</b>

<b>REVENUE</b>	<b>6M 2018</b>	<b>6M 2017</b>	<b>% change</b>
Italy	164	117	40%
Rest of Europe	182	202	-10%
N. Africa / Middle East	47	57	-18%
Americas	158	160	-1%
Asia Pacific	109	100	9%
<b>TOTAL</b>	<b>660</b>	<b>636</b>	<b>4%</b>

## First six months 2018 results - Main orders booked

Country	Project Name	Customer	Value (M€)
USA	LIRR expansion project from Floral Park to Hicksville – New York	Third track construction contract JV	38
Australia	Rio Tinto - Variation orders	Rio Tinto	37
Italy	Piscinola-Capodichino - Variation Order	EAV	35
Saudi Arabia	Princess Noura University O&M	Princess Noura Bint Abdul Rahman University	34
France	OCTYS system for Paris Metro Line 6	RATP	18
USA	Trip stop replacement	PAAC	17
USA	Los Angeles track circuit replacements	LACMTA	15
Various EU/Asia	Components	Various	46
Various EU/Asia	Service & Maintenance	Various	44
USA	Components	Various	24

## LIRR expansion project from Floral Park to Hicksville – New York

Ansaldo STS has been awarded a \$46.5 subcontract to furnish a Signal and Communications system for the third track expansion of Long Island Rail Road's existing line from Floral Park to Hicksville.

ASTS is serving as a subcontractor to 3rd Track Constructors, a Joint Venture of John P. Picone Inc., Dragados USA, Inc., CCA Civil, Inc., and Halmar International LLC. The Design-Build prime contract is part of a larger initiative sponsored by New York Governor Andrew M. Cuomo to increase the capacity of transportation services across Long Island.

ASTS is responsible for the design, supply, and testing of the Signal and Communications system.

The MicroLok units will be configured to allow LIRR to transition the signaling system to Positive Train Control in the future.



## Princess Noura University O&M - Riyadh

Ansaldo STS, together with our local joint venture partner Arail, has been awarded a €34 million contract from the Princess Noura Bint Abdul Rahman University for the provision of an operation and maintenance (O&M) service contract for its driverless metro at its Riyadh campus. This is the largest university for women in the world, with over 40,000 students. The metro is 11.5 km long, all on a viaduct, with 14 stations. We have been working on the site since the start in 2009. Under the new contract Ansaldo STS as leader will be the operator of the transit system APM (automated people mover) and Arail will have responsibility for facility management, infrastructure maintenance and cleaning. Over the last six years Ansaldo STS has supported the main contractor for the campus construction in the O&M activities.



*Signing ceremony with the University Vice Rector (centre left) and Italian ambassador (centre right)*



*Ceremony attended by our management and joint venture partner Arail*

## OCTYS CBTC system for Paris Metro line 6

RATP (Régie Autonome des Transports Parisiens), Paris metro operator, has awarded Ansaldo STS a 18 Euro million contract for the implementation of the OCTYS system (Open Control of Trains, Interchangeable & Integrated System), CBTC based technology to modernize the 14 km serving 28 stations of Paris metro line 6.

The project is part of “Metro 2030” strategic plan initiated by RATP for the modernization of the metro operating systems with the development of digital technologies on Paris metro network. Already operating since end of 2012 on line 3, Ansaldo STS’s CBTC offers the highest performances by reducing significantly the headways and increase operational efficiency.

Within the scope of the contract, Ansaldo STS will provide an updated version of its CBTC technology and systems (Zone Controller, Frontam), as well as related devices and architecture to interface with existing wayside signalling equipment, in order to perform the wayside automation systems on RATP line 6.





## 3. Recent key events

## **Ansaldo STS proud its technology has enabled Rio Tinto to launch the world's first autonomous heavy freight rail operation**

- The successful completion of the first journey of the world's first fully autonomous heavy freight rail operation by Rio Tinto on 10th July 2018 from Tom Price Mine to the port of Cape Lambert, a distance of 280 kilometres, with a fully loaded train recognizes a six year period of pioneering technical development, engineering and project delivery for the iron ore miner and for rail technology and systems provider ASTS.
- Together, Rio Tinto and Ansaldo STS have developed and deployed the train control solution that will enable the automation of Rio Tinto's freight rail network in the remote Pilbara region of Western Australia which includes 1,700km of track.
- Each locomotive has been installed with an onboard driver module which generates automatic reports on the exact position, speed and direction of travel of the entire fleet via IP communication to a central control centre in Perth, more than 1,500 kilometres away.



## New tramway line inaugurated in Florence

- A new tramway line has been inaugurated on July 16 in Florence, Italy. Ansaldo STS is proud to have contributed to a more efficient and sustainable mobility in Florence.
- The new T1 Leonardo line in Florence, with its 26 stops and 11.5 km track, will make it easier to travel for the 20 million passengers moving every year within the capital of Tuscany.
- Tramway T1 line will connect Villa Costanza to Careggi Ospedale with a journey time of 40 minutes. There will be one train every 4 minutes and 20 seconds, which means 500 runs per day, with a total annual CO2 reduction of 12,500 tons and less 9,300 cars on the roads every day.
- Ansaldo STS is responsible for System Integration and Signalling System and provides also key specialists for the Consortium technical coordination.



*Hitachi Rail Italy tram along the line equipped with Ansaldo STS signalling*

## 4. Financials

## First six months 2018 - Key Facts

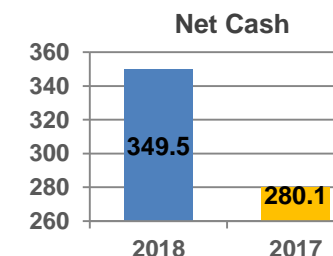
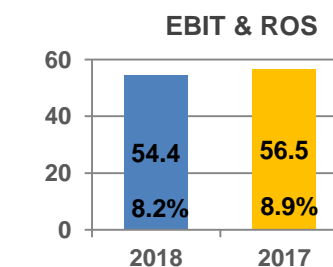
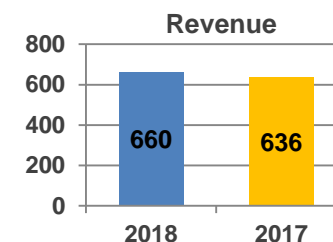
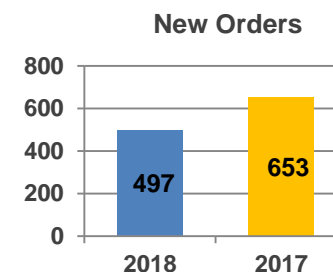
□ **New Orders** at 497 M€, down 156 million (-24%) compared with same period of last year, also due to the shifting of some important opportunities. Main orders booked in the second quarter of the year are: LIRR expansion project from Floral Park to Hicksville in New York for 38M€; Piscinola - Capodichino variation order in Italy for 35M€; Rio Tinto variation orders for 24M€; PAAC trip stop replacement in Pittsburgh for 17 M€.

□ **Revenue** at 660 million, with an increase of 24 million (+4%) compared with same period of last year, mainly due to higher contribution coming from projects in Italy and Asia Pacific regions, only partially offset by lower production in Rest of Europe and Middle East regions.

□ **EBIT** at 54.4 M€, 2.1 M€ lower versus same period last year, with a **ROS** of 8.2% compared to 8.9%. The period is characterized by higher volumes and higher R&D investments. Starting from January 1<sup>st</sup> this year new IFRS 15 standard came into force: net of this, **ROS restated** would have been 8.8%, approximately in line with the same period of last year.

□ **Net Financial Position (cash)** at 349.5 M€, approximately in line with December 2017 amount (357.5 M€) and improved versus the amount achieved at the end of June 2017 (280.1 M€).

**FOCF (Free Operating Cash Flow)** equal to -9.0 M€ compared to -54.7 M€ in the same period of last year.



## First six months 2018 results - Key data

<i>(M€)</i>	6M 2018	6M 2017	% change
New Orders	496.6	652.7	-23.9%
Order Backlog	6,259.7	6,453.8	-3.0%
Revenue	660.1	635.8	3.8%
EBIT	54.4	56.5	-3.7%
ROS	8.2%	8.9%	-0.7 p p
Tax Rate	27.1%	29.0%	-1.9 p p
Net Result	41.3	42.8	-3.7%
Net Working Capital	140.6	199.6	-29.5%
Net Financial Position	(349.5)	(280.1)	24.8%
R&D	21.9	18.3	19.3%
Total Headcount	4,207	4,127	1.9%
EVA	22.2	20.9	5.9%

## 2018 main key data Guidance

(M€)	2017 Actual	2018 Guidance
New Orders	1,500.8	1,500 - 2,000
Order Backlog	6,457.5	6,450 - 7,050
Revenue	1,361.0	1,350 - 1,450
ROS	7.4%	8.0% - 8.5%
Net Financial Position	(357.5)	(300) - (380)

- 2018 ROS is penalized by the implementation of the IFRS 15 new standard. Estimated impact is approximately -50 basis points.
- Due to the change of the closing of the fiscal year from December to March, a 15 months guidance (from January 2018 to March 2019) will be provided to the market soon.

## 5. Q&A



## 6. Accounting definitions

**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.

NB: Ansaldo STS 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).

**Net Working Capital:** It comprises trade receivables and payables, inventories, assets and liabilities from contracts and provisions for liabilities and charges, net of other current assets and liabilities.

**Net Financial Position (NFP) 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 signed with the customers during the period considered, which feature the contractual characteristics to be included in the order book.

**Order Backlog:** It represents revenues not yet recorded for orders received. Order backlog at the end of the accounting period is calculated as follows.

- Order backlog at the beginning of the accounting period;
- Plus orders intake during the period;
- Minus any cancellation of orders during the period;
- Less revenue for the period.

Order backlog may be subject to amendments due to certain changes in: the scope of consolidation, amounts deriving from contractual variables (price revisions, penalties) and exchange rate changes for contracts in currencies other than the working currency.

**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.

## 7. Glossary of rail terminology abbreviations

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

**APM:** Automated People Mover, is a type of small scale automated guideway transit system, usually serving small areas such airports, downtown districts or parks.

**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.

**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.

**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.



**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.

**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.

**OCTYS:** Open Control of Trains, Interchangeable & Integrated System.

**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.

**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 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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