Redesign of the International Timetabling Process (TTR)
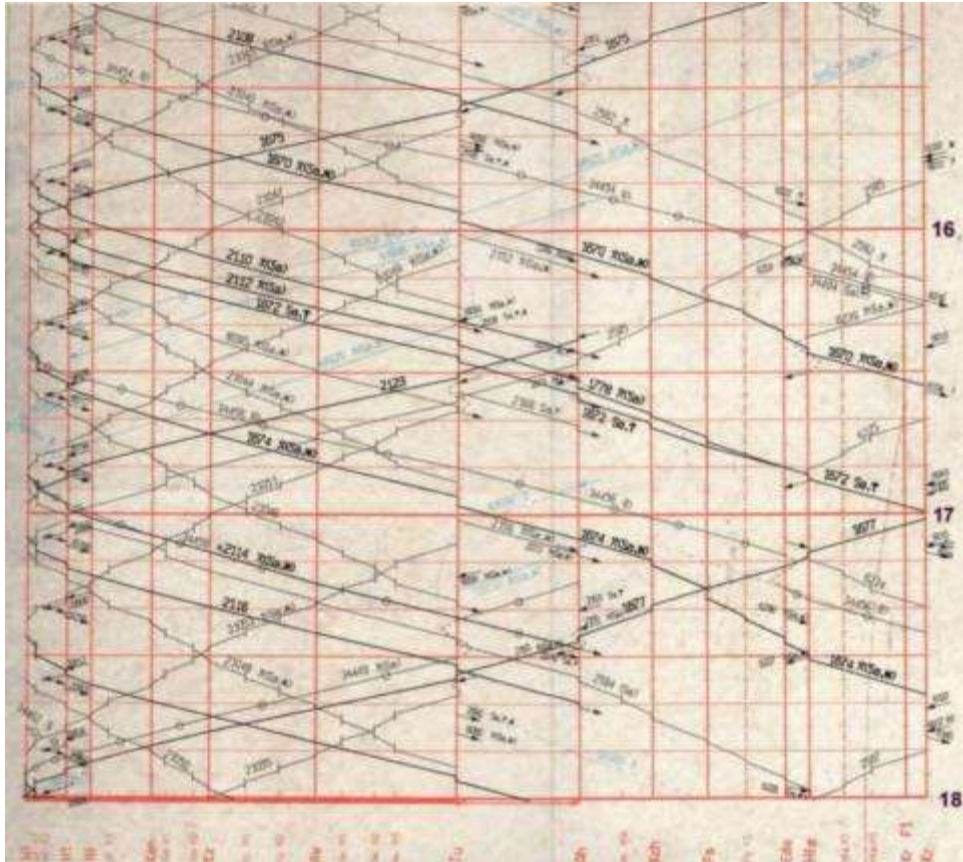
Ljubljana, 19 February 2019

TTR Introduction

Market needs, Vision, Elements, Timeline

The need for a redesigned TT process

- Out-dated timetabling process

- One static path request deadline does not fit to various market needs (e.g. freight traffic)

- Lack of harmonisation and cooperation

- Increasing national constraints

- Problem of coordination of works

Vision

The goal is the implementation of the **complete process (i.e. all process components as agreed by RNE and FTE) latest by the end of 2024 (Timetable 2025).**

- Clear focus on freight and passenger **market needs** with optimised request deadlines

- Improved **reliability, consistency and stability** incl. planning and execution of Temporary Capacity Restrictions (TCRs)

- **Binding** implementation and application of the redesigned timetabling process TTR

- Improvement of **efficiency** (capacities, resources, IT) in order to avoid multiple planning/work

- Making best **use of existing Infrastructure capacity**

Elements of the redesigned timetabling process

Railway sector created a new TTR process that has the following main elements:
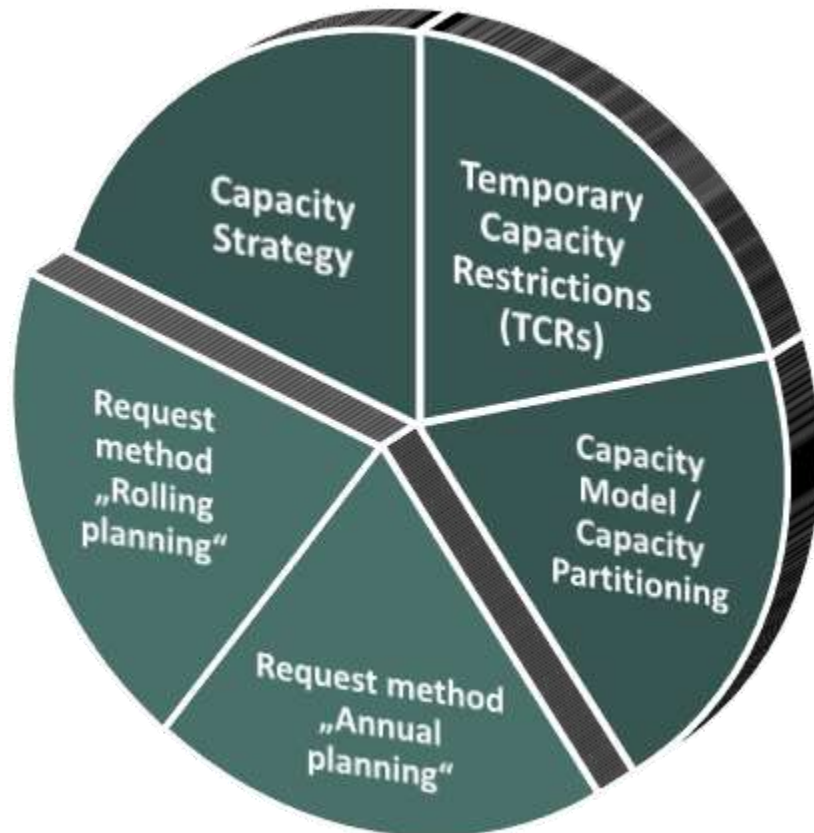
The successfully implementation of TTR relies on several pre-conditions:

Legal Framework

TTR must be supported by the legal framework, pragmatic solutions shall be applied
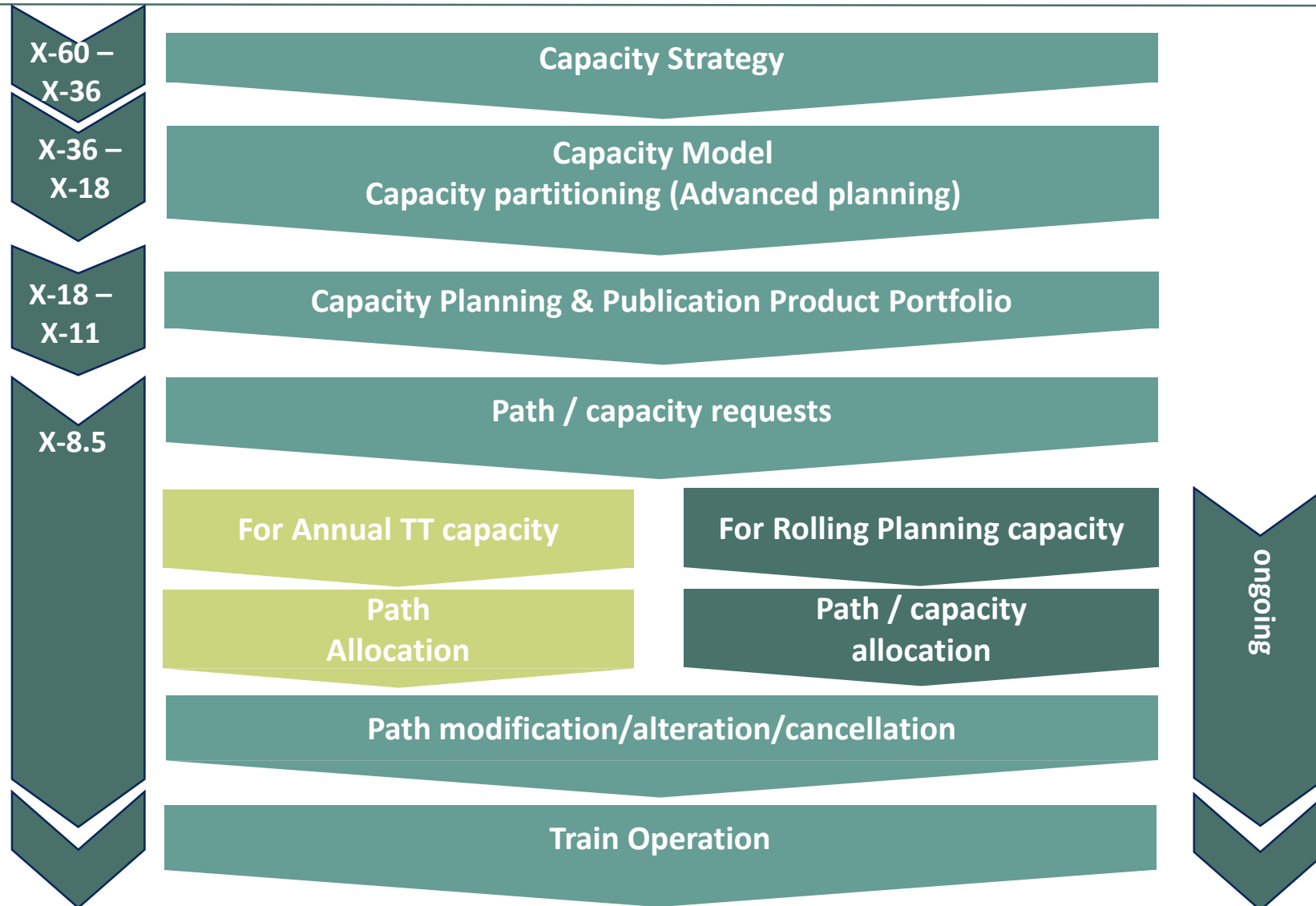
Commercial Conditions

Internationally harmonised CC are required to reduce waste of existing capacity

IT Landscape

Digitalisation and automatisation is must. A common IT solution needs to be placed

Process timeline of TTR

X-60 – X-36	**Capacity Strategy**
X-36 – X-18	**Capacity Model** **Capacity partitioning (Advanced planning)**
X-18 – X-11	**Capacity Planning & Publication Product Portfolio**
X-8.5	**Path / capacity requests**

For Annual TT capacity

For Rolling Planning capacity

Path Allocation

Path / capacity allocation

ongoing

Path modification/alteration/cancellation

Train Operation

FTE
FORUM TRAIN EUROPE

RNE
RailNetEurope

Benefits of TTR for the sector

- **Benefits detected in Business Case:**

  The complete implementation of all components will provide access to large financial benefits due to:

  - <u>Improved usage of available infrastructure</u> (increased capacity/quality) and subsequent higher marked share of railways in the modal split

  - <u>Increased efficiency of IMs and applicants</u> when planning and allocating capacity with minimization of redundant work steps

TTR Pilots

Antwerp – Rotterdam (RFC North Sea – Mediterranean)

Mannheim – Miranda de Ebro (Atlantic RFC)

Munich – Verona (RFC ScanMed)

ÖBB-Infrastruktur

TTR Pilots – Testing innovative TTR components

TTR Pilots were launched to test some of the new crucial TTR components, namely:

CAPACITY MODEL

A consolidation of all known capacity elements into a single entity to display available capacity and partition the expected traffic according to its attributes. It also safeguards capacity (high-quality slots) for Rolling Planning requests.

- Capacity available for annual requests
- Capacity required for TCR
- Capacity safeguarded for dynamic traffic

ROLLING PLANNING

To serve the volatile market and ensure stability, a new product is introduced: Rolling Planning requests can be placed at any time between 4 and 1 month before the first operation day and is valid for a maximum duration of 36 months.

TT 202.	TT 202. +1	TT 202. +2	TT 202. +3	TT 202. +4

Request — Operation

Request — Operation

Request — Operation
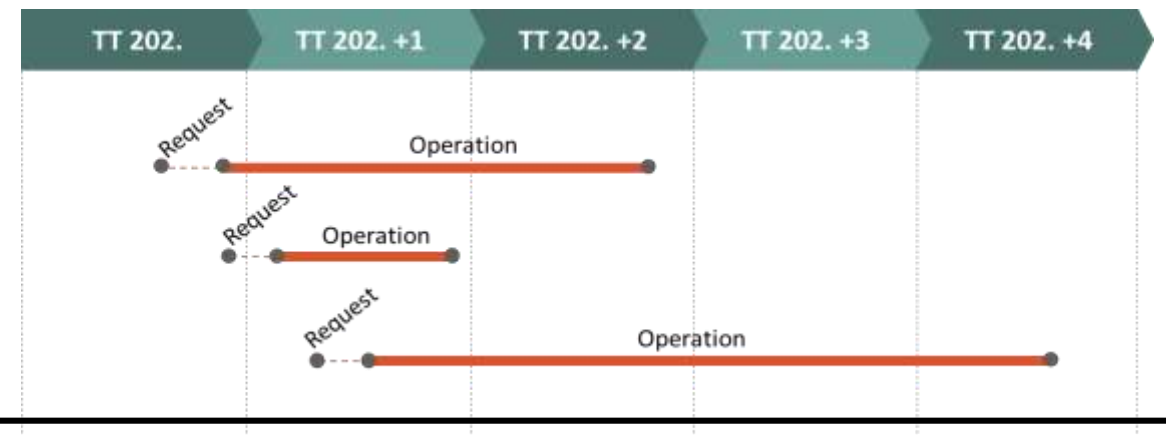
We need pilots to learn from experience!

Timetable period 2020

Timetable period 2021

Antwerp - Rotterdam

Munich - Verona

Postponed

Mannheim – Miranda de Ebro

PROGRESS

| **2018** CAPACITY MODEL | **2019** CAPACITY REQUEST | **2020** ACTIVE TIMETABLE |

Antwerp - Rotterdam

ÖBB-Infrastruktur

Munich - Verona

Mannheim – Miranda de Ebro

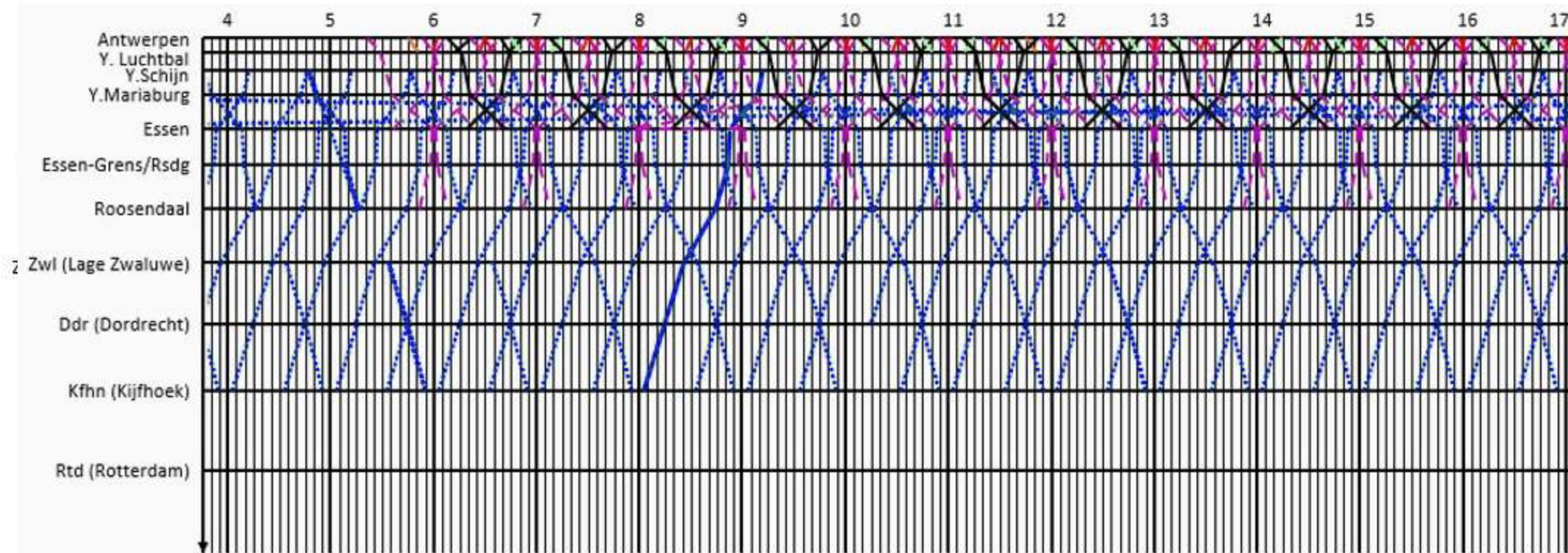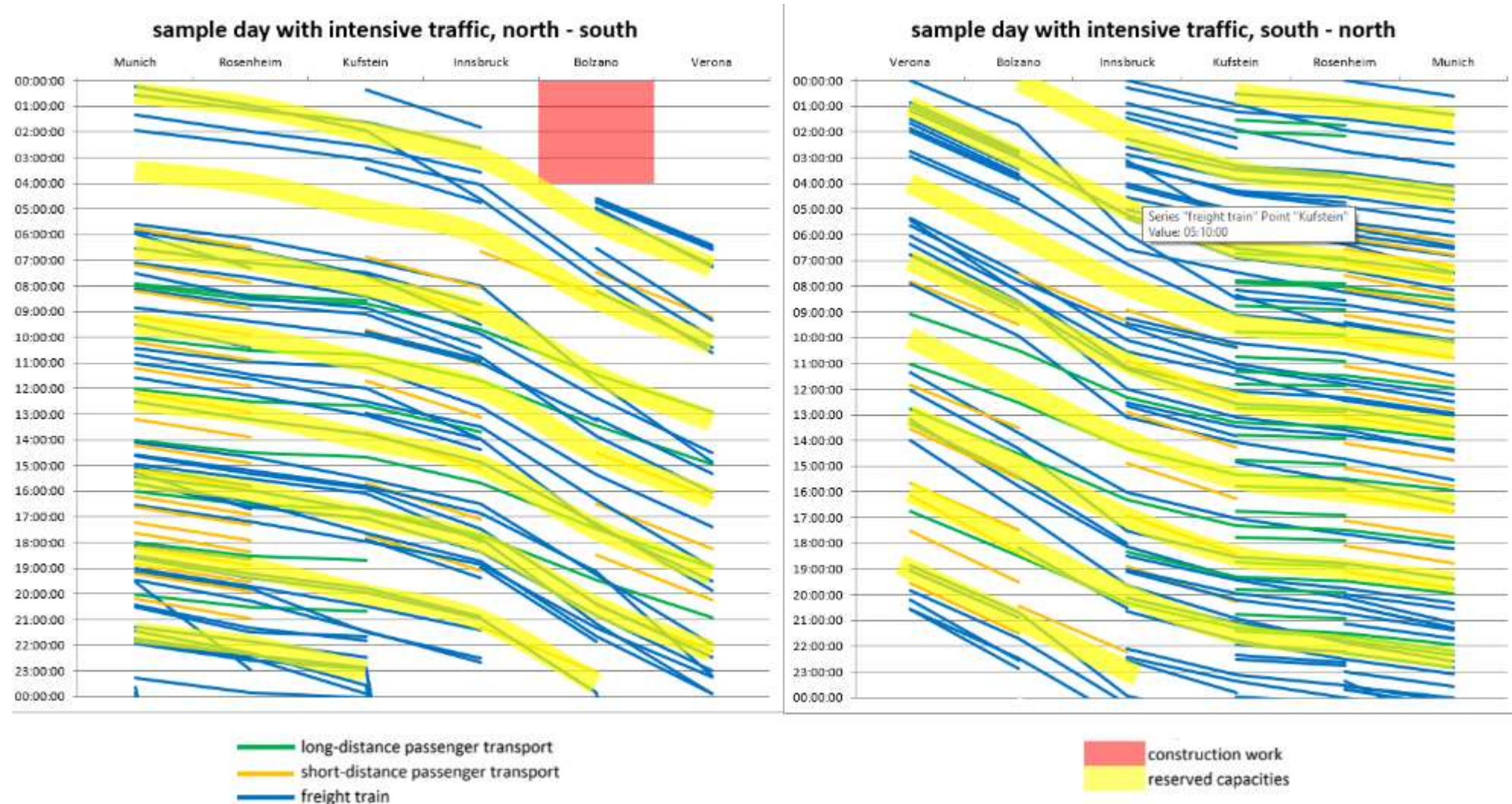| **2019** CAPACITY MODEL | **2020** CAPACITY REQUEST | **2021** ACTIVE TIMETABLE |
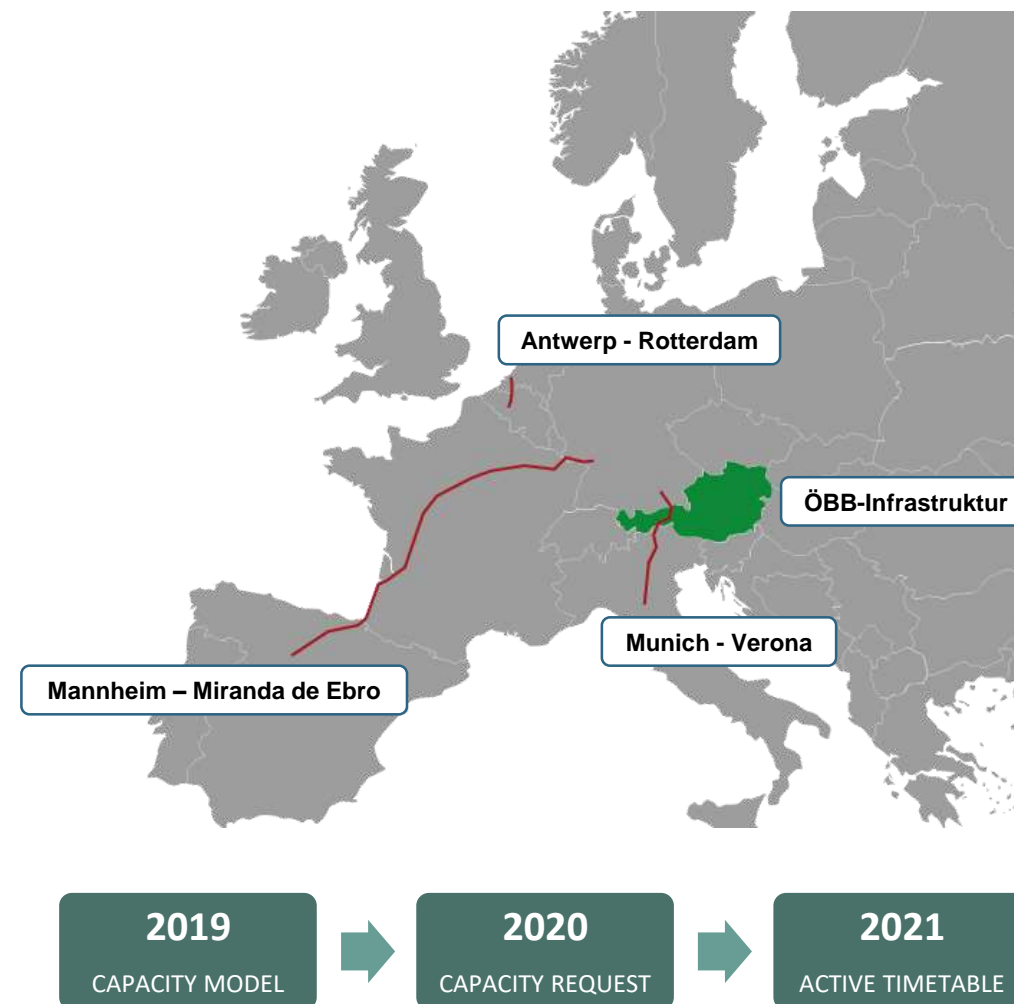
Example of Capacity Model (Rotterdam – Antwerp)

It contains:
- View on expected traffic volumes
- Partitioning in Annual Requests and Rolling Planning Request capacity
- View on capacity for maintenance in 2020
- View on TCRs in 2020

Example of Capacity Model (Munich-Verona)

sample day with intensive traffic, north - south

sample day with intensive traffic, south - north

long-distance passenger transport
short-distance passenger transport
freight train

construction work
reserved capacities

TTR Pilots: Achievements

- Joint text in Network Statements

- Increased awareness about TTR

- New annex to FCA

- Two pilot lines started phase 2
  - Antwerp – Rotterdam
  - Munich – Verona

- Documents published by the two pilot lines in CMS:
  - Pilot Information Documents (PIDs) for two pilot lines available
  - Capacity for two pilot lines published
  - Pilot publications online: https://cms.rne.eu/ttr-communication-platform

TTR Implementation

Approach: Implementation in packages
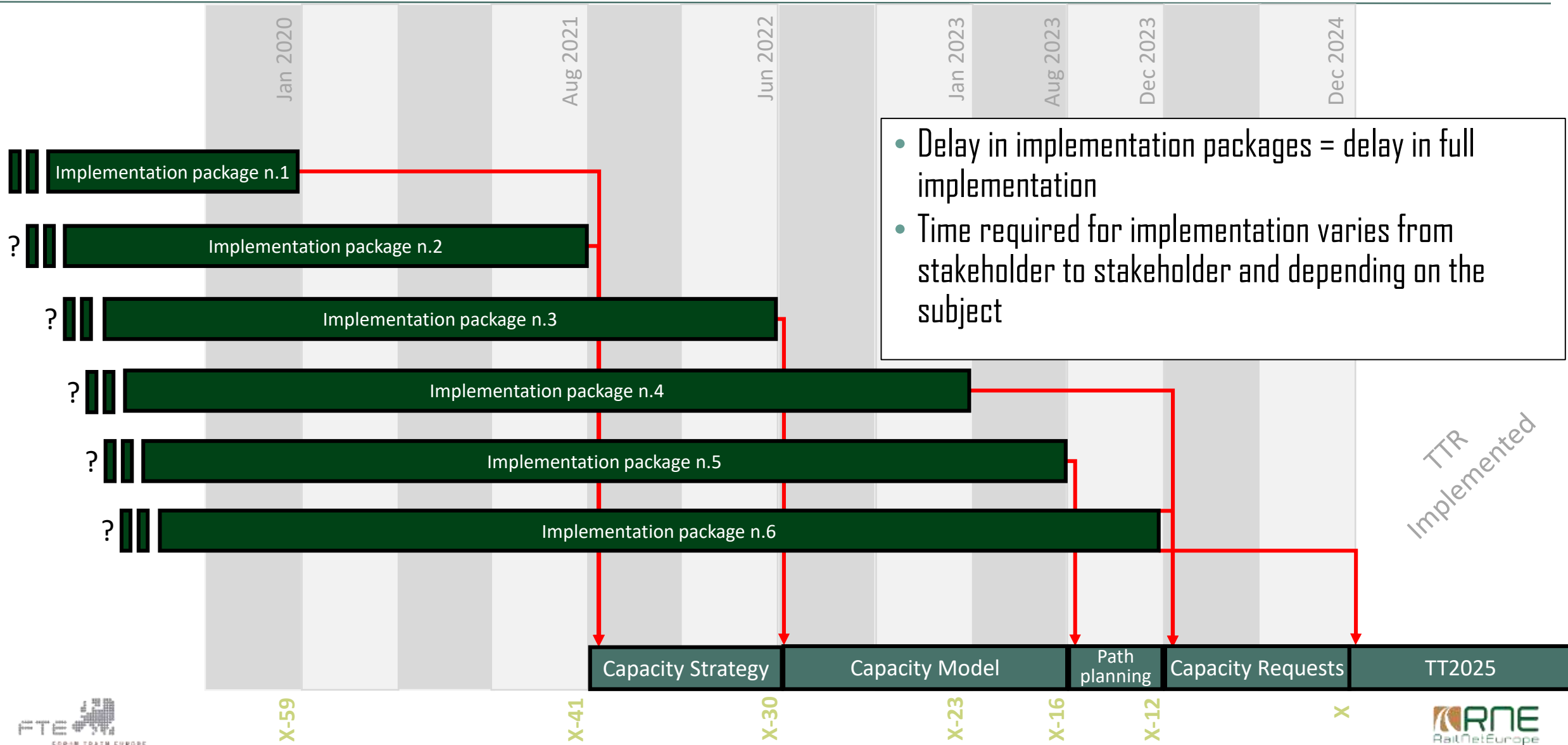
Implementation in Europe

- European organizations will be asked to adapt and provide
  - IT
  - Legal Framework
  - Commercial Conditions
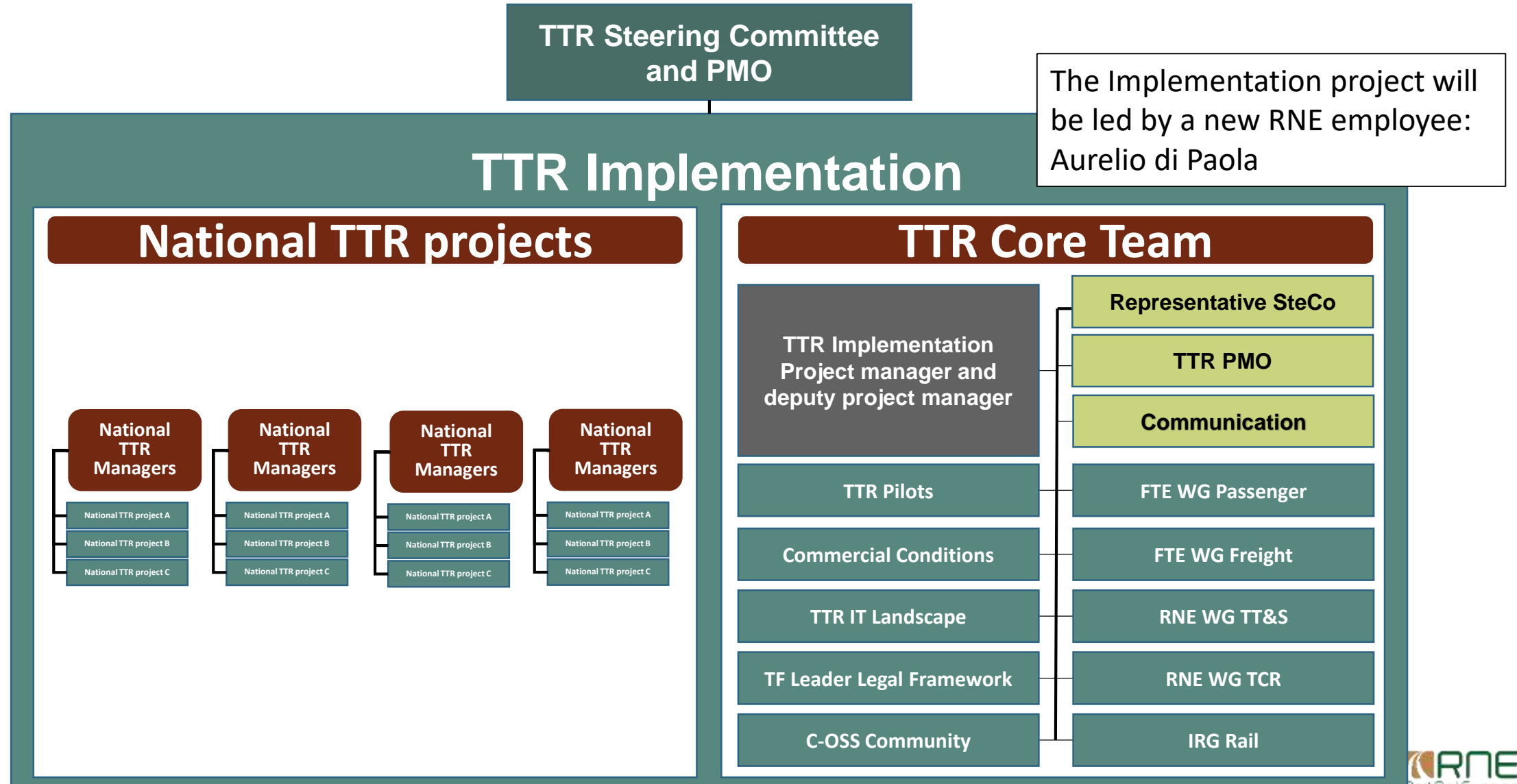
- Implementation steered by RNE

National implementation

- National organizations will need to adapt and provide
  - IT
  - Legal Framework (if required)
  - Commercial Conditions

- National implementation projects conducted by IMs
  - Inclusion of national stakeholders (e.g. RUs, RBs)
  - Coordination among projects via RNE

Structure TTR Implementation

TTR Steering Committee and PMO

The Implementation project will be led by a new RNE employee: Aurelio di Paola

TTR Implementation

National TTR projects

National TTR Managers	National TTR Managers	National TTR Managers	National TTR Managers
National TTR project A	National TTR project A	National TTR project A	National TTR project A
National TTR project B	National TTR project B	National TTR project B	National TTR project B
National TTR project C	National TTR project C	National TTR project C	National TTR project C

TTR Core Team

TTR Implementation Project manager and deputy project manager	Representative SteCo
	TTR PMO
	Communication
TTR Pilots	FTE WG Passenger
Commercial Conditions	FTE WG Freight
TTR IT Landscape	RNE WG TT&S
TF Leader Legal Framework	RNE WG TCR
C-OSS Community	IRG Rail

Thank you!

If you have further questions, you may contact…

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