

MODERN RAIL SYSTEM IN THE CZECH REPUBLIC – VISION 2050+

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1

Introduction

2

Czech Rail System Yesterday & Today

3

Facts & Figures

4

Czech Rail System Tomorrow - Next Steps Forward

5

Conclusions

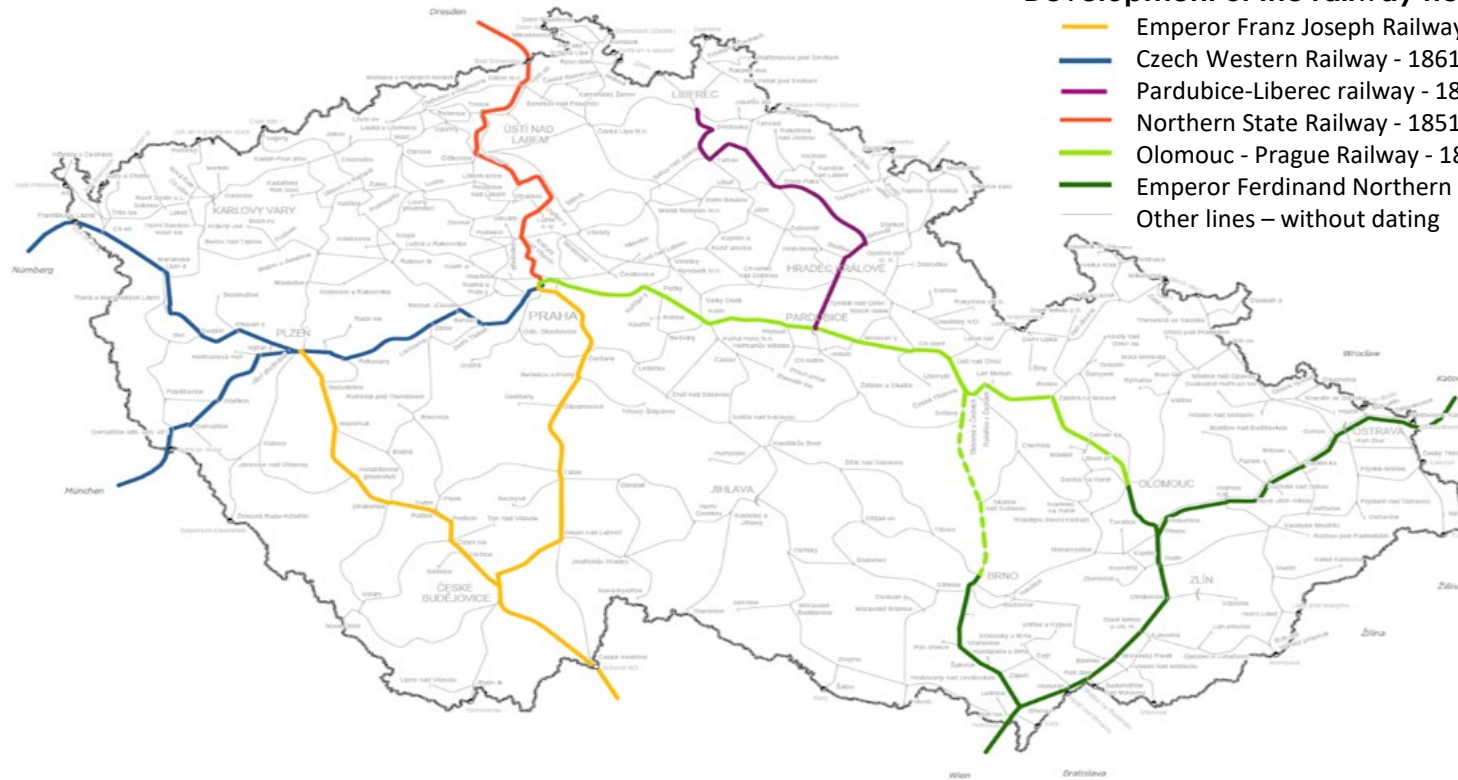
Czech Rail System Yesterday & Today

1839 – 1900

Czech Rail Network - Historical Heritage

Development of the railway network in the 19th century

- Emperor Franz Joseph Railway - 1874
- Czech Western Railway - 1861
- Pardubice-Liberec railway - 1859
- Northern State Railway - 1851
- Olomouc - Prague Railway - 1845-1849
- Emperor Ferdinand Northern Railway – 1839
- Other lines – without dating

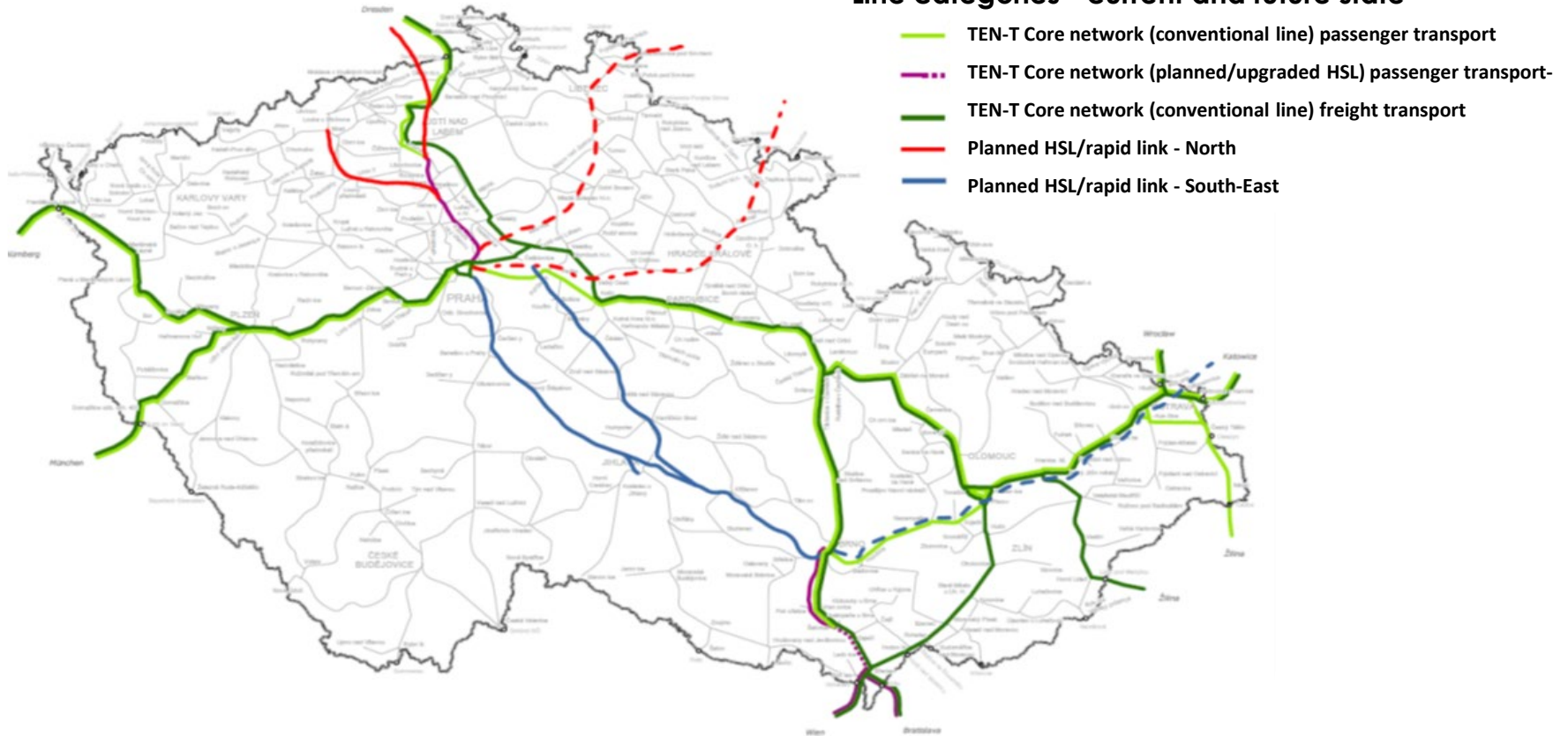


Czech Rail System Today & 2050+

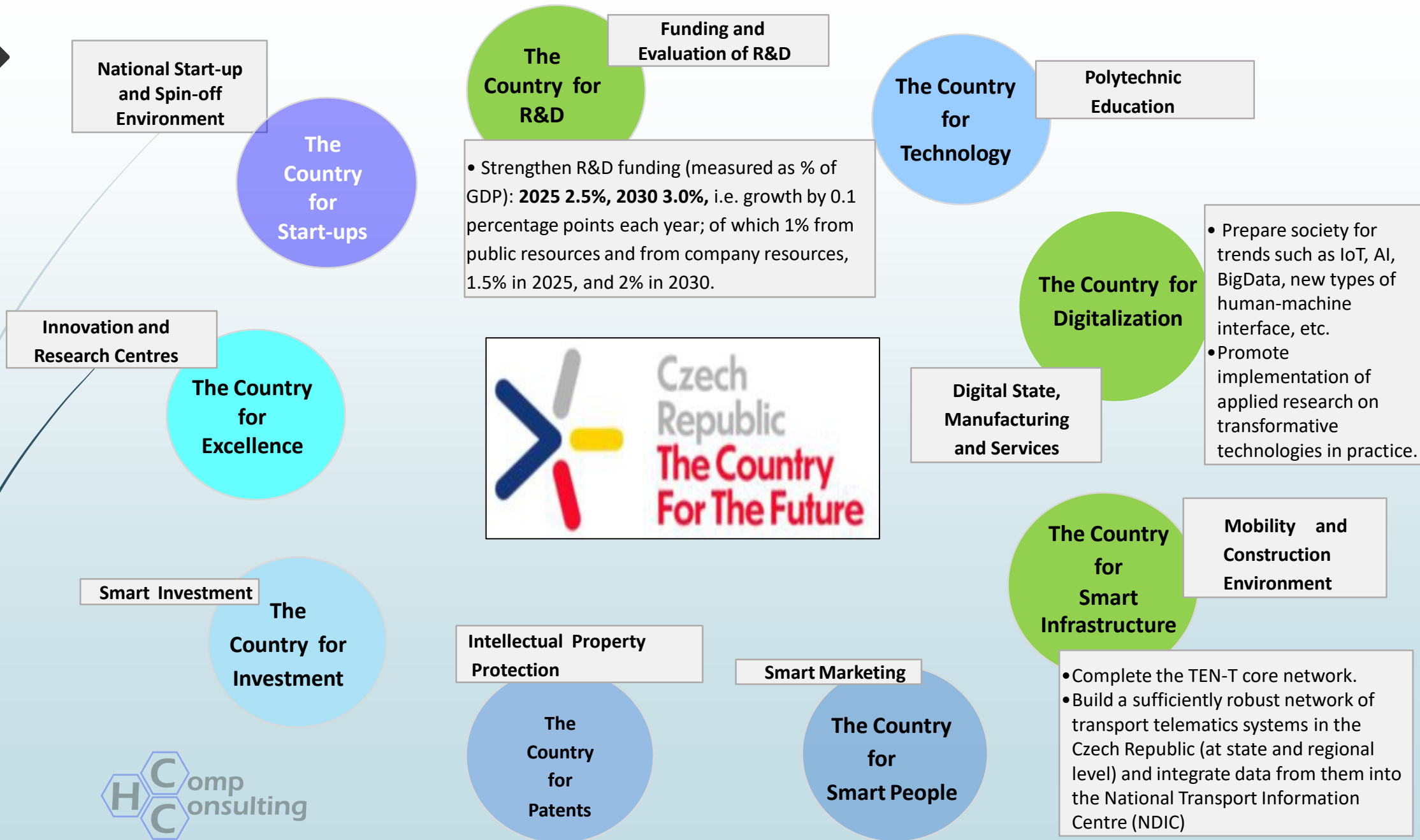
2021 - 2050

Czech Core Rail Network today

Line categories - current and future state



Czech Rail System – a Part of Czech Innovation Strategy



Czech Rail System – Challenges

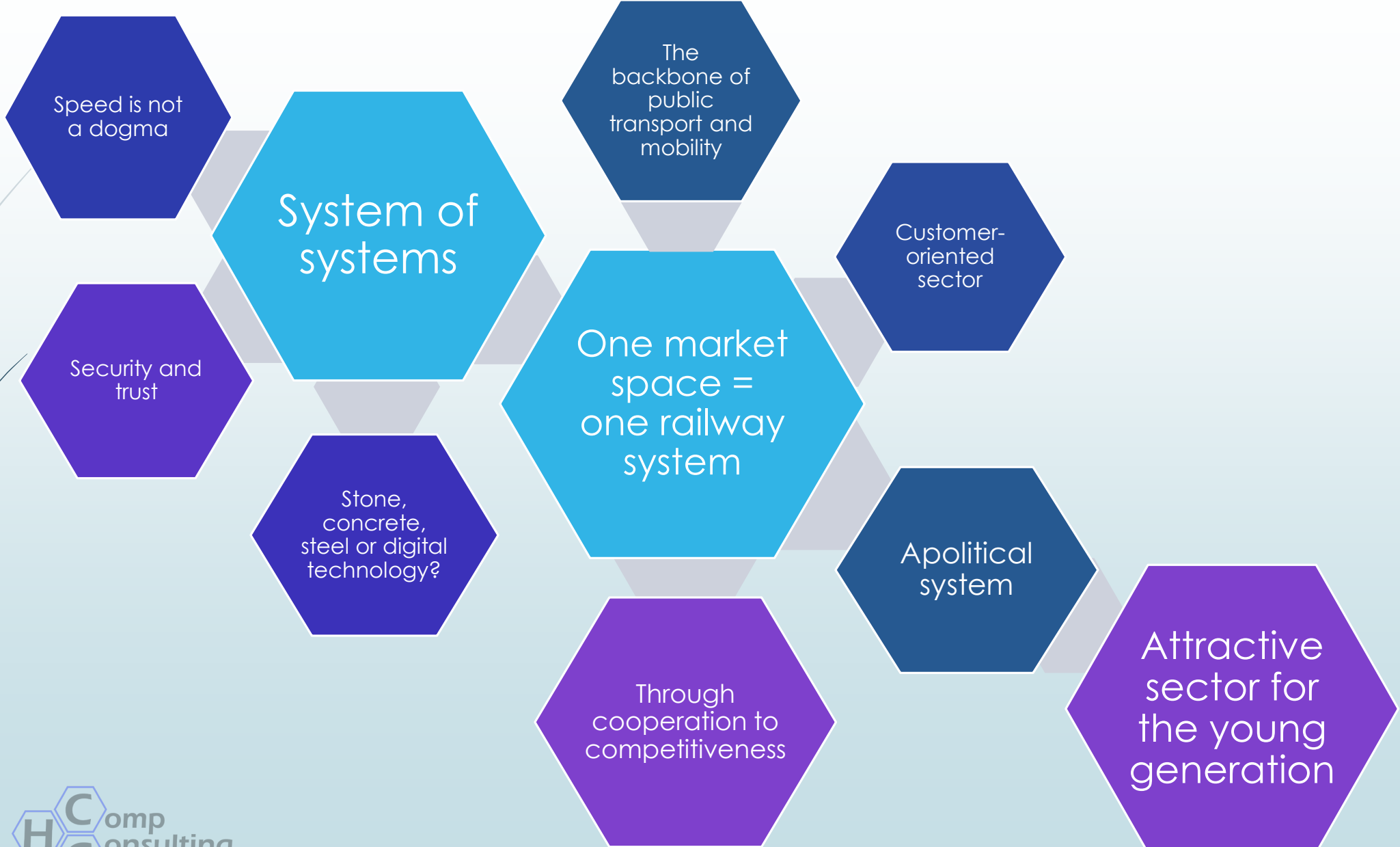
Railway

- is the transport **mode of the future**
- the most **convenient, fastest, safe and most ecological**
- The development of railways, especially high-speed lines, can fundamentally and positively **change the face of our country**
- rail mobility prevents rural depopulation, helps trade, **reduces traffic density on the motorways and improves the environment**

People's perceptions of railways

- are very **diverse and different**
- It is not necessary to say **what the railway looks like**
- but it is necessary to say **what it should be in the future**
- railway transport sets its partial short-, medium- and long-term goals, **defines its strategies and visions and tries to reflect development trends in society and in its own field**

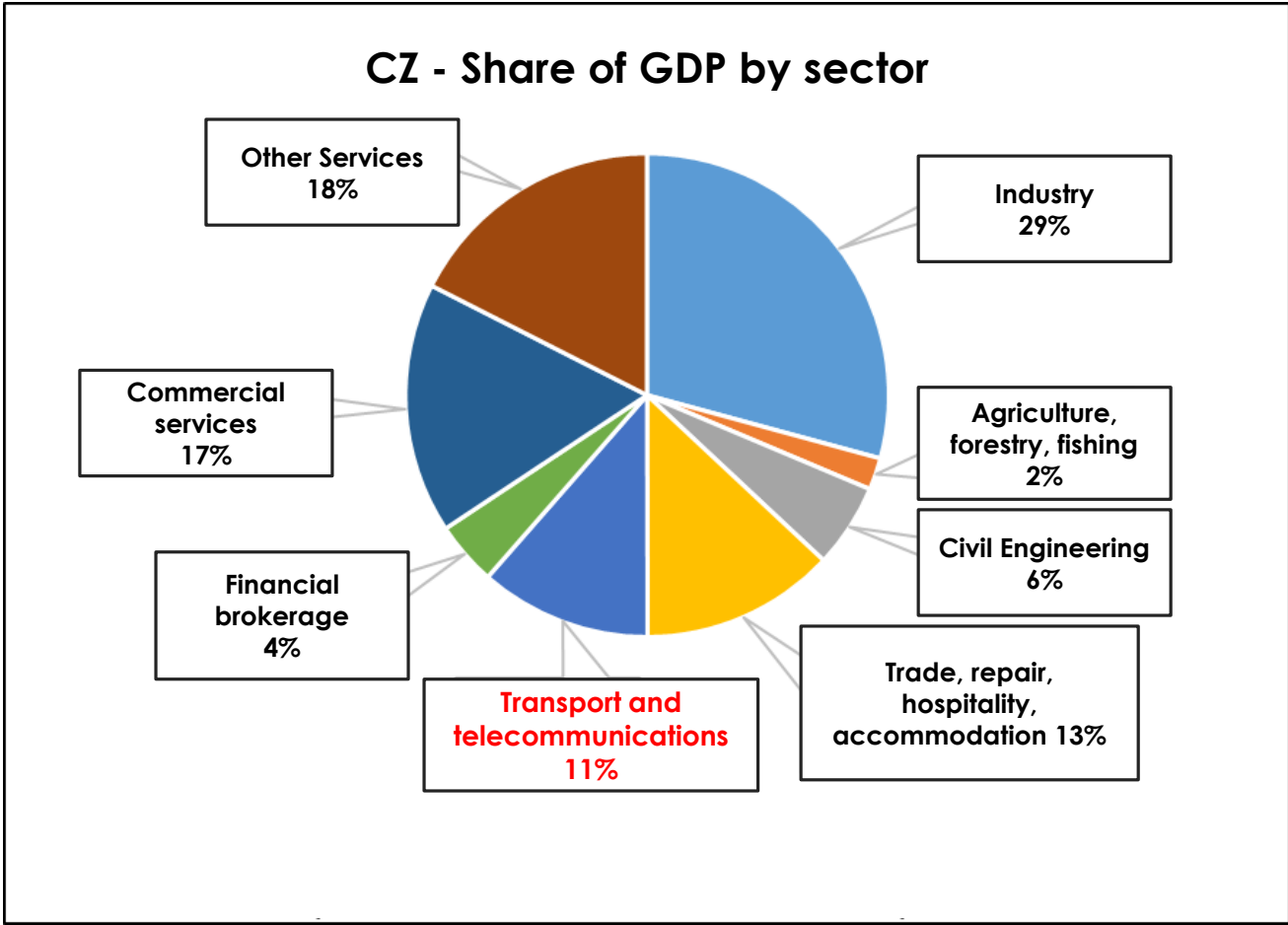
Czech Rail System – Innovation Perspectives



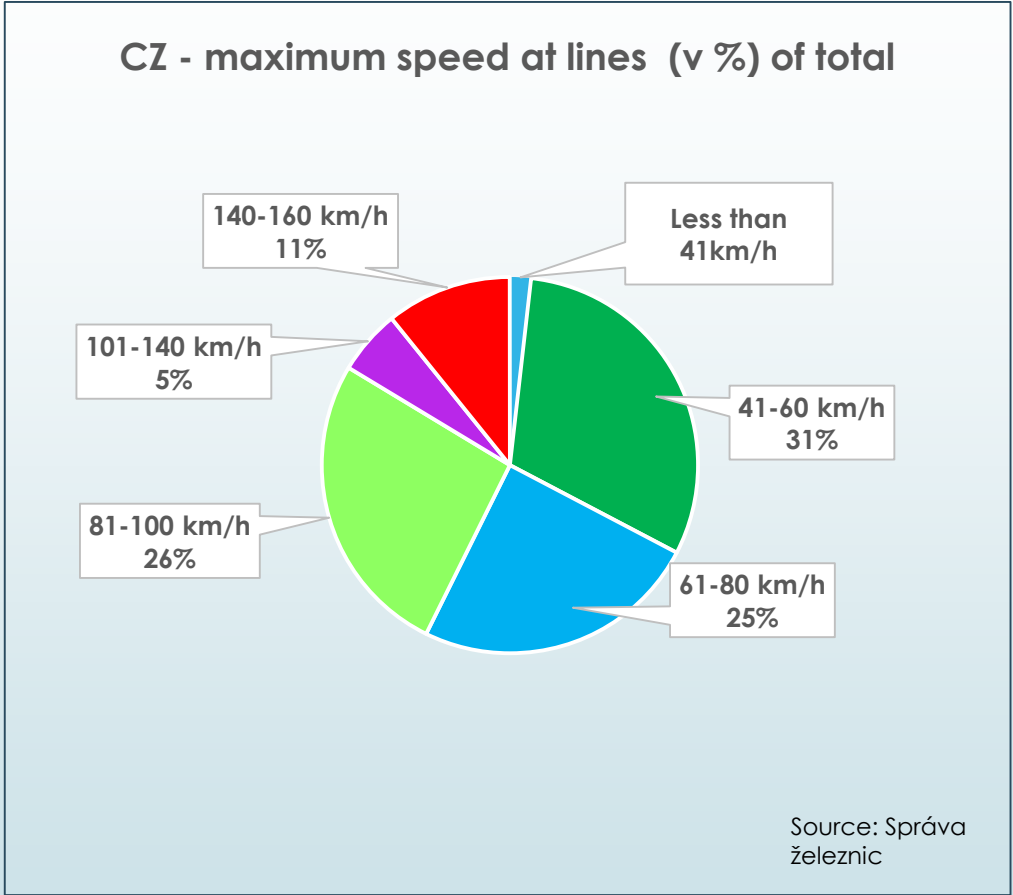
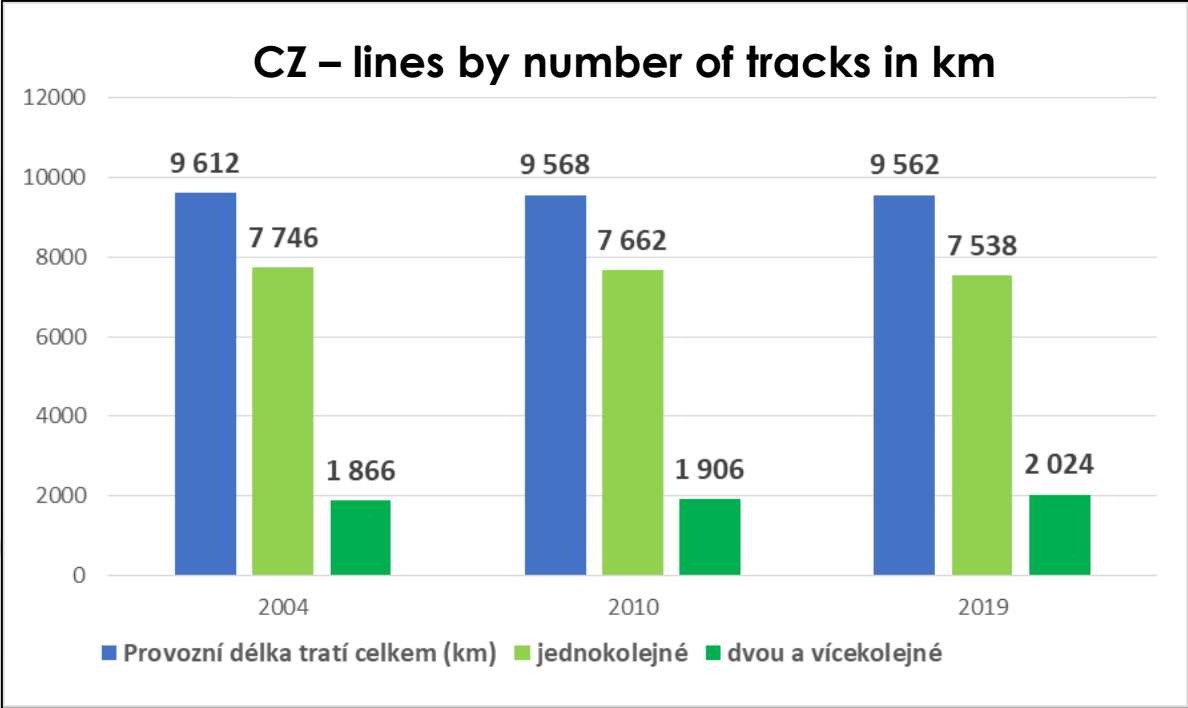
Czech Rail System – Innovation Perspectives



Czech Rail System – Facts & Figures

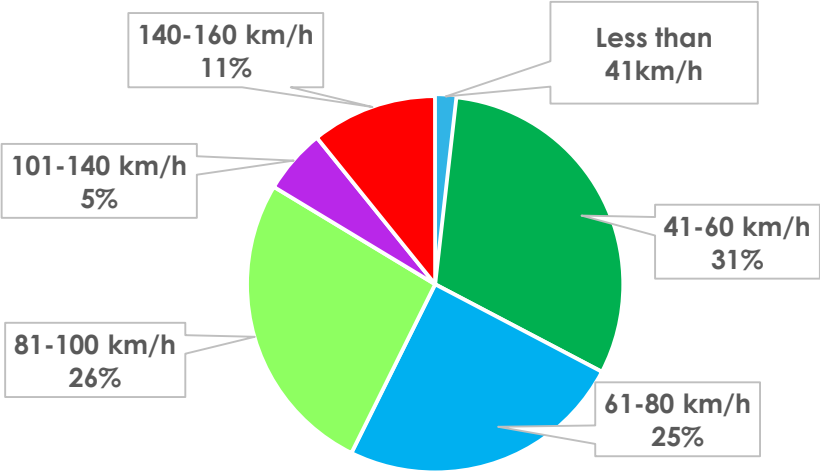


Czech Rail System – Facts & Figures



Czech Rail System – Facts & Figures

CZ - maximum speed at lines (v %) of total



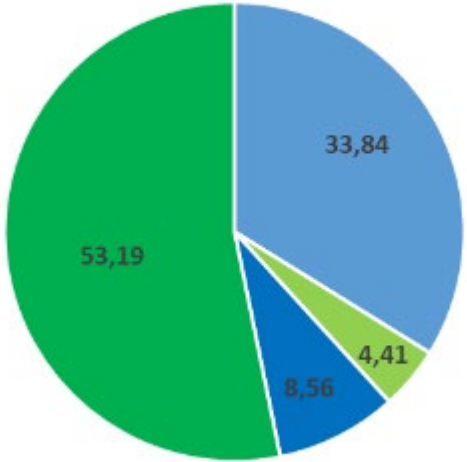
Source: Správa železnic

EU – rail network density (km/km²)



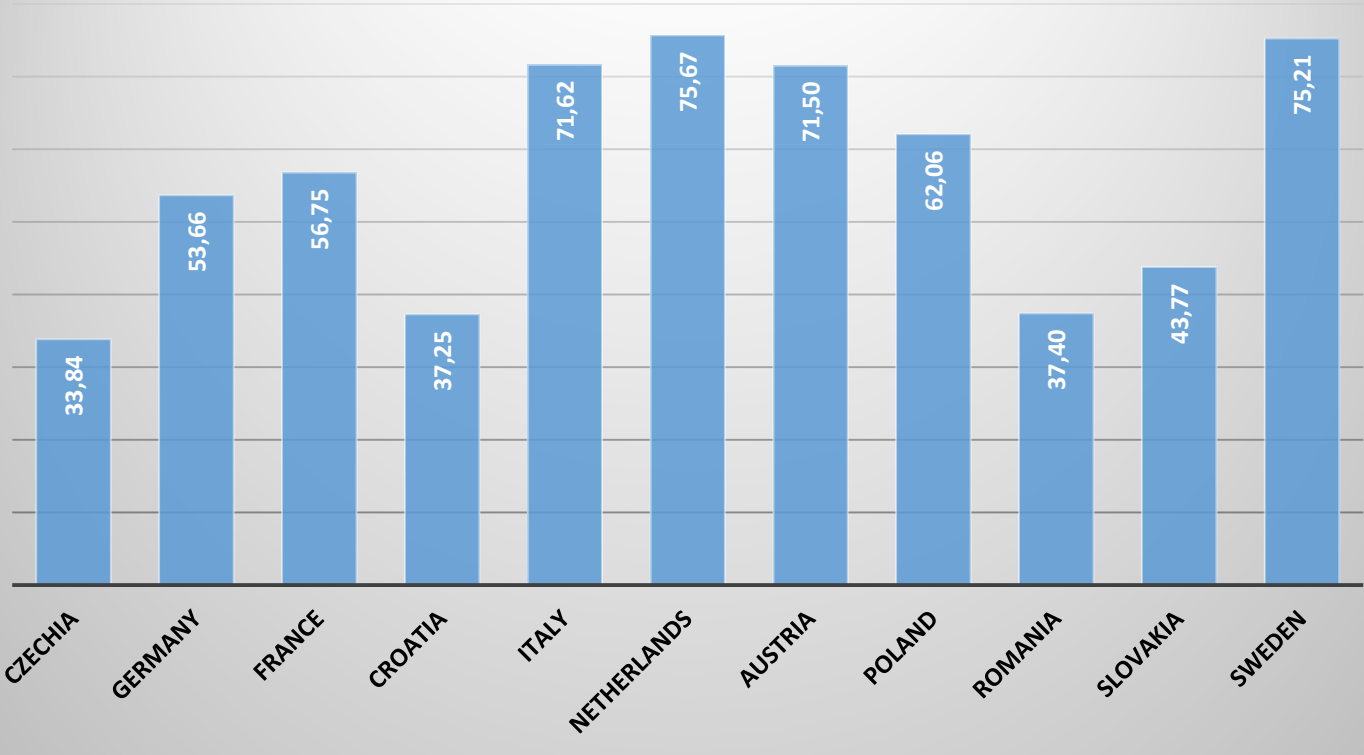
Czech Rail System – Facts & Figures

CZ – maximum axle load per lines in % of the whole network

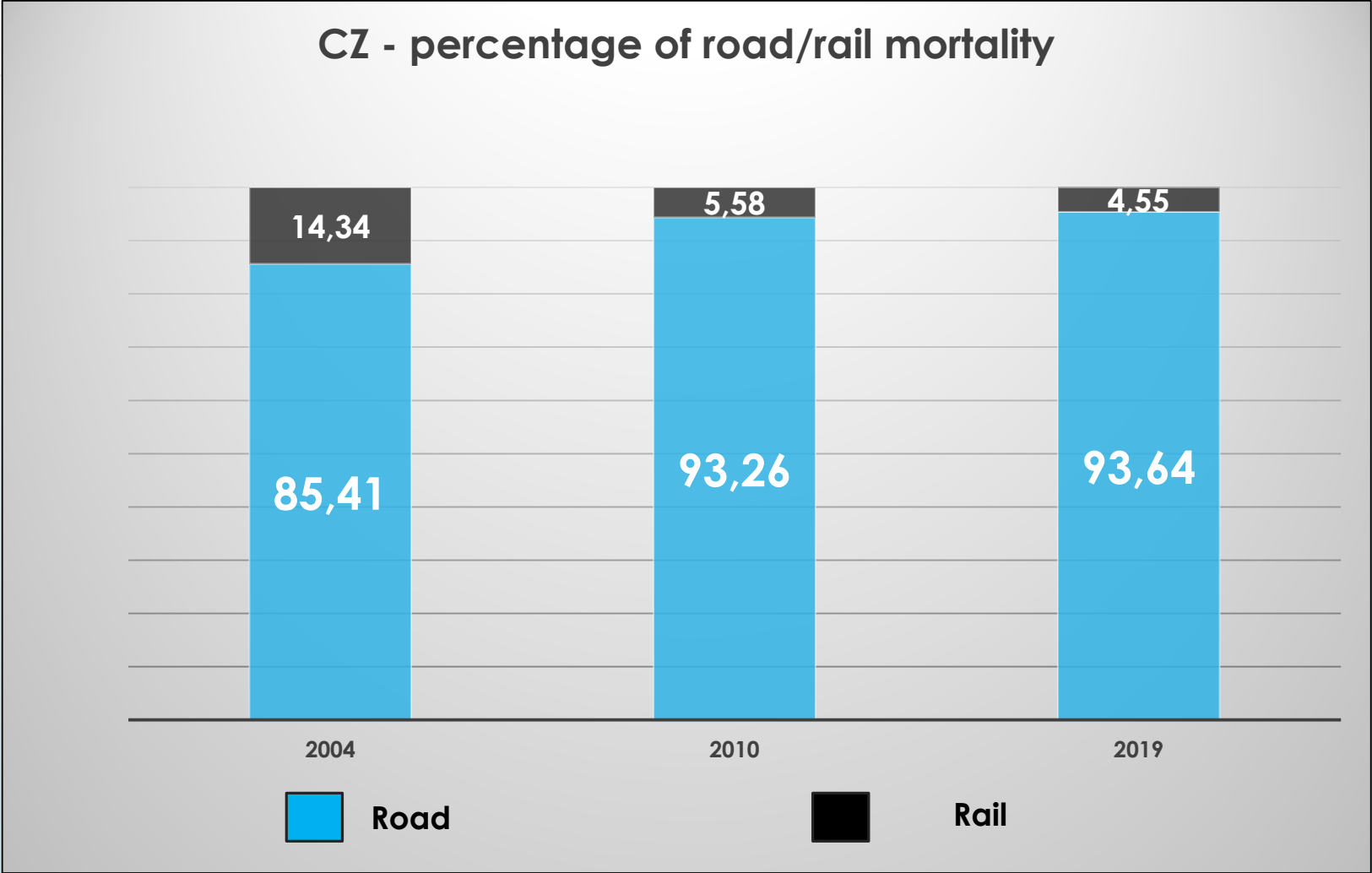


■ D - 22,5 t ■ A - 16 t ■ B - 18 t ■ C - 20 t

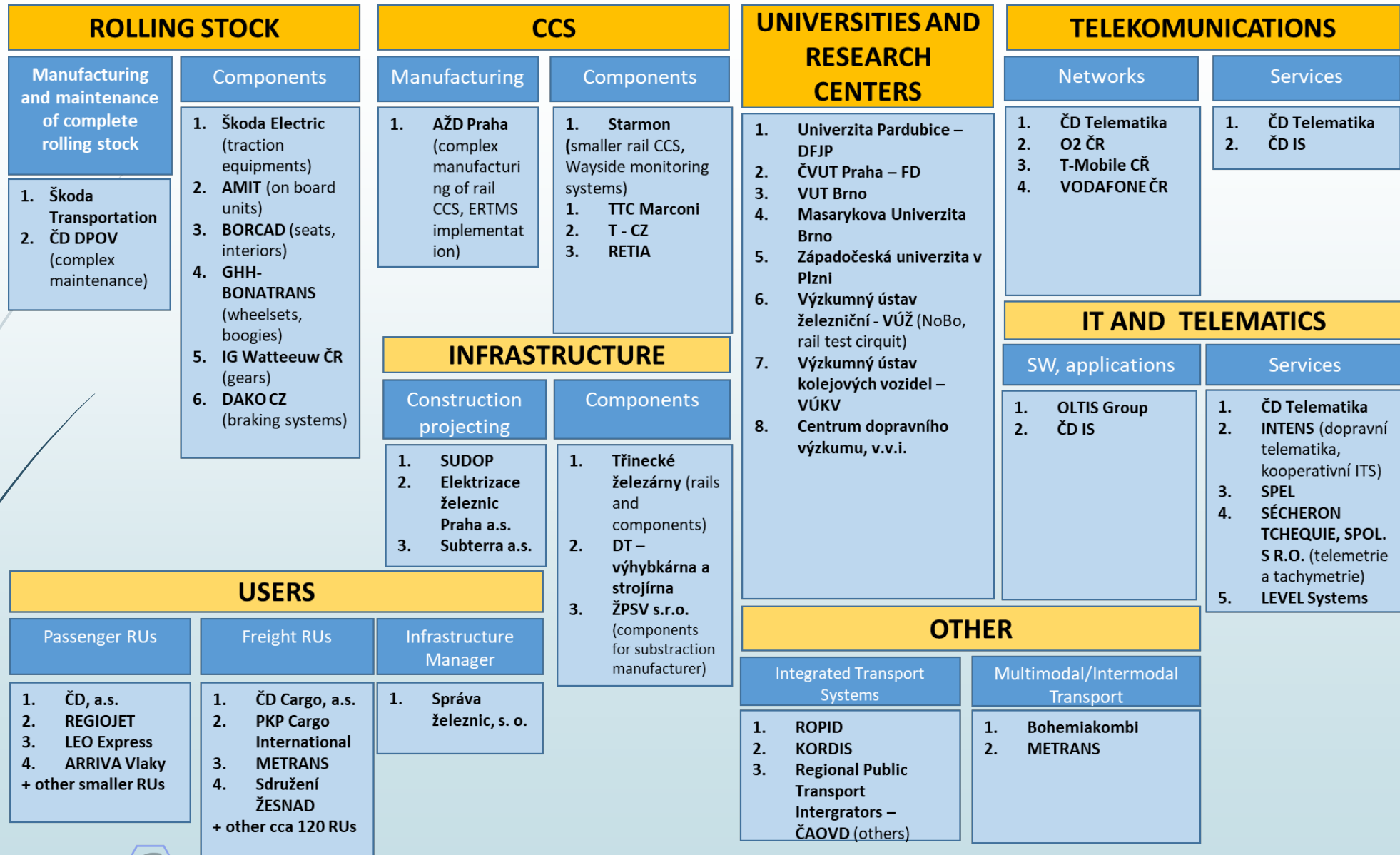
EU - electrified lines - status in 2016
(v % of the whole network)



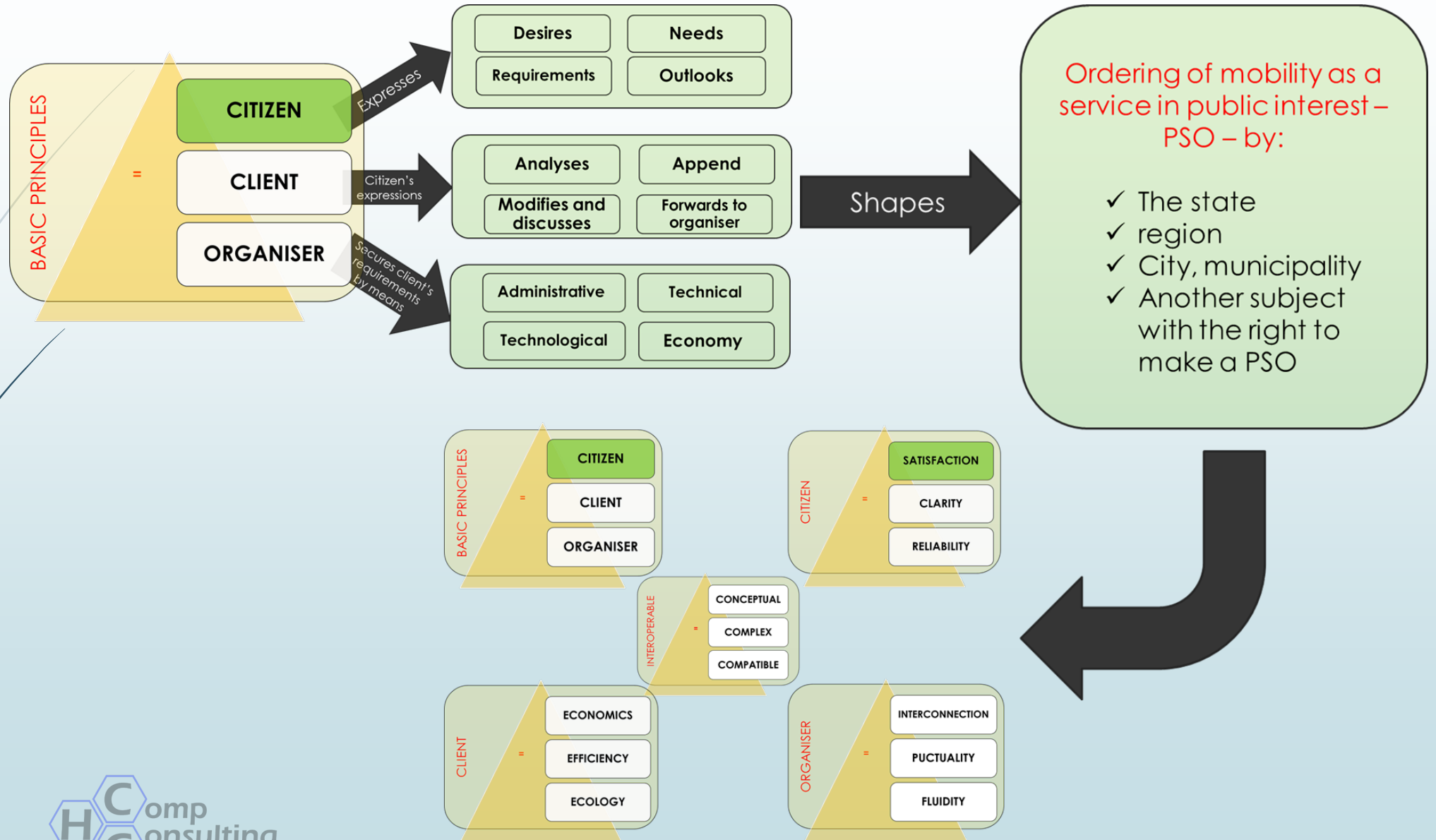
Czech Rail System – Facts & Figures



Czech Rail Sector in a Nutshell

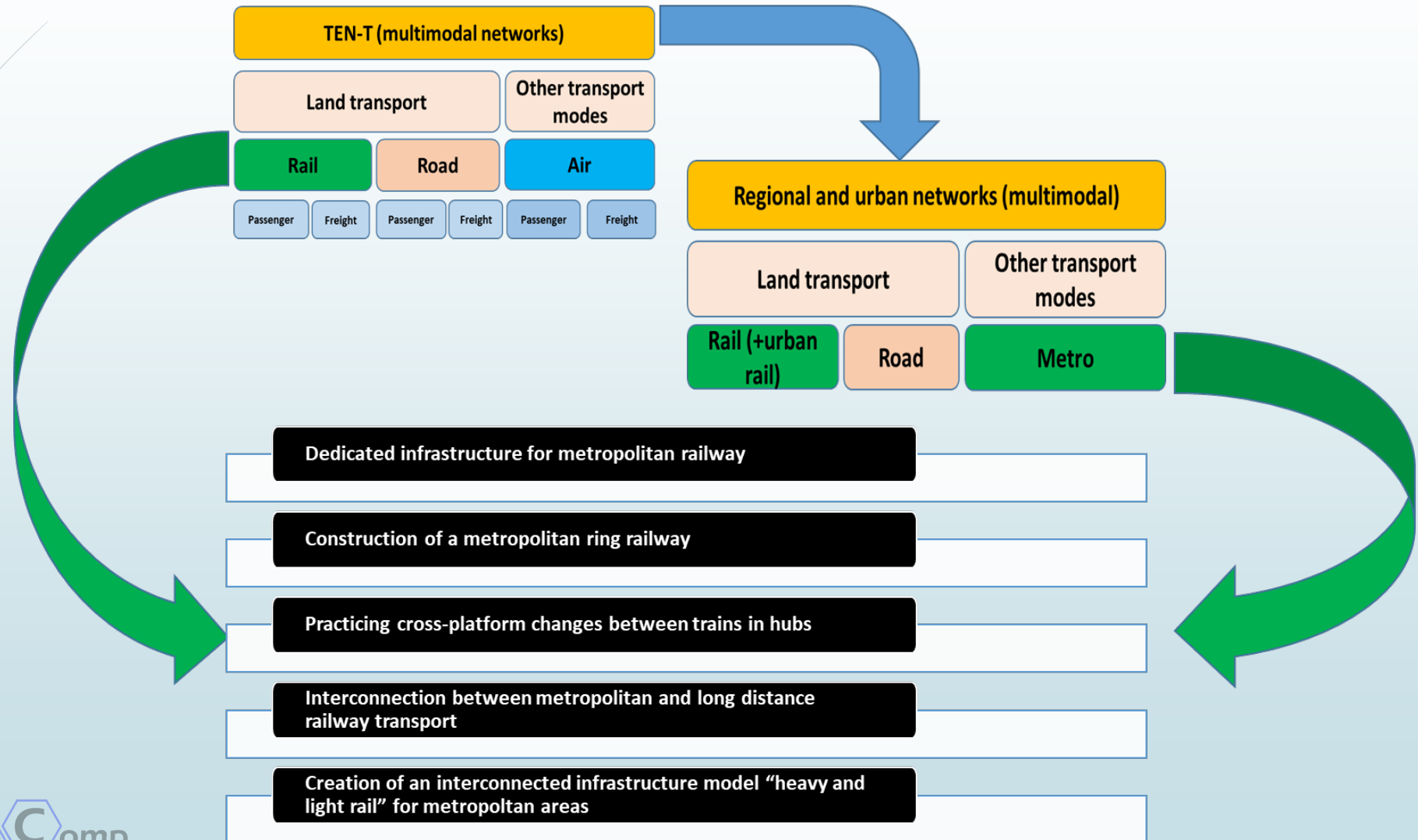


Czech Rail Metropolitan Mobility

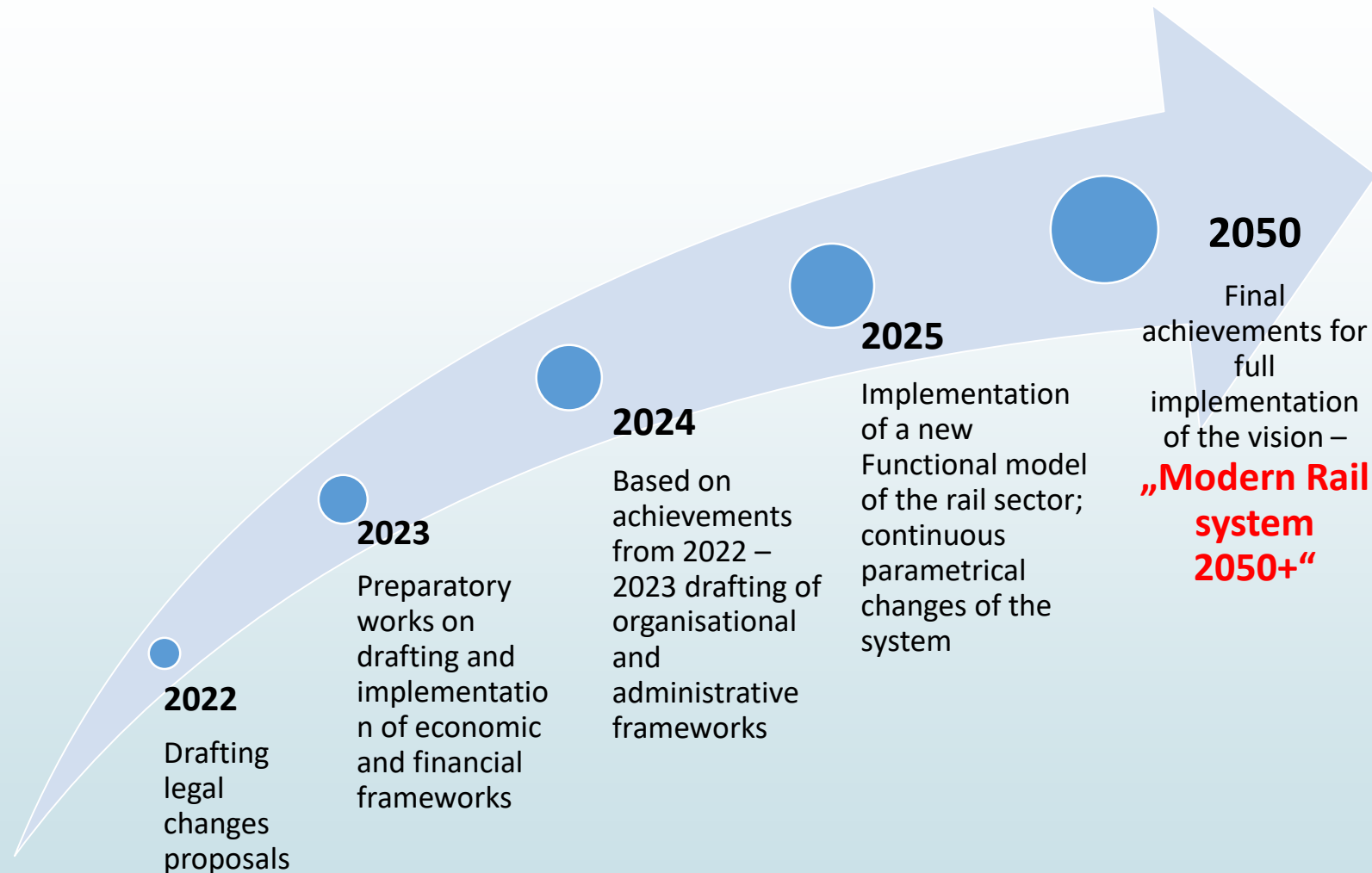


Czech Rail Metropolitan Mobility

INFRASTRUCTURE FOR METROPOLITAN MOBILITY



Czech Rail System Tomorrow - Next Steps Forward



CONCLUSIONS

Rail network multi-criterial optimization to improve infrastructure capacity and resilience

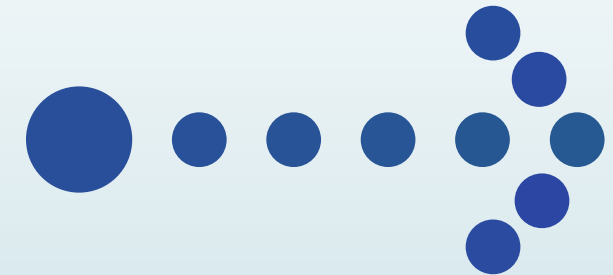


New business concepts in the entire rail sector

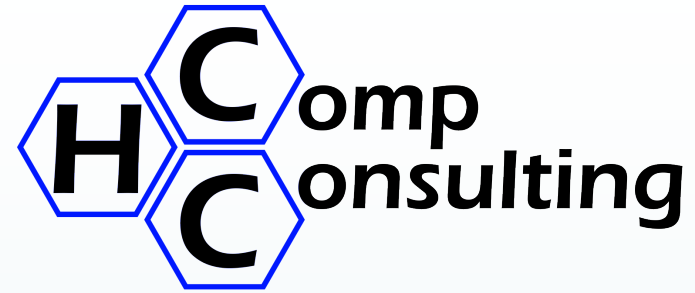


2025 → 2030 → 2040

New governmental strategies for green and sustainable transport



**RAIL SYSTEM FOR NEXT
100 YEARS**



THANK YOU FOR YOUR ATTENTION!



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