

# Next Generation Communication System



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#Shift2Rail

**Key Innovation programme 2**  
Advanced Traffic Management and Control Systems

## TD2.1 Adaptable Communications for all railways

User & System Requirements

Business Model

Specification of the  
Communication System

Guideline for a Choice of  
Technology

Development of Prototypes

Field Tests



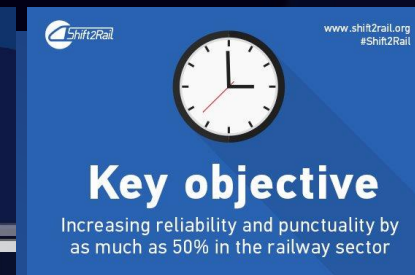
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**Key objective**  
50% reduction of live-cycle costs



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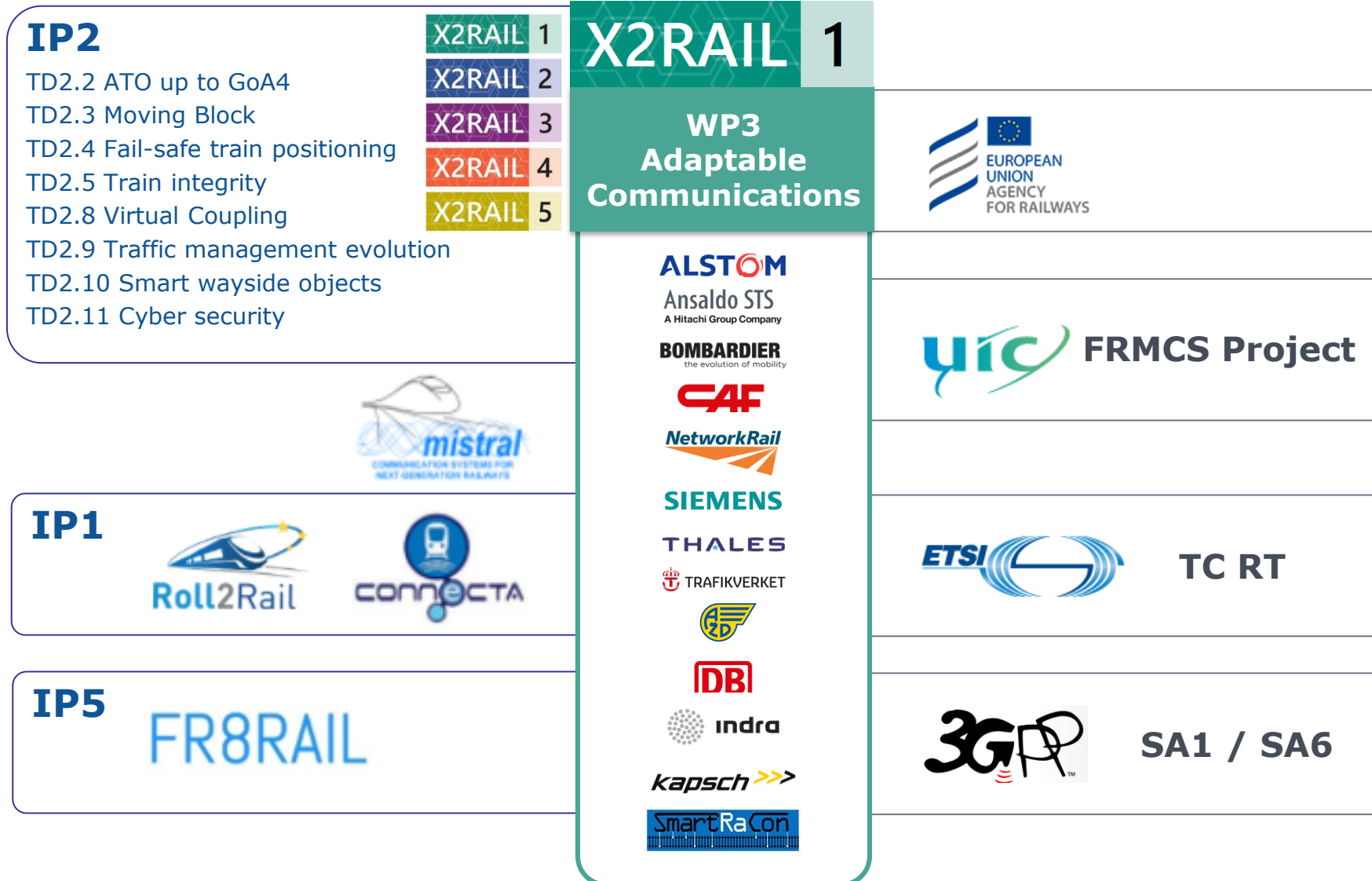
**Key objective**  
Doubling railway capacity



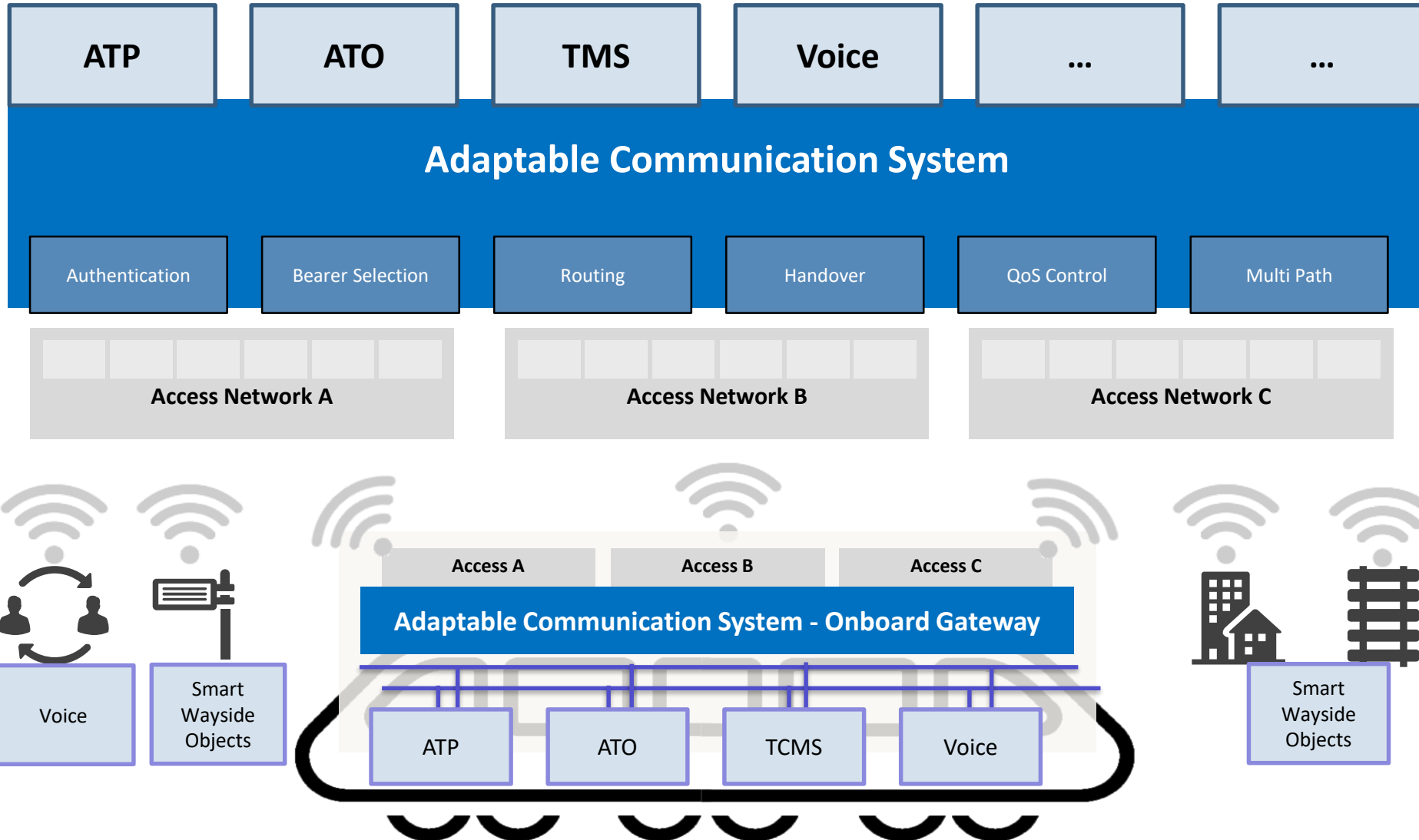
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**Key objective**  
Increasing reliability and punctuality by  
as much as 50% in the railway sector

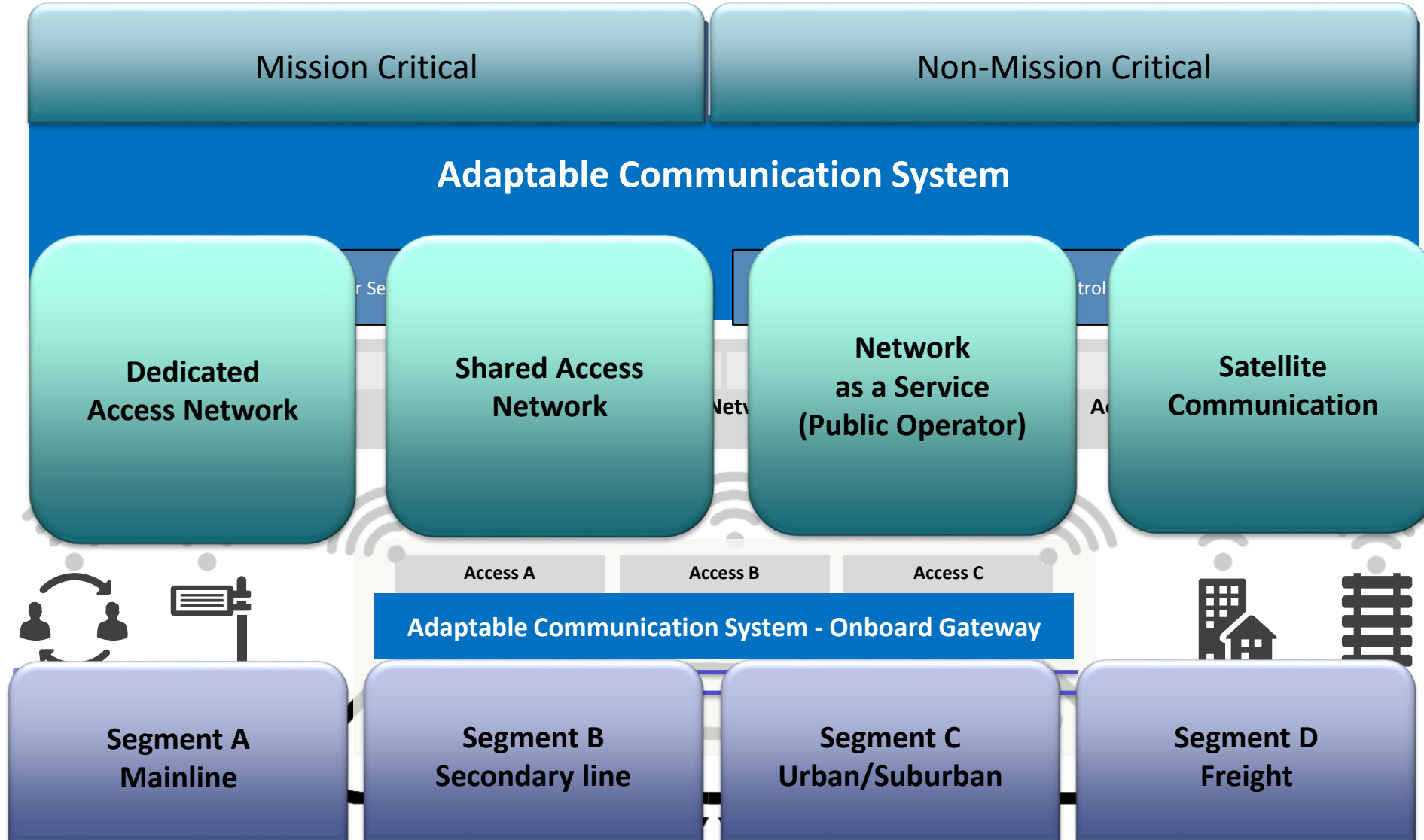
# Collaboration & Interactions



# Communication Architecture



# Innovation beyond Technology



# Next Generation Communication in Shift2Rail



Overcome the current limitations of GSM-R

Bearer independent and transparent to applications

Multi-Access Support & Resilient to Radio Technology Evolution

Backward compatible to ensure coexistence and smooth migration

Enable new operating models including „Network-as-a-Service“

Support new innovation and applications for railways