

IN2TRACK contextualization in Shift2Rail

IN2TRACK Final Conference
Paris 22 January 2018

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Programme Manager

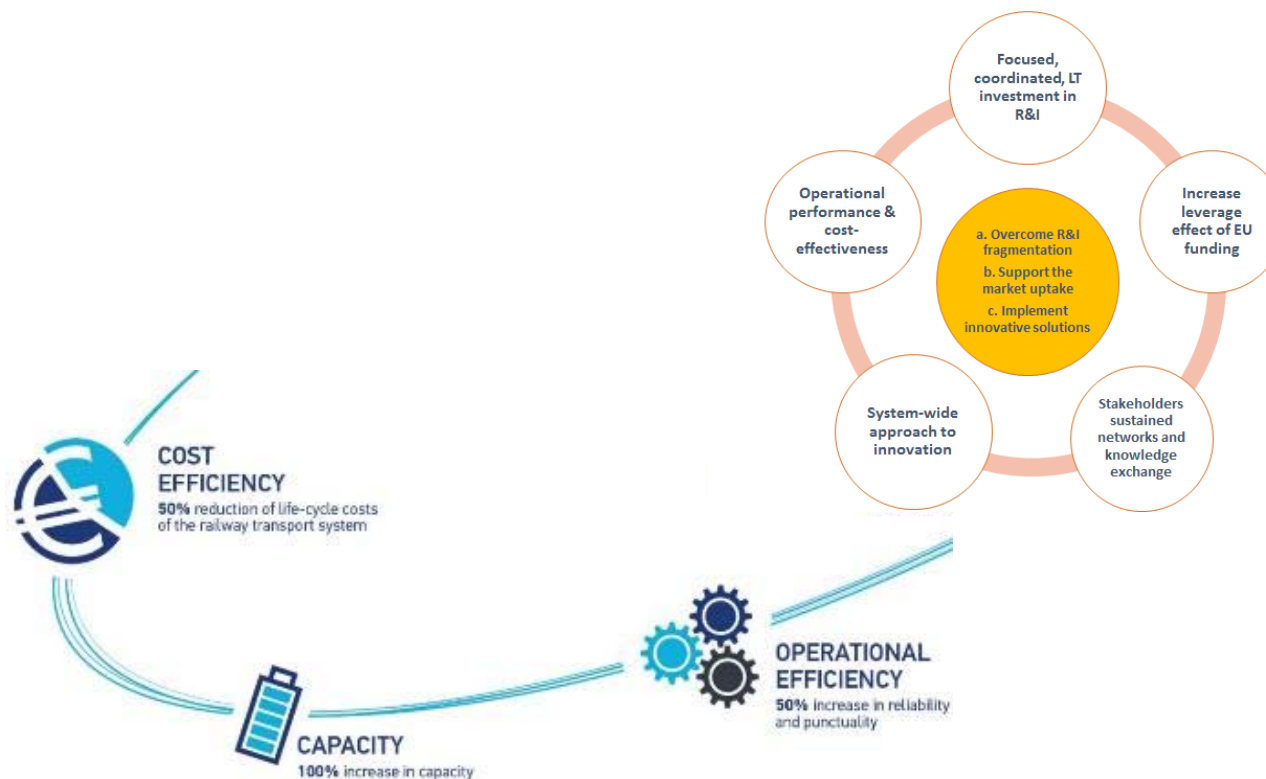
S2R Joint Undertaking

@Shift2Rail_JU
#Horizon2020



what is Shift2Rail

- ✓ A **Public-Private Partnership**, a platform for the rail sector as a whole, to work together to drive innovation in the years to come until 2024
- ✓ S2R has been tasked by EU **“to establish and develop a strategic Master Plan”**, which encompasses rail R&I until 2030 - *Council Regulation (EU) No 642/2014 of 16 June 2014 (S2R Regulation)*





28
MEMBERS



343
PARTICIPANTS INVOLVED
FROM **27** COUNTRIES

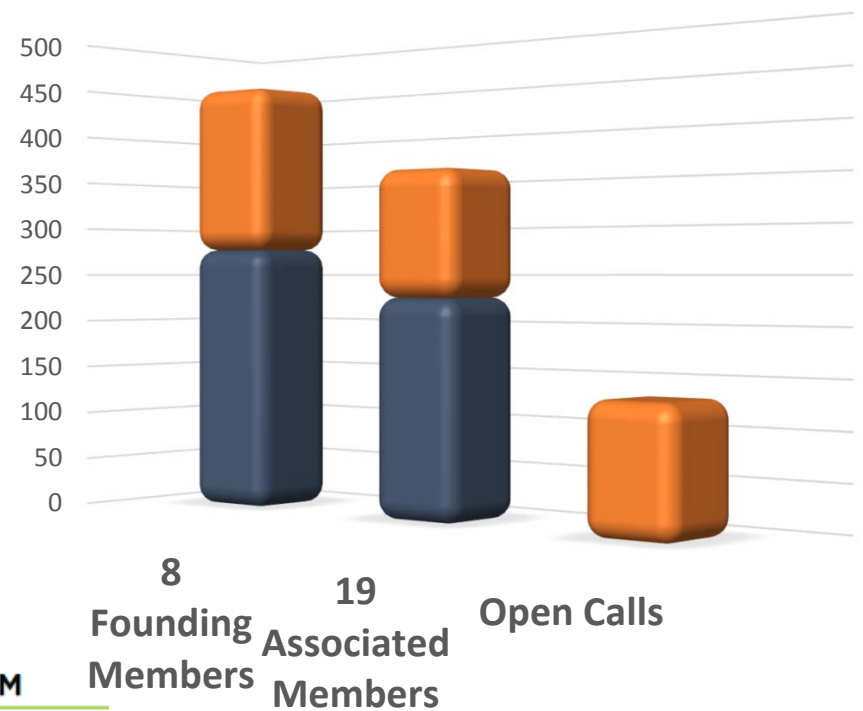


92
SMEs



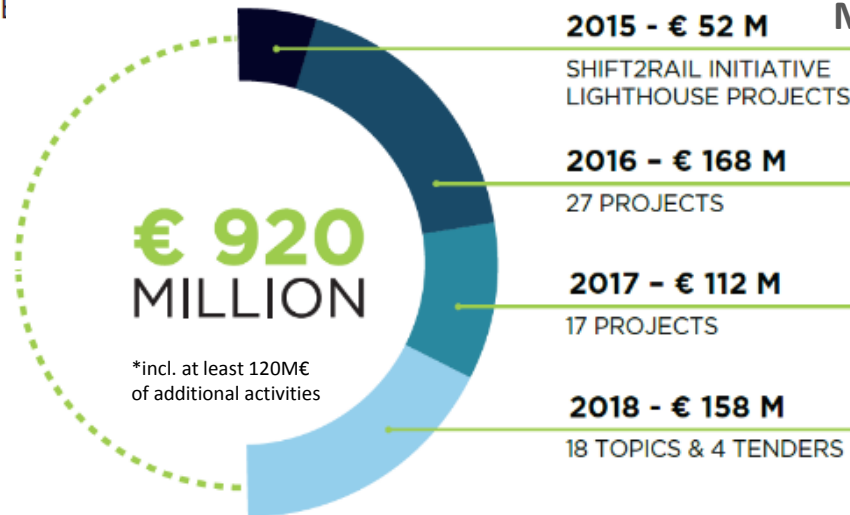
84
RESEARCH CENTRES
AND UNIVERSITIES

AN OPEN and ACTIVE ORGANISATION



Values as at 1 Sept 2016 in Million EUR

¹Data extracted from CORDA database in April, 2018



S2R Key Objectives & Vision

S2R OBJECTIVES



INCREASE RELIABILITY & PUNCTUALITY **BY 50%**



DOUBLE RAILWAY CAPACITY



HALVE LIFE-CYCLE COSTS OF RAILWAY TRANSPORTS



CONTRIBUTE TO **REDUCTION OF NEGATIVE EXTERNALITIES**, SUCH AS NOISE, VIBRATIONS, EMISSIONS & OTHER ENVIRONMENTAL IMPACTS



CONTRIBUTE TO THE **ACHIEVEMENT OF THE SINGLE EUROPEAN RAILWAY AREA**

To **deliver** through **research and innovation** the **capabilities** to bring about the most **sustainable, cost-efficient, high-performing, time driven, digital** and **competitive, customer-driven** transport **mode** for Europe



A Shift2Rail holistic approach...

WHAT & WHY

user
vision

easy, personalised
and integrated mobility

strategic goals

clustered around issues
of carbon, cost, customer
and capacity

market needs

market segments
and needs e.g. SPDs

HOW

innovation capabilities

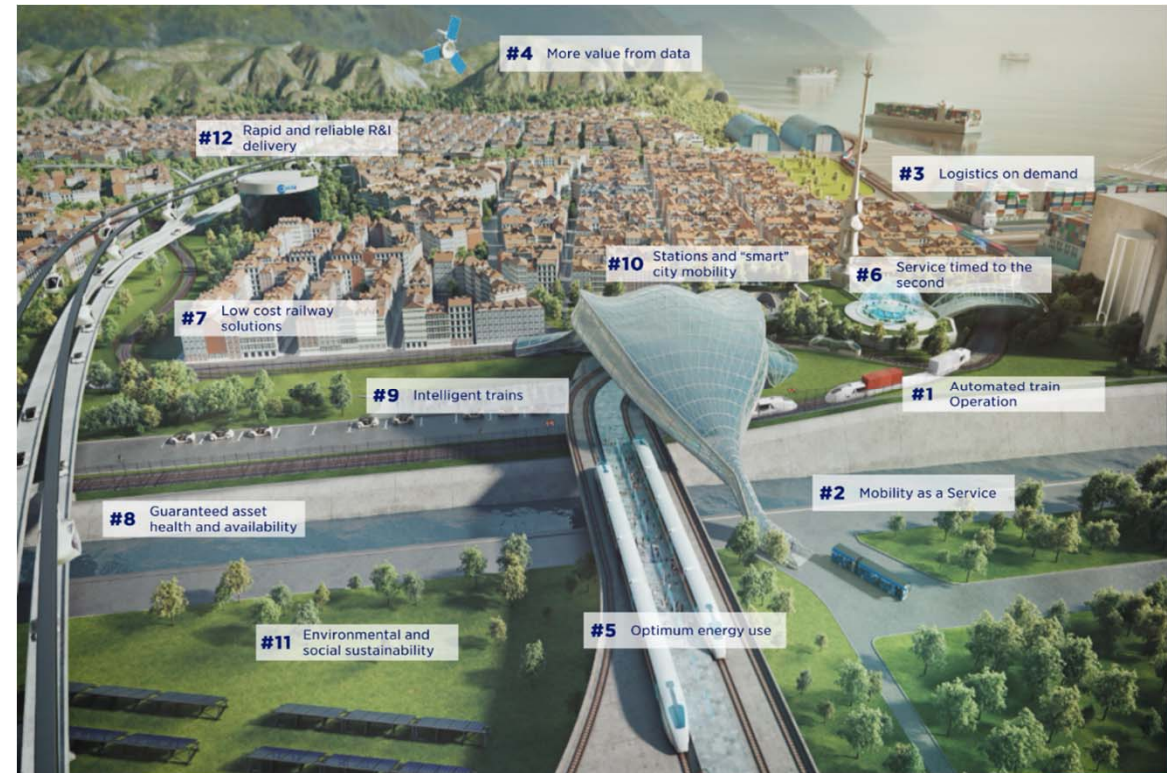
linking the goals with
the specific R&I programmes

investment programmes in new capabilities

portfolio of significant
programmes e.g. Shift2Rail

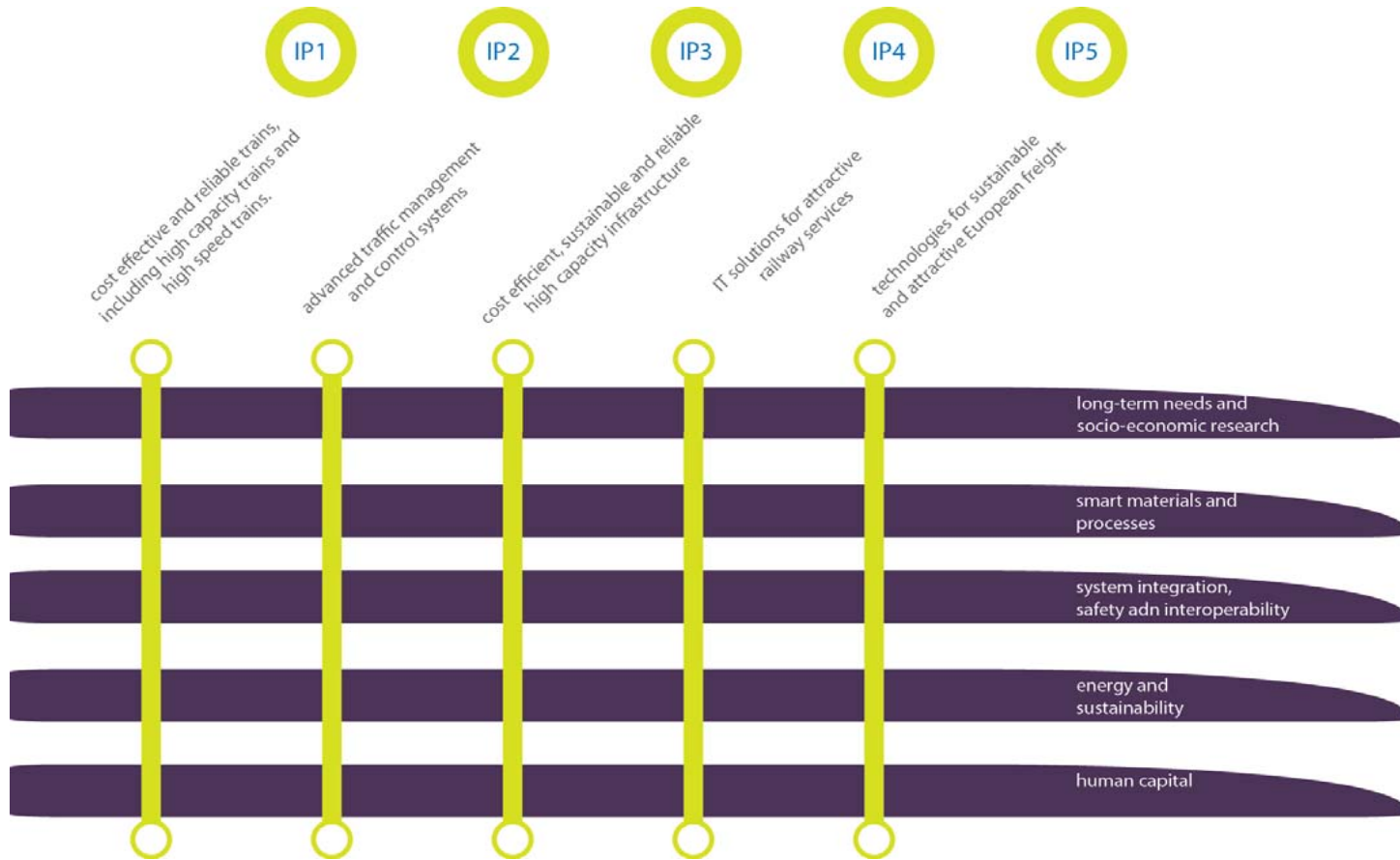
investment projects

Shift2Rail projects,
Solutions catalogue

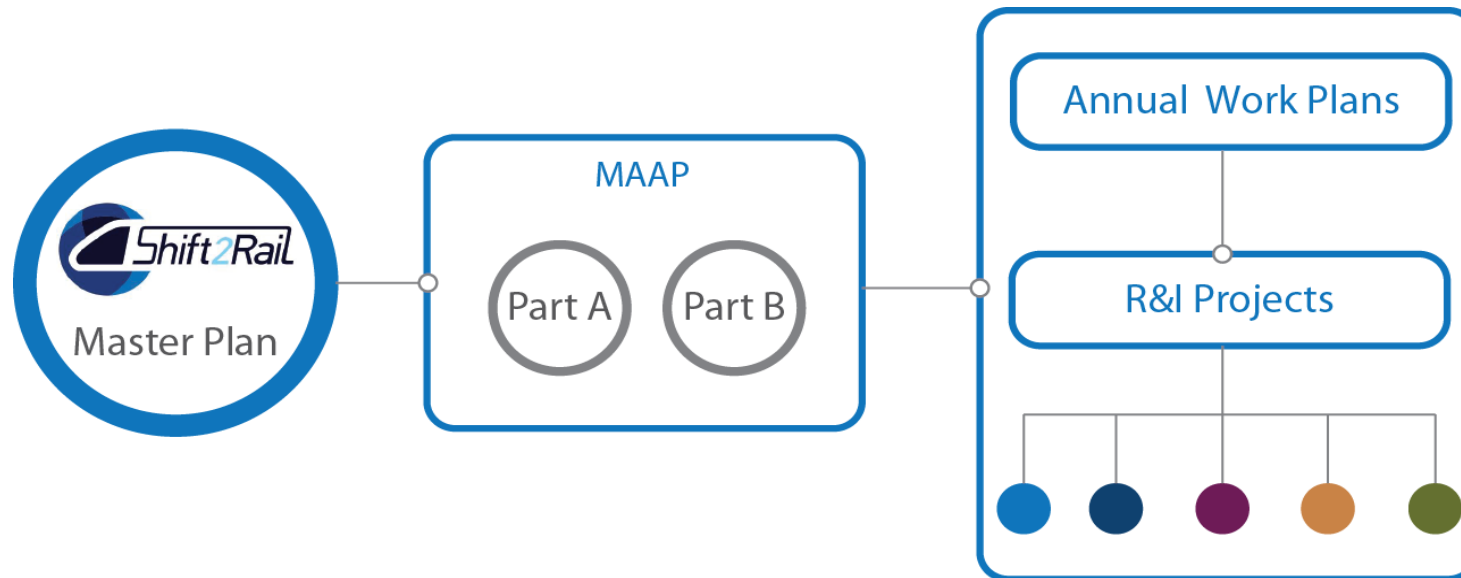


R&I Programmes for Innovation Capabilities

S2R PROGRAMME:
INTEGRATED
CONSISTENT
DELIVERY ORIENTED

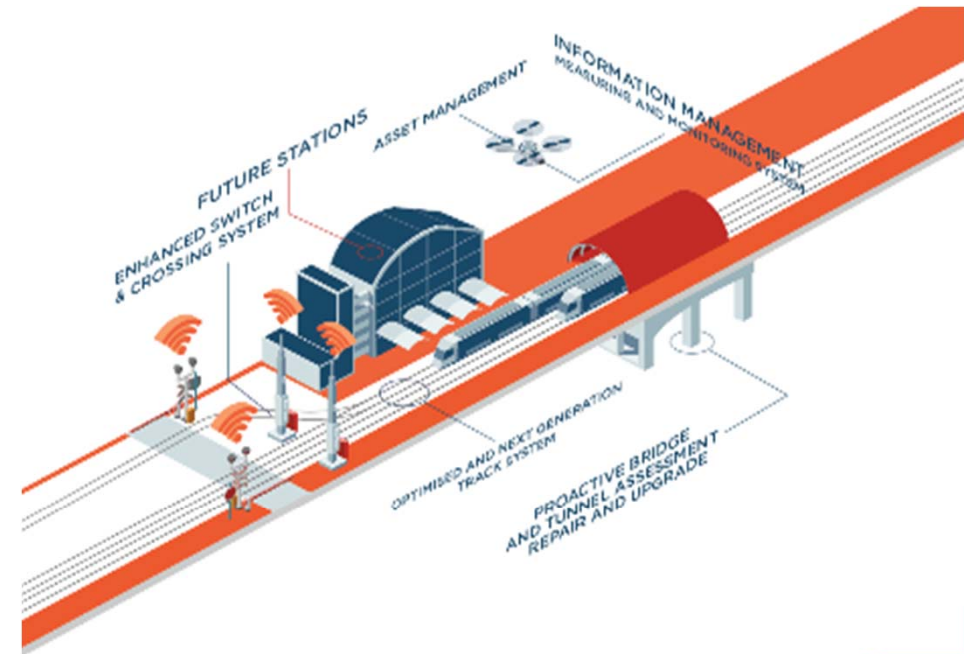
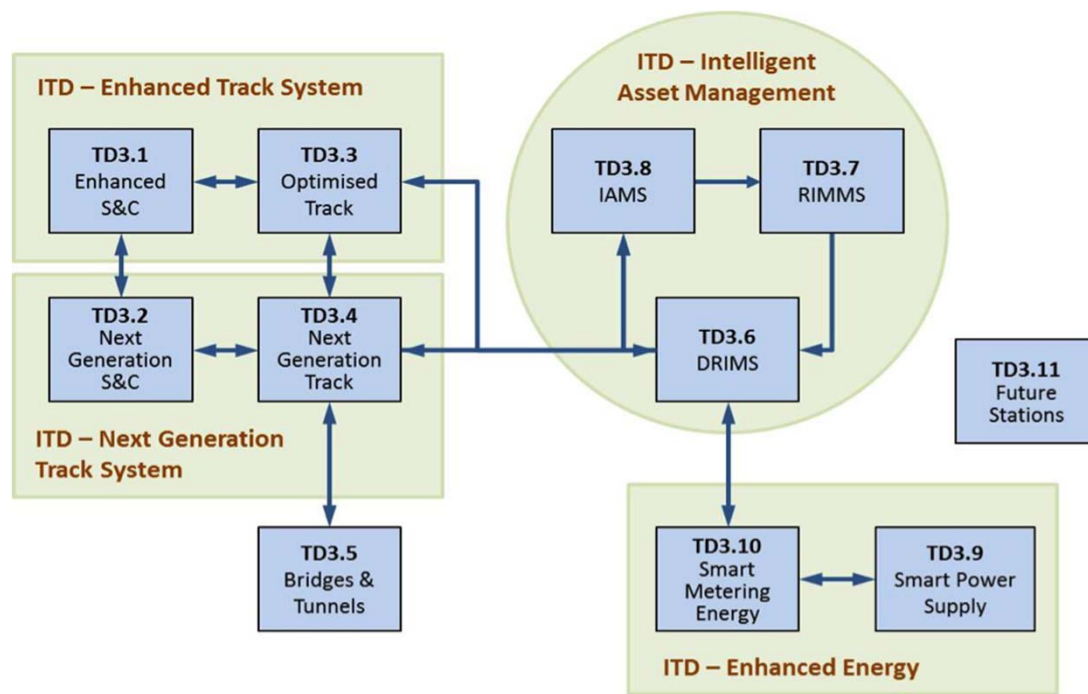


The S2R Programme implementation



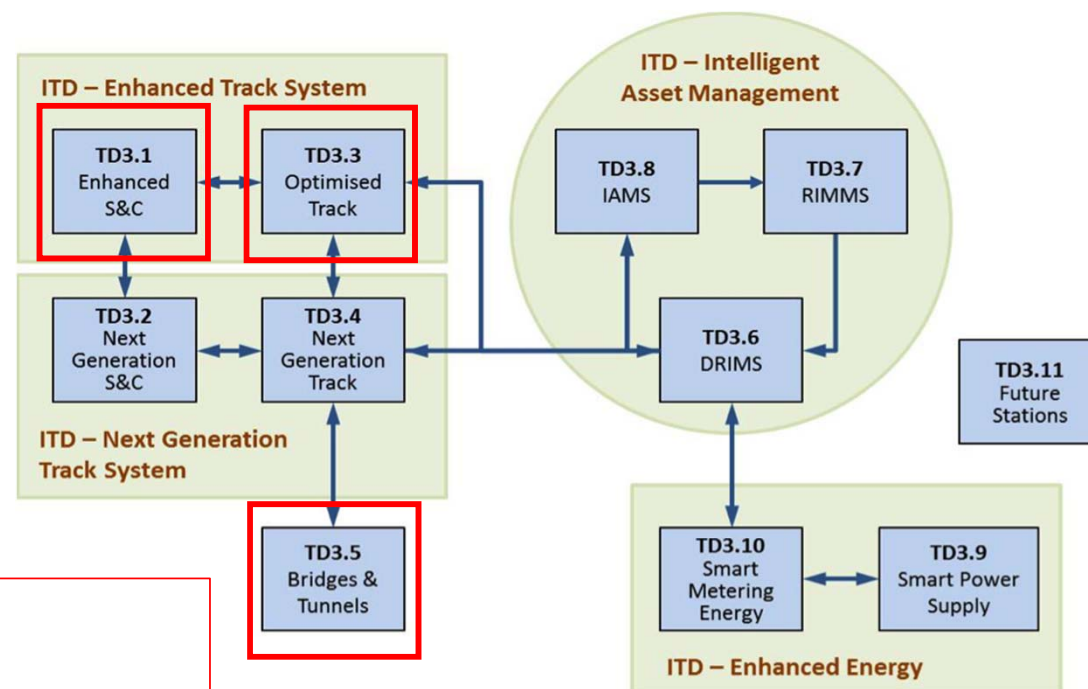
- **Shift2Rail Master Plan** defines the strategic R&I Priorities and the Vision for the Railway sector.
- **Shift2Rail Multi-Annual Action Plan (MAAP)** provides the Innovation Capabilities, and defines the concrete R&I activities, milestones & deliverables
- **Annual Work Plans** are result-oriented, and include Call for Proposals and Tenders
- **R&I Projects** are awarded grants to implement parts of S2R MAAP

Innovation Programme 3: Cost Efficient and Reliable High Capacity Infrastructure



IAMS = Intelligent Asset Management Solutions
 RIMMS = Railway Integrated Measuring and Monitoring System
 DRIMS = Dynamic Railway Information Management System

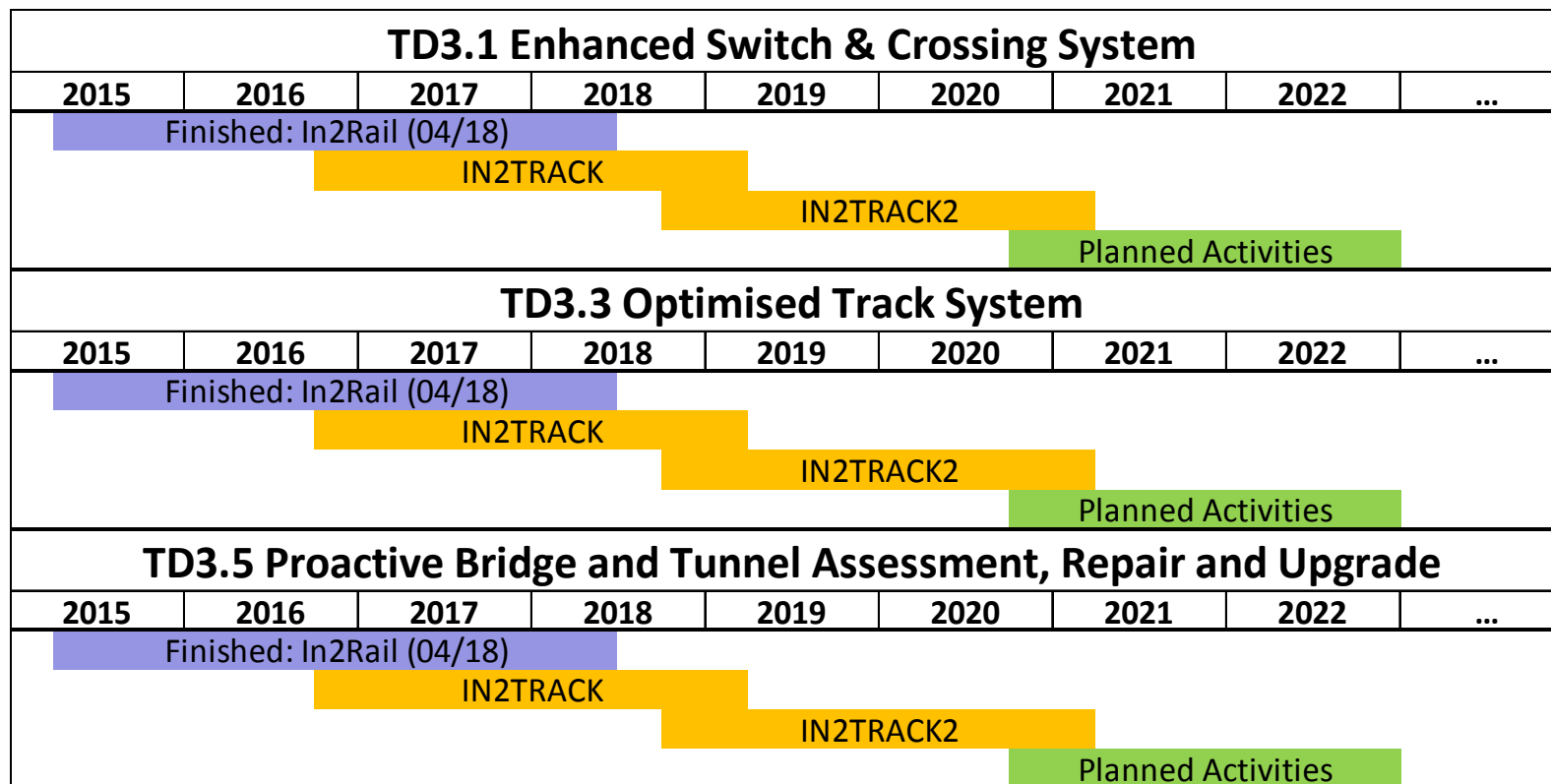
IN2TRACK contextualisation in Shift2Rail programme



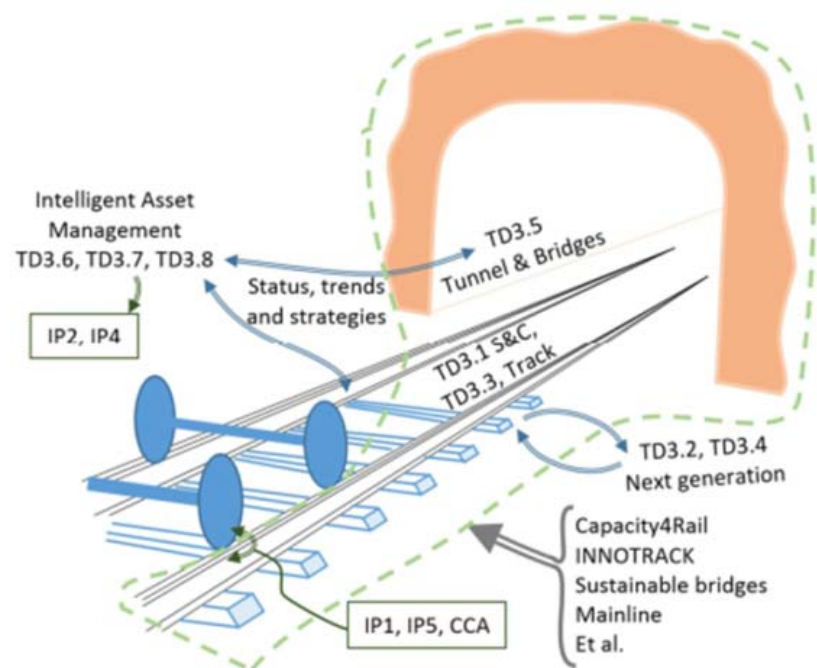
Relation to S2R MAAP:

- ✓ **TD3.1** Enhanced Switches & Crossings (S&C) System
- ✓ **TD3.3** Optimized Track System
- ✓ **TD3.5** Proactive Bridge and Tunnel Assessment, Repair and Upgrade

IN2TRACK contextualisation in Shift2Rail programme



IN2TRACK contextualisation in Shift2Rail programme



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Complementarities with running S2R Actions:

- ✓ **S2R-OC-IP3-01-2016 S-CODE**, receiving input for work in TD3.1
- ✓ **S2R-CFM-IP3-01-2018 IN2TRACK2**, acting as predecessor for work continuation in TDs 3.1, 3.2, and 3.5 to reach higher TRL
- ✓ **S2R-OC-IP3-01-2018 ASSETS4RAIL**, cooperating within TD3.5

FOUNDING MEMBERS



ALSTOM

Ansaldo STS A Hitachi Group Company

BOMBARDIER

CAF

NetworkRail

SIEMENS

THALES

TRAFIKVERKET

ASSOCIATED MEMBERS



Virtual Vehicle Austria consortium+ (VVAC+) European Rail Operating community Consortium (EUROC) Swi'Tracken consortium Smart DeMain (SDM) consortium



AERFITEC Competitive Freight Wagon Consortium (CFW) Smart Rail Control (SmartRaCon) consortium

