



# Overview on Shift2Rail

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# Background information

- **What is Shift2Rail?**

The Shift2Rail Joint Undertaking (S2R JU) is a public-private partnership in the rail sector, established under Horizon 2020, to provide a platform for coordinating research activities with a view to driving innovation in the rail sector.

- **Are there other transport JUs in the EU?**

Yes – CleanSky 2, Sesar, Fuel Cells Hydrogen, CCAM (under construction)

- **What are the objectives of Shift2Rail?**

- Cutting the life-cycle cost of railway transport by as much as 50%;
- Doubling railway capacity;
- Increasing reliability and punctuality by as much as 50%.

# Shift2Rail: EU-Förderprogramm für Innovationen im Schienensektor innerhalb des Forschungsrahmenprogramms Horizon 2020

## Hintergrund

- Öffentlich-private Partnerschaft (Joint Undertaking) aus der EU und 27 Unternehmen aus dem europäischen Bahnsektor (u.a. Siemens, Bombardier, Alstom, Trafikverket, SNCF, Thales, CAF)
- S2R vereint alle EU-Forschungs- und Innovationsaktivitäten im Schienensektor bis zur Demonstratorebene
- Beitritt der DB als assoziiertes Mitglied mit Gründungsrechten (Sitz im Verwaltungsrat) im Dezember 2015 gem. Vorstandsbeschluss
- Gesamtbudget von 920 Mio € (Förderquote 44,44 %)

## Primärziele

- Reduzierung der Lebenszykluskosten um 50%
- Verdopplung der Kapazität des europäischen Eisenbahnsystems
- Erhöhung der Zuverlässigkeit und Qualität um 50%

# Joint Undertaking (Laufzeit 2016-2021): Kommission hält Stimmrechtsmehrheit - Erstmals sektorweite und interkulturelle Projektarbeit



- Öffentlich-private Partnerschaft (Joint Undertaking) aus der EU und 27 Unternehmen aus dem europäischen Bahnsektor

## Europäische Kommission

- Die Kommission besitzt 50% der Stimmrechte im Joint Undertaking



## Founding Member

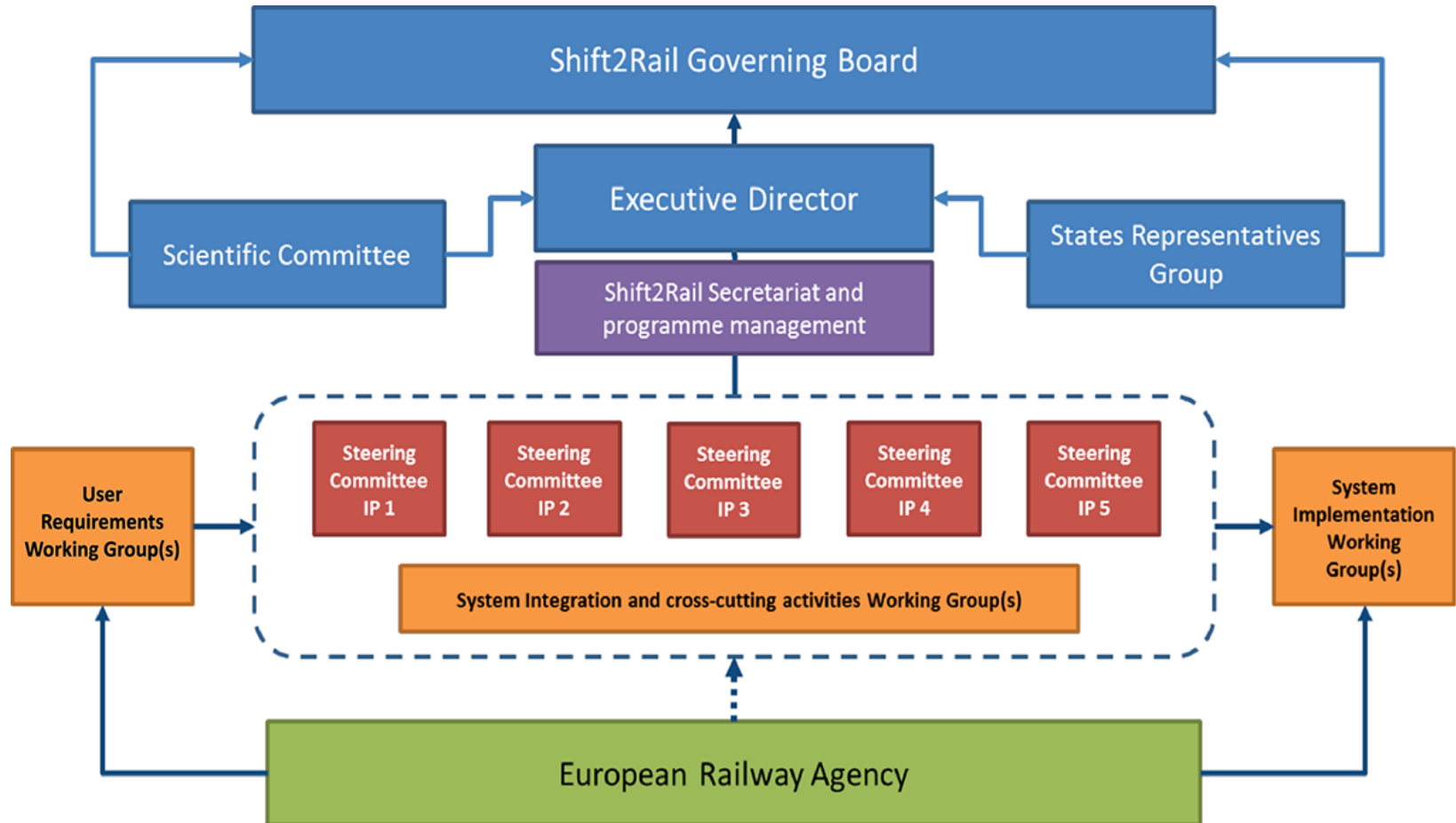
- 8 Gründungsmitglieder mit ständigem Sitz im Governing Board
  - ALSTOM Transport SA
  - ANSALDO STS S.p.A.
  - Bombardier Transportation GmbH
  - Construcciones y Auxiliar de Ferrocarriles S.A.
  - Network Rail Infrastructure Limited
  - Siemens Aktiengesellschaft
  - THALES
  - Trafikverket

## Associated Member

- 19 assoziierte Mitglieder, welche über ein Bewerbungsverfahren dem JU beigetreten sind
  - AERFITEC
  - Amadeus IT Group SA
  - AZD Praha s.r.o.
  - Competitive Freight Wagon Consortium
  - Deutsche Bahn AG\*
  - DIGINEXT
  - EUropean Rail Operating community Consortium
  - Faiveley Transport
  - HaCon
  - INDRA SISTEMAS S.A.
  - Kapsch CarrierCom AG
  - Knorr-Bremse
  - MER MEC S.p.A
  - Smart DeMain (SDM) consortium
  - Smart Rail Control consortium
  - SNCF
  - Swi'Tracken consortium
  - Patentes Talgo S.L.U.
  - Virtual Vehicle Austria consortium+

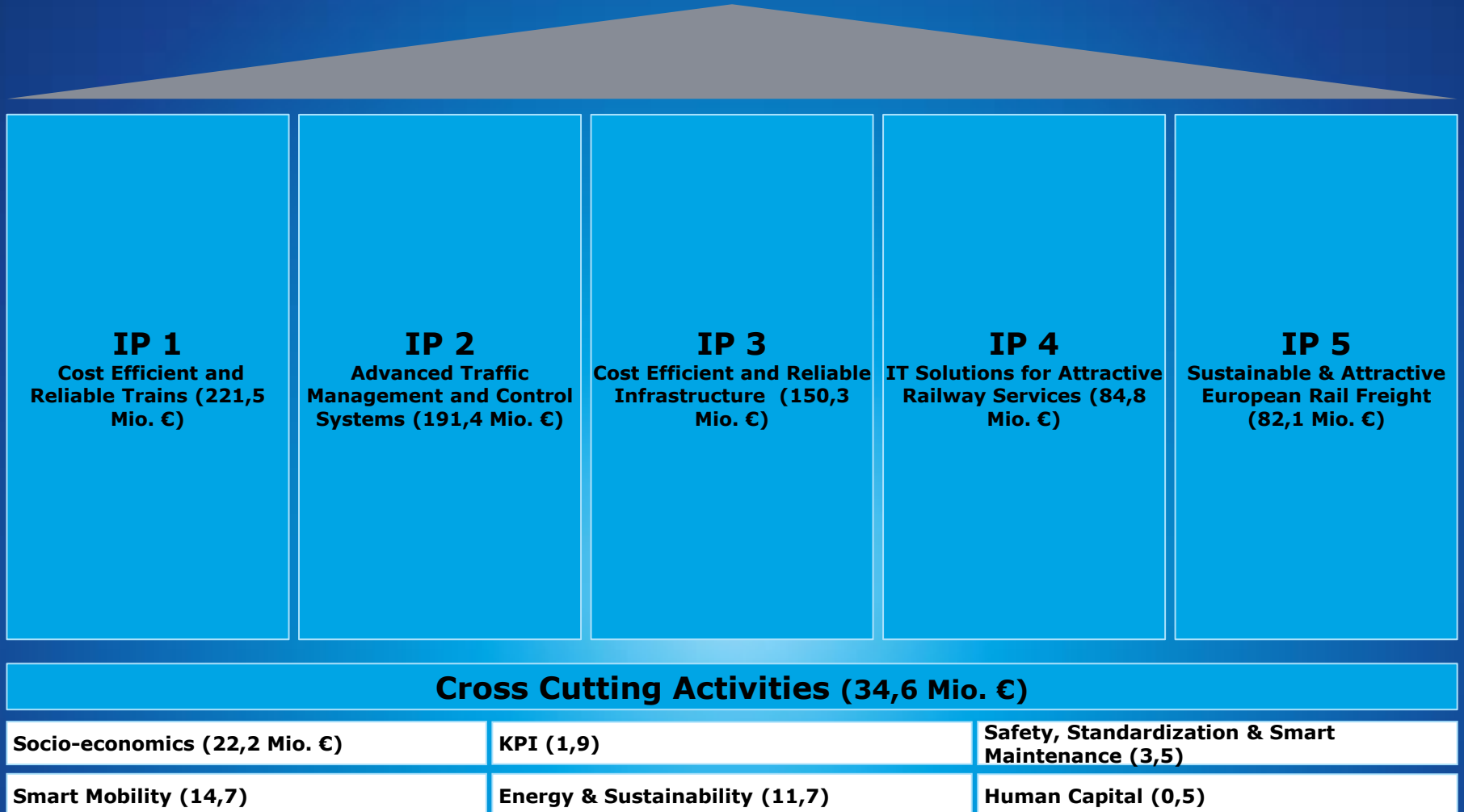
\*Assoziiertes Mitglied mit Gründungsrechten

# Shift2Rail Organisational Structure



# Overview of S2R Innovation Programmes

## Überblick Shift2Rail Struktur und Themen



## Lighthouse projects - Looking forward to first results



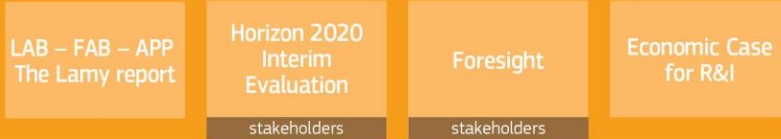
SMART RAIL

- **Roll2Rail** – promoting radical innovation in the field of railway vehicles
- **In2Rail** – setting the foundations for a resilient, consistent, cost-efficient, high capacity European network
- **It2Rail** - providing a new seamless travel experience, giving access to a complete multimodal travel offer
- **SmartRail** - looking at the European rail freight system as a whole, integrating existing and new knowledge that originates from various parts of this system



European Commission

## BUILDING THE POST 2020 FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION



EU Budget (MFF)  
Multiannual financial framework

Proposal for  
post-2020 FP  
for R&I



Impact  
Assessment

stakeholders

European Parliament & Council  
Q2 2018

January 2021  
Launching post 2020 FP

© European Union, 2018

# Post 2020 FP for Research and Innovation

- On-going discussions on budget and content; it should include funding opportunities for rail research;
- Current opportunities for rail stakeholders to share their views:
  - Call for feedback on research and innovation missions
  - Public consultation on EU funds in the area of research & innovation

Mobility and  
Transport

CONNECTING  
EUROPE



## Shift2Rail post 2020



- **Added value** already demonstrated by Shift2Rail is a strong basis to propose a continuation of Shift2Rail for the next MFF.
- **Your commitment** is needed to build a very strong case for a possible Shift2Rail-2.
- Focus on a **limited number of further reaching objectives** such as automation, digitalisation, costs reduction, freight.
- **Governance**: need for a massive acceleration from development to piloting and deployment and smooth alignment with CEF.

