

Europan Rail Research & Innovation ongoing and beyond 2020

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S2R PROGRAMME: ORIEN INTEGRATED CONSISTENT **DELIVERY**

Long-term needs and socio-economic research

Smart materials and processes

System integration, safety and interoperability

Energy and sustainability

Human capital

IP₁ Cost-efficient and Reliable Trains, including

high capacity trains and high speed trains Advanced Traffic Management & Control

IP 2

Systems

IP Cost-efficient, Sustainable and Reliable High

Capacity Infrastructure

IP 4

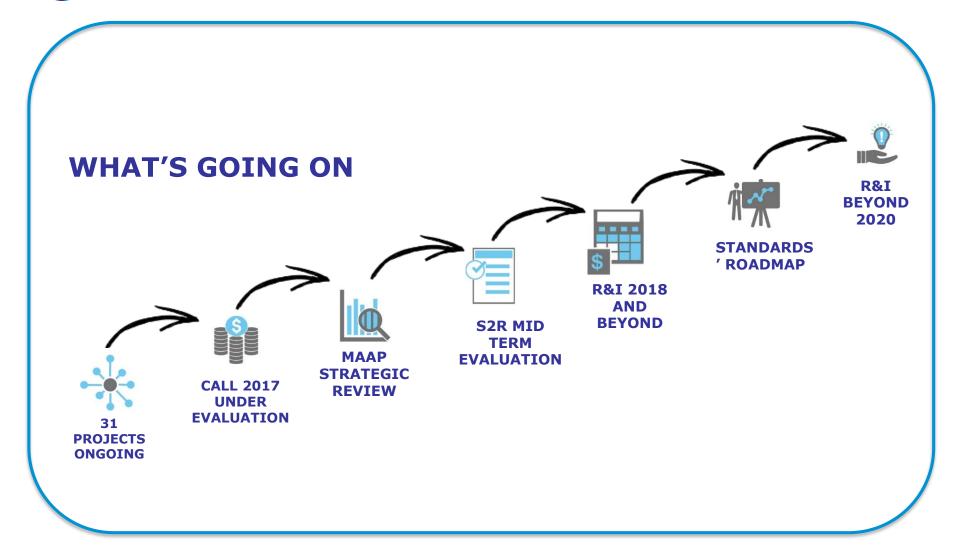
IP 5

Technologies for Sustainable & Attractive European Freight

T Solutions for Attractive Railway Services

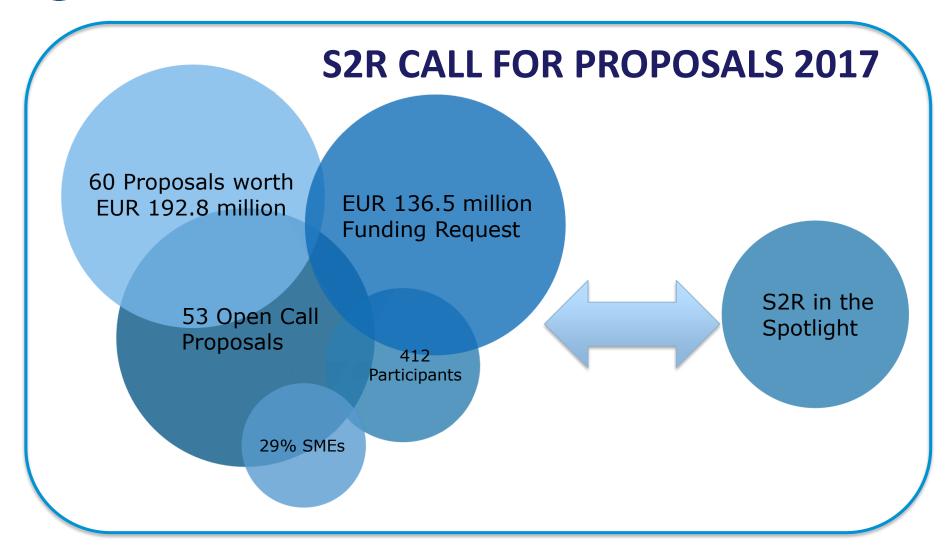






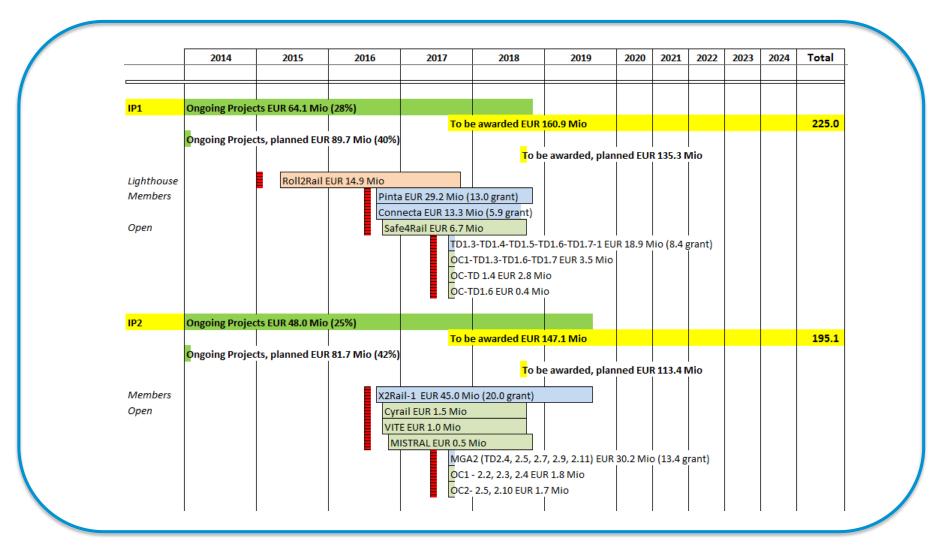






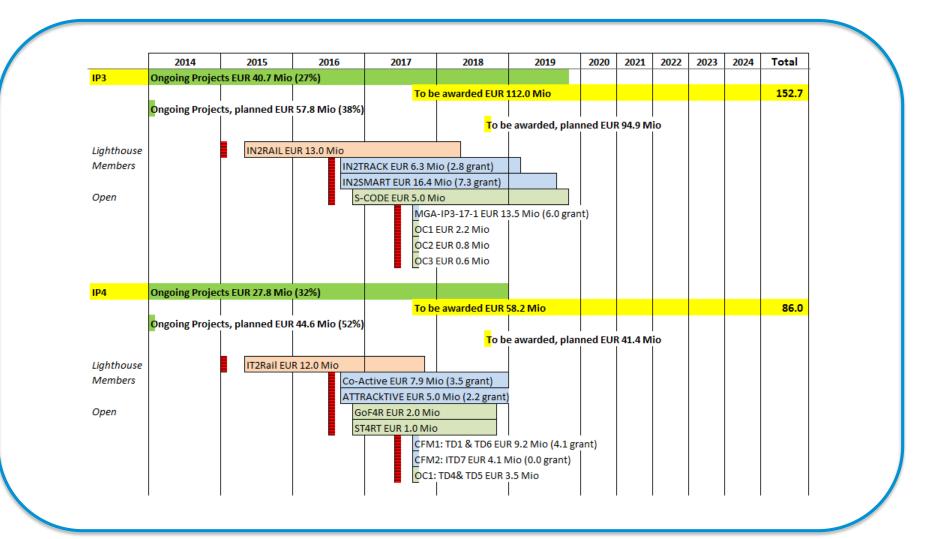






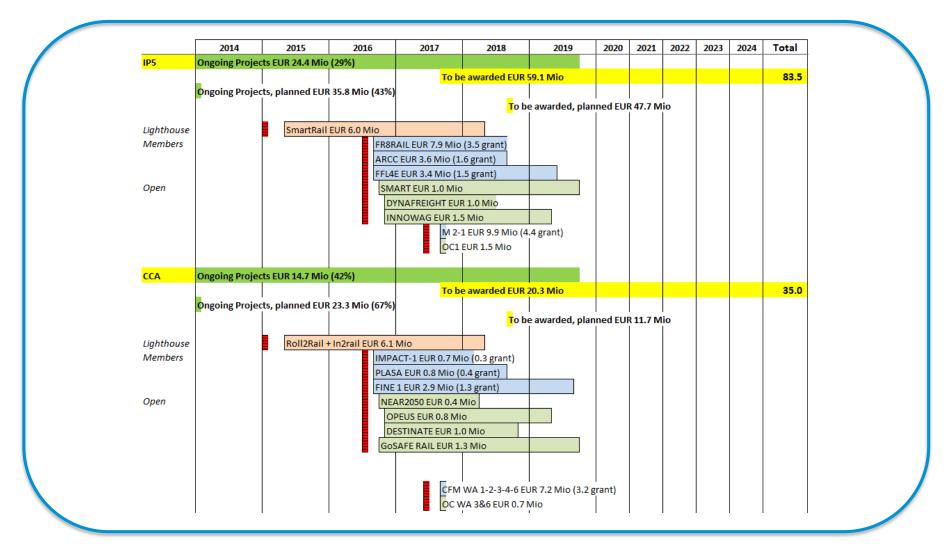






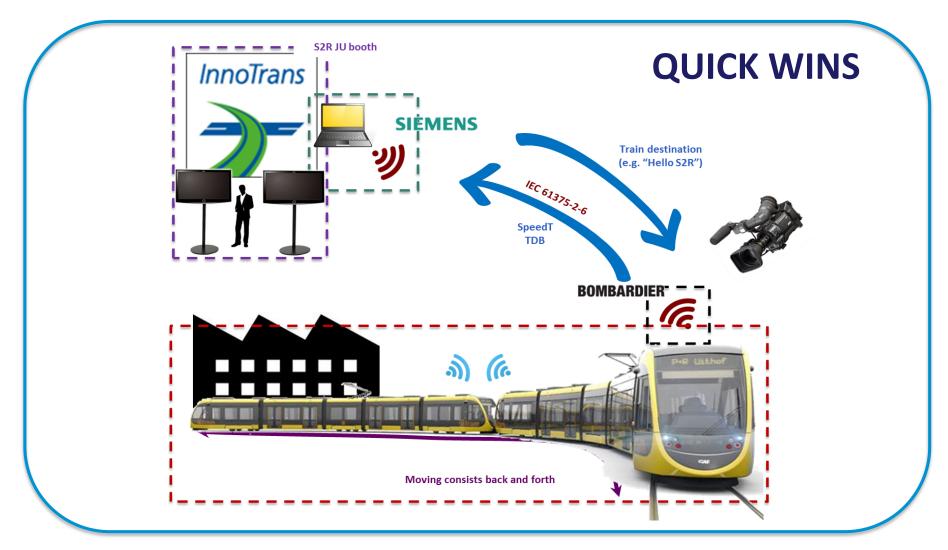






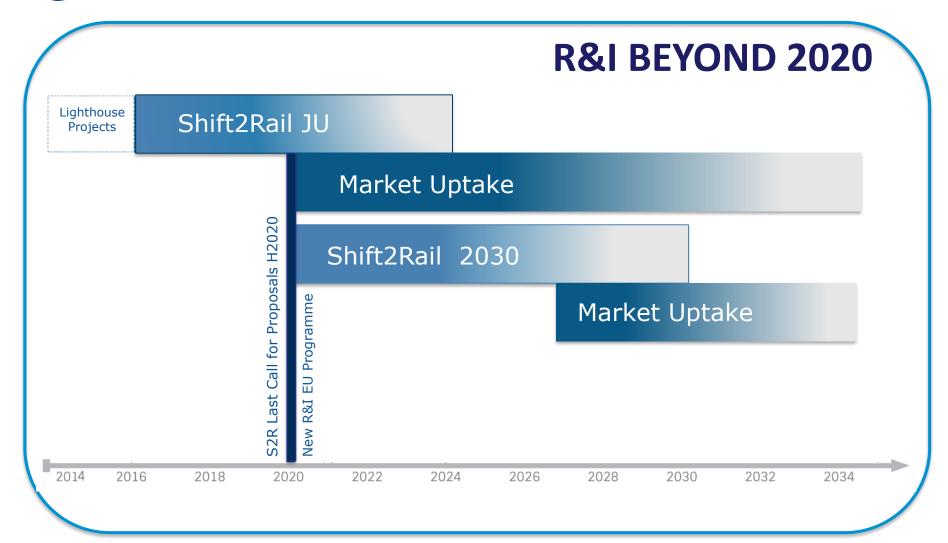
















UNION COMMITMENT
TO IMPLEMENT 2030
GLOBAL AGENDA
AND SUSTAINABLE
DEVELOPMENT
GOALS







NEEDS

of rail and market stakeholders (e.g. end users, citizens, industry) evolving demand a more targeted effort (ERTMS, mobility in the urban, regional and long distance)

SERVICE COST/ EFFICIENCY

versus across the components of the system (also through Big Data, Cloud, IoT, Smart Materials, Robotics, Artificial Intelligence to Social Behaviour, etc.)

COMPETITIVENESS

driver for a more competitive and stronger European Railway industry and system

RAIL R&I



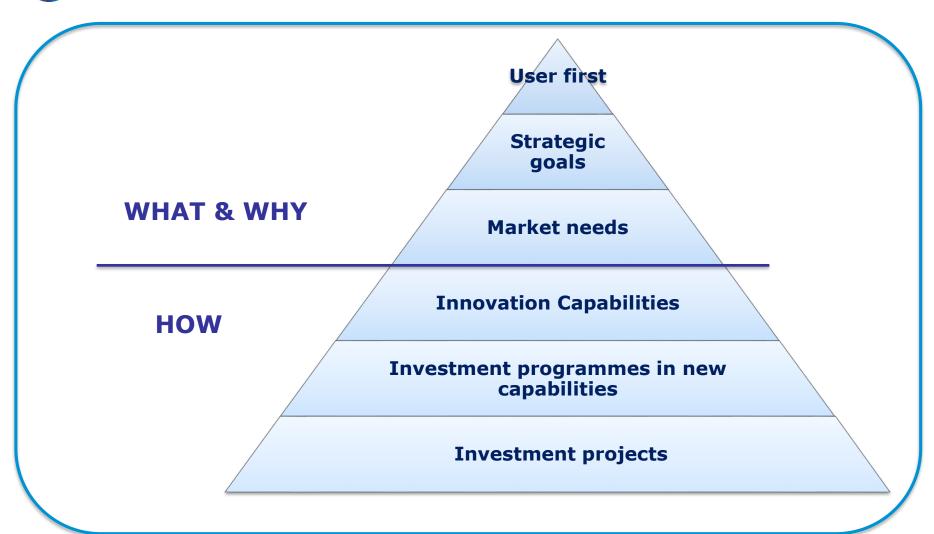


USER FIRST:
USER CENTRIC MOBILITY
AS A SERVICE



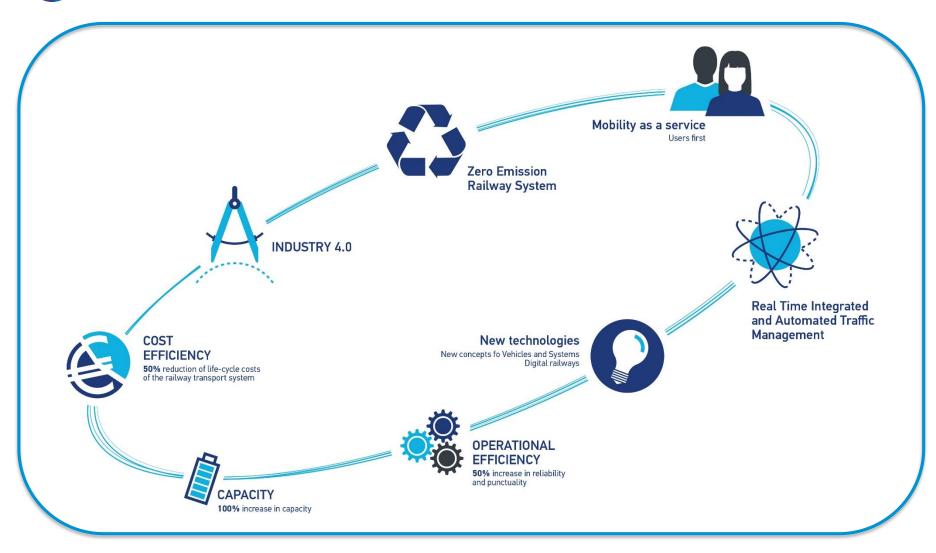






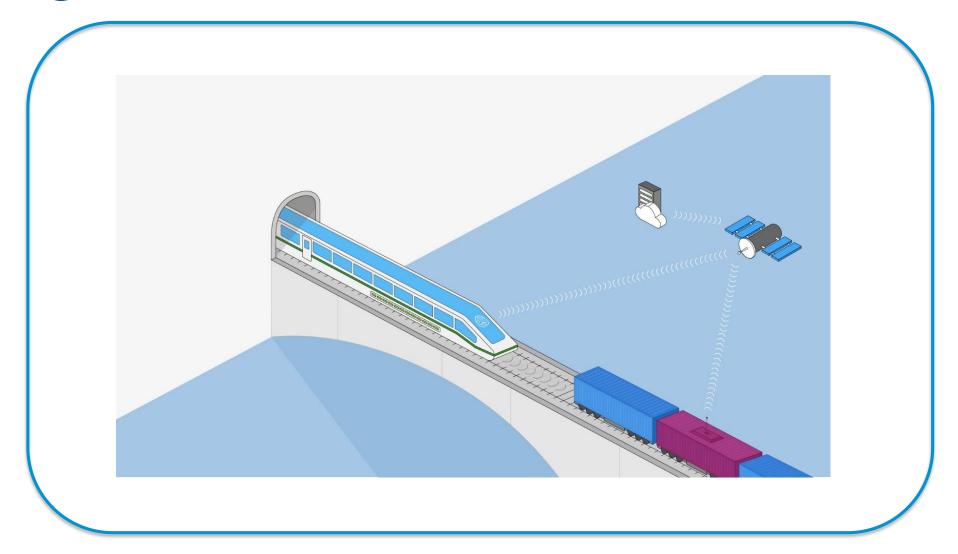
















Thank you



