# Better use of railways infrastructure capacity between Vienna and Budapest

## - EC Passenger Pilot projects

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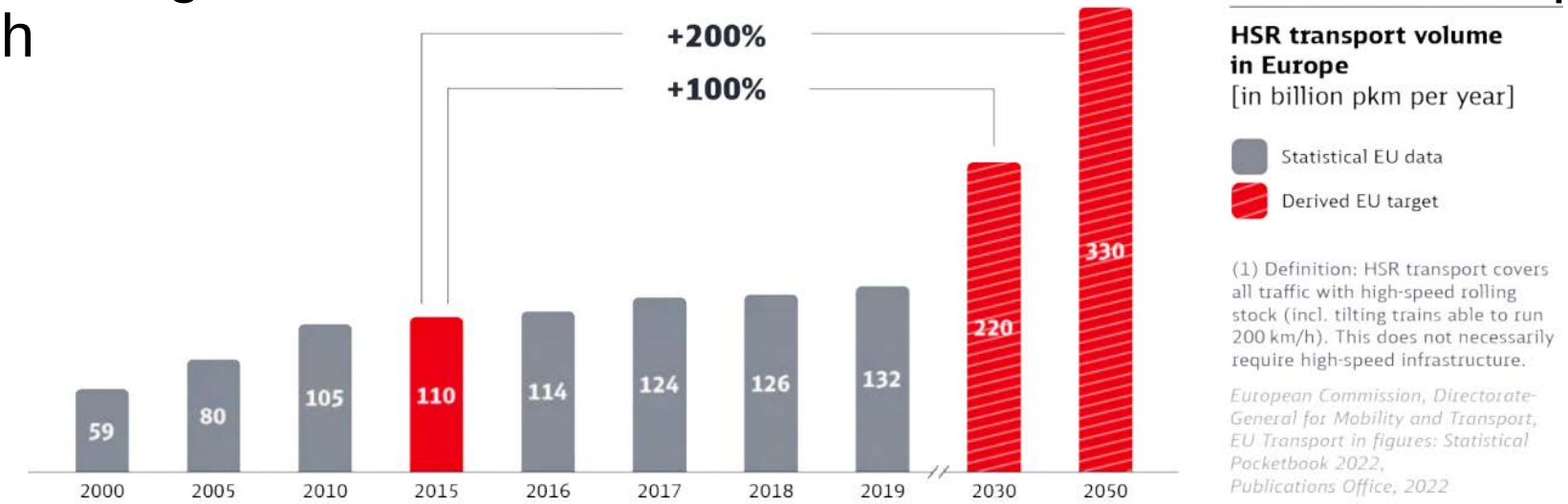
# Why is advance capacity planning important?

- EU Policy focus shifts from building railways to properly using it

COM(**2011**) 144: Triple EU high speed railway **infrastructure** by 2030 (Roadmap to a Single European Transport Area – Towards a competitive and resource-efficient system)

COM(**2020**) 789: Triple EU high speed railway **ridership** by 2050 (Sustainable and Smart Mobility Strategy – putting European transport on track for the future)

- In the ideal growth case, infrastructure investments will not keep up with market growth

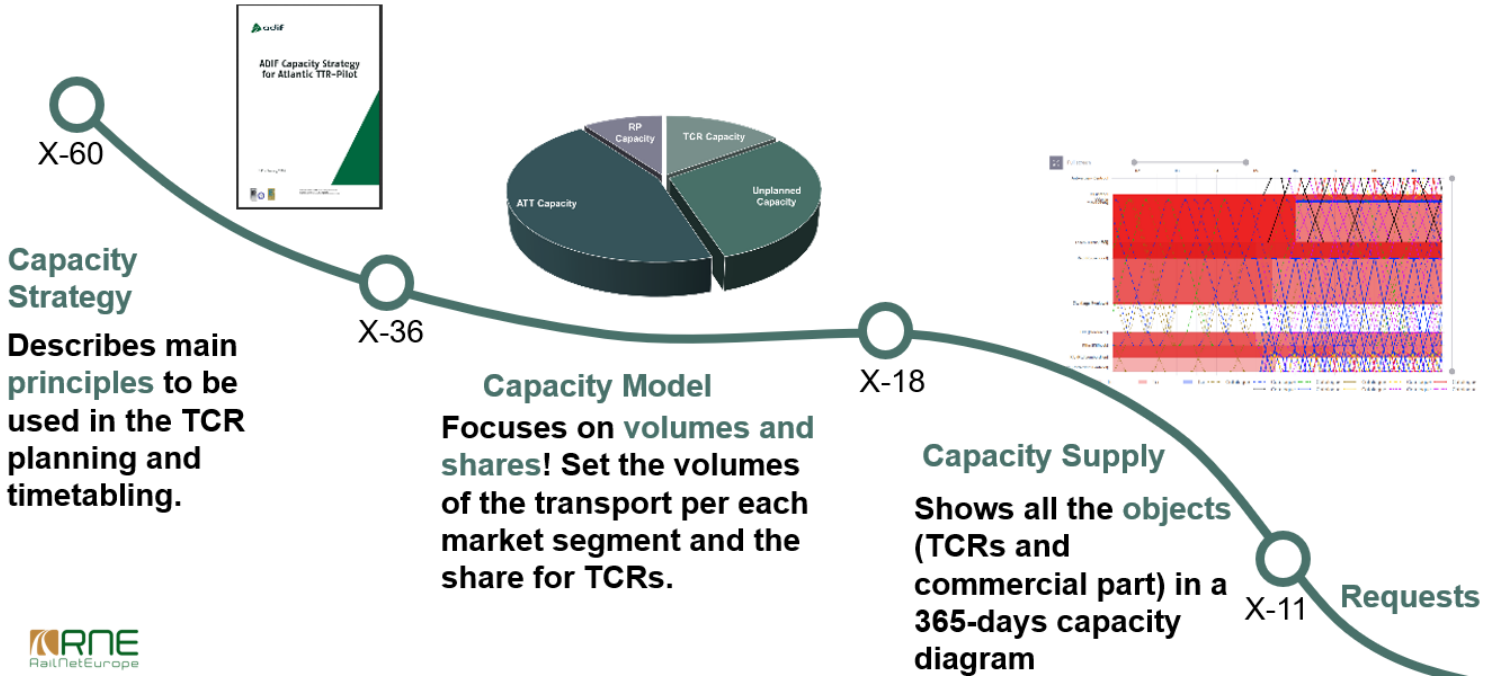



Source: Deutsche Bahn: Metropolitan Network: A strong European railway for an ever closer union

- Strategy for infrastructure investment should be complimented by strategy for use

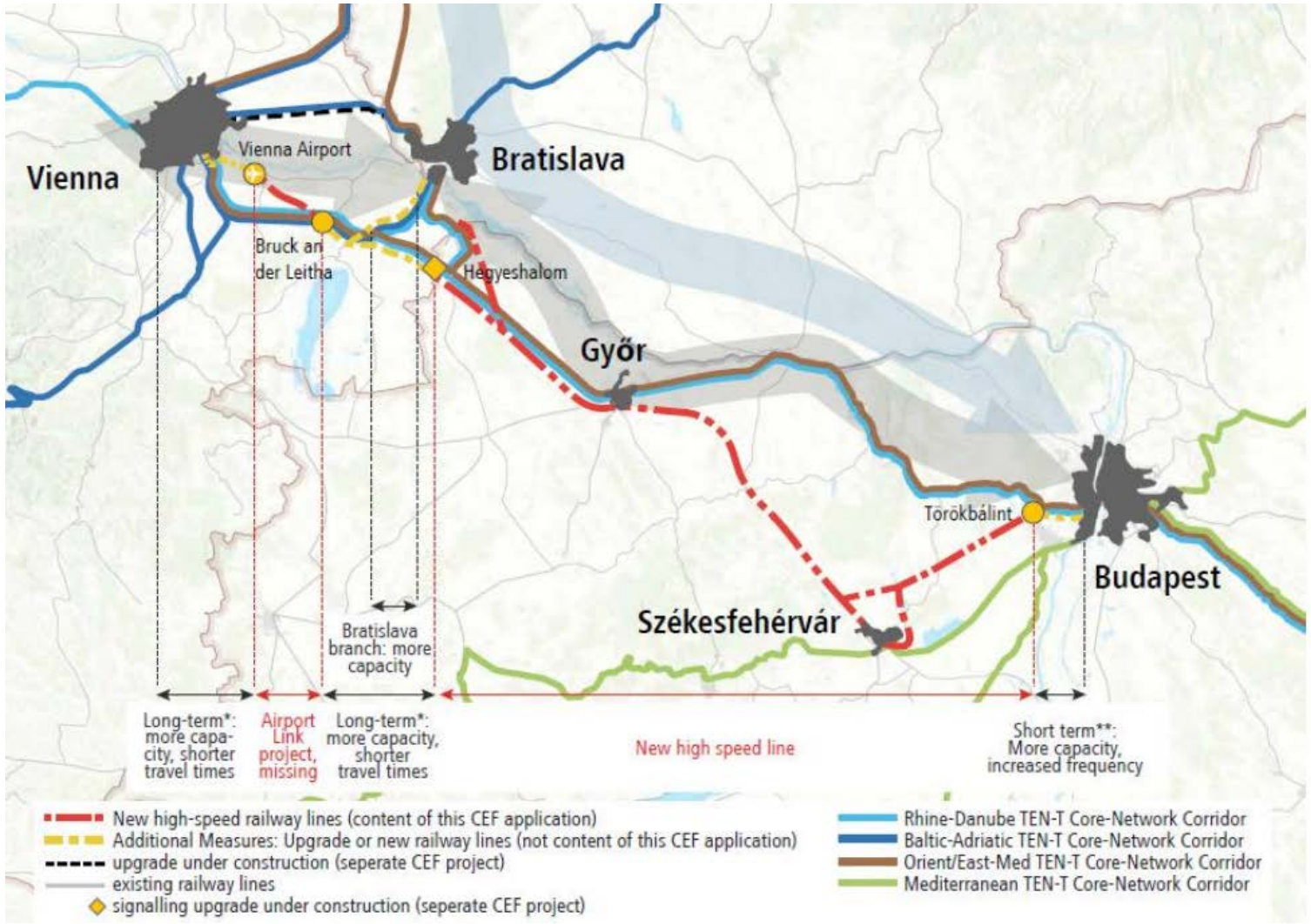
# Why is advance capacity planning important? (2)

- Railways is not free like airspace: capacity not properly planned is capacity lost.
- Therefore: Timetable Redesign (TTR) for smart capacity management
  - a sector initiative




- Taken up by the European Commission proposal on the use of railway infrastructure capacity (COM(2023) 443) – with a Network Coordinator

# Section Vienna-Budapest: long term plans vs. short term growth potential




Source: CEF project documentation 2020-HU-TMC-0092-S

- The long-term solution for more speed and capacity between Vienna and Budapest is a new high speed line
- Feasibility study closed with positive outcome; environmental appraisal in progress by an EU co-funded project
- New alignment taken up in TEN-T revision proposal as Extended Core / Comprehensive network

# Section Vienna-Budapest: long term plans vs. short term growth potential (2)

| Vasútkód | Ország | 2022 I-III | 2023 I-III | 2023 / 2022 |
|---|---|---|---|---|
| OBB | Ausztria | 184 754 | 307 215 | 66% |
| DB | Németország | 76 935 | 125 068 | 63% |
| ZSSK | Szlovákia | 51 507 | 64 451 | 25% |
| UZ | Ukrajna | 68 775 | 63 959 | -7% |
| CFR | Románia | 57 070 | 58 237 | 2% |
| CD | Csehország | 31 515 | 57 108 | 81% |
| Eurail | Interrail+Eurail | 8 630 | 45 764 | 430% |
| SBB | Svájc | 14 835 | 23 230 | 57% |
| PKP IC | Lengyelország | 8 173 | 18 164 | 122% |
| SZ-SI | Szlovénia | 2 719 | 3 382 | 24% |
| HZ | Horvátország | 2 313 | 3 025 | 31% |
| NS | Hollandia | 305 | 773 | 153% |
| SNCB | Belgium | 131 | 499 | 281% |
| SNCF | Franciaország | 57 | 110 | 93% |
| CFL | Luxemburg | 13 | 81 | 523% |
| DSB | Dánia | 4 | 18 | 350% |
| BDZ | Bulgária | 24 | 8 | -67% |

- Ridership already skyrocketing above pre-COVID numbers
- Infrastructure capacity issues translate to train overcrowding
- What to do until long-term infrastructure investments?
- Better use capacity of existing infrastructure!

- Also enabled by ongoing signalling upgrade (co-funded by EU)

Source: MÁV-Start / Zsolt Hegyi

# EC passenger pilot initiative – aiming for the low hanging fruit of ridership growth

- Launched by European Commission in framework of Sustainable and Smart Mobility Strategy and Action Plan to boost cross-border rail
- 10 pilots selected by COM on 31 January 2023, comprising of 14 proposals
- Good cross-section of EU rail market (geographic; incumbent-new entrant, high speed – conventional, day-night)
- Relevant pilots for Vienna-Budapest:
  - München-Vienna-Budapest (Westbahn)
  - Vienna-Budapest-Romania (Arad/Oradea) - Hungarian Ministry of Transport
- Not financial assistance – technical assistance to dismantle entry barriers
- 13 of 14 proposals identified capacity allocation as entry barrier
- RNE contracted by Commission for technical assistance in capacity management issues

# Role of RNE in the EC Passenger Pilot initiative

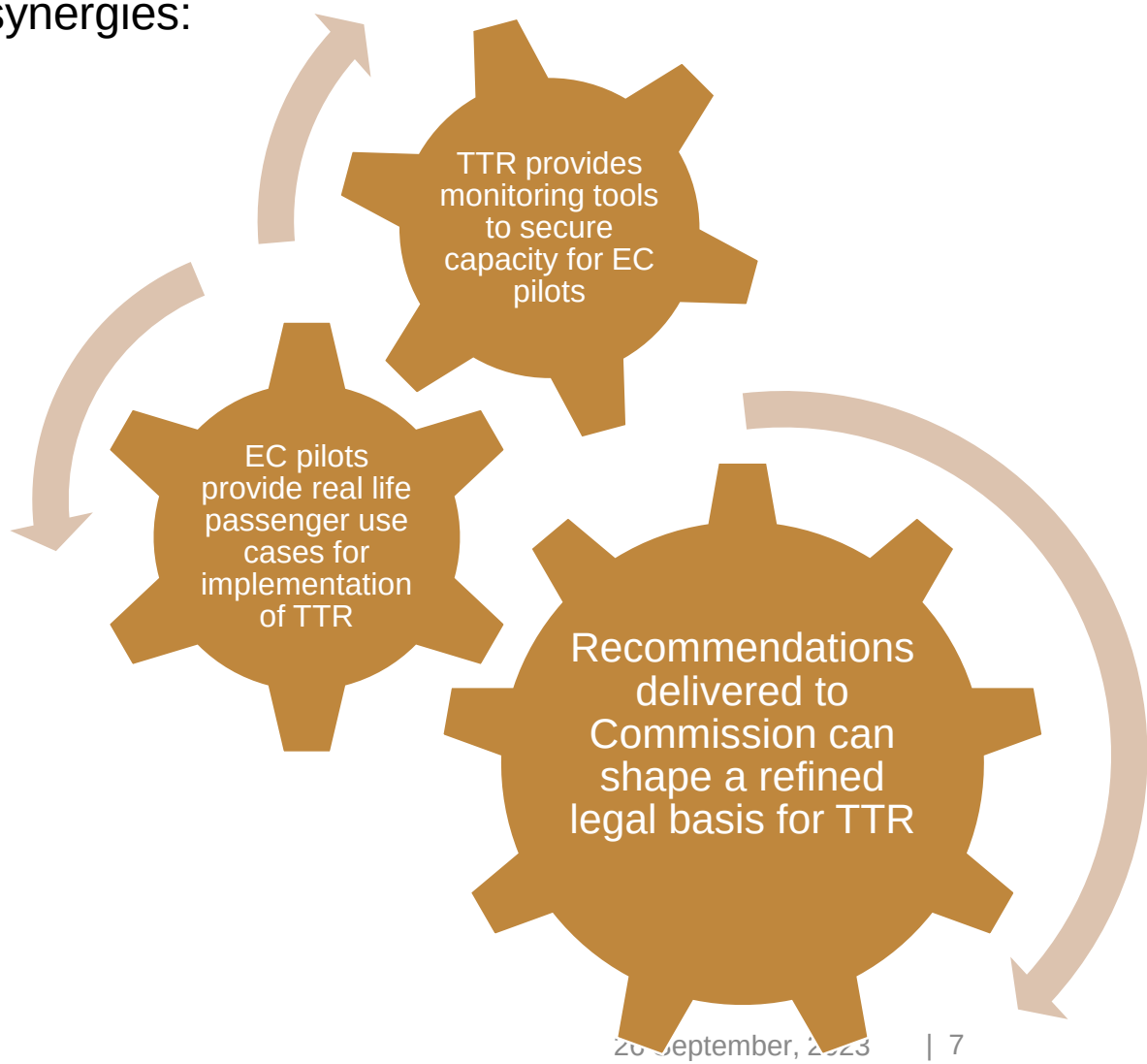
RNE technical assistance to European Commission is three-fold:

**Support** pilot applicant RUs as single point of contact in capacity-related issues

**Measure** and report capacity related progress of pilots

**Develop** recommendations overarching and beyond the pilots to support cross-border passenger services

Parallel implementation of TTR and EC pilots offer synergies:



# EC passenger pilots on Vienna-Budapest section

| | Currently | Aimed |
|---|---|---|
| Base frequency | every 60 minutes | every 30 minutes |
| Travel time | 2:26 | 2:11 (with signalling upgrade) |
| Extension from Vienna westwards | ca. every 2 hours (from :30 node) | possible every hour, both from :00 and :30 node |
| Extension from Budapest eastwards | 2xdaily, 1x night (via Budapest-Keleti) | possible every hour, directly |
| Capacity for new entrants | as over-the-top train paths | integrated into base frequency |
| Governance | via PSO | via TTR? via Framework Agreements? |

Source: VPE


- Pilot applicant: Ministry of Transport, Hungary
- Executed by: VPE (Hungarian railway track capacity allocation office)
- Gradual implementation until 2028

# EC passenger pilots on Vienna-Budapest section (2)

Current operators


Future operators

*Aspiration of RNE is to showcase by our assistance in the Passenger Pilots to the Commission and pilot applicants, that advance planning by TTR can result in better capacity products for both current and future railway operators.*