Realising the High-Speed Masterplan for Europe

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High-speed lines – Reality of the future

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CER priorities

- CER manifesto for the next legislature “On Track For Europe”
- Ensuring fair competition between modes
- Ensuring adequate financing of railways
- Digitalising rail services and ensuring the deployment of rail’s key enablers such as ERTMS, DAC, DCM
- TEN-T Regulation revision
- Greening transport package
- Passenger Mobility package

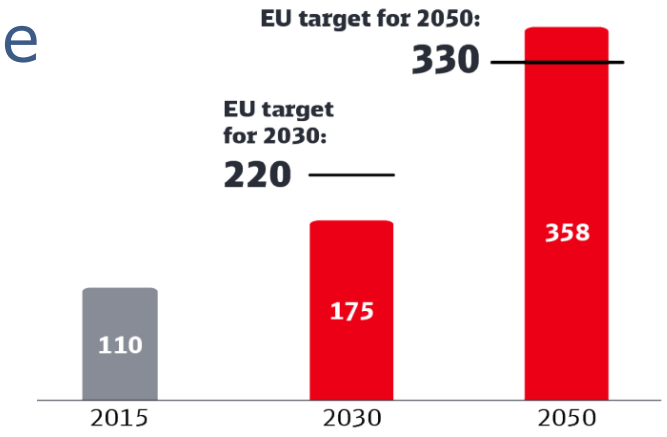
ERTMS – key enabler to improve cross-border operations

- Ensuring transport reliability, increasing capacity and improving safety levels
- Despite benefits ERTMS trackside and onboard deployment is very slowly progressing
- Syncronised and harmonised deployment with suitable funding and financing options
- Centralised EU-level ERTMS governance and program management

High-speed infrastructure is possible

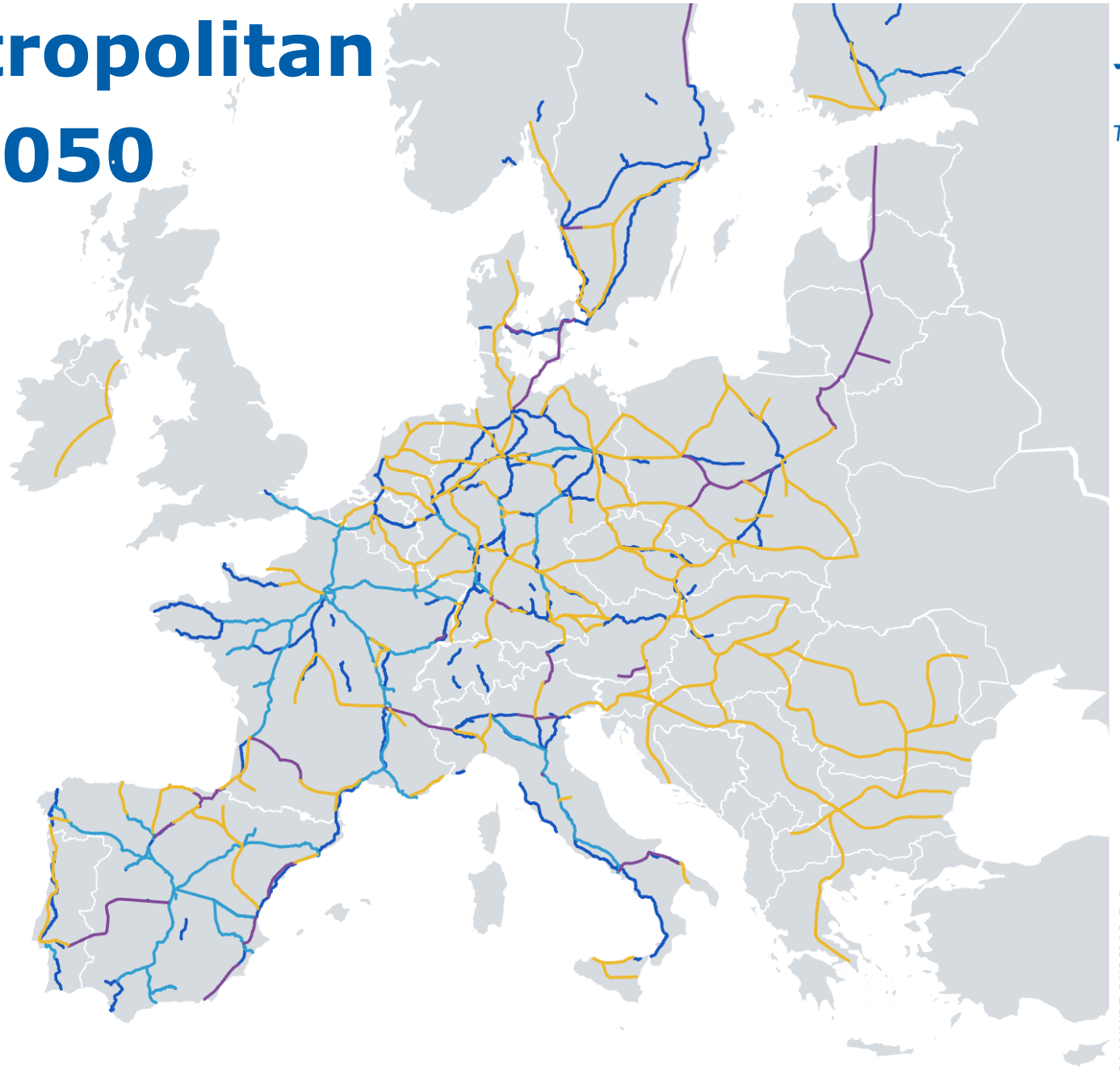
- EU27 HSR network is 11,336 km
- The planned infrastructure measures will only deliver a 60% HSR target achievement (175 bn pkm) by 2030
- Many metropolitan regions in Europe will remain unconnected
- A metropolitan network covering EU countries and the candidate countries as well as other EU neighbouring countries could make a change
- This plan requires around 750 km of new rail HSR per year over the next 27 years; EU27 1000 km of motorways were built during the last two decades

HSR passenger kilometres – target and simulation of the Metropolitan Network 2050
[in billion pkm per year]



Vision of Metropolitan Network in 2050

- 21,000 km of HSR lines to be added between 2030 and 2050
- 60% of EU citizens to be connected by HSR network
- 19% of total rail market share expected by 2050



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2050 HSR scenario – net positive benefits to society

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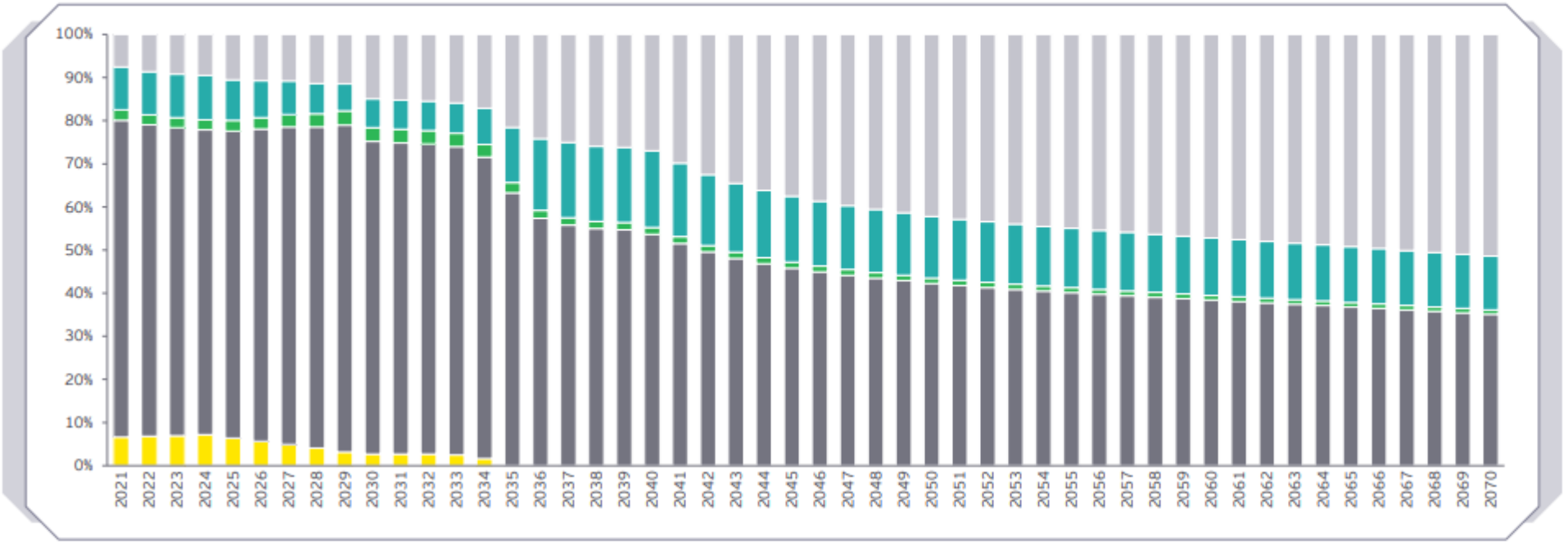

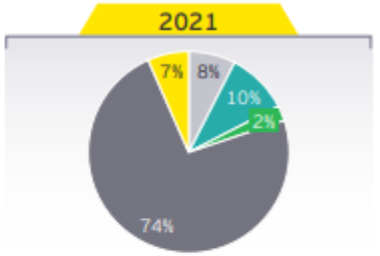

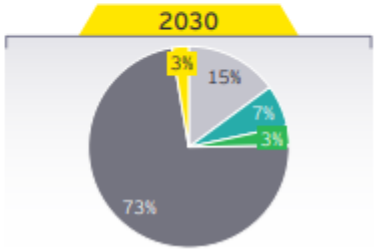

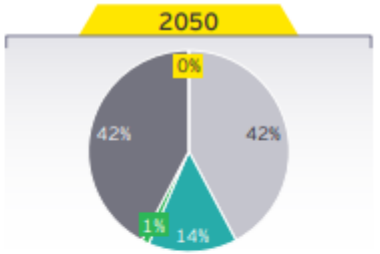

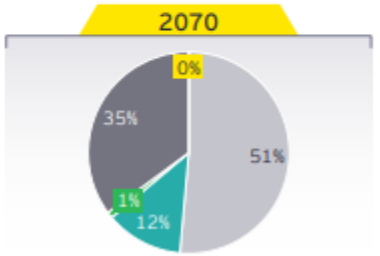

Avg. Construction costs	Scenario Construction cost (bn €)	NPV (M€)	B/C Ratio
12 €M per KM	414	876.170	3,9
16.5 €M per KM	569,2	766.867	2,9
25 €M per KM	862,5	560.407	1,9

Incremental production from construction (€ M)	Incremental GVA from construction (€ M)	Incremental job-years from construction ('000)	Incremental GVA from operations (€ M)
152.430 (-30%)	70.889 (-30%)		
217.758 (100%)	101.269 (100%)	1.848	352.828 - 545.279
283.085 (+30%)	131.650 (+30%)		

Comments

- The 2050 Scenario builds on the 2030 Scenario by taking into account a **possible expansion of the HSR** network where **all European Functional Urban Areas above 250k inhabitants are connected** by HSR. The total **network length** of the 2050 scenario is an estimated **51.500 km.**
- Moreover, it includes **all shocks** in the study, namely new HSR infrastructure, open-access competition on long distance services, aviation fuel tax hikes, aviation ticket tax hikes, short haul flight bans, fuel price increases, shared mobility, long distance bus liberalization, S2R technologies, as well as highway tolls.
- A duopoly will arise between rail and passenger cars in the market for long distance passenger transport. **HSR will reach a mode share of 51% in 2070. Short-haul aviation** virtually **disappears. Passenger cars** maintain a non-negligible share of the market (**35% in 2070**). **Conventional long-distance rail will benefit from the spill-overs of increased HSR traffic** and account for **12%** of the passenger transport traffic in **2070**. Moreover, a total 5 billion tonnes CO2 will be net saved as a result of the modal shift.

HSR Conventional Rail Bus & coach: Long Distance Personal vehicle: Long Distance Air - short haul

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