



Rail in the Physical Internet: views and role of S2R

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Physical Internet
Efficient Sustainable Logistics

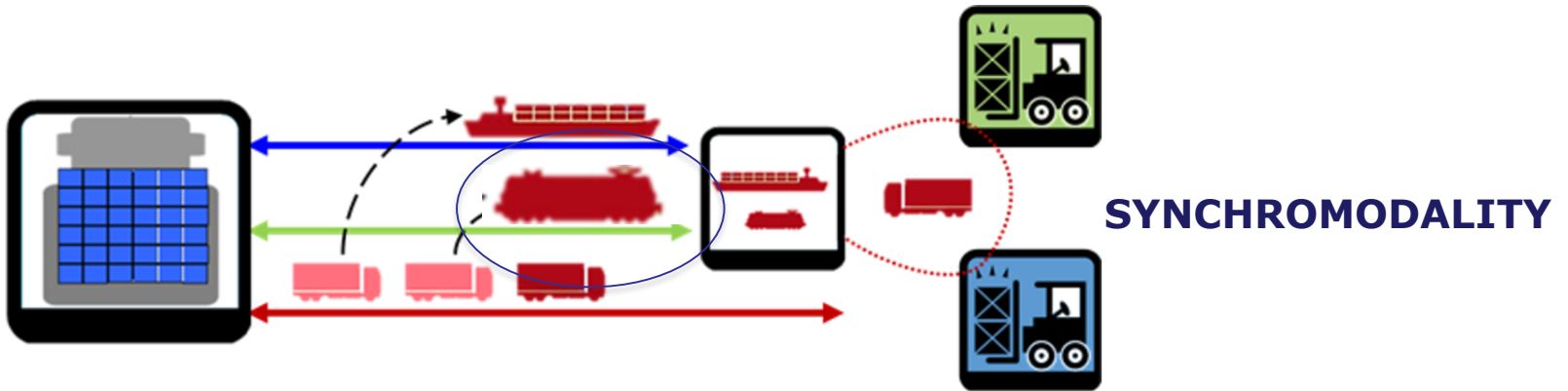
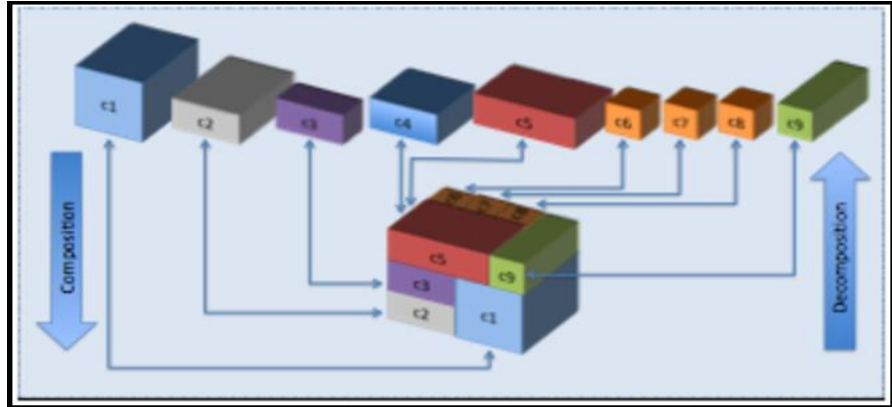
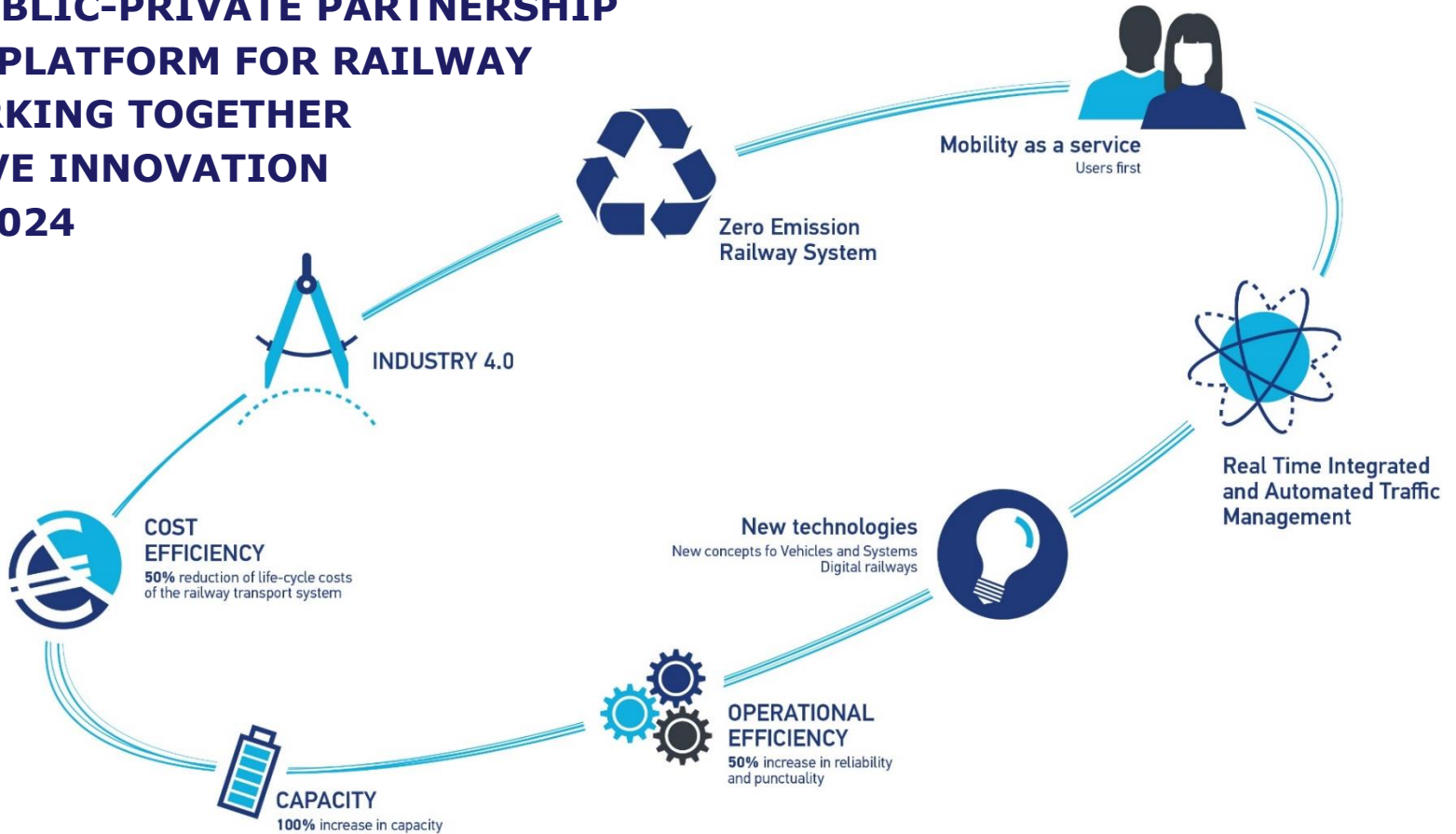


Figure 1: Synchronomodal transport.

Source: TUDelft



A PUBLIC-PRIVATE PARTNERSHIP R&I PLATFORM FOR RAILWAY WORKING TOGETHER DRIVE INNOVATION BY 2024



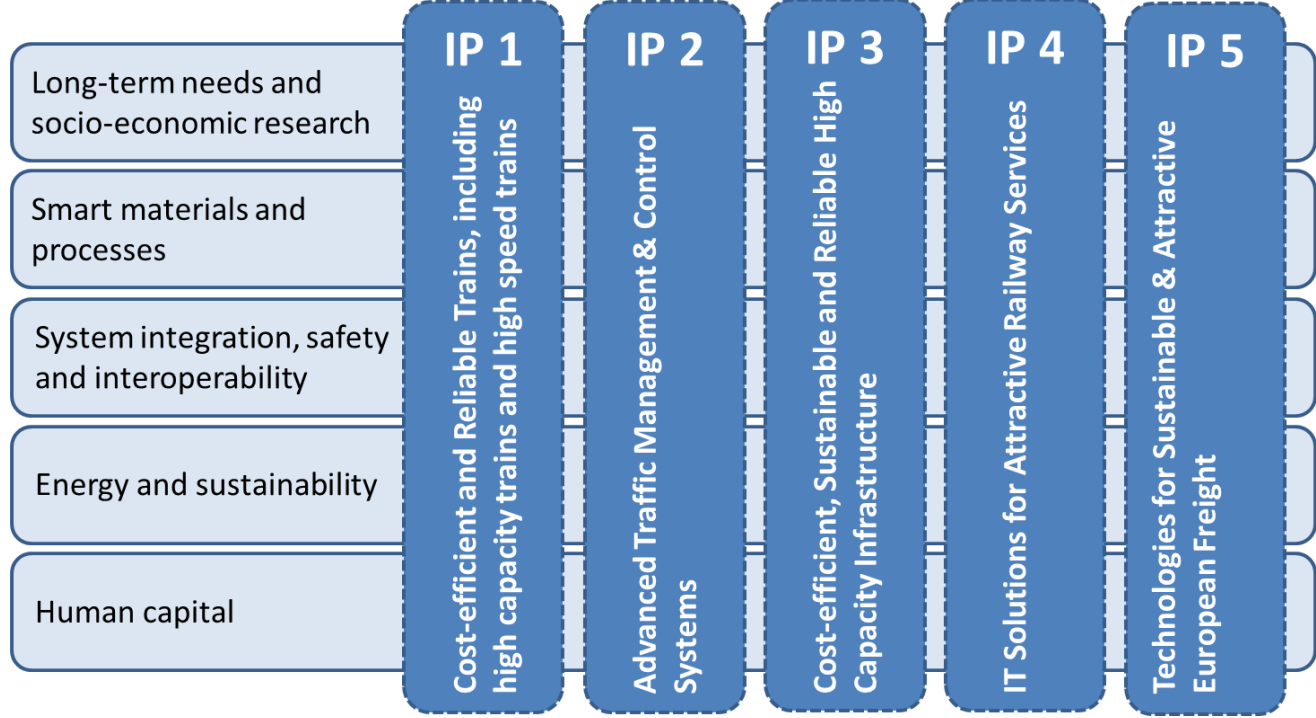
**SINGLE EUROPEAN
RAILWAY AREA**

**ATTRACTIVENESS &
COMPETITIVENESS OF
THE EUROPEAN
RAILWAY SYSTEM**

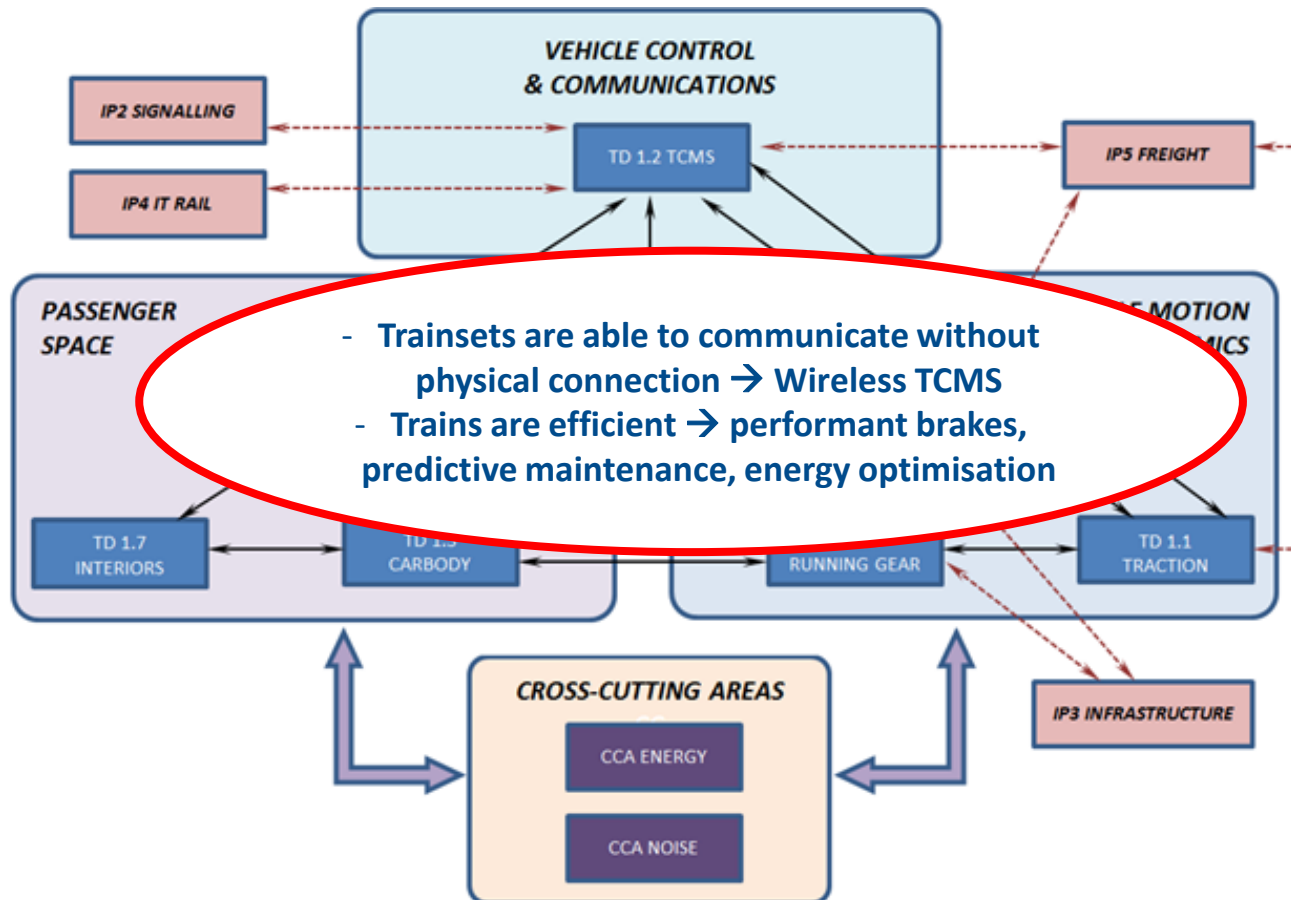
**LEADERSHIP ON THE
GLOBAL MARKET**

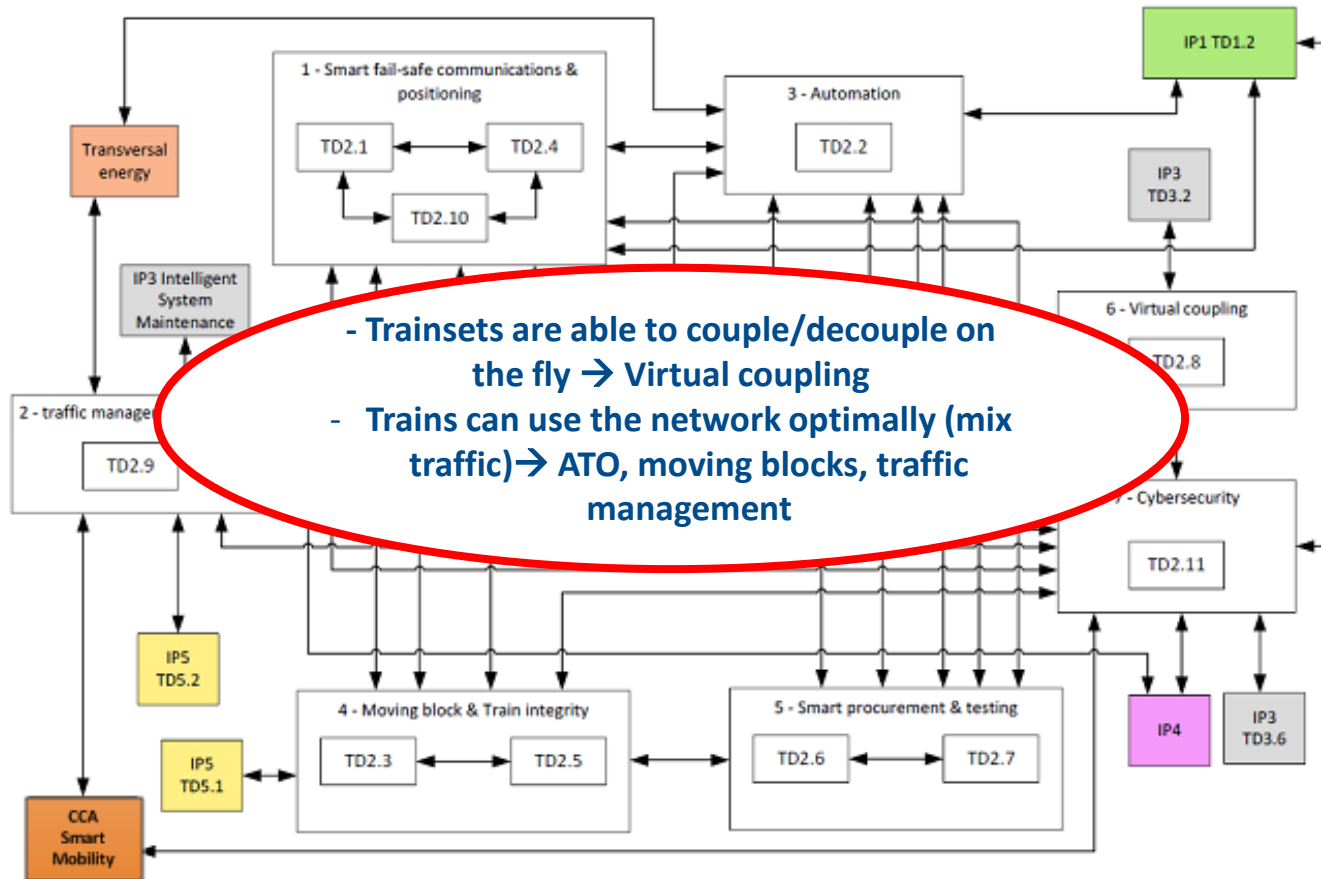


**S2R PROGRAMME:
INTEGRATED
CONSISTENT
DELIVERY ORIENTED**

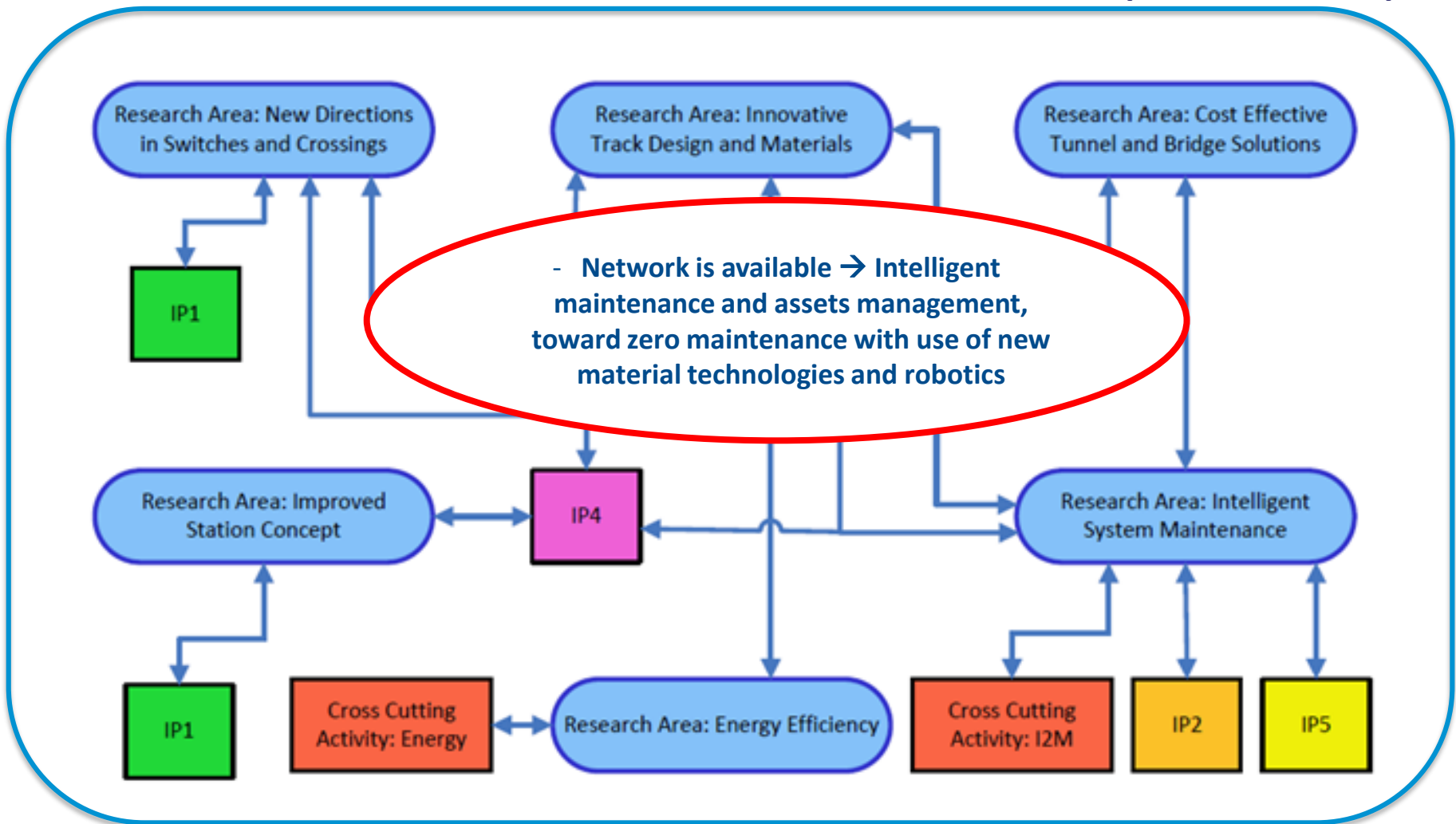


IP1 (225 Mio EUR)

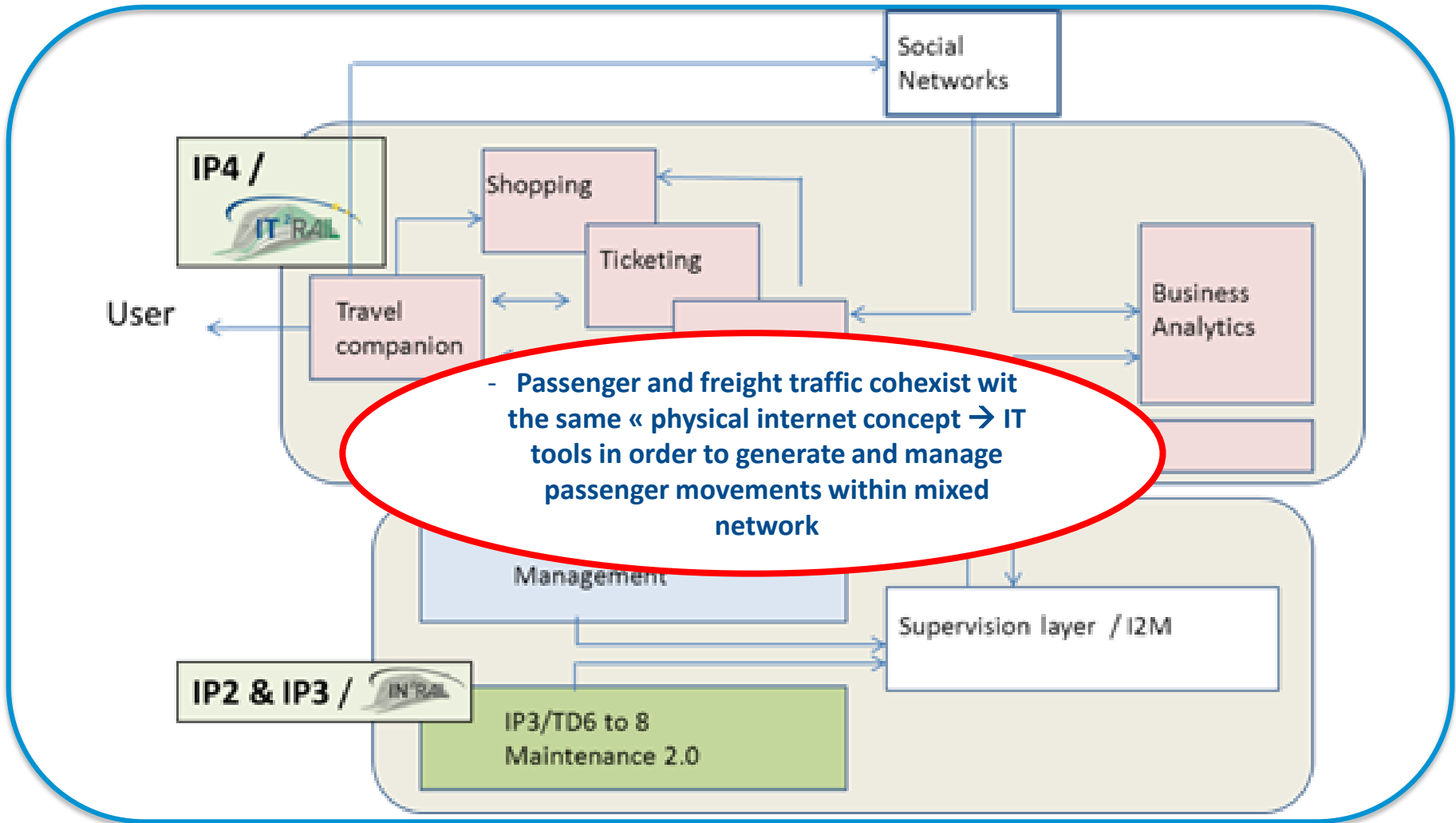




IP3 (153 Mio EUR)



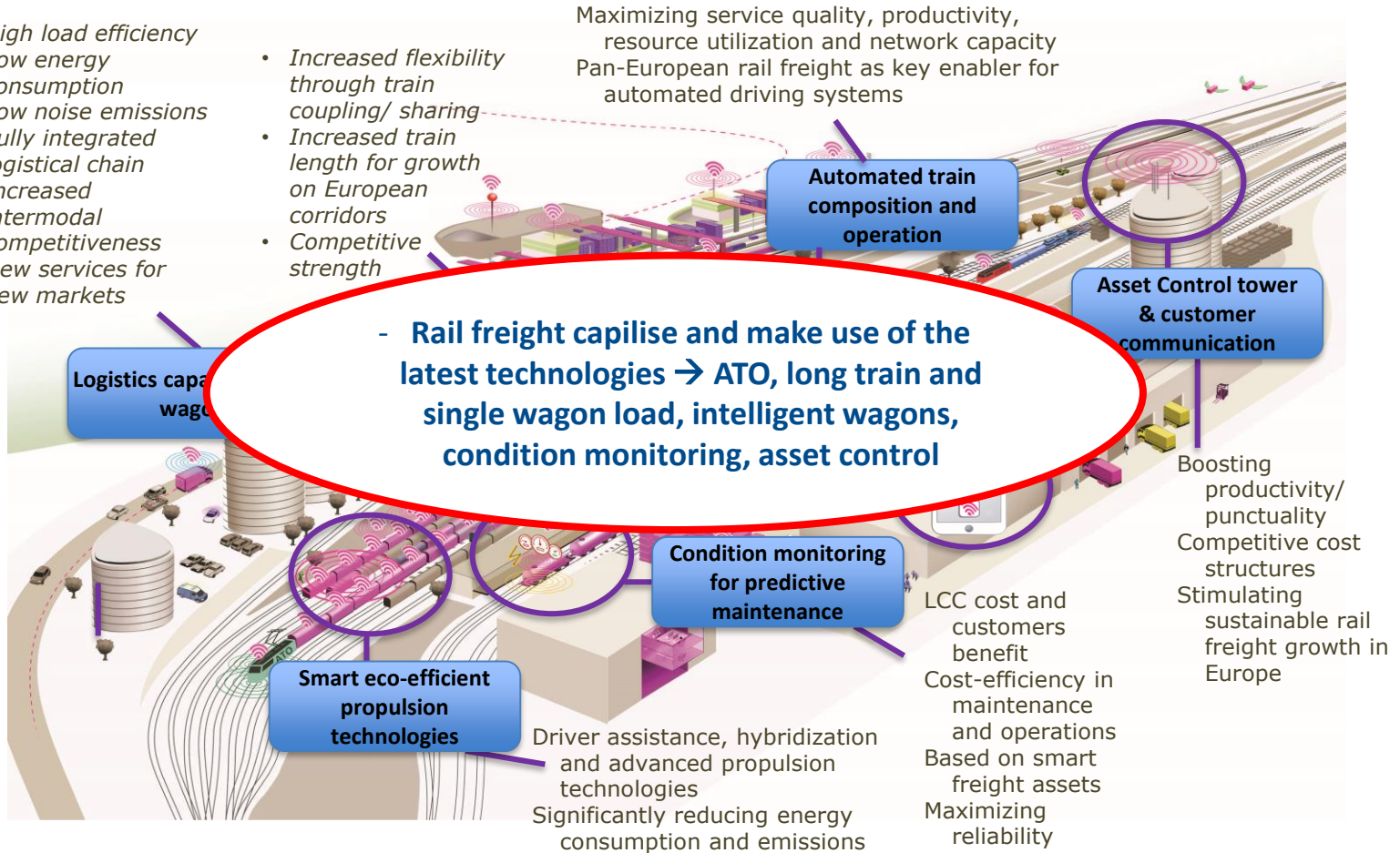
IP4 (86 Mio EUR)



- High load efficiency
- Low energy consumption
- Low noise emissions
- Fully integrated logistical chain
- Increased intermodal competitiveness
- New services for new markets

- Increased flexibility through train coupling/ sharing
- Increased train length for growth on European corridors
- Competitive strength

Maximizing service quality, productivity, resource utilization and network capacity
Pan-European rail freight as key enabler for automated driving systems



- Rail freight capilise and make use of the latest technologies → ATO, long train and single wagon load, intelligent wagons, condition monitoring, asset control

Asset Control tower & customer communication

Boosting productivity/ punctuality
Competitive cost structures
Stimulating sustainable rail freight growth in Europe

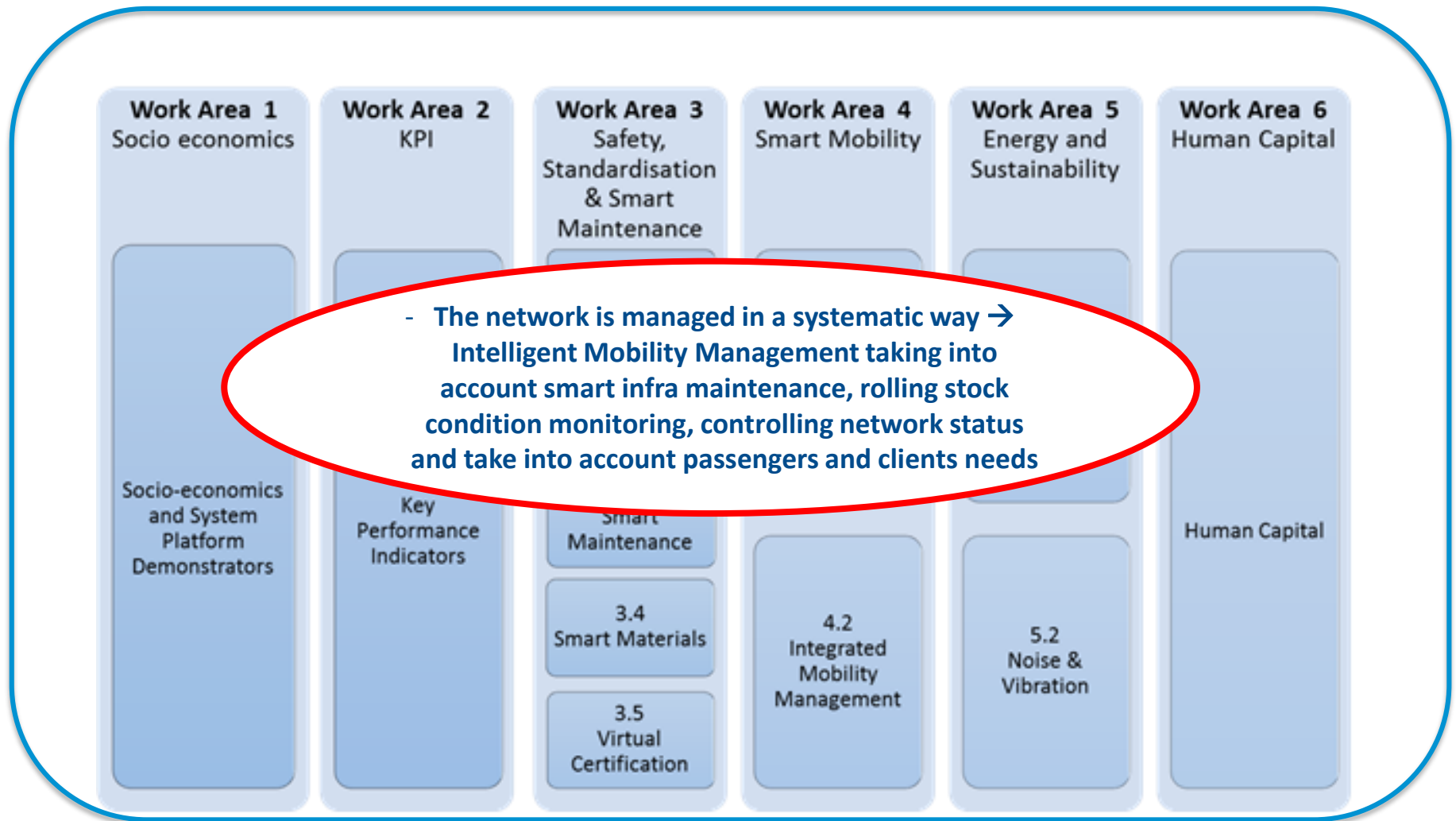
LCC cost and customers benefit
Cost-efficiency in maintenance and operations
Based on smart freight assets
Maximizing reliability

Smart eco-efficient propulsion technologies

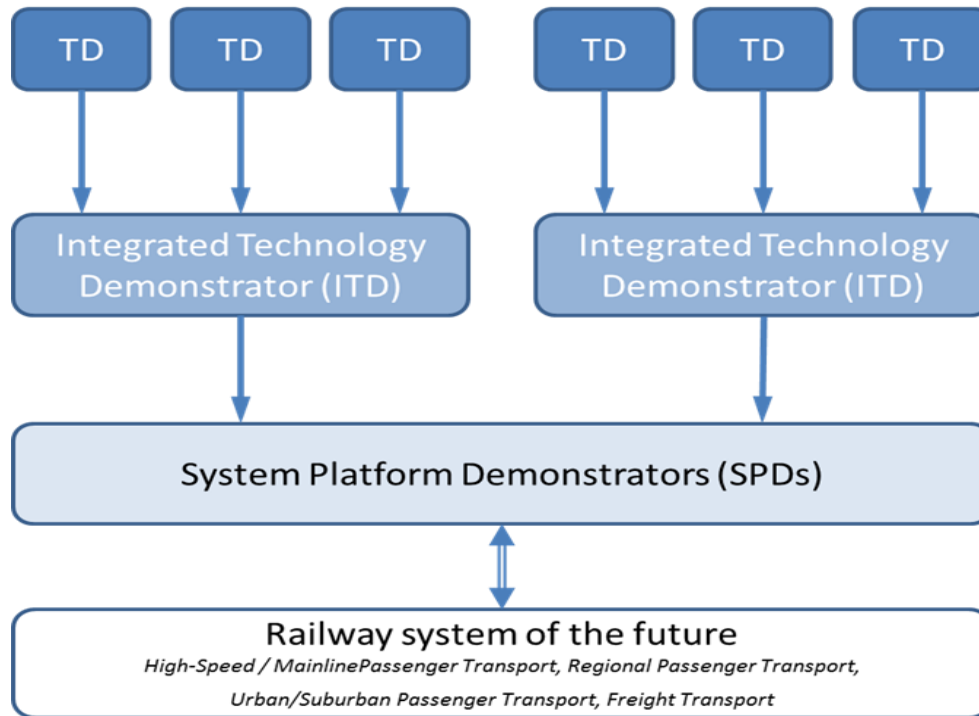
Driver assistance, hybridization and advanced propulsion technologies
Significantly reducing energy consumption and emissions



CCA (35 Mio EUR)



From TRL0 to TRL6/7



Technology Demonstrators (TDs):
Projects which specify, develop and demonstrate a specific technology, resulting in a laboratory tested and/or simulated prototype

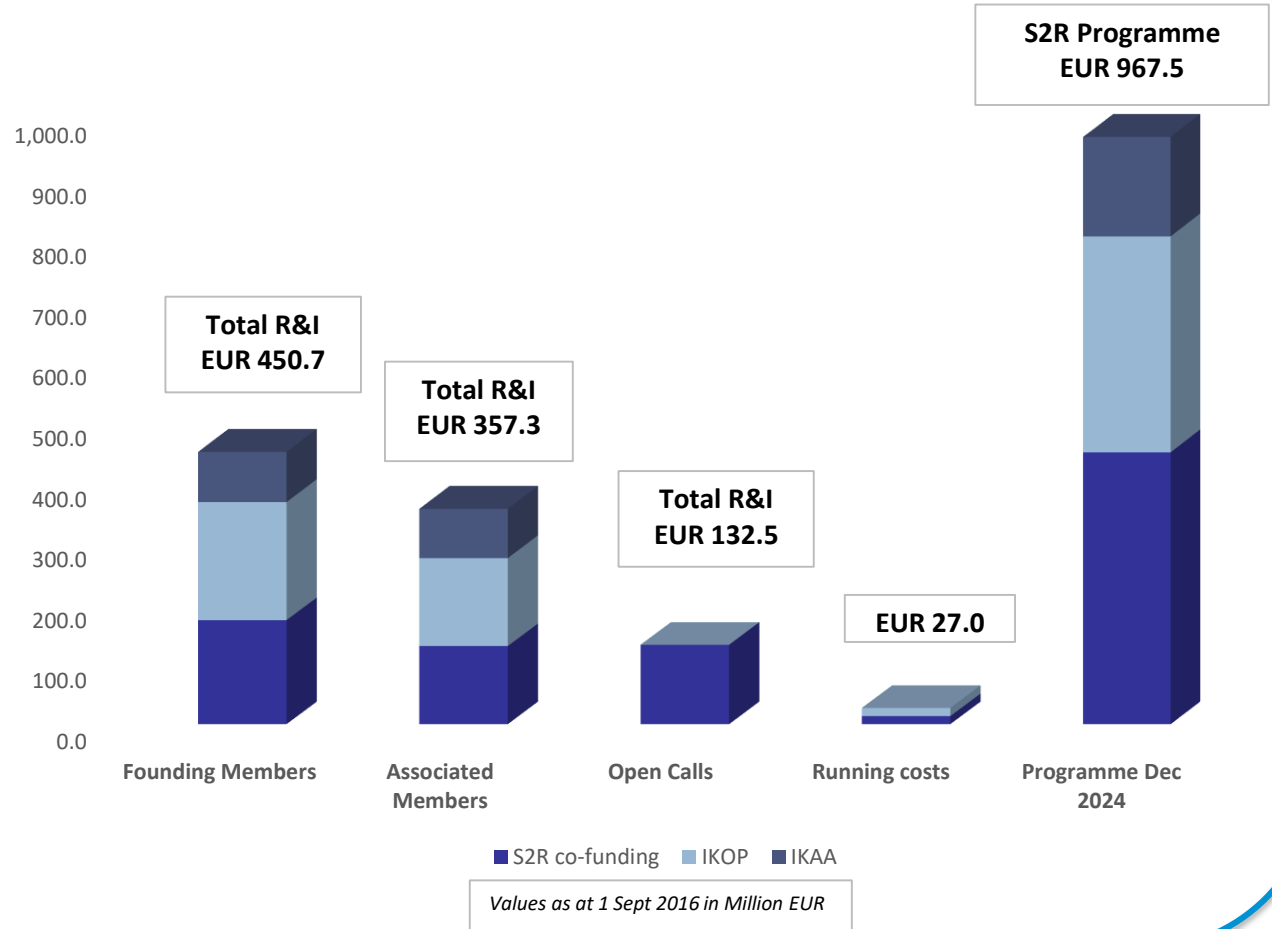
Integrated Technology Demonstrators (ITDs):
Projects integrating / combining TD prototypes at system level (both in lab and on-site) and testing system performance

System Platform Demonstrators (SPDs):
Assessment of the whole system level performance based on the results of TDs and ITDs. SPDs will bring S2R's innovative solutions to a technology maturity level for a new generation of railway systems

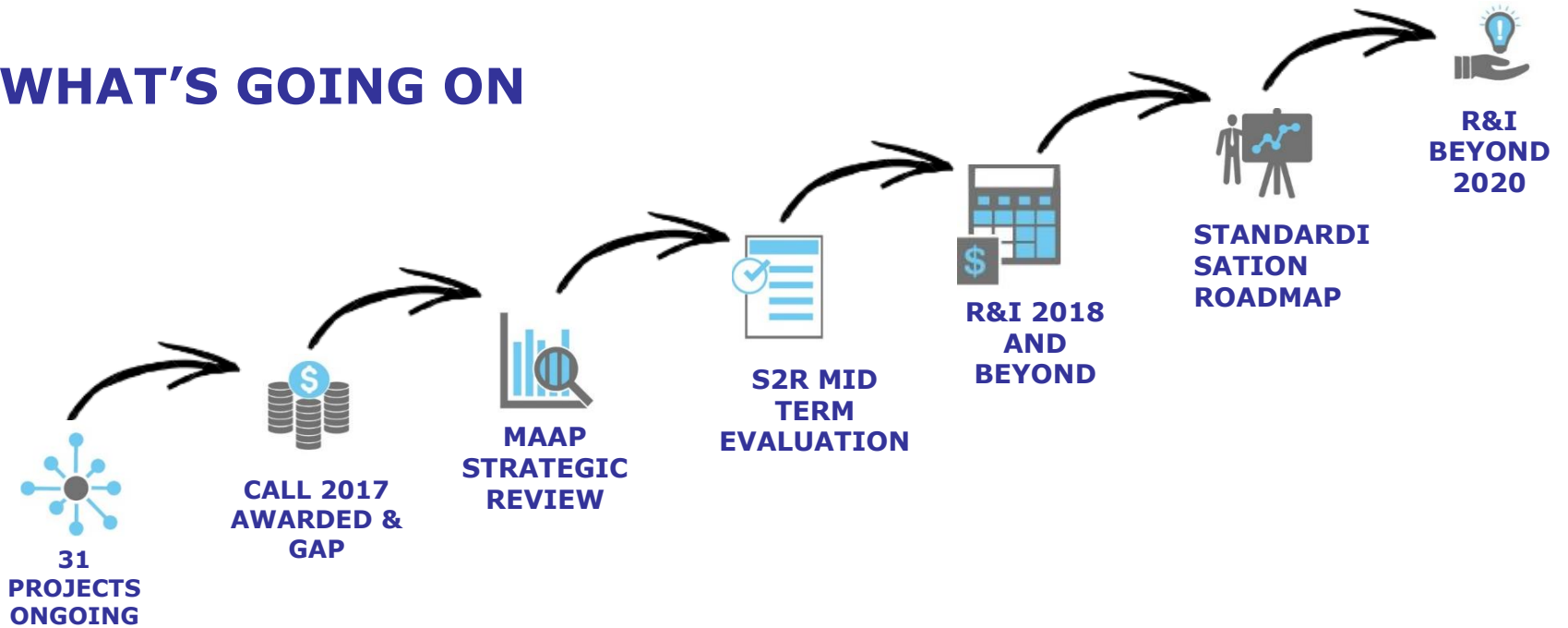


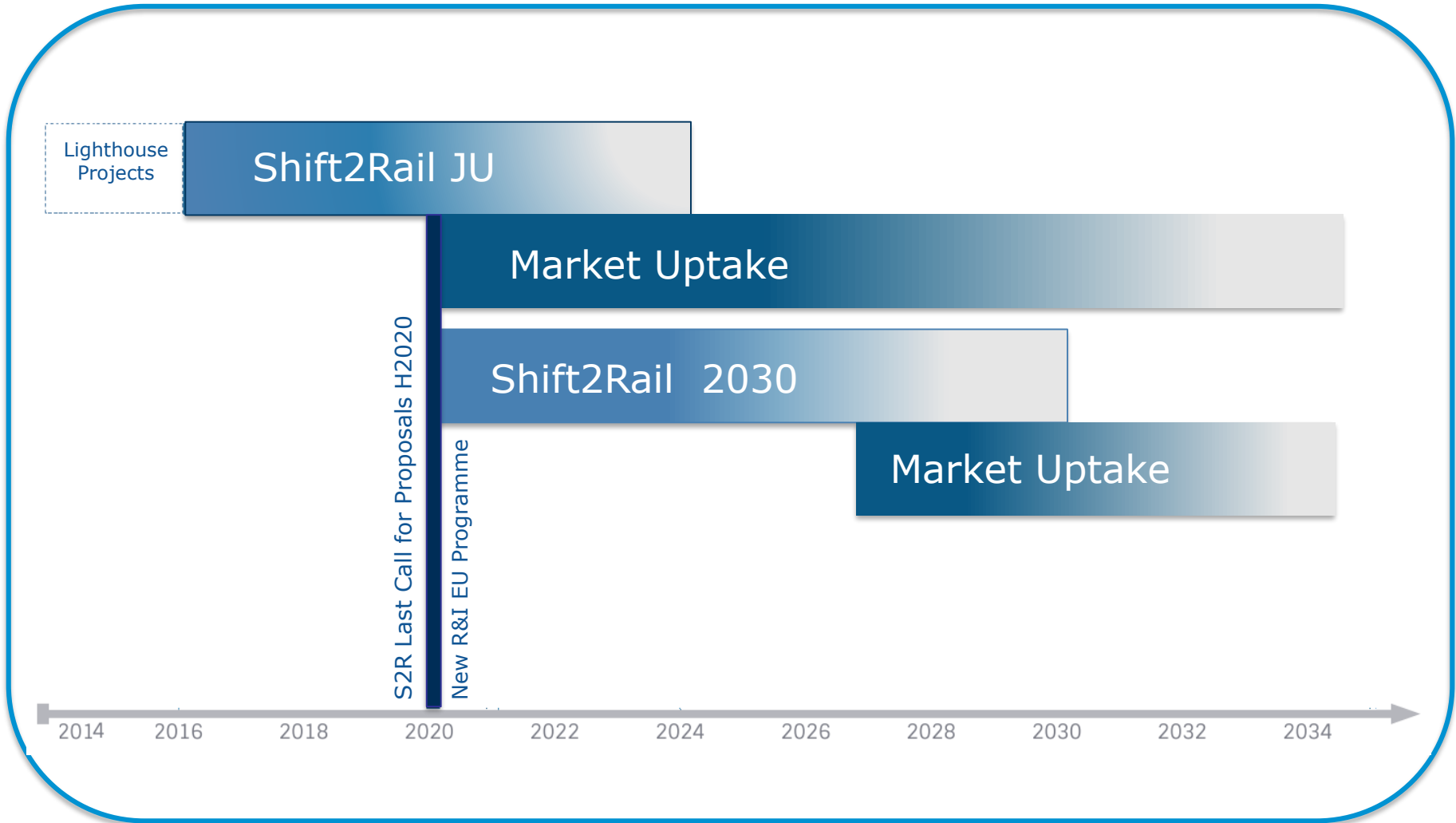
AN OPEN ORGANIZATION

A PROGRAMME VALUED EUR 967 MIO



WHAT'S GOING ON

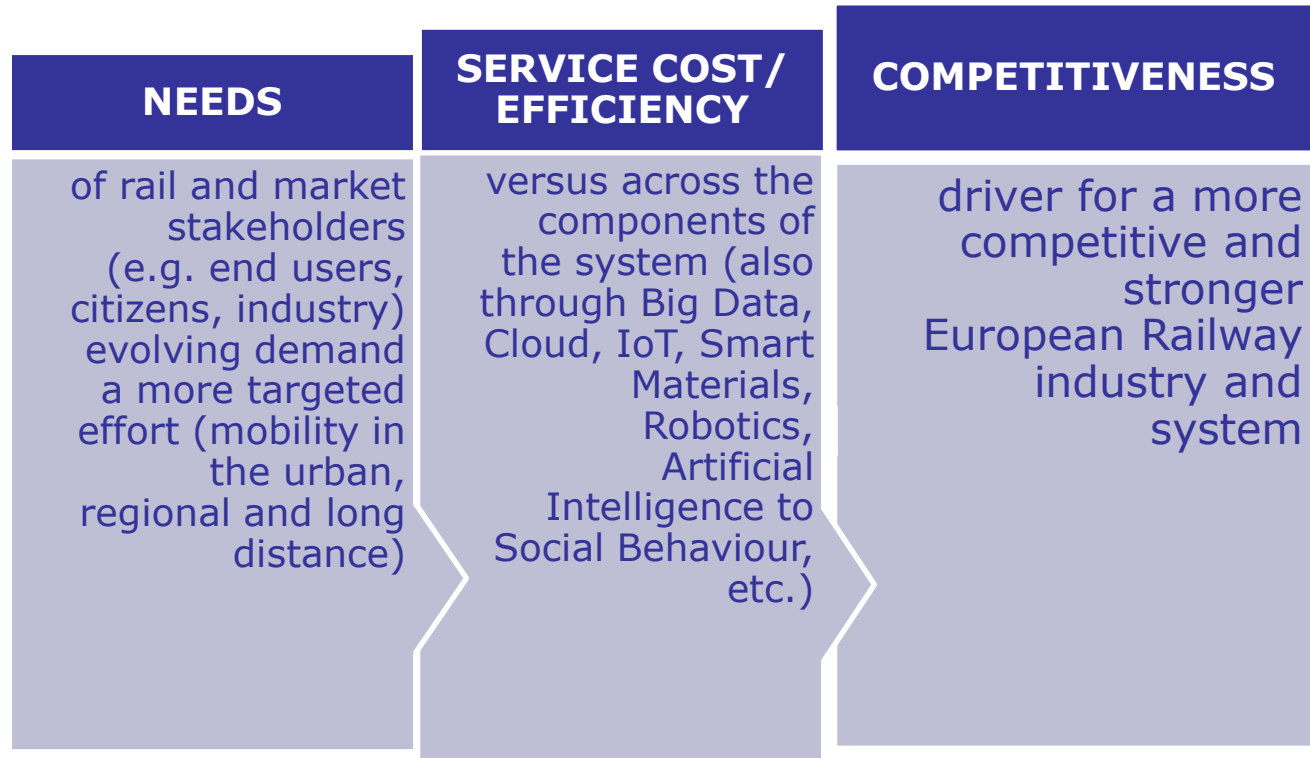




UNION COMMITMENT TO IMPLEMENT 2030 GLOBAL AGENDA AND SUSTAINABLE DEVELOPMENT GOALS



RAIL R&I

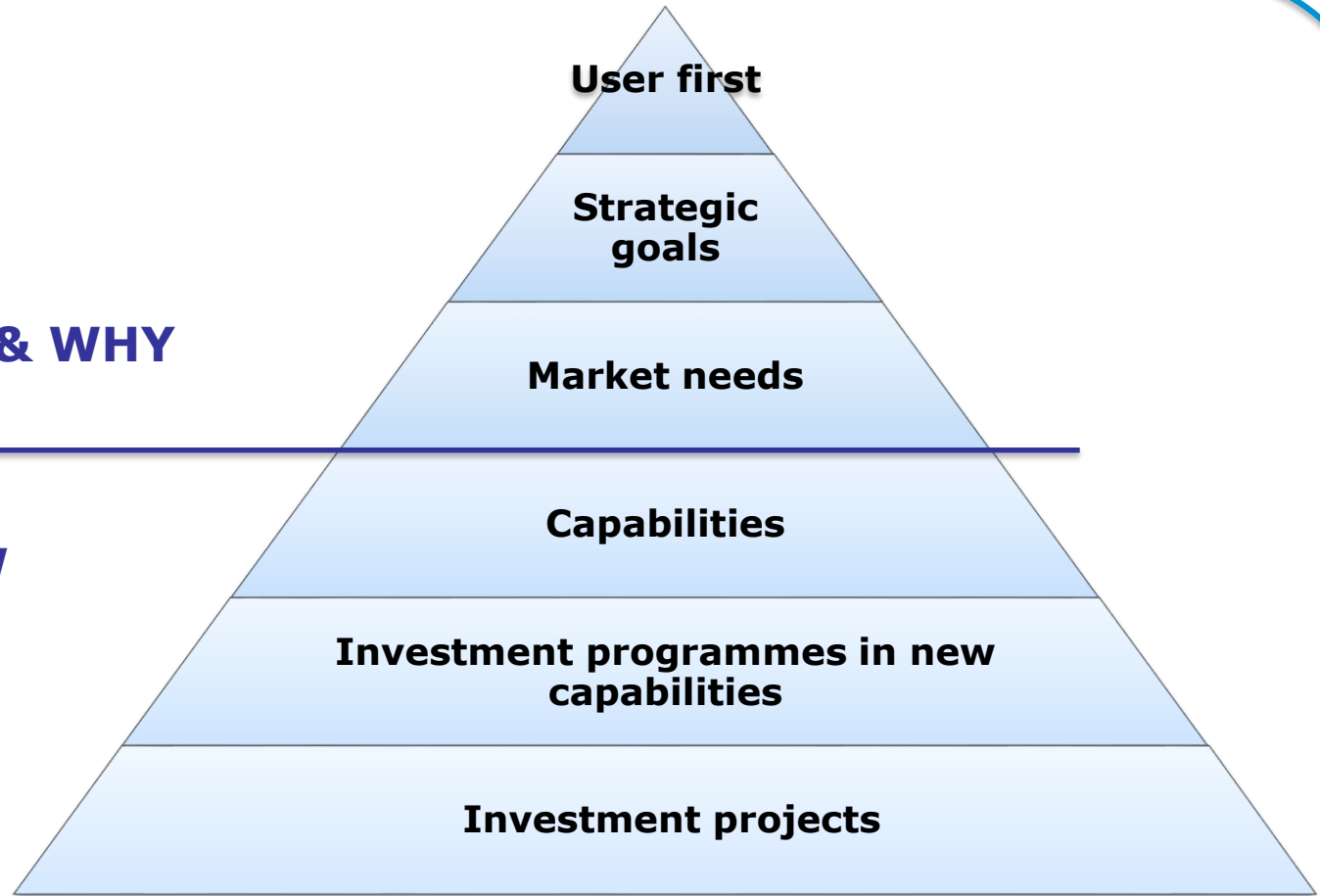


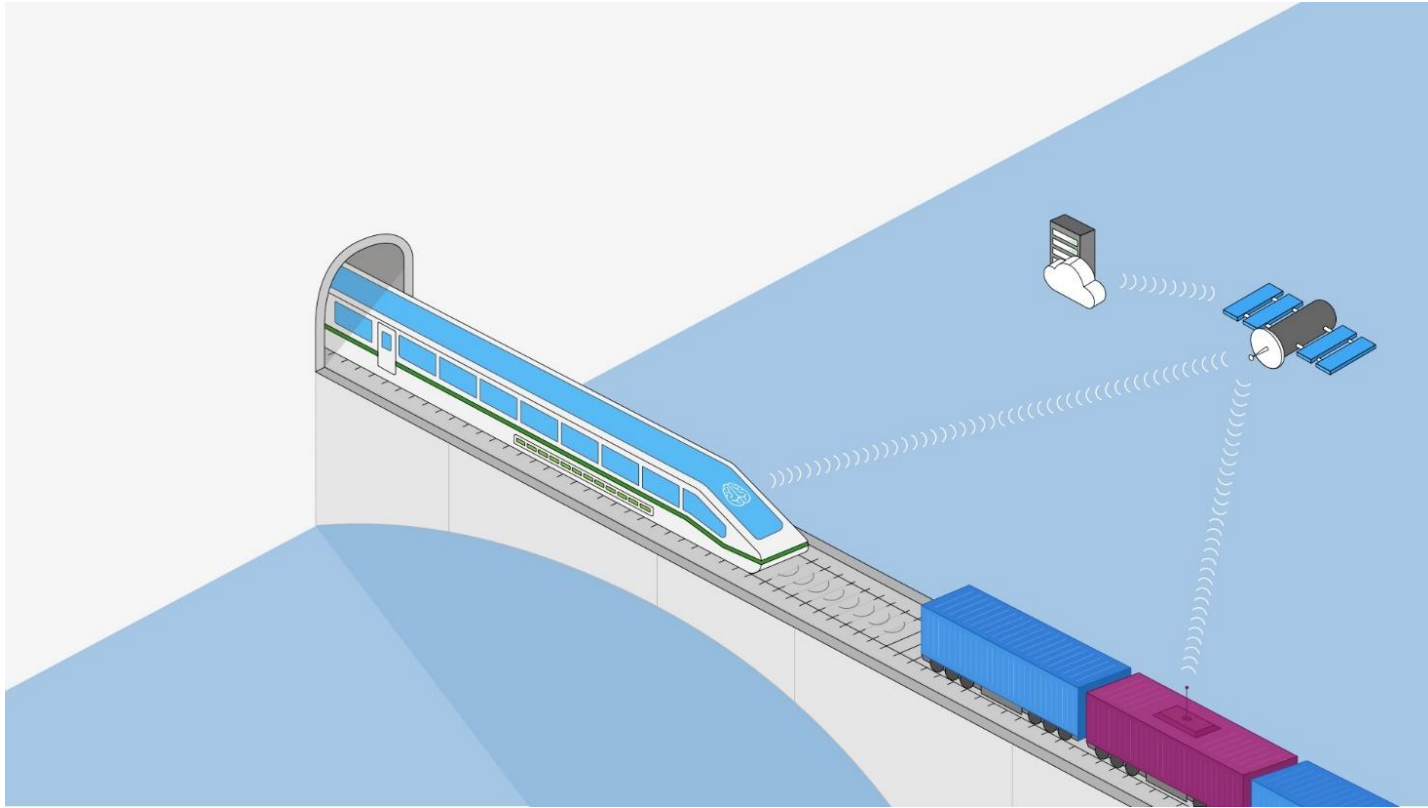
**USER FIRST:
USER CENTRIC MOBILITY
AS A SERVICE**



WHAT & WHY

HOW





Thank you

