



Railway Systems Business Unit Business Strategy

Hitachi IR Day 2018

June 8, 2018

Alistair Dormer

**Senior Vice President and Executive Officer
CEO of Railway Systems Business Unit
Hitachi, Ltd.**

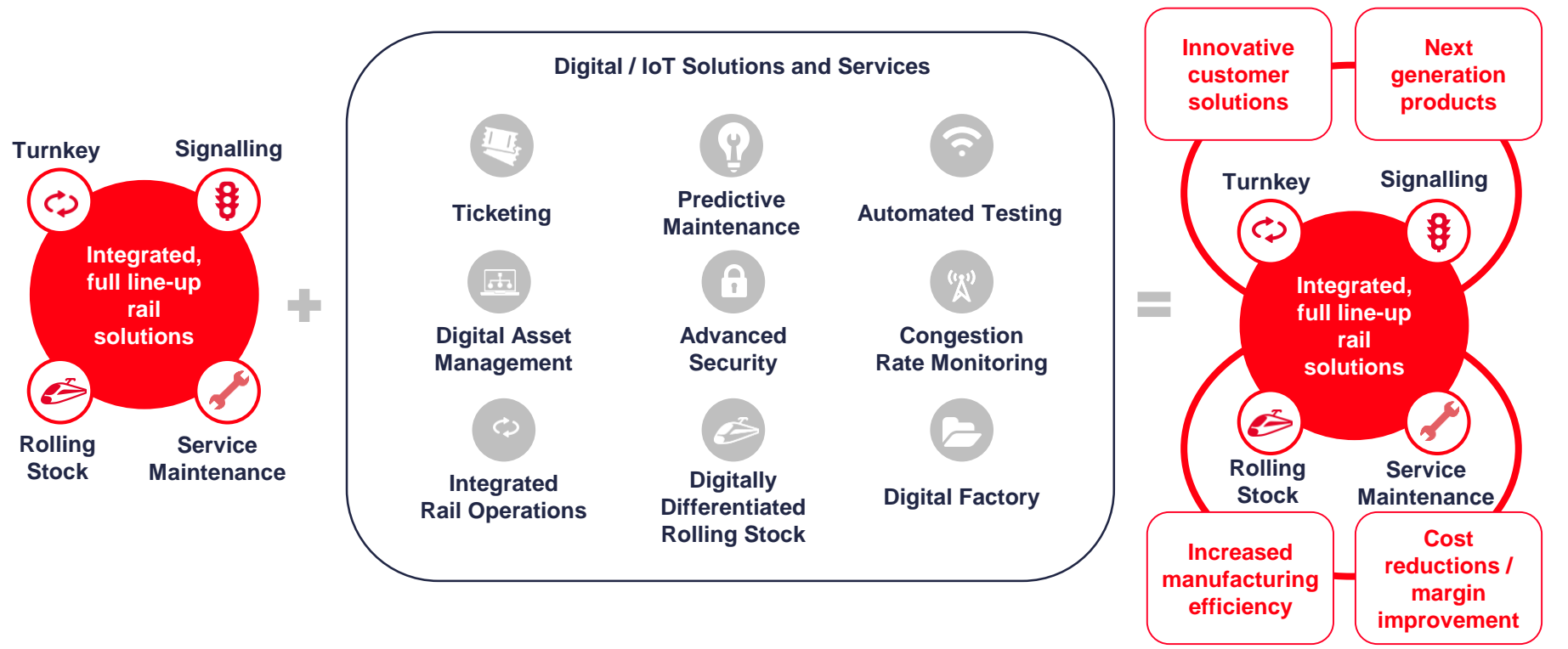
Railway Systems Business Unit Business Strategy

Contents

- 1. Business Overview**
2. Key Achievements
3. Financial Results and Forecasts
4. Our Growth Strategy
5. Conclusion
6. Appendix

1.1. We are transforming our rail business through new technology, to compete in a changing environment

We have expanded the business rapidly to become an integrated, full line-up rail player and now strive for industry leading technology and solutions to drive value for customers



1.2. We have grown, globalized, and expanded our product offering

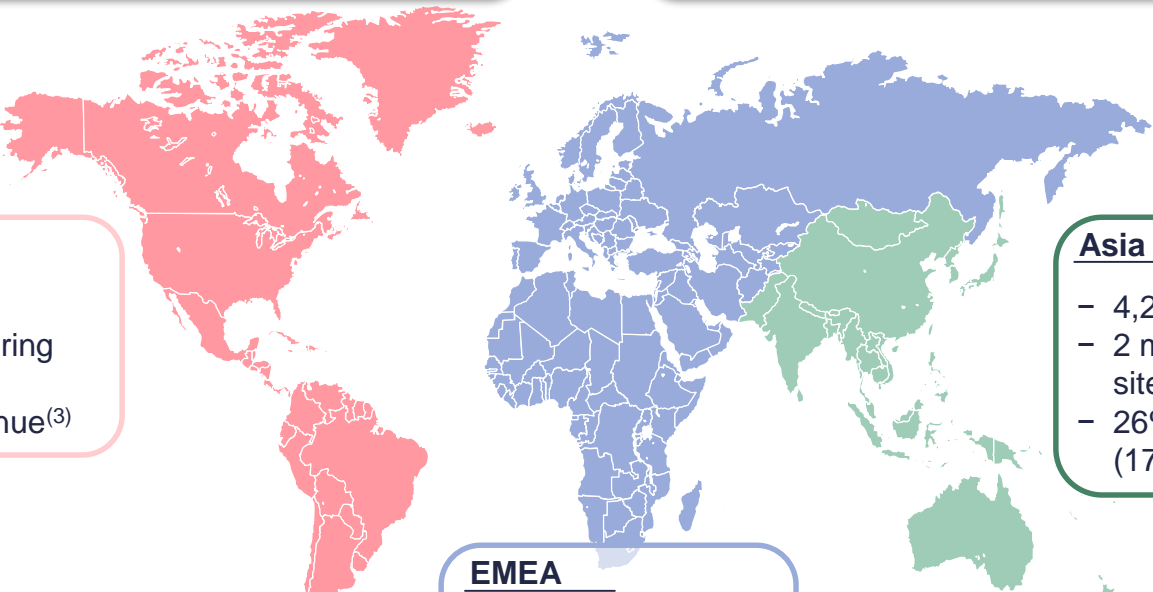
(1)



We are a **fully integrated, global provider of rail solutions** across rolling stock, signalling, services and turnkey



We have a **presence in 27 countries** and **11 manufacturing sites** across 3 continents



Americas

- 867 FTEs⁽²⁾
- 3 manufacturing sites
- 11% of revenue⁽³⁾

Asia Pacific

- 4,232 FTEs⁽²⁾
- 2 manufacturing sites
- 26% of revenue (17% from Japan)⁽³⁾

EMEA

- 7,360 FTEs⁽²⁾
- 6 manufacturing sites
- 63% of revenue⁽³⁾



We employ over **12,400 full time employees**

<p>4 QUALITY EDUCATION</p>	<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>

Deliver Sustainable Railway Systems

(1) © 2018 East Japan Railway Company
FTEs = Full Time Employees

(2) Headcount as of 31 March 2018
(3) Percentage of FY2017 revenue

1.3. Our growth rate and the pace of change have been strong, and we plan to carry on

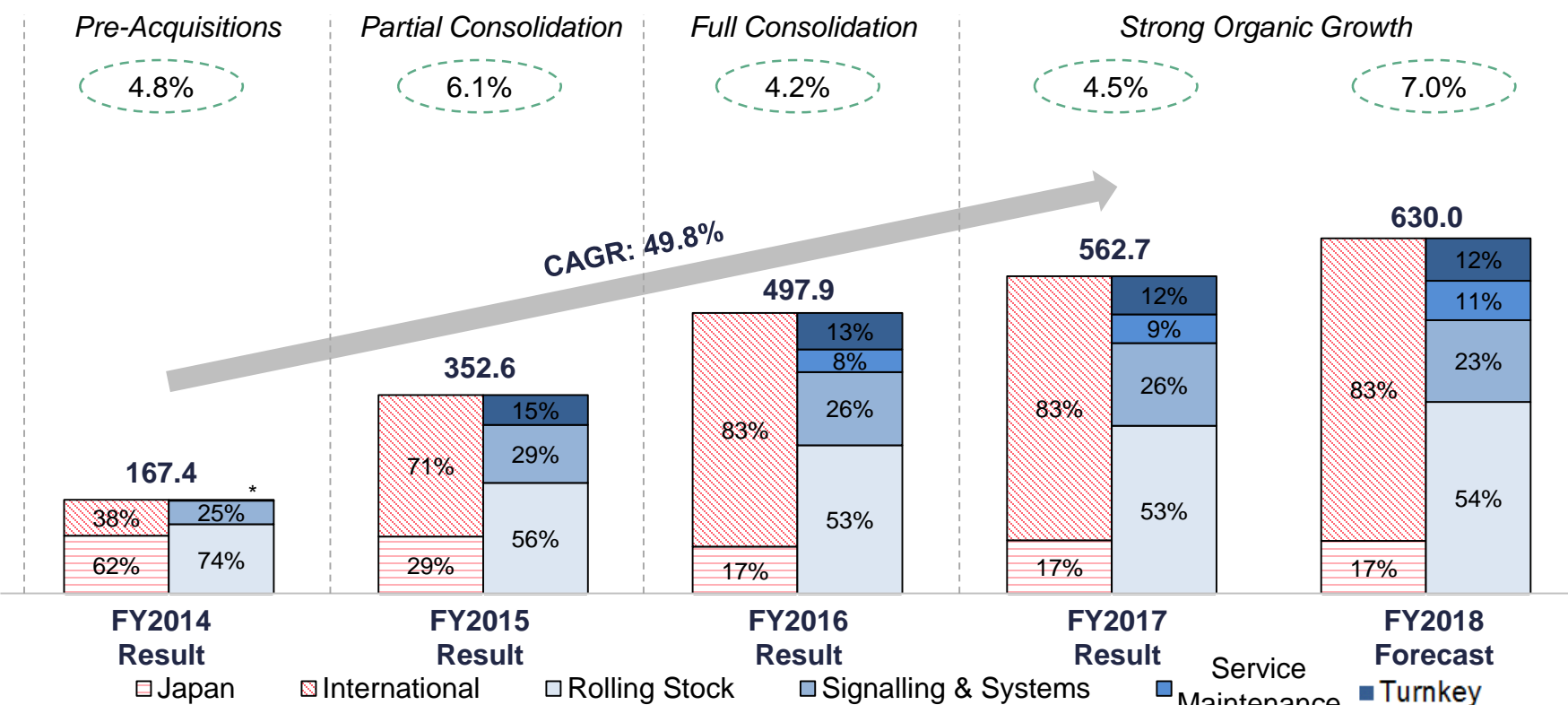
Establishing a Global Business

Building on Success

- Organic expansion into the UK leading to major contract wins including HS1 and IEP
- Acquisition of AnsaldoBreda and Ansaldo STS diversifies revenue geographically and also adds new capability in Signalling and Turnkey in particular

- We have gone on to integrate the acquired businesses and establish a truly global, full line-up rail company
- We continue to grow and look to expand into new key geographies such as North America and new products including IoT / Digital

Revenue (Billion Yen) and Adjusted Operating Income Ratio (%)



HS1 = High Speed 1 (Class 395)
IEP = Intercity Express Programme

* Service / Maintenance = 1%

1.4 The last year has seen continued growth and we have hit important milestones

	FY2016 (Results)	FY2017		
		Forecast as of June 2017	Results	Year over Year
Revenue (Billion Yen)	497.9	540.0	562.7	113% ↑
Adjusted Operating Income (Billion Yen)	20.7	30.0	25.1	121% ↑
Adjusted Operating Income Ratio	4.2%	5.6%	4.5%	+0.3% ↑
Free Cash Flow (Billion Yen)	(45.6)	77.0	79.9	+125.5 ↑
Order Received (Billion Yen)	473.1	572.0	562.2	119% ↑

Yen to Pound FX rates: at June 2017 forecast = 140:1; at FY2017 results = 147:1

Yen to Euro FX rates: at June 2017 forecast = 115:1; at FY2017 results = 130:1

Railway Systems Business Unit Business Strategy

Contents

1. Business Overview
- 2. Key Achievements**
3. Financial Results and Forecasts
4. Our Growth Strategy
5. Conclusion
6. Appendix

2.1. Our landmark project IEP reached key delivery and testing milestones

Project Highlights

- The Intercity Express Programme (IEP) is the largest investment in UK rolling stock in over 30 years
- We will supply 57 trains for the Great Western Main Line (GWML) and 65 trains for the East Coast Main Line (ECML)
- We will also maintain both fleets for 27.5 years and manage the associated depots

FY2018 and Beyond

- Our priority for FY2018 is to complete delivery of the GWML fleet and begin delivery of the ECML fleet
- As the fleets begin operation and the maintenance schedule starts, our services business in the UK will increase significantly, reaching full operation in 2020
- Through our Lumada, IoT platform, we will collect 13GB of data per train every day. We will utilise this data to optimise maintenance and improve customer experience

IEP = Intercity Express Programme



FY2017 Key Milestones



June 2017
Queen Elizabeth II travels on an IEP train to mark the 175th anniversary of the first rail journey by a monarch

October 2017
First IEP train on GWML enters service



November 2017
Minimum fleet acceptance reached on Great Western Main Line as 10 trains are accepted by operator Great Western Rail

December 2018
Testing begins on ECML IEP trains in the Scottish Highlands

Key

- East Coast Main Line
- Great Western Main Line
- Depots
- Manufacturing site

2.2. We continue to deliver for our customers...

Delivering for our Customers and Reaching Key Milestones



20 driverless trainsets for the new metro were delivered to Lima



Base order of 28 driverless train sets delivered to Copenhagen Cityringen Metro line



Delivered 14 out of 17 driverless trainsets to Taipei Metro



Honolulu Driverless Unattended Metro first train running



Hitachi built metro cars entered revenue service in Miami Dade



Delivered all 15 trainsets of the first option for Milan Metro 4 months early



Aarhus Tram-Train urban section revenue service



Pre-series build for new TransPennine Express has began journey from Japan to the UK for testing



South Europe-Atlantic and Brittany-Loire LGV High Speed Line revenue service



Testing began on the first Rock double-deck EMU for Trenitalia



Testing began on the new Class 385 fleet for Abellio Scotrail due to be delivered this year



Achieved Type Approval for our West of England trains due for delivery to First Group this year



First fully autonomous heavy haul train journey in Australia by Rio Tinto

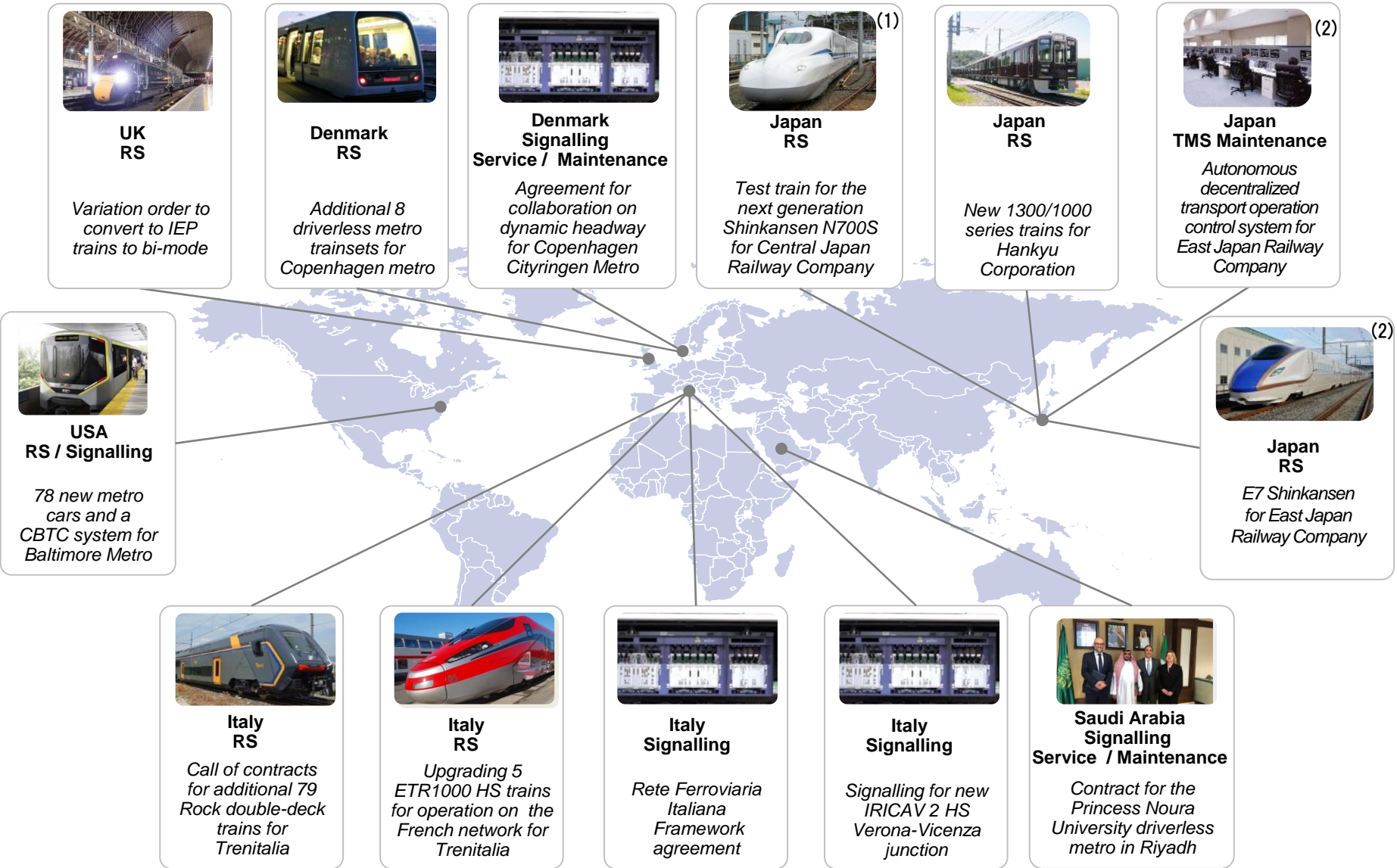


Our maintenance depot in Ashford UK celebrated its 10 year anniversary



Our new trains for Sagami Railway Company entered service in February 2018

2.3. ...And continue to win new orders around the world across all of our product lines



(1) © 2018 Central Japan Railway Company RS = Rolling Stock; TMS = Traffic Management System;
 (2) © 2018 East Japan Railway Company CBTC = Communications-Based Train Control

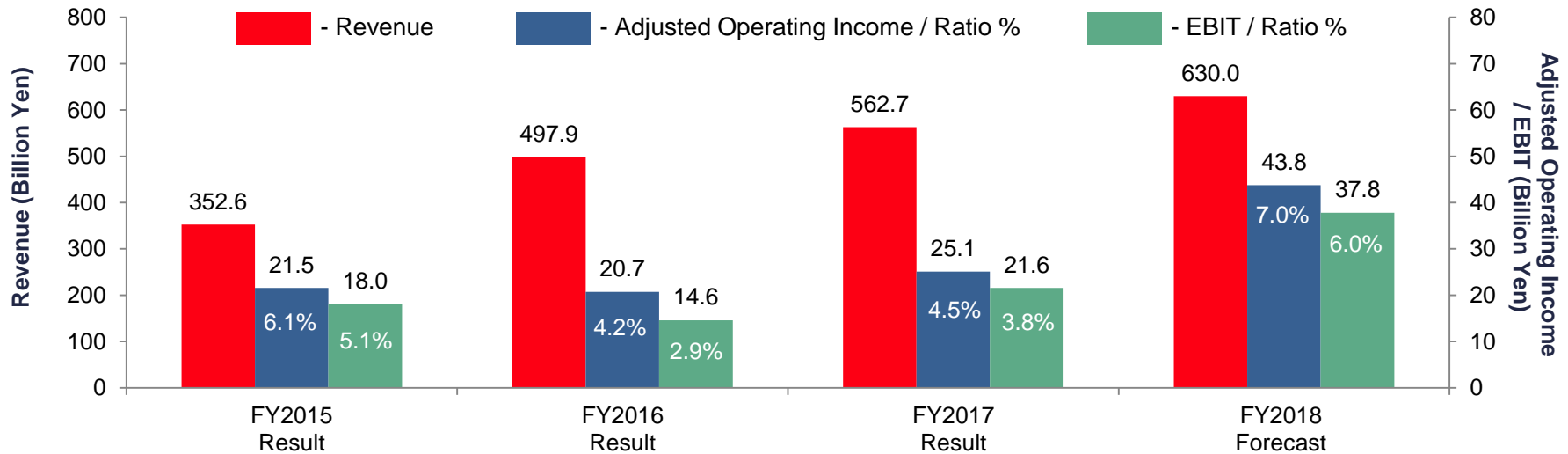
Railway Systems Business Unit Business Strategy

Contents

1. Business Overview
2. Key Achievements
- 3. Financial Results and Forecasts**
4. Our Growth Strategy
5. Conclusion
6. Appendix

3.1. Our revenue growth is supported by a strong backlog. We will improve profit ratios through our continuing transformation program

Order Received (Billion Yen)	408.4	473.1	562.2	640.0
Order Backlog* (Billion Yen)	3,159.3	2,786.8	2,846.6	2,795.8
Overseas revenue ratio	71%	83%	83%	83%

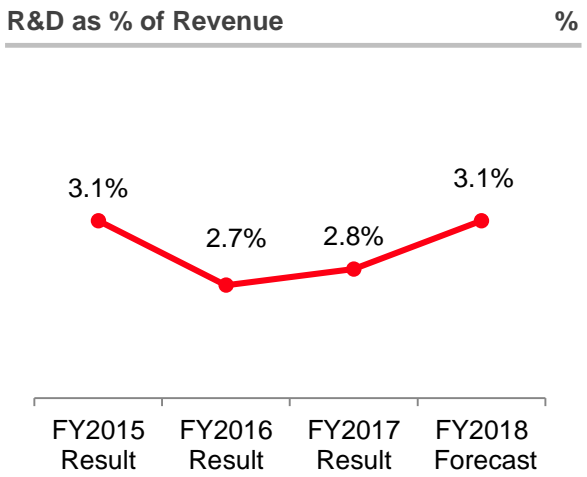
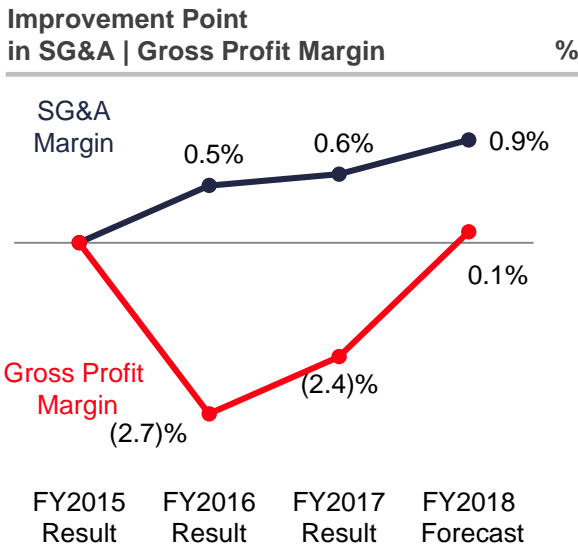
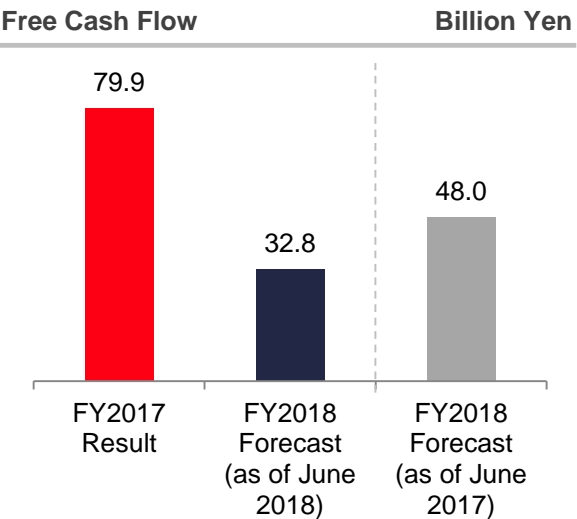
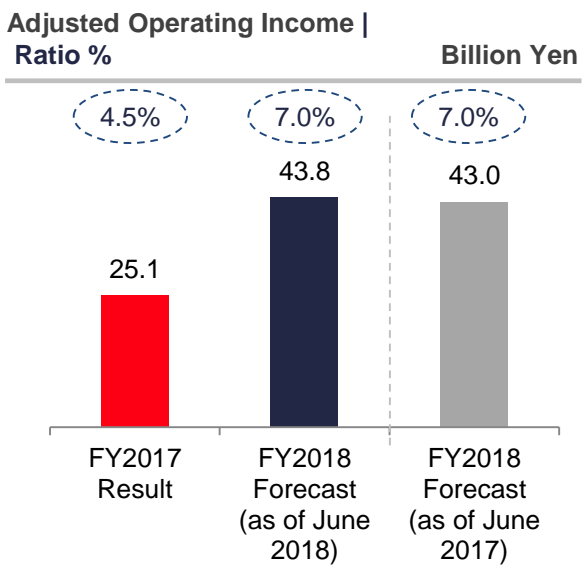
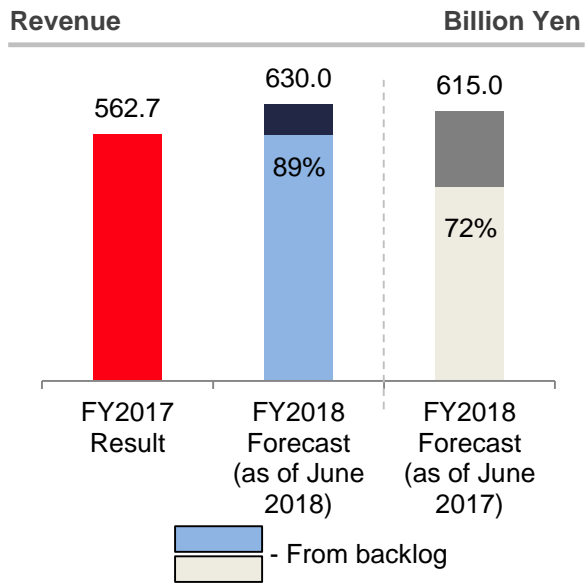
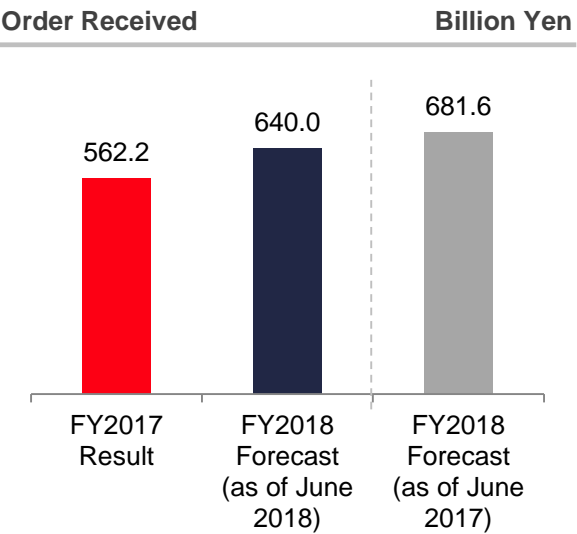


FX rates at June FY2018 forecast - Yen to Pound = 140:1; Yen to Euro = 130:1

	Previous FY2017 and FY2018 Target / Forecasts (Billion Yen)	
	FY2017 Forecast as of June 2017	FY2018 Target as of June 2016 Forecast as of June 2017
Revenue	540.0	640.0 / 615.0
Adjusted Operating Income / Ratio %	30.0 / 5.6%	51.3 / 8.0% / 43.0 / 7.0%
EBIT / Ratio %	24.1 / 4.5%	45.0 / 7.0% / 36.9 / 6.0%
Pound : Yen	1 : 140	1 : 160 / 1 : 140

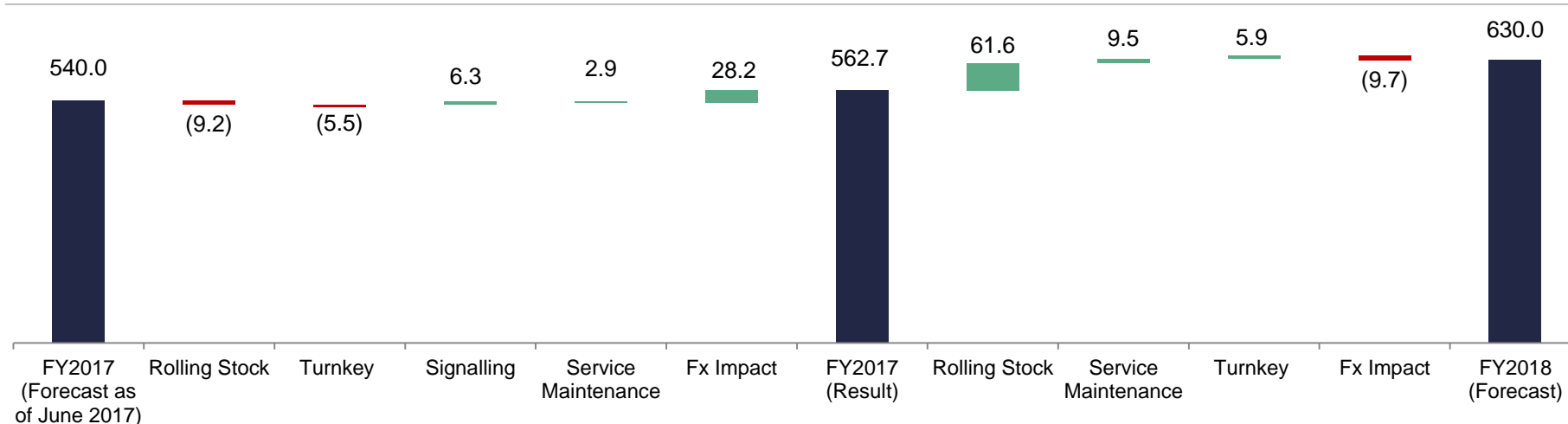
* Application of IFRS 15 has resulted in all Maintenance contracts being included in backlog. FY2015 and FY2016 results have been restated to reflect this. In FY2016 the FX impact was approx. (348) Billion Yen

3.2. Profitability growth will be driven by a shift in revenue mix and continued cost reduction

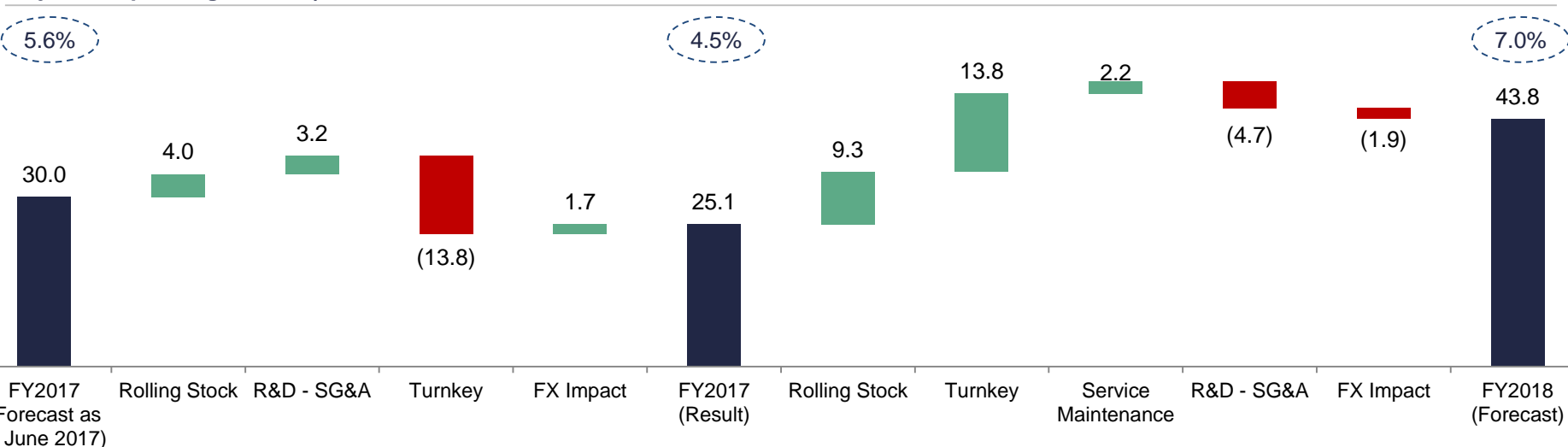


3.3. Our FY2017 revenue was ahead of forecast. Profitability was lower due to one-off project losses

Revenue Bridge



Adjusted Operating Income | Ratio %



Yen to Pound FX rates: at June 2017 forecast = 140:1.; at FY2017 results = 147:1; at June FY2018 forecast = 140:1
 Yen to Euro FX rates: at June 2017 forecast = 115:1.; at FY2017 results = 130:1; at June FY2018 forecast = 130:1

3.4. We have turned cash flow positive in FY17 and will remain so in FY2018

Free Cash Flow Overview

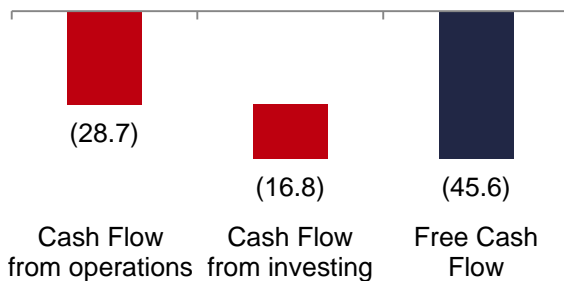
- FY2017 Free Cash Flow was aligned to our expectations
 - Milestone payments for delivery of key projects will confirm the positive trend of cash flow from operations
- For Cash Conversion Cycle, we are targeting more than 25 days improvement from FY2017 to FY2018
- The volume of investment to improve business performance will be confirmed and increased due to new cross border projects (e.g. Project Lifecycle Management) in order to enhance our competitiveness

Free Cash Flow Results and Forecast

Billion Yen

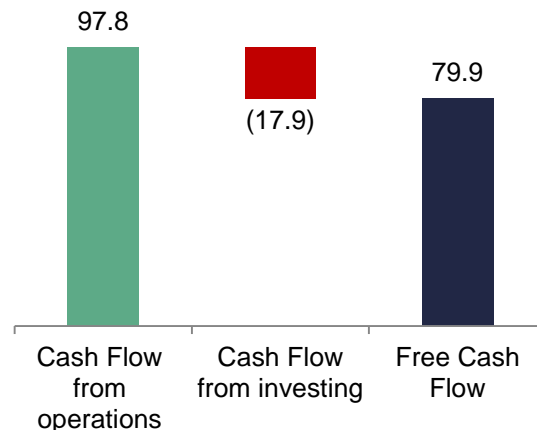
FY2016 Result

CCC: 139.4 days



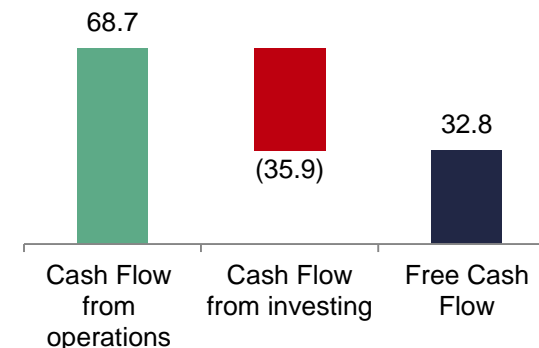
FY2017 Result

CCC: 80.2 days



FY2018 Forecast

CCC: 53.2 days



Note: FY2015 CCC was 83.6 days
CCC = Cash Conversion Cycle

Railway Systems Business Unit Business Strategy

Contents

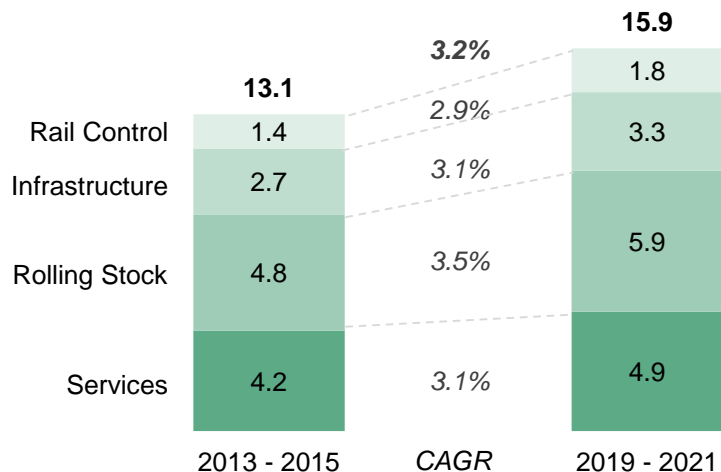
1. Business Overview
2. Key Achievements
3. Financial Results and Forecasts
- 4. Our Growth Strategy**
5. Conclusion
6. Appendix

4.1. Our industry is growing, supported by strong global trends. We are well placed to grow as it continues to consolidate

Industry Growth and Macroeconomic Drivers

Market Growth by Product ⁽¹⁾

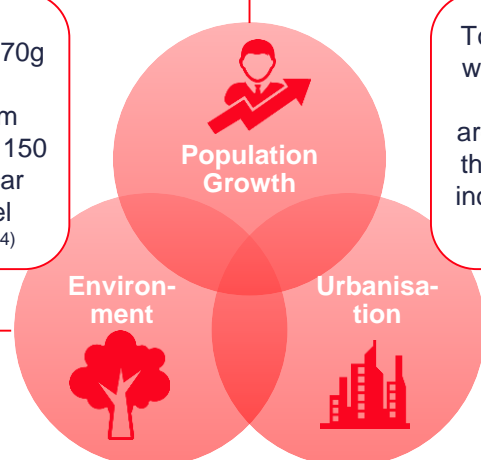
Trillion Yen



Global population is forecast to grow to approximately 9.7 billion by 2050 from 7.6 billion in 2018 ⁽²⁾

Rail travel produces 30 – 70g of CO₂ per passenger km compared with 150 and 170 for car and air travel respectively⁽⁴⁾

Today, 55% of the world's population lives in urban areas, a proportion that is expected to increase to 68% by 2050 ⁽³⁾



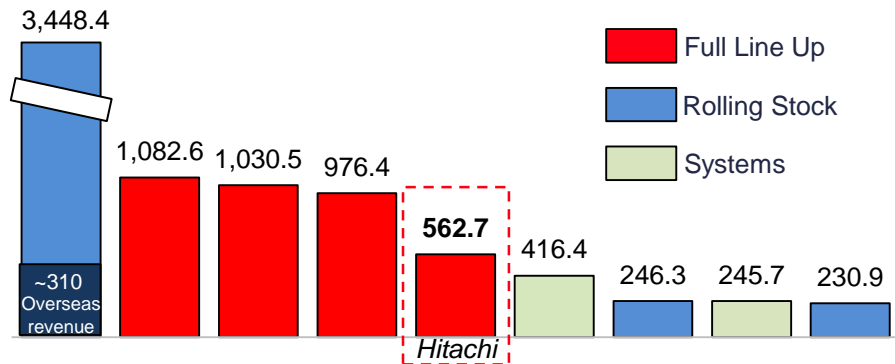
(1) Source: UNIFE World Rail Market Study 2016. FX rate Euro :Yen = 1:130

Sources: (2) World Bank data (3) United Nations: World Urbanization Prospects: The 2018 Revision (4) World Health Organisation

Competitive Landscape

Revenue vs. Competitors ⁽⁵⁾

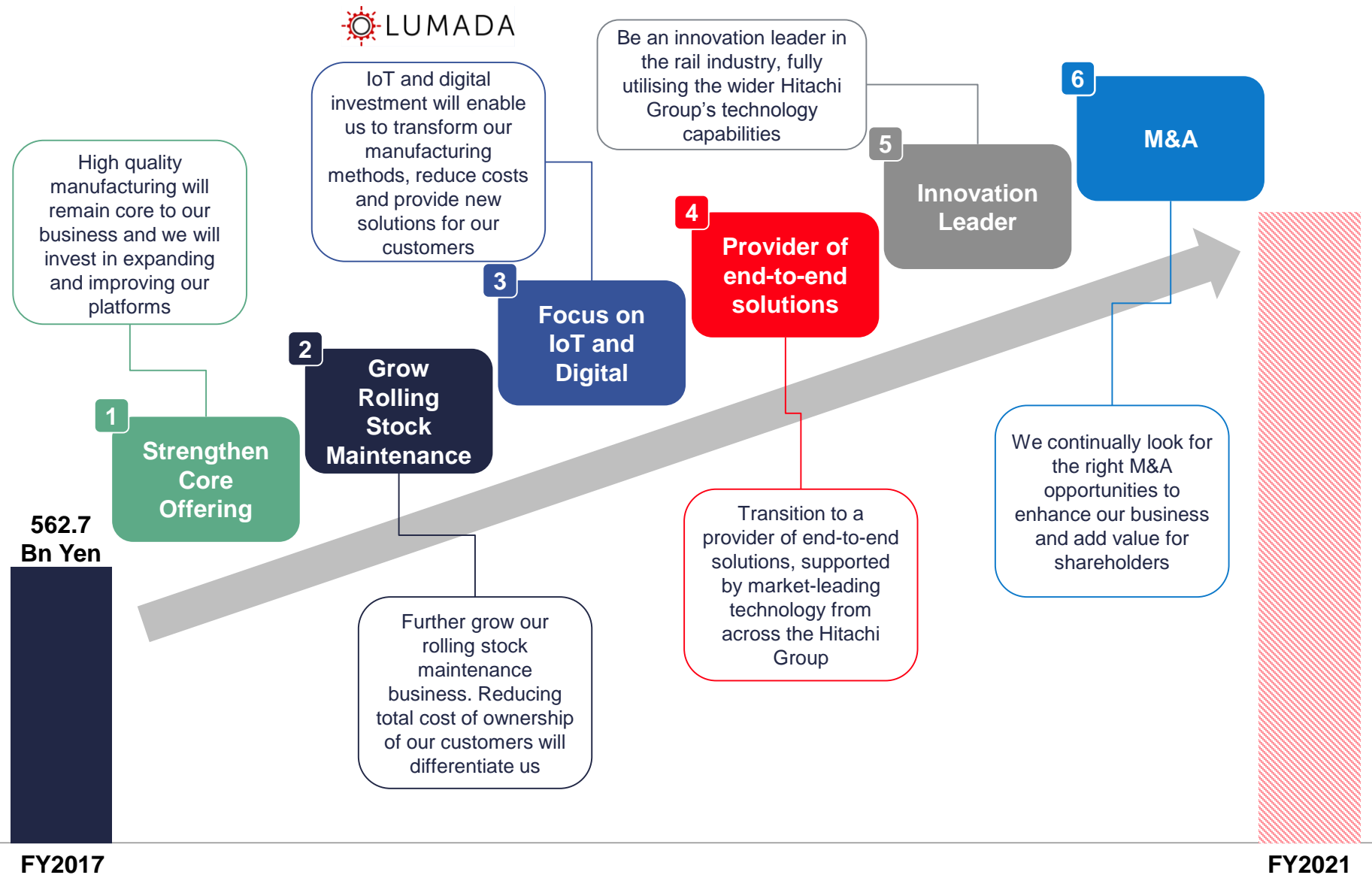
Billion Yen



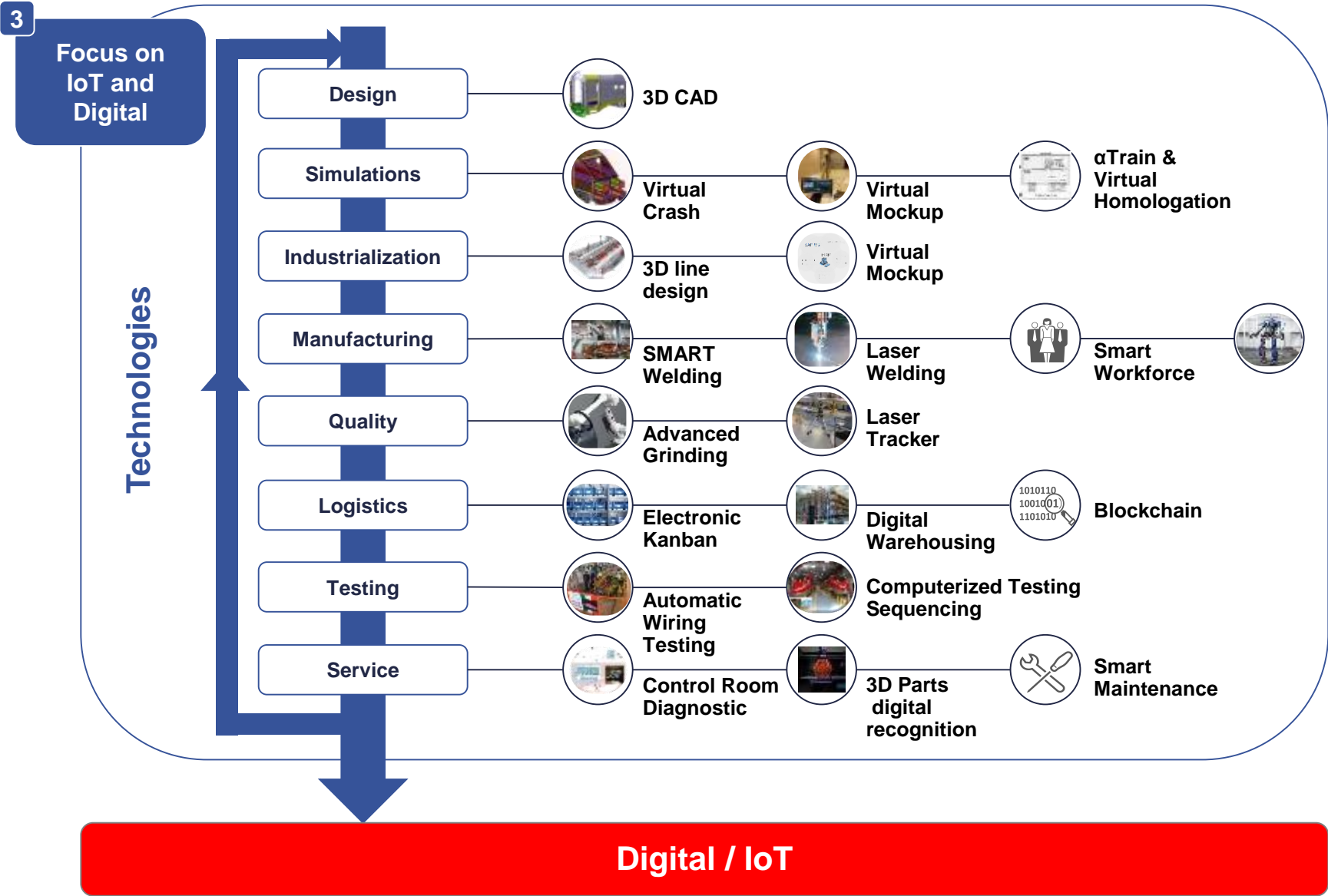
- We have continued to see consolidation within the industry this year with two of our major competitors announcing a planned merger in September 2017
- Large Asian competitors continue to seek international expansion
- Full Line Up players have been actively adding Digital / IoT competencies through smaller M&A deals

(5) Financials calendarised to March 2018. Source: Annual reports, broker estimates and Capital IQ consensus estimates. Average FX rate over last 12 months from 31 March 2018 used

4.2. We understand how to position ourselves as a market leader as the rail industry continues to evolve



4.3. Our investment in digital / IoT will improve our manufacturing efficiency and reduce costs



4.4. EMEA is now generating 63% of our revenues. We have built and inherited exceptional relationships with new customers

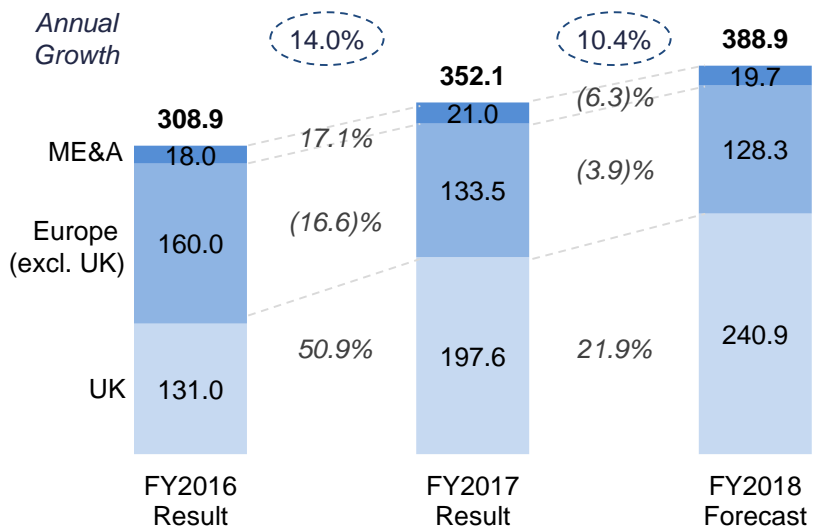
Key Enablers for Growth - EMEA

- 1 Implementation of new digital Product Lifecycle Management system will remove costs and improve manufacturing efficiency
- 3 We will continue to invest in our core Rolling Stock platforms which has already led to new orders e.g. Rock for Trenitalia
- 2 Our UK backlog contains a significant amount of Service / Maintenance revenue and we look to build on this with new contract wins across EMEA
- 3 We will look to build on the success of our Dynamic Headway project for Copenhagen Metro to win further Digital / IoT orders
- 4 Working with Hitachi Vantara, our IoT platform (Lumada) will allow us to offer predictive maintenance solutions to customers and grow Service / Maintenance revenue

Our EMEA Revenue Trend

Billion Yen

– Strong growth in EMEA has been driven by success in the UK market



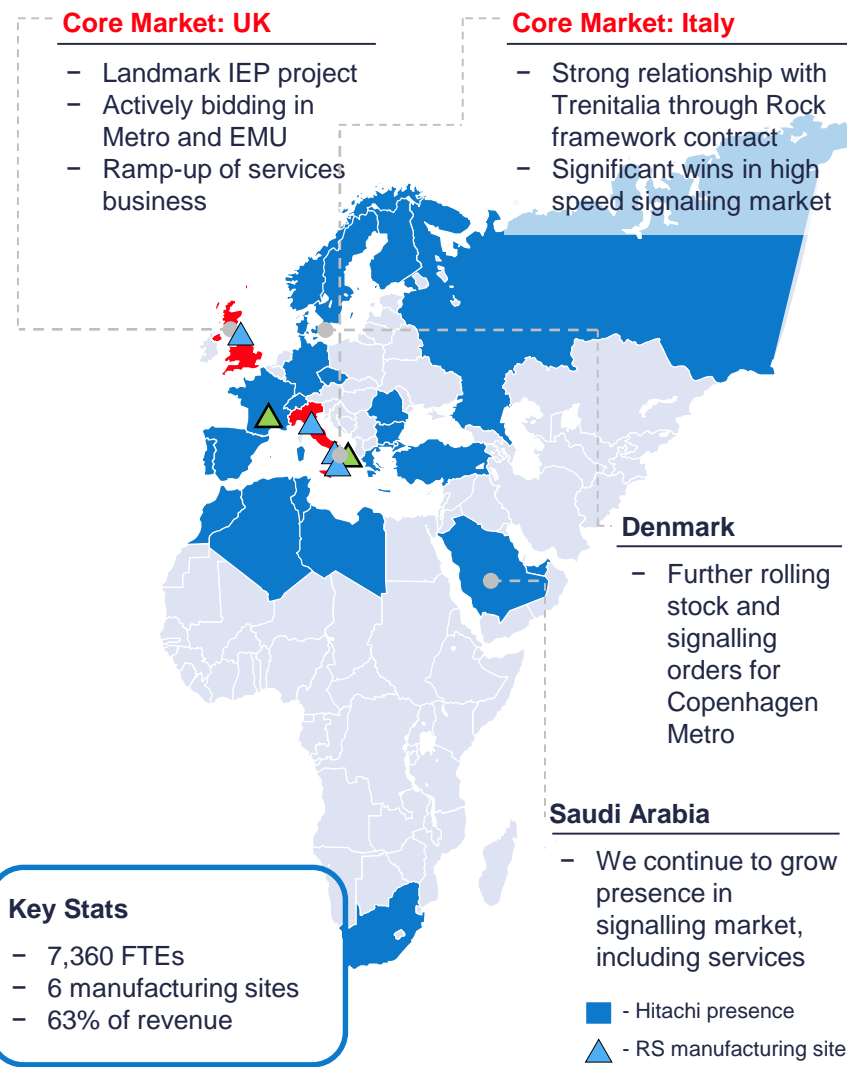
Our Presence in EMEA

Core Market: UK

- Landmark IEP project
- Actively bidding in Metro and EMU
- Ramp-up of services business

Core Market: Italy

- Strong relationship with Trenitalia through Rock framework contract
- Significant wins in high speed signalling market



Denmark

- Further rolling stock and signalling orders for Copenhagen Metro

Saudi Arabia

- We continue to grow presence in signalling market, including services

Key Stats

- 7,360 FTEs
- 6 manufacturing sites
- 63% of revenue

- - Hitachi presence
- ▲ - RS manufacturing site
- ▲ - ASTS manufacturing site

EMU = Electric Multiple Unit
ASTS = Ansaldo STS

4.5. Japan and APAC remain core and we are innovating to support our customers here

Key Enablers for Growth - APAC

1 Japan remains our core market to incubate new products /
5 technologies e.g. Shinkansen, TMS, radio based signalling systems

1 We will look to invest in our existing high speed products and increase market share outside of Japan (e.g. India, Texas USA)

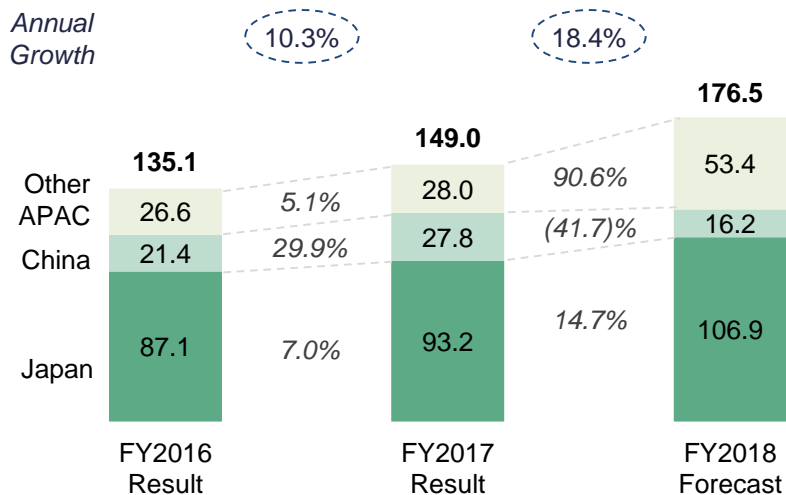
3 Development of new business leveraging Hitachi IoT platform
5 (Lumada) is key to the further growth both in Japan and globally

1 Leveraging ASTS capability to deliver complex Turnkey projects will
4 be key for growth in the APAC region

Our APAC Revenue Trend

Billion Yen

– Japan remains our core market in APAC region



Our Presence in APAC

Core Market: Japan

- Established supplier of Shinkansen, Metro and Intercity rolling stock
- Provider of wide range of solutions such as TMS, signalling and ticketing solutions to JR companies and private railway companies
- Manufacturer of technologically advanced rolling stock components

China

- Traction and signalling components sales

Taiwan

- Currently delivering Metro turnkey project

Vietnam

- Currently undertaking Turnkey metro project in Ho Chi Minh

Australia

- ASTS have presence in both freight and passenger markets for signalling and components

Key Stats

- 4,232 FTEs
- 2 manufacturing sites
- 26% of revenue

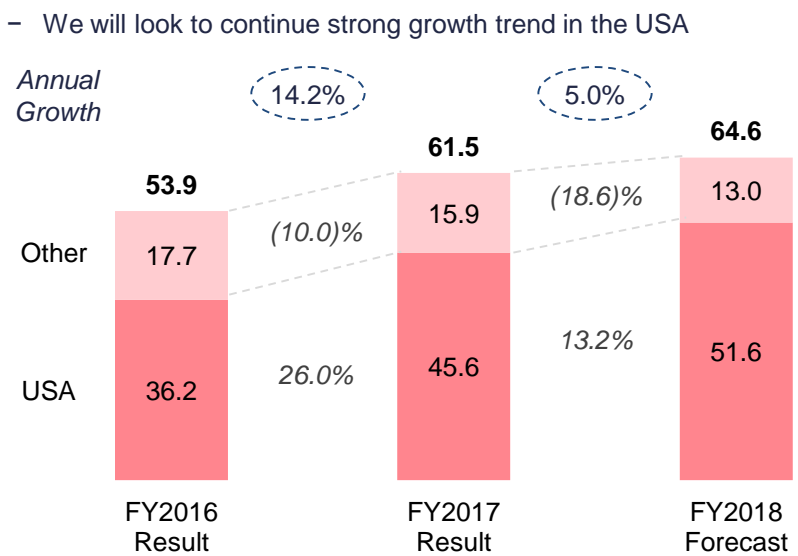
■ - Hitachi presence
▲ - Manufacturing site

4.6. We are targeting strong growth in Americas and will invest to serve new customers

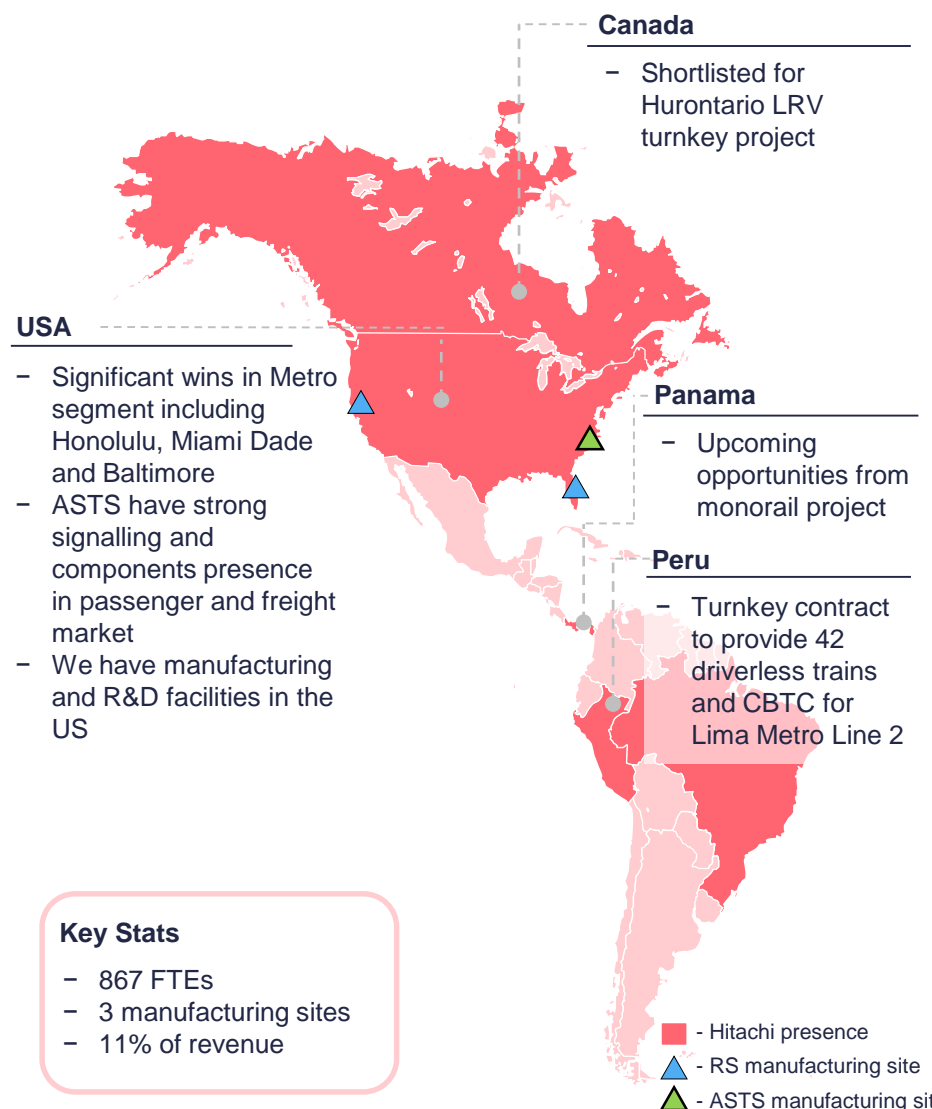
Key Enablers for Growth - Americas

- 1 We will leverage our existing technology to increase our market share in the US Metro segment
- 1 Utilising core products and ASTS's project delivery capabilities will allow us to target the growing PPP market in Canada, particularly in the LRV segment
- 4 Demand in the USA for CBTC is increasing which represents an opportunity for ASTS
- 1 We will look to expand our product offering in the Americas to include Digital / IoT solutions, utilising the presence of Hitachi Vantara in the USA
- 3 We continually evaluate M&A opportunities for complimentary products and technologies that could assist our expansion in the Americas
- 5
- 6

Our Americas Revenue Trend Billion Yen



Our Presence in Americas



Railway Systems Business Unit Business Strategy

Contents

1. Business Overview
2. Key Achievements
3. Financial Results and Forecasts
4. Our Growth Strategy
- 5. Conclusion**
6. Appendix



An IEP train for Great Western Railways arrives at Paddington



Concept design for new Baltimore Metro trainsets

- We have achieved 49.8% CAGR revenue growth between FY2014 and FY2017
- We continue to deliver for our customers and win new contracts worldwide
- We are investing in technology and IoT to increase manufacturing efficiency, reduce costs and provide innovative solutions for our customers
- We are targeting 12.0% revenue growth in FY2018 and 7.0% adjusted operating income ratio

Railway Systems Business Unit Business Strategy

Contents

1. Business Overview
2. Key Achievements
3. Financial Results and Forecasts
4. Our Growth Strategy
5. Conclusion
- 6. Appendix**

ASTS	Ansaldo STS
CAGR	Compound Annual Growth Rate
CBTC	Communications-Based Train Control
CCC	Cash Conversion Cycle
EBIT	Earnings Before Interest and Taxes
EMEA	Europe, Middle East and Africa
EMU	Electric Multiple Unit
IEP	Intercity Express Programme
IoT	Internet of Things
LRV	Light Rail Vehicle
PPP	Public Private Partnership
RS	Rolling Stock
SG&A	Selling, General and Administrative Expenses
TMS	Traffic Management System

Cautionary Statement

Certain statements found in this document may constitute “forward-looking statements” as defined in the U.S. Private Securities Litigation Reform Act of 1995. Such “forward-looking statements” reflect management’s current views with respect to certain future events and financial performance and include any statement that does not directly relate to any historical or current fact. Words such as “anticipate,” “believe,” “expect,” “estimate,” “forecast,” “intend,” “plan,” “project” and similar expressions which indicate future events and trends may identify “forward-looking statements.” Such statements are based on currently available information and are subject to various risks and uncertainties that could cause actual results to differ materially from those projected or implied in the “forward-looking statements” and from historical trends. Certain “forward-looking statements” are based upon current assumptions of future events which may not prove to be accurate. Undue reliance should not be placed on “forward-looking statements,” as such statements speak only as of the date of this document.

Factors that could cause actual results to differ materially from those projected or implied in any “forward-looking statement” and from historical trends include, but are not limited to:

- economic conditions, including consumer spending and plant and equipment investment in Hitachi’s major markets, particularly Japan, Asia, the United States and Europe, as well as levels of demand in the major industrial sectors Hitachi serves;
- exchange rate fluctuations of the yen against other currencies in which Hitachi makes significant sales or in which Hitachi’s assets and liabilities are denominated;
- uncertainty as to Hitachi’s ability to access, or access on favorable terms, liquidity or long-term financing;
- uncertainty as to general market price levels for equity securities, declines in which may require Hitachi to write down equity securities that it holds;
- fluctuations in the price of raw materials including, without limitation, petroleum and other materials, such as copper, steel, aluminum, synthetic resins, rare metals and rare-earth minerals, or shortages of materials, parts and components;
- the possibility of cost fluctuations during the lifetime of, or cancellation of, long-term contracts for which Hitachi uses the percentage-of-completion method to recognize revenue from sales;
- credit conditions of Hitachi’s customers and suppliers;
- fluctuations in product demand and industry capacity;
- uncertainty as to Hitachi’s ability to implement measures to reduce the potential negative impact of fluctuations in product demand, exchange rates and/or price of raw materials or shortages of materials, parts and components;
- uncertainty as to Hitachi’s ability to continue to develop and market products that incorporate new technologies on a timely and cost-effective basis and to achieve market acceptance for such products;
- increased commoditization of and intensifying price competition for products;
- uncertainty as to Hitachi’s ability to attract and retain skilled personnel;
- uncertainty as to Hitachi’s ability to achieve the anticipated benefits of its strategy to strengthen its Social Innovation Business;
- uncertainty as to the success of acquisitions of other companies, joint ventures and strategic alliances and the possibility of incurring related expenses;
- uncertainty as to the success of restructuring efforts to improve management efficiency by divesting or otherwise exiting underperforming businesses and to strengthen competitiveness;
- the potential for significant losses on Hitachi’s investments in equity-method associates and joint ventures;
- general socioeconomic and political conditions and the regulatory and trade environment of countries where Hitachi conducts business, particularly Japan, Asia, the United States and Europe, including, without limitation, direct or indirect restrictions by other nations on imports and differences in commercial and business customs including, without limitation, contract terms and conditions and labor relations;
- uncertainty as to the success of cost structure overhaul;
- uncertainty as to Hitachi’s access to, or ability to protect, certain intellectual property;
- uncertainty as to the outcome of litigation, regulatory investigations and other legal proceedings of which the Company, its subsidiaries or its equity-method associates and joint ventures have become or may become parties;
- the possibility of incurring expenses resulting from any defects in products or services of Hitachi;
- the possibility of disruption of Hitachi’s operations by natural disasters such as earthquakes and tsunamis, the spread of infectious diseases, and geopolitical and social instability such as terrorism and conflict;
- uncertainty as to Hitachi’s ability to maintain the integrity of its information systems, as well as Hitachi’s ability to protect its confidential information or that of its customers; and
- uncertainty as to the accuracy of key assumptions Hitachi uses to evaluate its employee benefit-related costs.

The factors listed above are not all-inclusive and are in addition to other factors contained in other materials published by Hitachi.

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