





History of successful development

Revenues €m 700 - 600 - 500 - 400 - 300 - 600

- >> 1942: two pioneers meet and bring new ideas to disrupt the century-old rolling stock manufacturing industry
- 1968: Talgo creates the world's first international train with automatic variable gauge
- >> 1973: the first naturally tilting train is developed. Coaches automatically adapt to curves, reducing travel times... with no infrastructure investment required
- >> 1989: Talgo goes global, with the introduction of new services in Germany and later in the USA

- Late 1990s: Talgo develops a new generation very high-speed train, ready to compete face-to-face in top segment
- 2010: Talgo develops the world's first 100% interoperable train: variable-gauge; multi-voltage and hybrid
- >> **2015**: Talgo proceeds with an IPO to float 45% of the ordinary shares
- 2016: Talgo commercializes its first widebodyshell VHS train able to offer 3+2 seating under the UIC standard loading gauge



200

100













1942

1968

1973

1989

2000

2015

2017

Talgo

Company

1

2

3

4

5

7

8

Developing into a global player

UNITED STATES

Milwaukee

Established network of operations in key markets to service growing international operations





Tulpar Talgo

Countries where maintenance equipment have been sold

Countries where trains have been sold

- Offices and Maintenance Workshop
- Manufacturing Plants
- Commercial Offices

Talgo

1

3

RUSSIA

KAZAKHSTAN

UZBEKISTA

SAUDI

4

9

6

7

8

Developing into a global player

Doubled capacity in recent years to cover increasing manufacturing demand, able to produce 400-500 coaches per year

Owned facilities

Las Matas II

- >> Activity: Powerheads manufacture and assembly, repair activities and maintenance equipment manufacture
- >> Capacity: 6 powerheads / month 1 coache / day
- >> Workshop surface: 23,500 sqm

Rivabellosa

- >> Activity: Coaches and wheelsets, integral manufacturing and assembly
- >> Capacity: 2 coaches / day
- >> Last significant capex: 2014
- >> Workshop surface: 40,000 sqm

Tulpar Talgo

- >> Activity: Coaches manufacturing and assembly
- >> Capacity: 1 coach / 2.4 days
- >> Last significant capex: 2011
- >> Workshop surface: 31,000 sqm

Milwaukee

- >> Activity: Coaches assembling and heavy maintenance
- >> Workshop surface: 12,449 sqm



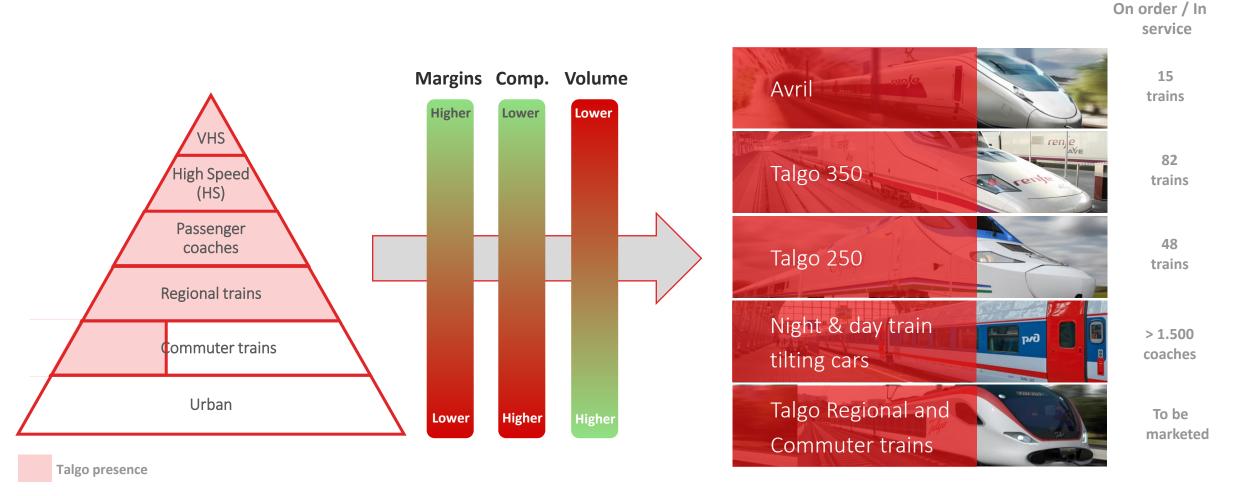


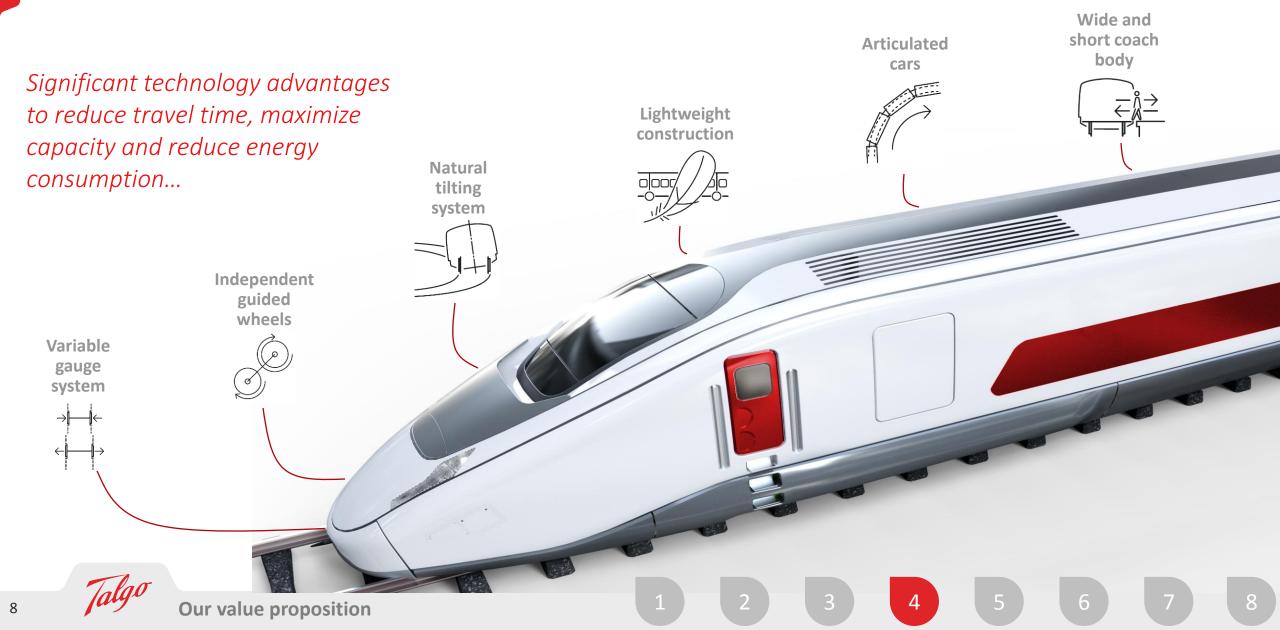
Partnerships

/ Concessions

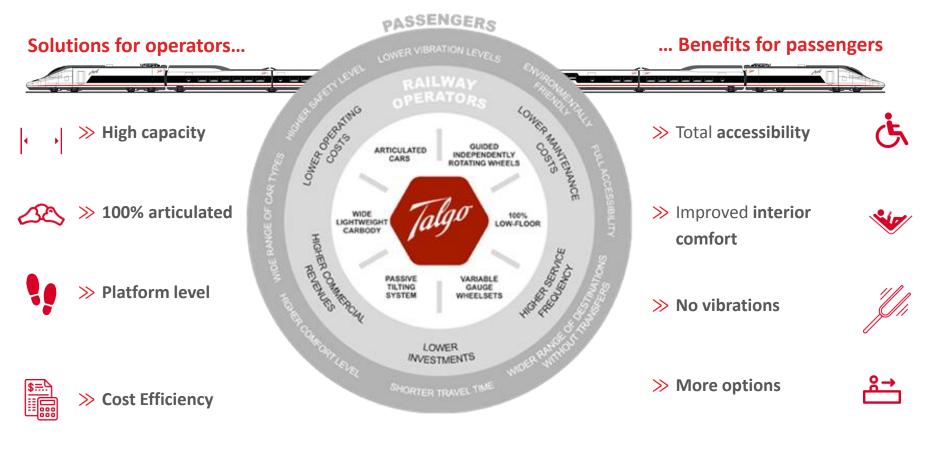
High quality solutions

Broad range of solutions formed by bespoke products servicing the most demanding segments of the industry



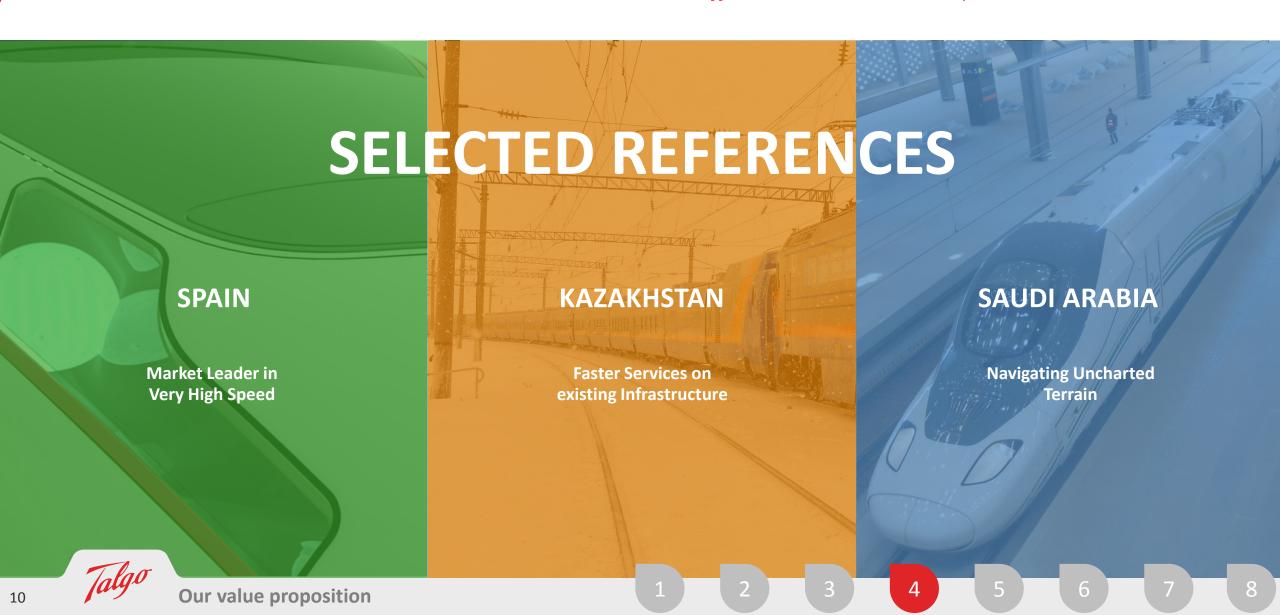


... positioning Talgo as unique solution for operators around the globe with positive social benefits





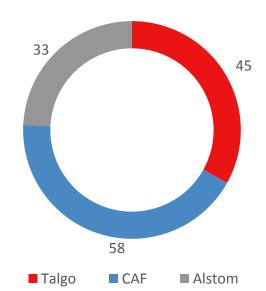
Applying proprietary technologies to meet different international requirements



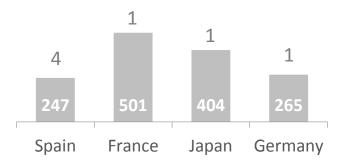
Spain - Market Leader in VHS

A thriving & competitive home market, at the forefront of a worldwide Very High-Speed revolution

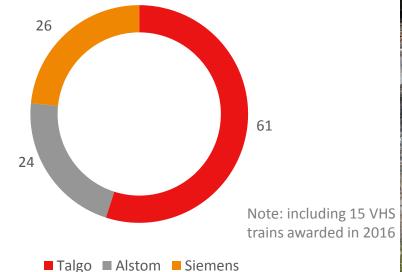
HS market (# of trains >250km/h)



Supplier nationalities & HS/VHS Fleet size



VHS market (# of trains >300km/h)







Kazakhstan - Faster services on existing infrastructure

Talgo technology reduced the journey time of long distance services without the need for *infrastructure investment*

- >> Talgo **technology has proved to be key** for the commercial success of the operator KTZ
- >> Our trains improve travel times and passenger comfort without investing in infrastructure
- >> Since 2001 Talgo has provided KTZ with more than 600 coaches

- >> The KTZ-Talgo overnight fleet operates 230 million kilometers... per year
- >> Talgo has developed a new generation of wide bodyshell coaches (3,200mm) homologated to operate at -40°C and certified in the founding member countries of the Eurasian Customs Union

Start date	2012		2013		2014		2015	
Route	Almaty- Petropavlovsk	Astaná- Aktobe	Astana- Atyrau	Almaty- Atyrau	Astana- Kyzylorda	Aktobe- Almaty	Astana- Leninogorsk	Almaty- Zachshita
Hours current fleet	30	27	34	50	33	42	31	24
Hours new Talgo fleet	18	15	19	30	18	27	13	11
Time saving (%)	(37.6)%	(47.1)%	(44.2)%	(39.6)%	(44.8)%	(35.0)%	(57.4)%	(54.3)%





Saudi Arabia: Navigating uncharted terrain

Talgo high-speed trains will become the world's first to operate on a desert climate region

- >> Talgo is the sole provider for the Haramain high speed rail link between Mecca and Medina: 36 VHS trains + 12-year maintenance
- >> Maximum line capacity thanks to minimal dwell times: 5 minute headway
- >> Maximum speed of 330 km/h
- >> High-performance air conditioning system + backup for >2 hours without overhead supply
- >> Thermal resistance certified up to 50°
- >> Special protection against desert dust and sand: military-grade filtering; wheel/track blowing system; critical equipment protection...





Operational excellence

Introduction

Talgo's business model reflects its adaptability, flexibility, efficiency and integration throughout the asset life to lead industry-leading performance

Talgo services encompass manufacturing, maintenance and provision of ancillary equipment leveraging deep industry expertise









Manufacturing activity

- >> Engineering and manufacturing of rolling stock
- >> System integrator, commissioning and the final delivery
- >> Specialising in the aluminium welding and the manufacture of safety parts

Light maintenance activity

- >> Maintenance of all trains manufactured by Talgo and some third-party trains
- >> Most low value-add maintenance services are subcontracted
- >> Recurring business with contract lengths of c.5-20 years, renewed upon expiry

Heavy maintenance / overhaul

- >> New segment for third party trains gaining momentum
- First project awarded in 2016 (LACMTA)
- >> Leveraging manufacturing track-record of delivering high quality service

Maintenance equipment

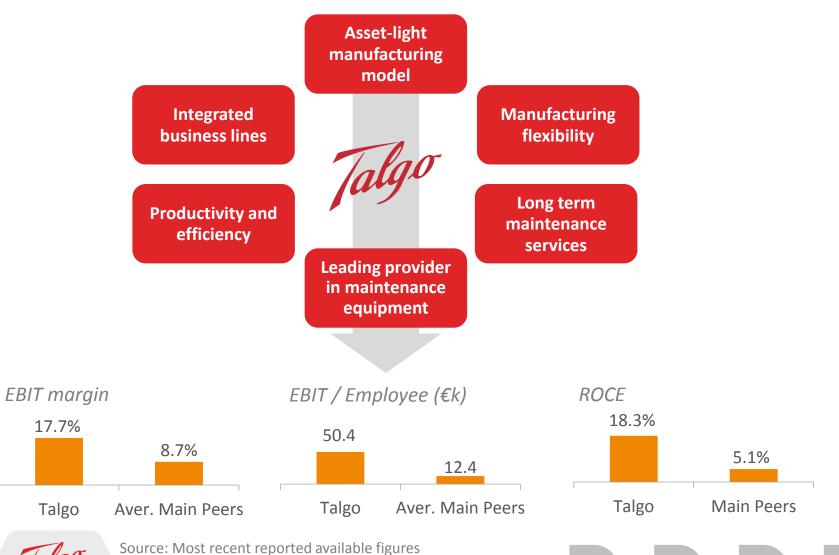
- >> Leading manufacturer of train maintenance equipment
- >> Increases Talgo's brand awareness and provide access into new markets
- >> Proprietary technology products sold to train operators worldwide

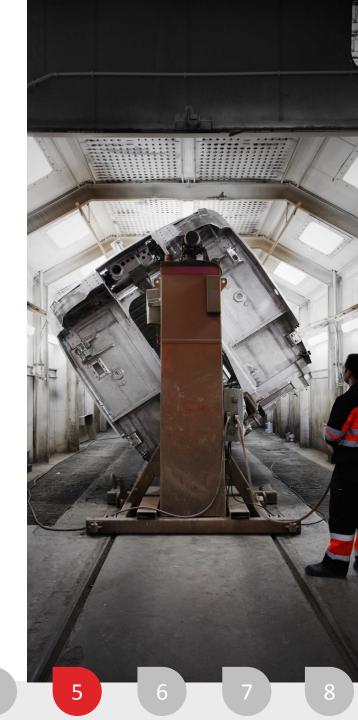


Operational excellence

Our value proposition

Business model





Manufacturing flexibility

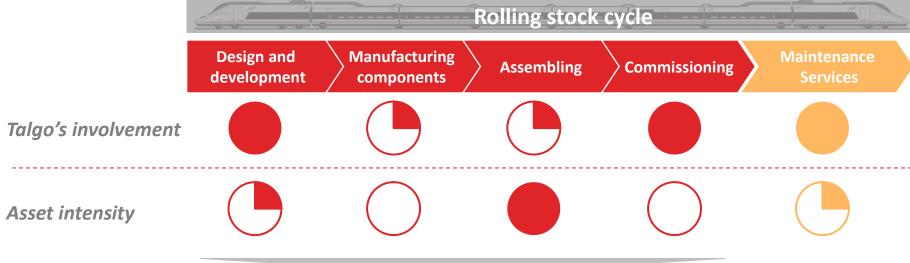
Long term maintenance services

Leading provider in maintenance equipment

Productivity and efficiency

Integrated business lines

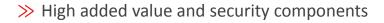
Lean asset-light business model manufacturing only critical and high added value components in-house



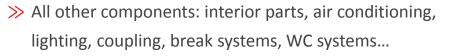
























Manufacturing flexibility

Long term maintenance services

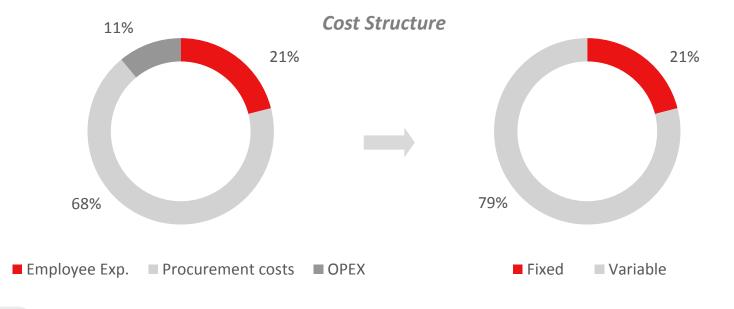
Leading provider in maintenance equipment

Productivity and efficiency

Integrated business lines

Large element of cost structure outsourced providing resilience to variations in activity levels

- >> Ability to adapt to volume requirements
- >> Maintain ability to increase capacity utilisation through additional workforce shifts and additional working days
- >> Only 21% of costs are fixed





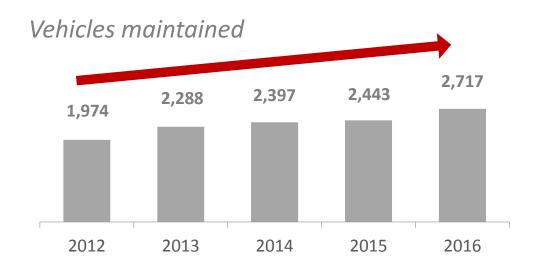


Heavy

maintenance

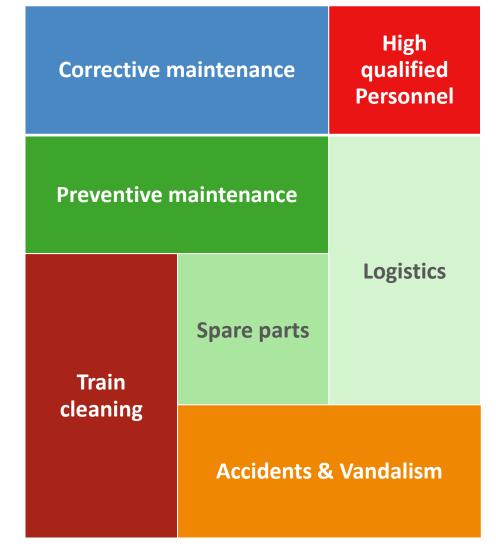
100% Talgo fleet maintained since 1952 with asset-light maintenance model: services operated at customer premises

Our value proposition



Light

maintenance





Manufacturing flexibility

Long term maintenance services

Leading provider in maintenance equipment

Productivity and efficiency

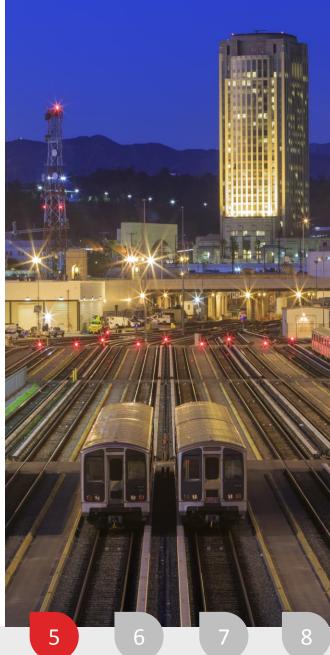
Integrated business lines

Light maintenance

Heavy maintenance

Talgo emerges as a reliable partner to perform renewal, overhaul and refurbishment programs

- >> For 65 years Talgo has been the sole maintainer of the rolling stock it has manufactured
- >> This lengthy experience has allowed us to gain an invaluable expertise and to export the knowledge to new areas and segments
- >> We are already undertaking our first project to overhaul a metropolitan heavy rail fleet in Los Angeles (USA): up to 74 vehicles
- >> Overhaul and refurbishment services by Talgo will gain relevance in the future as part of our ongoing diversification strategy



Manufacturing flexibility

Long term maintenance services

Leading provider in maintenance equipment

Productivity and efficiency

Integrated business lines

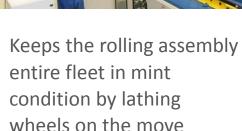
Equipment sold in 44 countries and global market share reaching 15-20%, Talgo is a company of reference in the sector

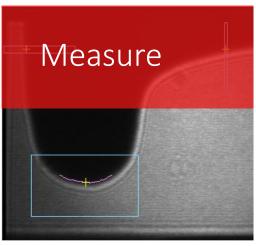
Small % of Group revenues but further opportunity for return on industry expertise

6% of Group revenue









Checks the geometry and the integrity of the wheels



Empower maintenance operations with shunting devices designed to move vehicles easily and cheaply



Manufacturing flexibility

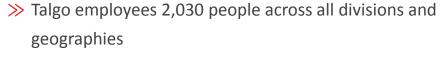
Long term maintenance services

Leading provider in maintenance equipment

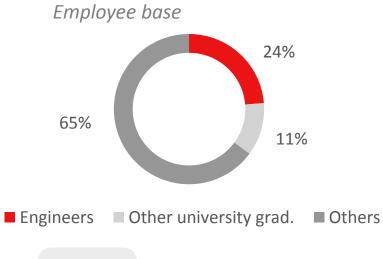
Productivity and efficiency

Integrated business lines

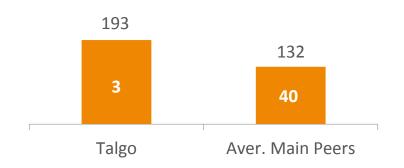
Active talent management which gives a highly productive workforce and greater profitability



- 25% are engineers which reflects the Group's design and technical profile
- >> Our production sites offer good economies of scale and scope for further efficiency improvements



Revenues / Production sites (€m)





Manufacturing flexibility

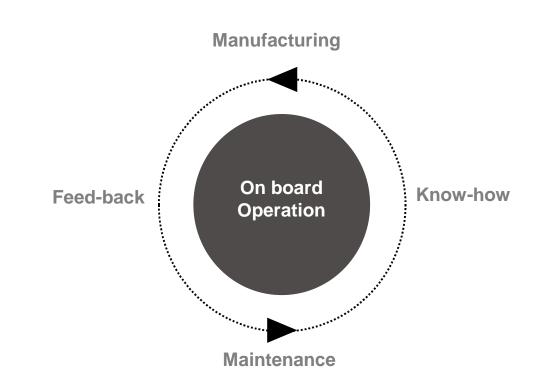
Long term maintenance services

Leading provider in maintenance equipment

Productivity and efficiency

Integrated business lines

Over 60 years of expertise in the whole life cycle of rolling stock, applied to continuous improvement in quality and reliability and therefore value proposition



Manufacturing

2-3 years

Maintenance services

30-40 years

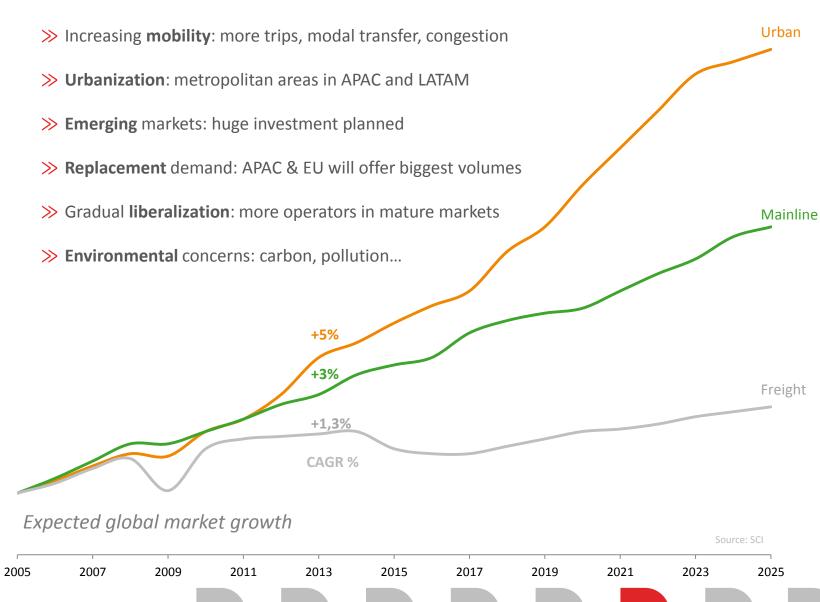
Rolling stock life cycle





Market trends & Growth drivers

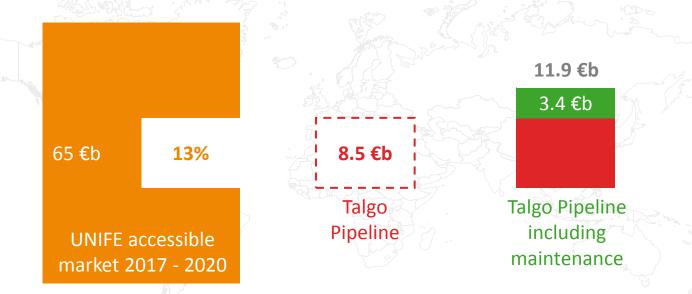
Talgo aims for a larger market share of an increasingly attractive, growing market



Talgo

Talgo's accessible market overview

Opportunities identified over the next four years worth almost 12 €b



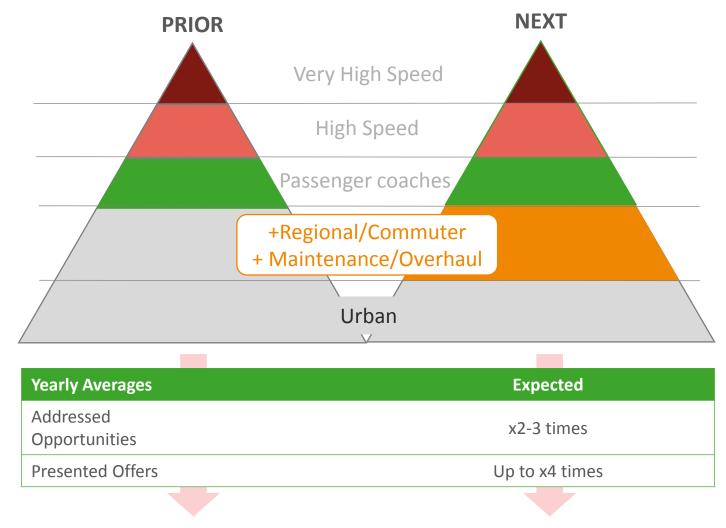




Talgo portfolio moving to steadier flow of opportunities

Objectives based on increasing pipeline across a enlarged target market whilst maintaining selectivity to ensure high quality backlog

Reaching the customer



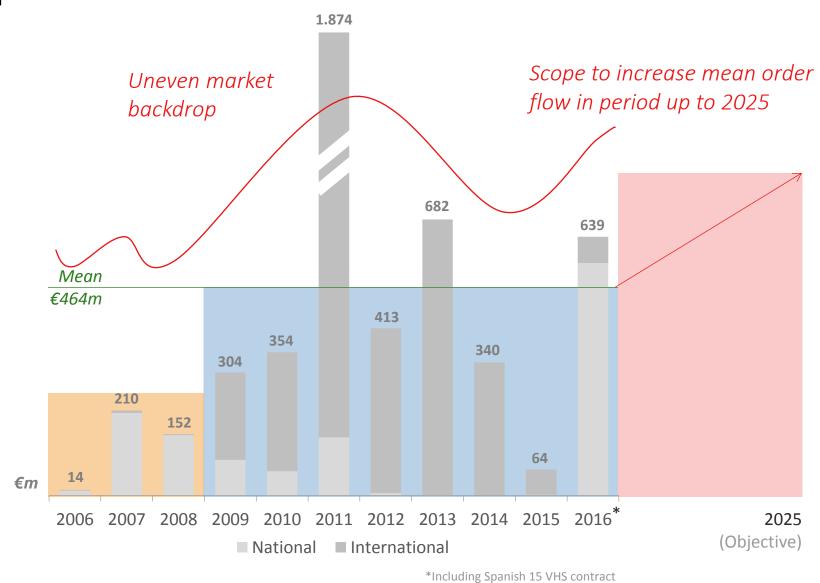
- >> Portfolio focused on top segments
- >> Focused commercial activity
- >> High hit ratio over market allowance

- >> Enlarged market, enlarged portfolio
- >> Strengthened commercial activity
- → More wins & growth → more volume driven



Commercial approach Order flow profile

Profile evolution: from a highly selective commercial activity and a highlyspecialized portfolio, to a wider range, more stable and consistent approach



6

Pursuing sales opportunities

Profitability, cash flow profile and legal framework are considered together with technical capabilities when approaching new opportunities

>> Proactive rather than reactive: anticipated commercial action focused on A-type customers, modulating the necessity at its earliest stage

>> Analysis to transfer leads into managed pipeline opportunities using probability / risk criteria-based filtering process

Selective approach on bilateral negotiations

>> Competitiveness focus on tenders, via optimal product configuration according to customer requirements, accurate benchmark and efficient costing

>> Final award, manufacturing, product delivery and warranty

>> Importance of the maintenance activity in the overall process

>> Close monitoring through the complete value life cycle

>> Consolidate and strengthen the customer intimacy



A renewed organization for a renewed strategy



New approach demands organizational change: the Commercial Directorate is undergoing a transformation from its former geographically-based deployment to a **Key Account commercial network, adapted to different cultural markets and fully customer-focused**. As a result, Talgo's commercial branch will be invigorated

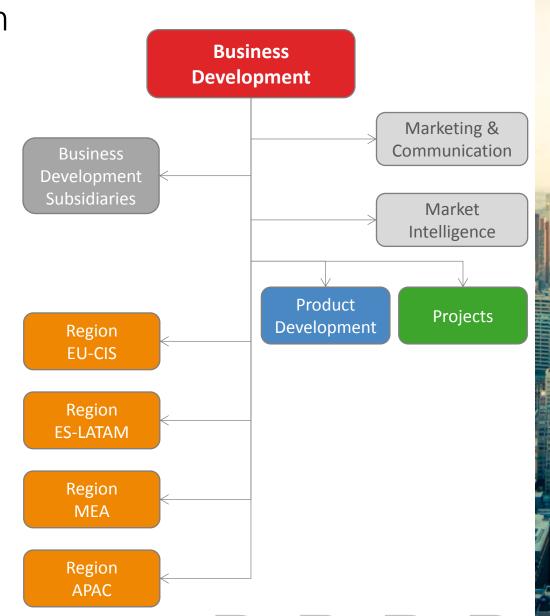


>> The new Talgo offering will be based upon an improved processes flow: products/services will be designed upon a standardized platform portfolio, which will provide a **complete range of customization options designed to fit every demand**, and will boost **efficiency in time to market** and transfer to Projects execution.

A renewed organization for a renewed strategy

NEW ORGANIZATIONAL CHART:

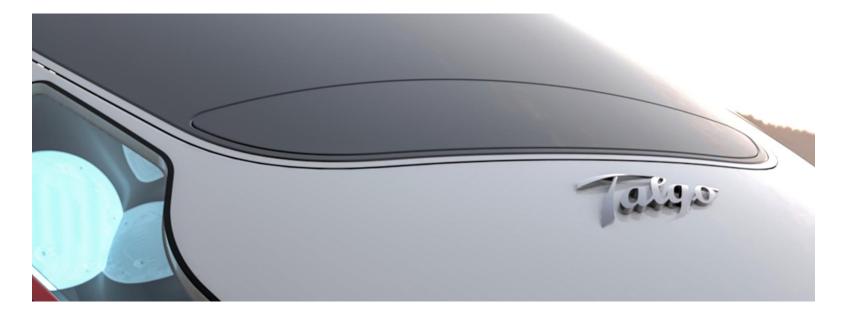
- . CUSTOMER FOCUSED
- . DOUBLE FOLDED TASK FORCE
- . SOLID PRODUCT BASE SUPPORTED





Setting the foundations to grow while ensuring business stability

With an wider market base and a reinforced and renewed commercial structure Talgo expects to capture increased business volume Recurrence of the order intake profile will be significantly improved when compared with the latest years, ensuring greater business stability



1

2

3

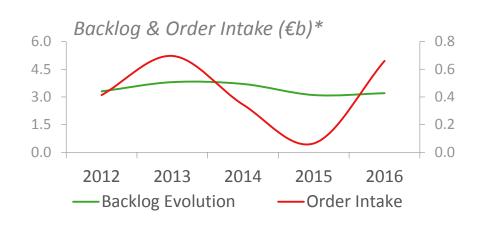
4

5

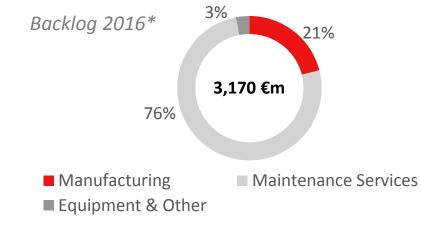
6

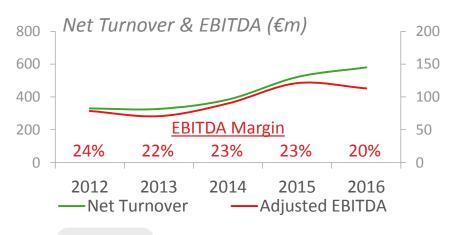
Financial Review

Talgo's best-in-class financial performance driven by continuous efficiency initiatives to enhance profitability ratios

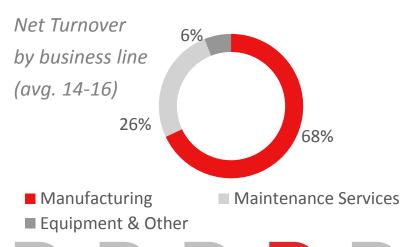


- >> Over 600 €m of manufacturing backlog
- 92 HS trains and over 1,500 coaches make up a young and growing maintained fleet
- >> Uneven order intake driven by product portfolio and selective commercial approach





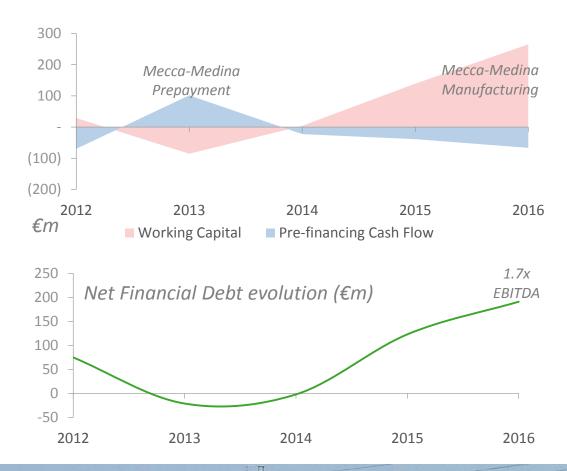
- Strong revenue recognition in recent years driven by strong manufacturing activity
- >> 82% of revenues from international markets
- EBITDA margins continue to reflect efficient management oriented to client delivery and shareholders return



Talgo

* Including Spanish 15 VHS contract pending for signature

Financial Review



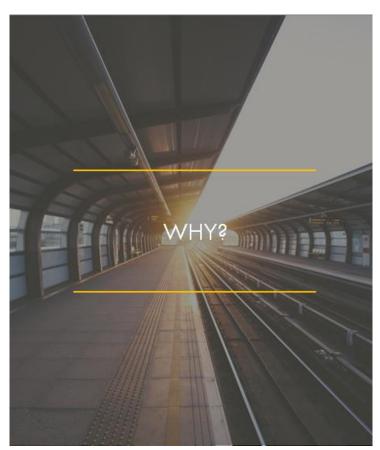
Cash flow recovery expected in short to medium term as final testing and delivery stages are met

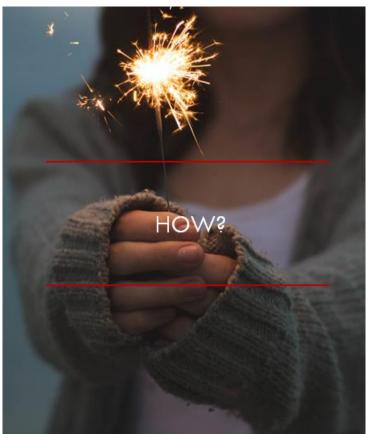
- Current company working capital driven by status of main manufacturing contracts
- >> Cash-cycle expected to change in short term returning all cash invested in the manufacturing projects

- >> Talgo deeply analyses both cash flow profile and legal framework of the manufacturing contracts, assuming credit exposure only in those contracts where the company is well protected
- During 2016 Talgo took advantage of debt markets to issue long term debt with bullet maturities and attractive interest rates, reducing the short term exposure and improving financial profile



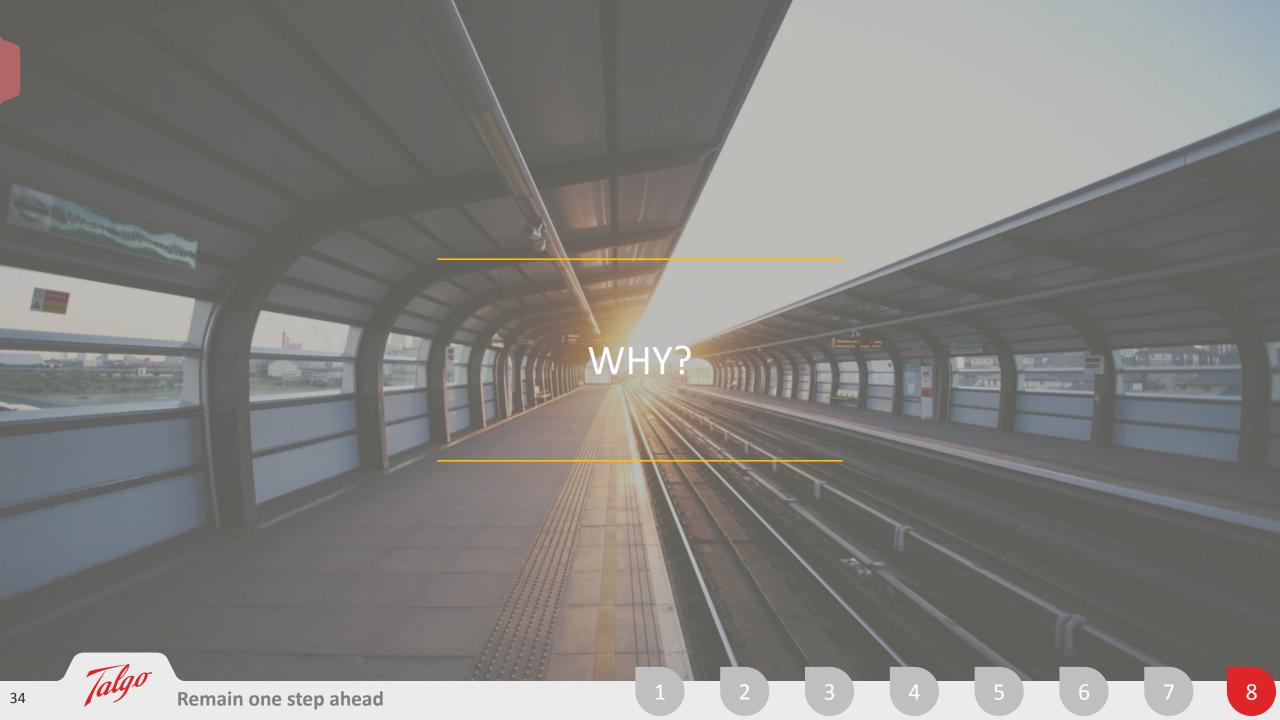
Committed with Innovation











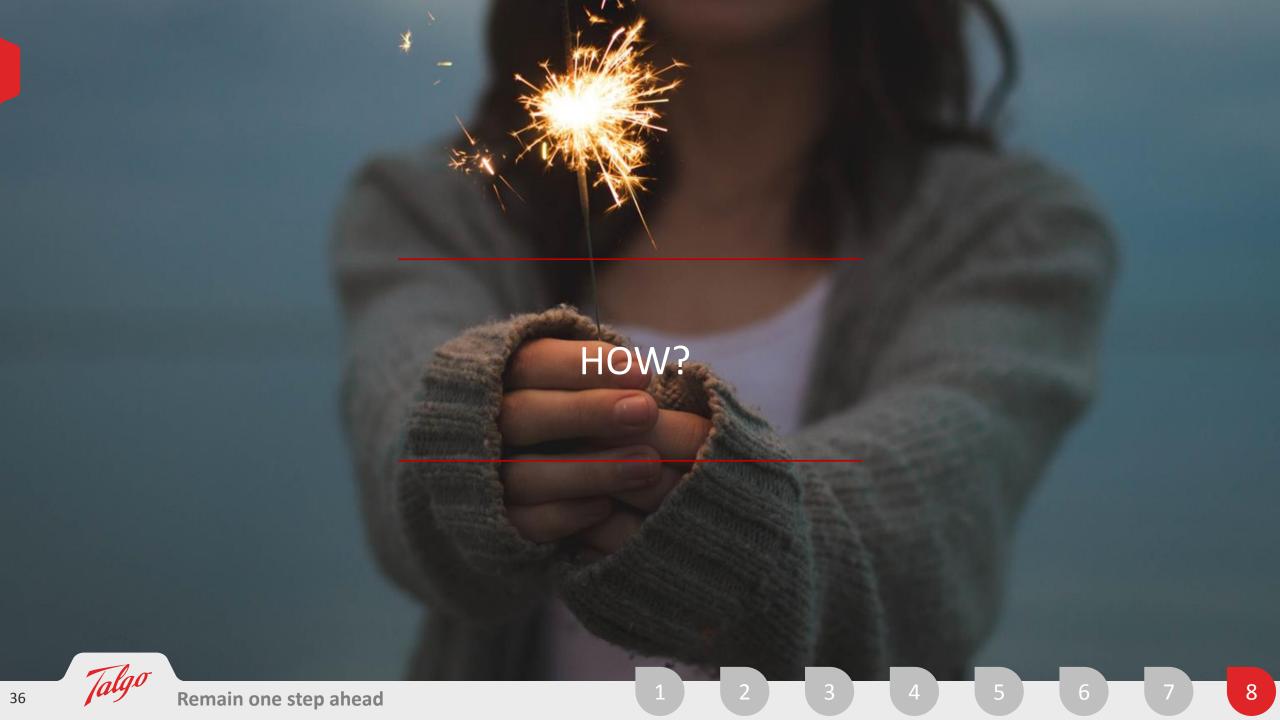


Why does Talgo innovate?

- + Talgo was born of innovation and grows through innovation.
- Innovation is what differentiates us.
- + We adapt to the evolving needs of the clients.
- + This is the only way to break into a mature market,
- + reduce cost and increase competitiveness.

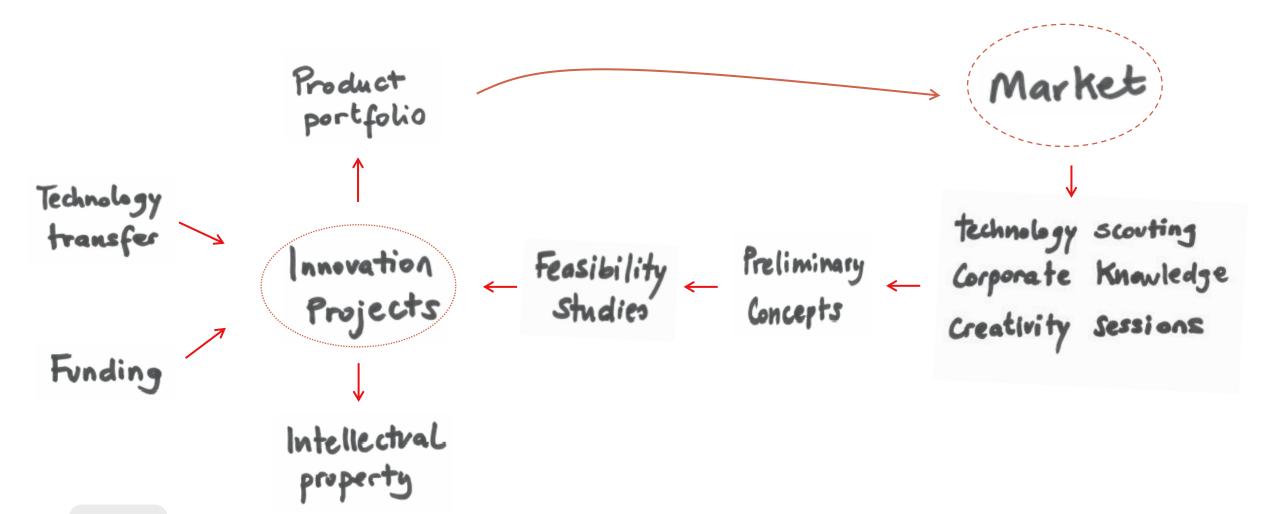








Innovation Flow





Technology scouting



UNIVERSE OF TECHNOLOGIES

Exploration to Identify Selection to monitoring Analysis & Evaluation

Main goals:

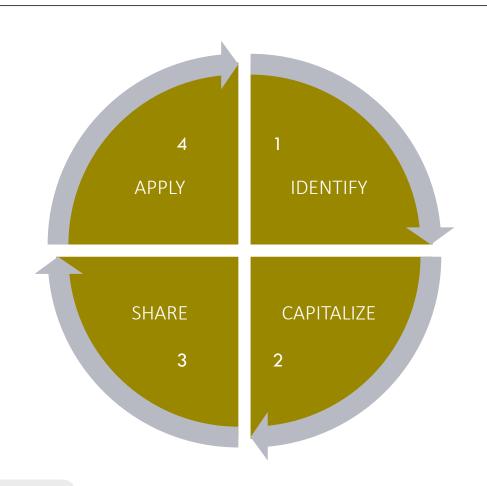
To find the most interesting technologies to be implemented in our trains

To have the best possible information for deciding: Should we buy? or Should we develop?





Knowledge Management



Main goals:

- To guarantee the conditions for the creation, exchange and use of knowledge (internal and external)
- To increase intellectual capital

To maintain and cultivate the knowledge required to meet current and future challenges.







Innovation Funding

R&D Grants

10,7 €m

Equivalent Non-refundable grants 2009-2016

R&D Tax Deductions

18,6 €m

Total deduction (R&D + Innovation) 2009-2015*

European Investment Bank

50 €m

Very low interest <u>loan</u> 2012-2015

29,3M€ in <u>non-refundable</u> subsidies since the creation of the Innovation Department in 2009

* 2016 figure estimated pending to be confirmed





Innovation Funding

The main options for subsidies are:







(1) Proportion of budget in non-refundable subsidies

Tax deductions:

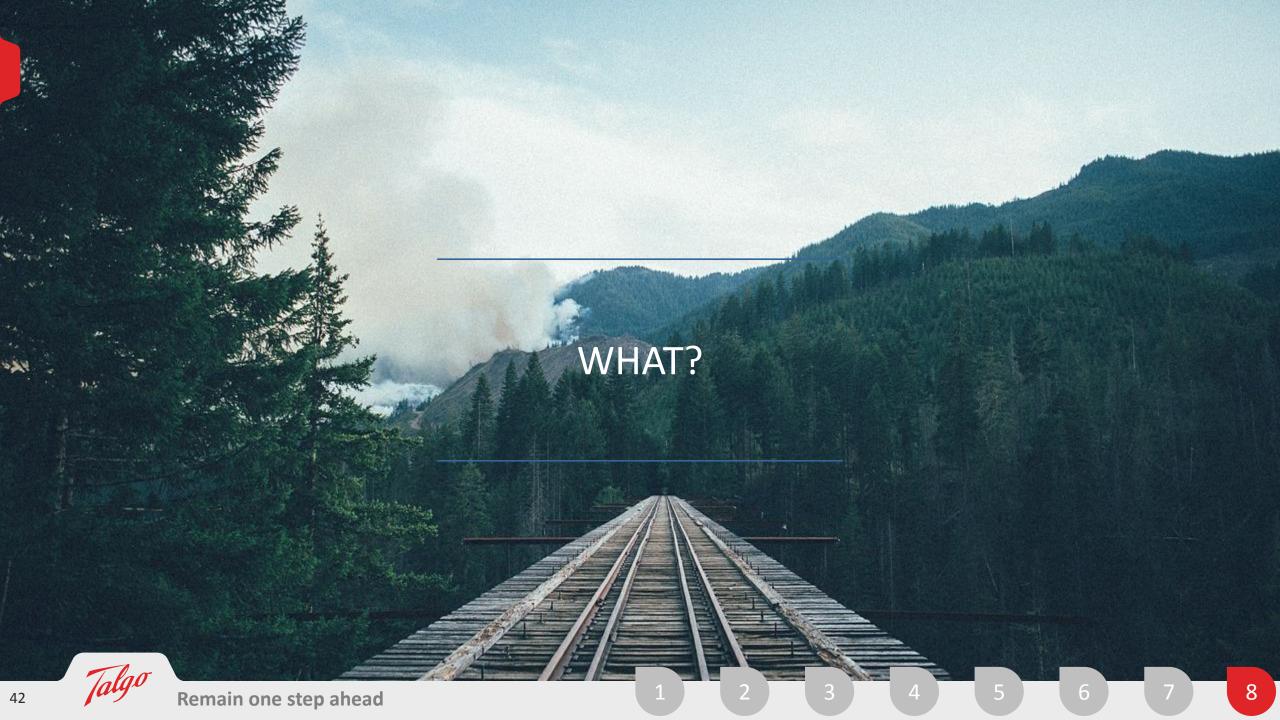




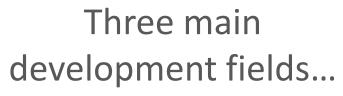
$$\frac{Investment\ in\ Innovation}{Turnover} = 3,48\%$$

(2) Average value 2009-2015









High Speed

Commuter & Regional trains

Passenger coaches





Very High Speed (VHS)





AVRIL with traction in power heads



AVRIL with distributed traction



New ad-hoc VHS concepts for special markets (UK, Saudi Arabia...)

High Speed / Intercity

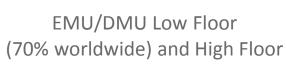


Multifunctional train





Commuter and regional trains















Passenger coaches

Opportunity: To adapt the classical Talgo technology to the emergent countries



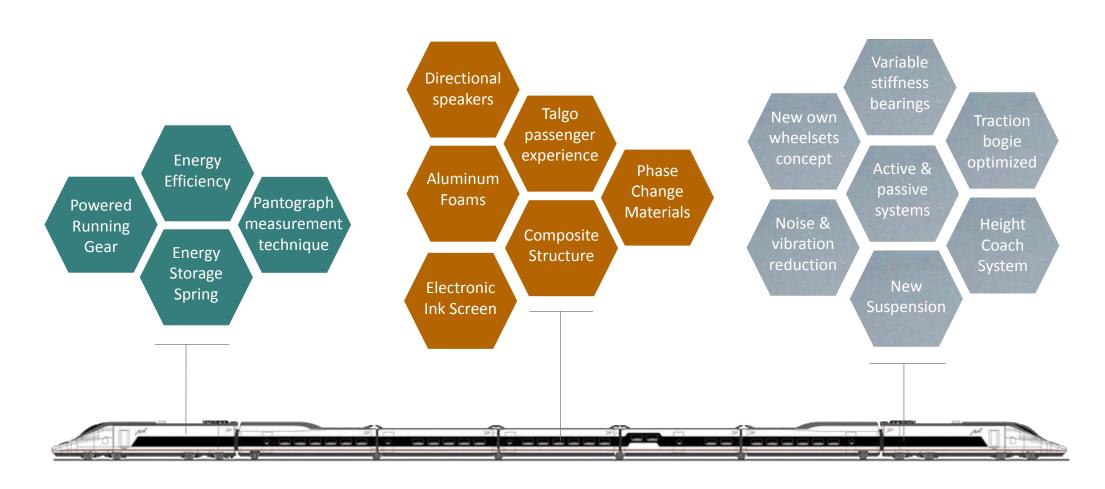


India Tests

Operations in Kazakhstan



Fast Track to Innovation



Projects to reinforce Talgo's core technologies and to improve our current and future products





Strategic focus and actions

Efficient delivery of current contract book

- >> On time/on budget delivery of backlog
- >> Ongoing improvement in manufacturing efficiency

Further development of existing geographies and entry into new markets

- >>> Commercial structure through a key account/customised products focus
- >> Exploit increasing numbers of tenders expected in next years but maintaining selective approach with limited contractual risk
 - European opportunities in VHS
 - APAC/MENA opportunities in Passenger Coaches
 - Entering Commuter/Regional in Europe/Latam

Further develop strategic maintenance business

- >>> Develop heavy maintenance offer with 3rd party customers after LACTMA win
- >>> Focus on high value-add in lighter maintenance and extend contracts
- >> Continue to develop range of market-leading maintenance equipment

New product development and penetration

- >> Current innovation projects remain selective, focus on higher value-add areas where Talgo has competitive advantage
- >> Further markets/enhancements for 'AVRIL'
- Regional/Commuter train trials adapt Talgo technology to new markets/applications







Established track-record with management fully committed to the sustainable growth of the business

Increasing cash generation in short to medium term

Sustainable profitability, industry-leading margins and return on capital

Focus on Innovation to continue developing differentiated technologies

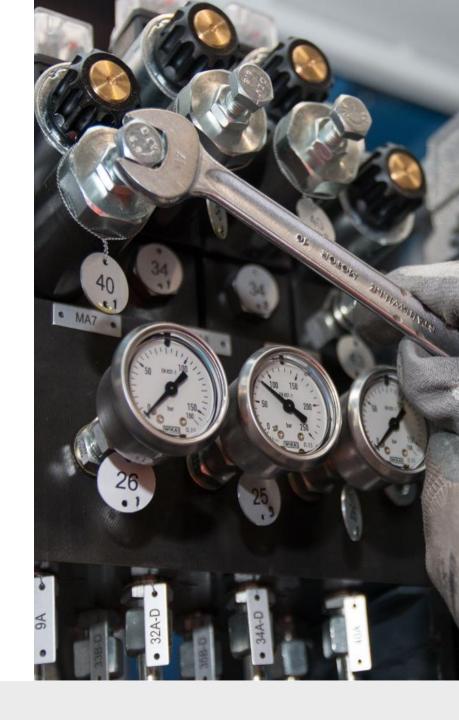


Resilient business model based on asset-light operations

Maintenance activity to provide stability on a long term basis

Commercial strengthening in new geographies and with new products to accelerate growth

Growth & Sustainability





Thank you!



