



# **ERRAC**

## **The European Rail Research Advisory Council**

### **Vision of the Rail Sector**

**Alberto Parrondo** (VP Thales)  
Chairman ERRAC  
11th European Innovation Summit  
Tuesday 04th February 2020, Brussels

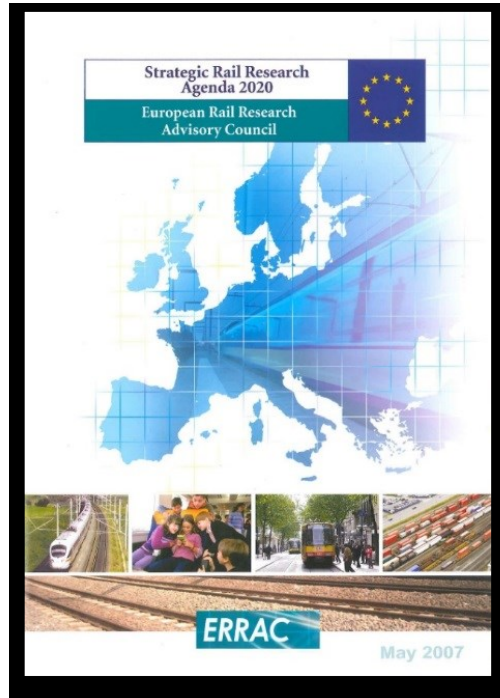


- The European Technology Platform for rail - was set up in 2001.
- Promotes the holistic vision of the rail system with all stakeholders.
- Aims to revitalise the European rail sector.
- Identifies business needs and innovates to make it attractive and more competitive.
- Fostering and guide research efforts at European level.
- Representatives from all the major European rail research stakeholders are gathered:

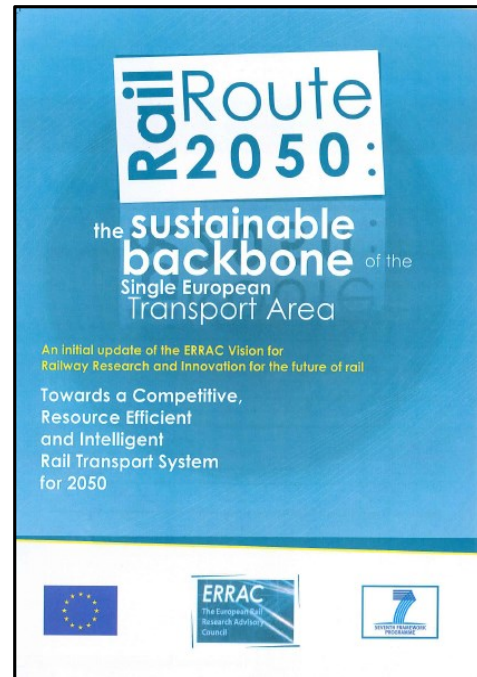
Operators	Infrastructure managers
Manufacturers	The European Commission
EU Member States	Shift2Rail / ERA
Users' groups	Academics

- ERRAC covers all segments of rail transport: from conventional, high speed and freight applications to urban and regional services.

**Strategic Rail  
Research Agenda  
(SRRRA)**  
*May, 2007*



**Rail Route 2050**  
*2012*



**Strategic Rail  
Research and  
Innovation Agenda  
(SRRRIA)**  
*November, 2014*



**ERRAC Roadmaps**  
*April, 2016*





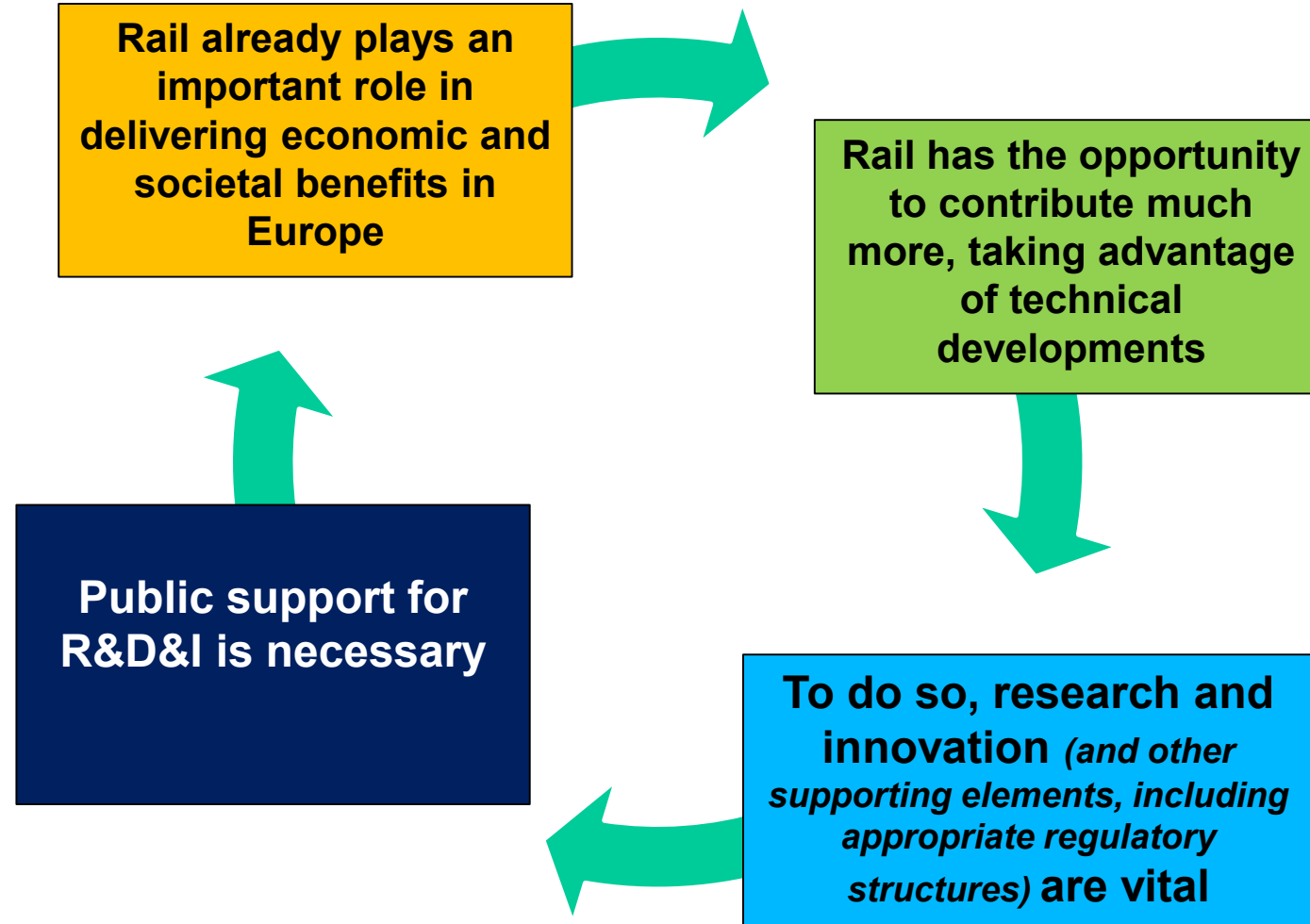
### ERRAC 2050 Vision in a nutshell

*“In 2050, rail transport in Europe is the backbone of an intermodal **“Mobility as a Service”** in cities and outside for both passengers and goods, meeting the needs of EU citizens and society. The suppliers and service organisations of the European rail industry are seen as the world’s thought leaders for railway products and services.”*

[https://errac.org/wp-content/uploads/2019/03/122017\\_ERRAC-RAIL-2050.pdf](https://errac.org/wp-content/uploads/2019/03/122017_ERRAC-RAIL-2050.pdf)



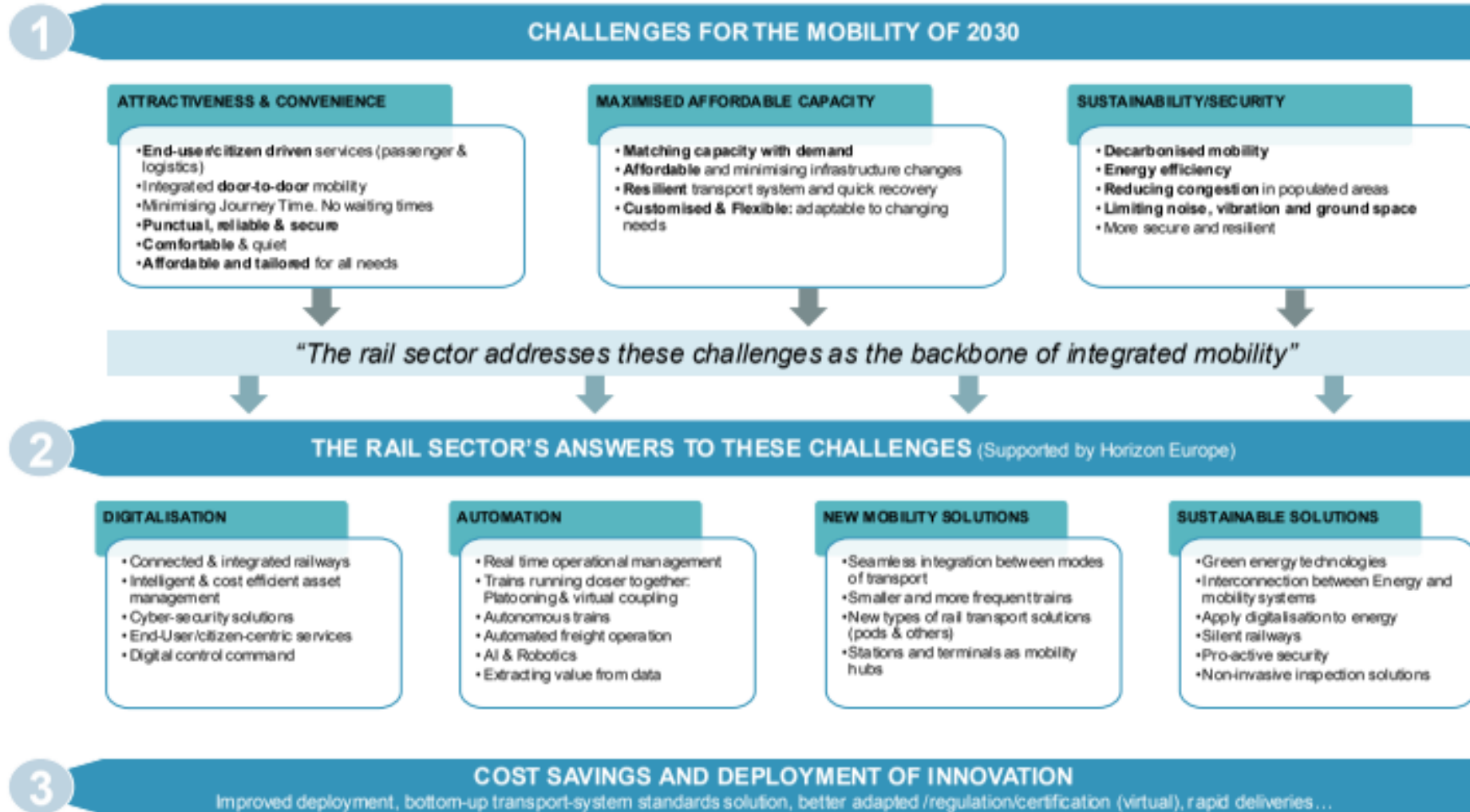
## ERRAC Rail 2050 vision in a nutshell (2/2)



- ✓ Reaching the ERRAC 2050 Vision requires consideration of the stages between today and then, particularly which aspects of the vision should be delivered by each stage, as a guide to **formulating the priorities for research and innovation**. The first such stage is **the period to 2030**, the focus of this document.
- ✓ The 2030 rail system **will interact with other transport modes** and with local, regional, national and European economic activities in transformational societal changes and trends.
- ✓ The objective of the sector is to offer **end-users/citizens easy and seamless access to a portfolio of sustainable mobility options which have rail as their backbone**.
- ✓ This document describes the priorities, which form the base for rail research and innovation, to build up the 2030 railway system.

[https://errac.org/wp-content/uploads/2019/09/errac\\_rail\\_2030\\_research\\_and\\_innovation\\_priorities.pdf](https://errac.org/wp-content/uploads/2019/09/errac_rail_2030_research_and_innovation_priorities.pdf)

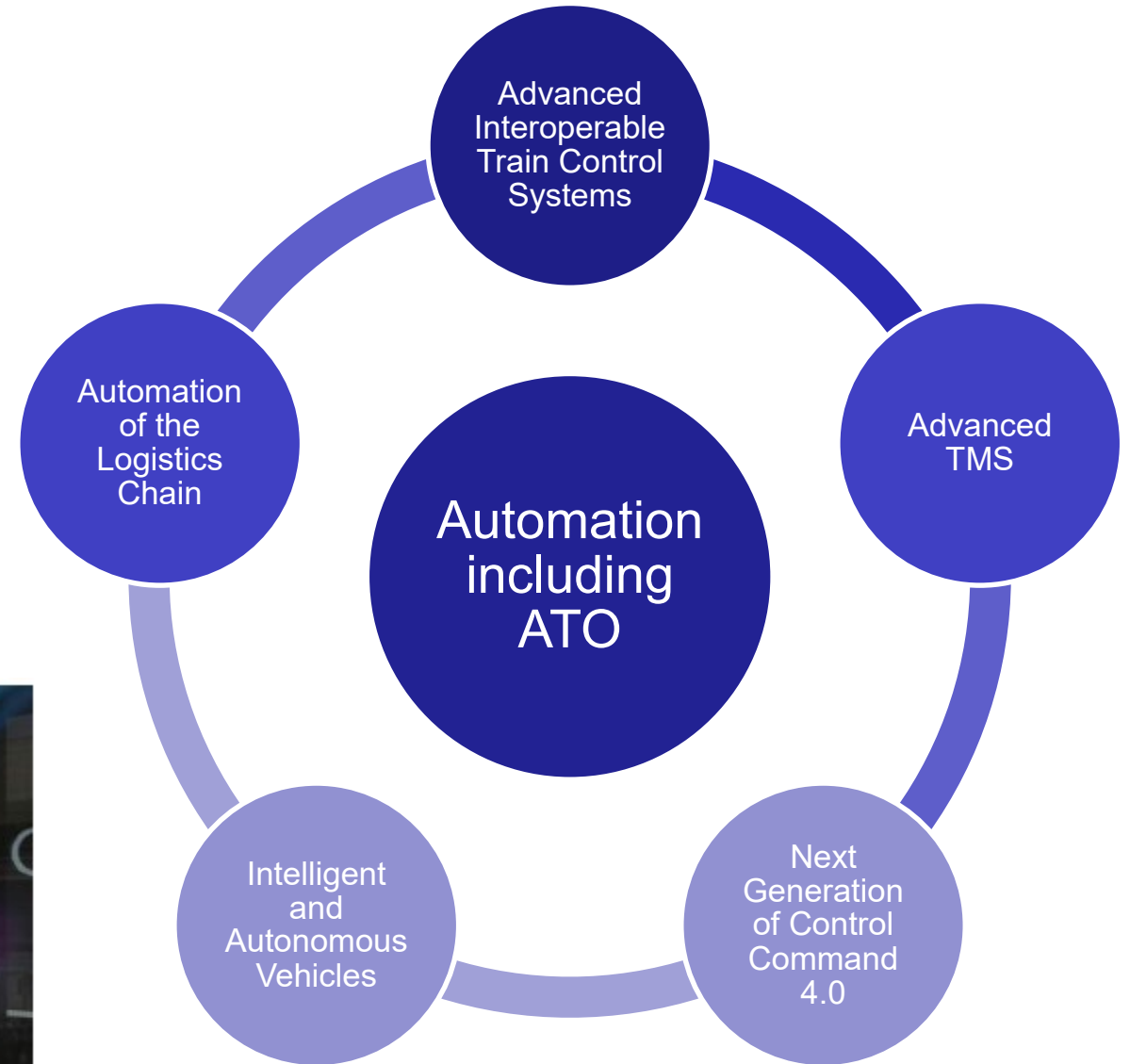








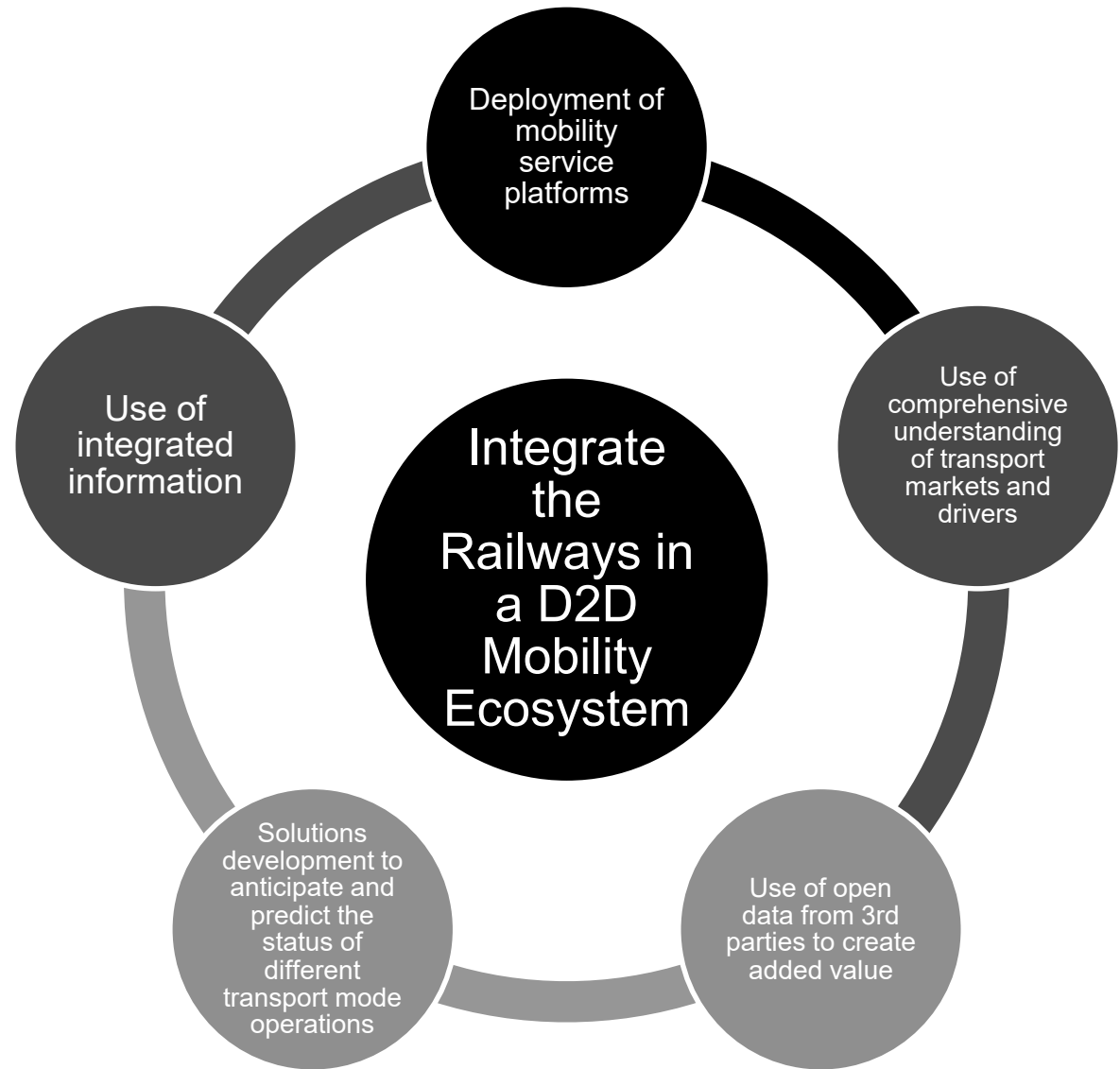
## RAIL 2030 R&I Priorities(3/7)

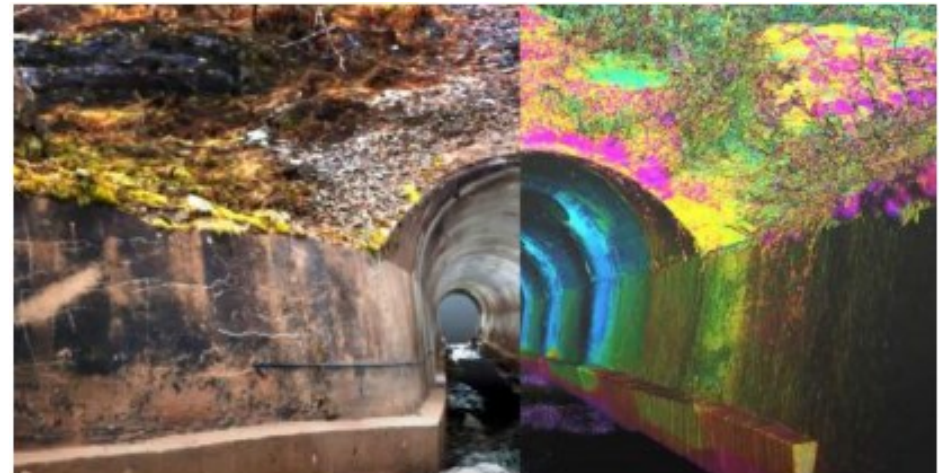
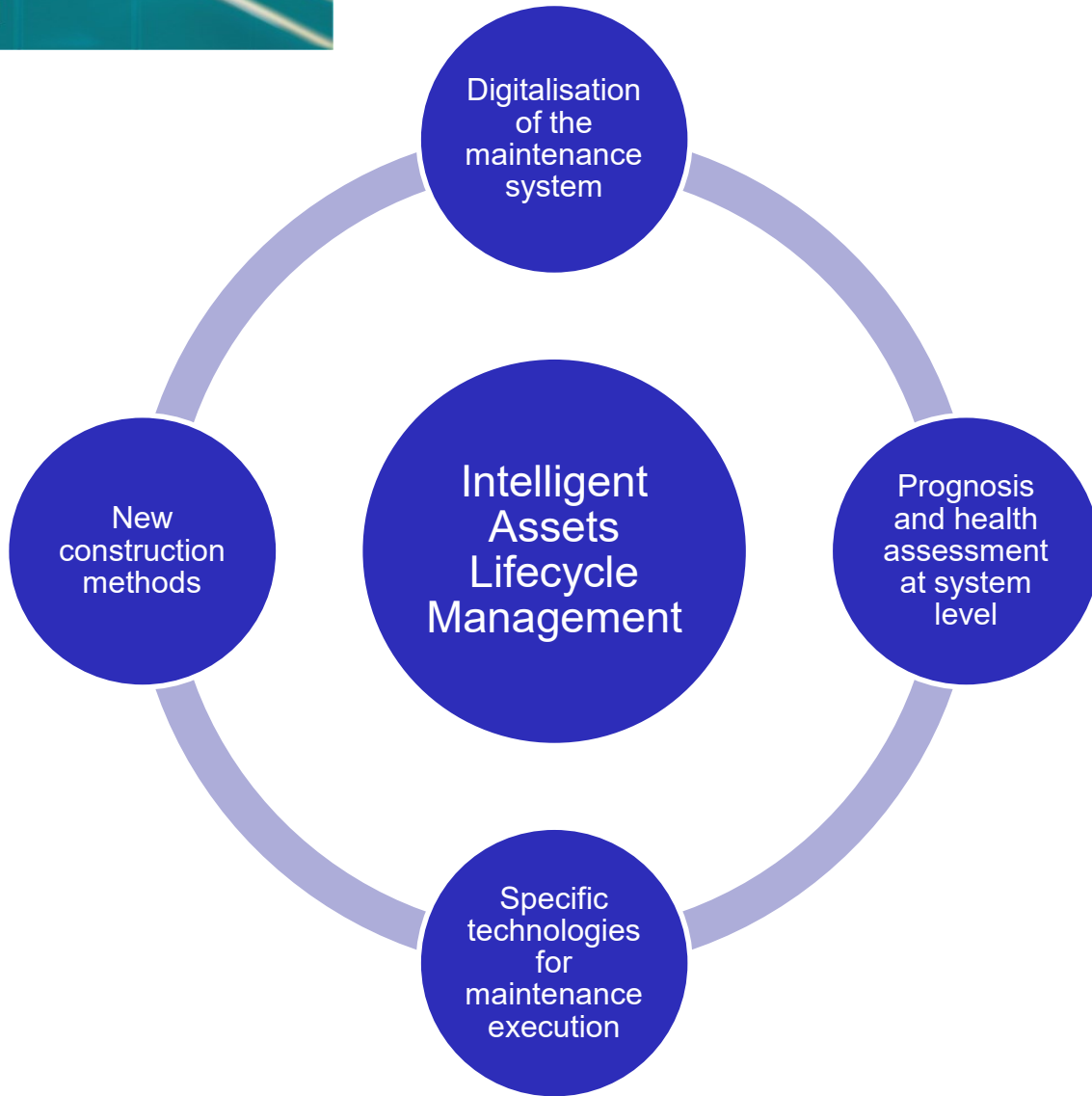






## RAIL 2030 R&I Priorities(4/7)









**RAIL IS 9X LESS CO<sub>2</sub>**  
intensive than road for freight  
and air travel for passengers.

Affordable  
alternative  
propulsion

Environmental  
sustainability  
and carbon  
free mobility

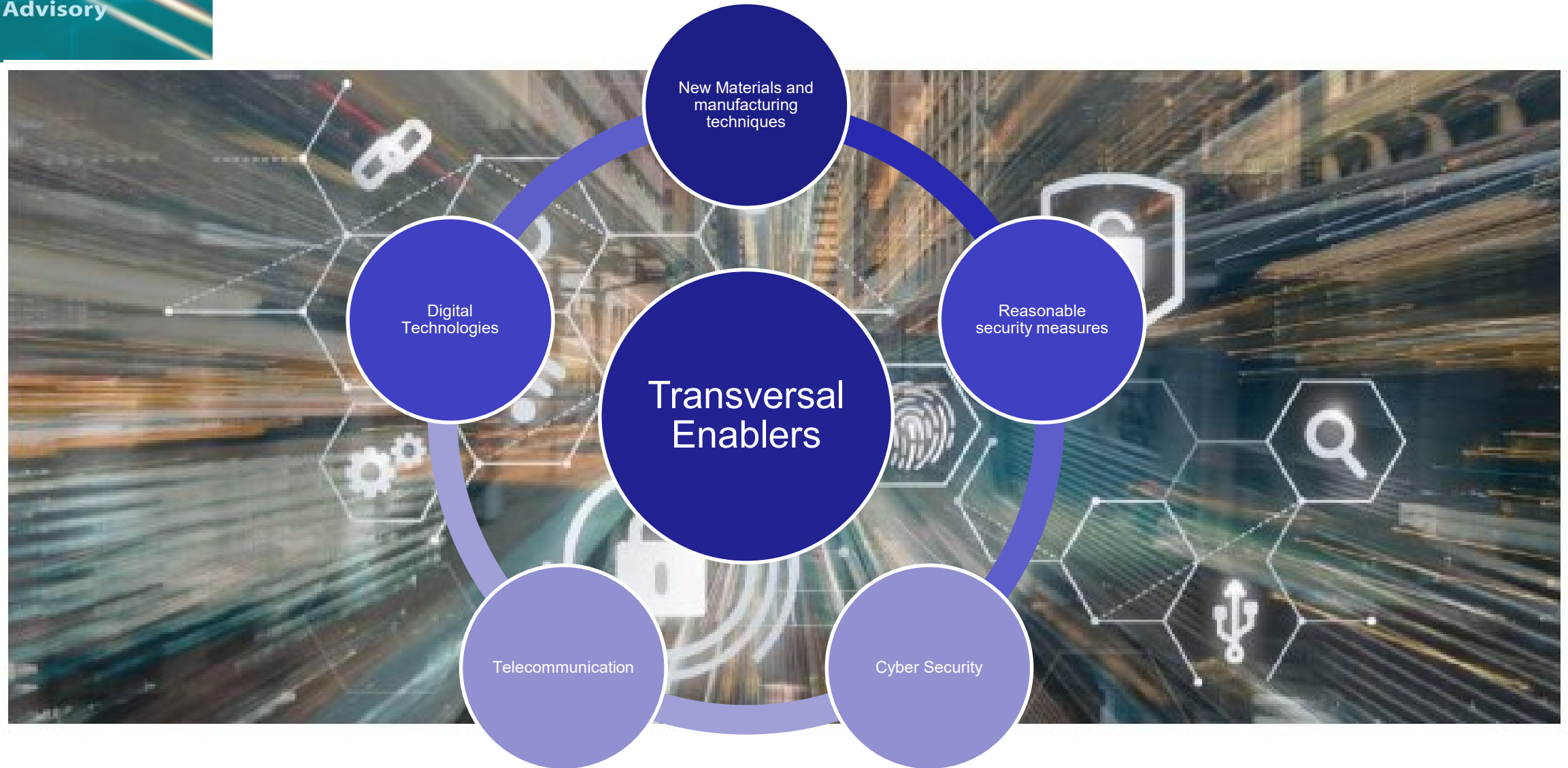
Holistic energy  
management  
approach for  
railways

Simulation tools  
and procedures  
to predict noise  
and vibrations

Procedures and  
techniques for  
recycling  
vehicles and  
eliminating  
polluting  
substances







- **We have a momentum – now is the time to act!**
- **Need to get the extension of Shift2Rail in Horizon Europe following the iPPP Model!**



**Thank you for your attention!**

