

Gaining accurate input data for a comprehensive assessment of the railway system

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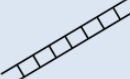

Agenda



- Challenges in the European railway sector
 - National differences
 - Sensitivity
 - Aggregation level
 - Cost composition
- Examples from the IMPACT project
 - Data for freight train definition
 - Value of time data for modal shift calculation



Challenges in the European railway sector



- Because of history, systems often still end at the national border
- This leads to differences in:



KM Measuring system **Miles**

 Track gauge 

 15kV Line voltage  25kV

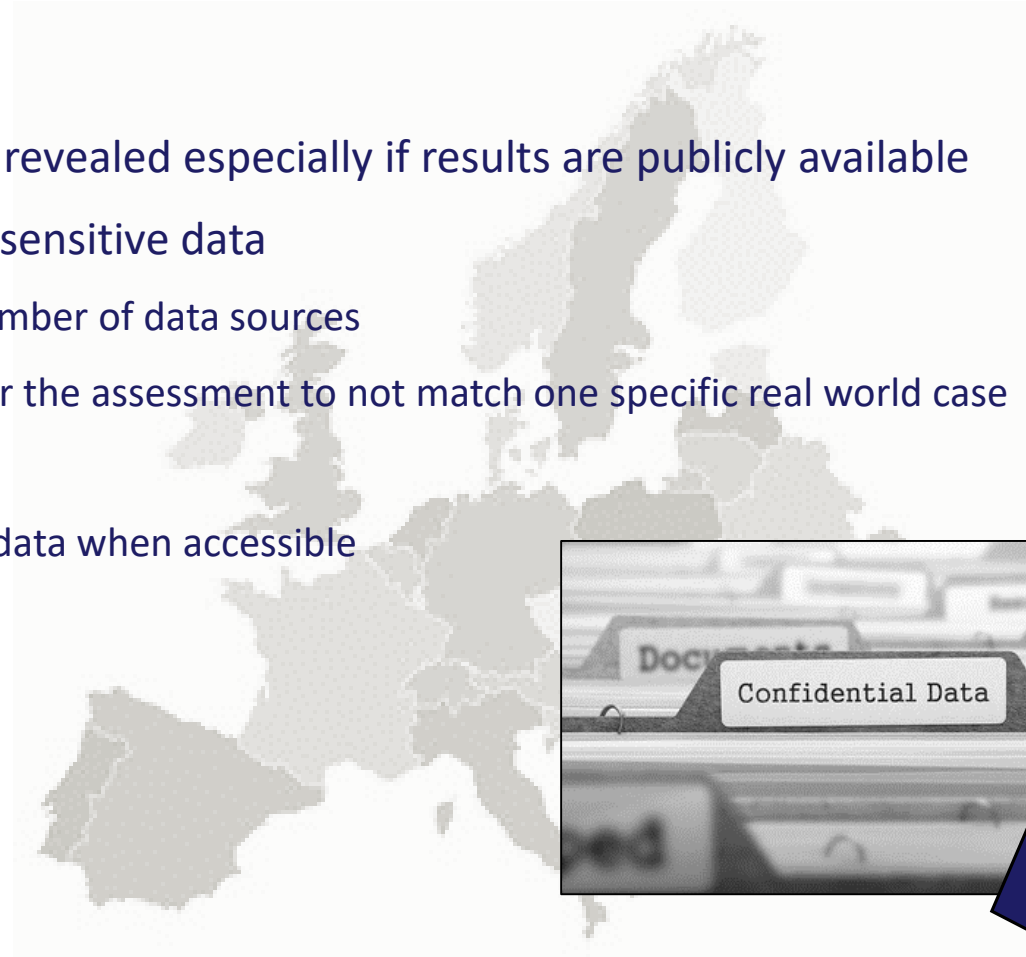
 Guten Tag! Language  Hello!

 Datapool 

 CCS System 

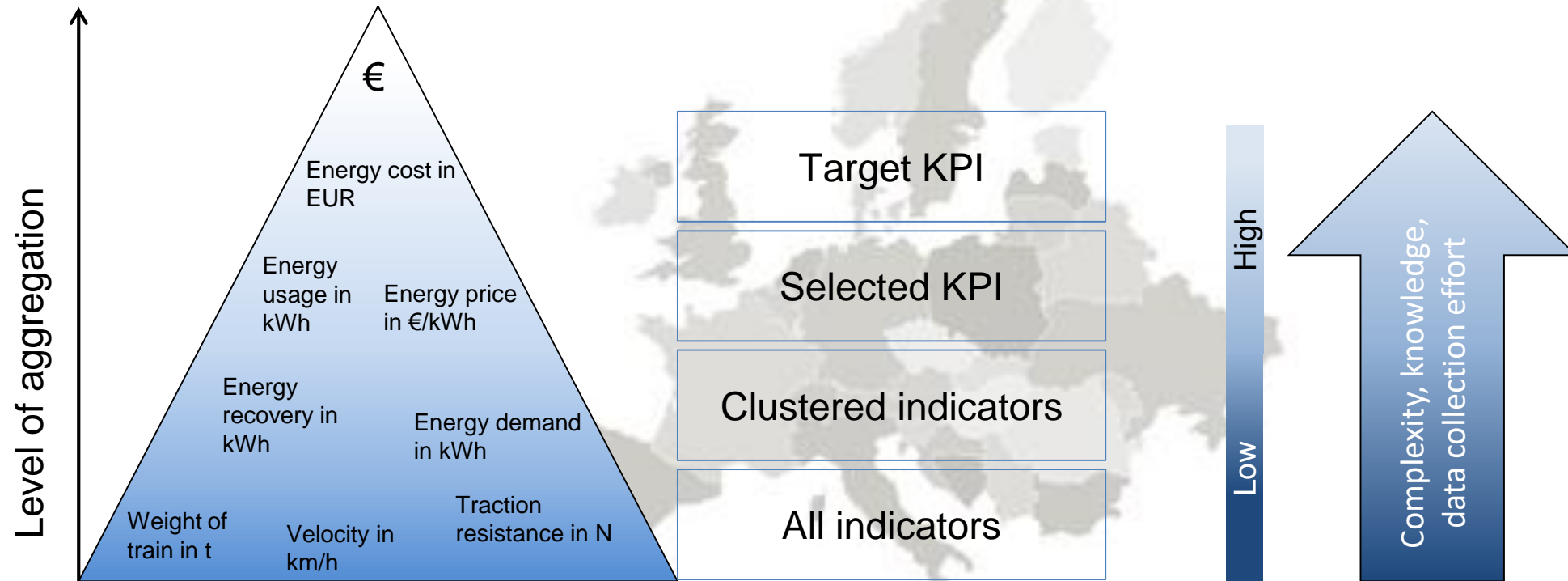
Challenges in the European railway sector

- Sensitivity of data
 - Sources can not always be revealed especially if results are publicly available
 - Approaches used to cover sensitive data
 - Average values over a number of data sources
 - Definition of scenarios for the assessment to not match one specific real world case
 - Estimation by experts
 - Use of publicly available data when accessible



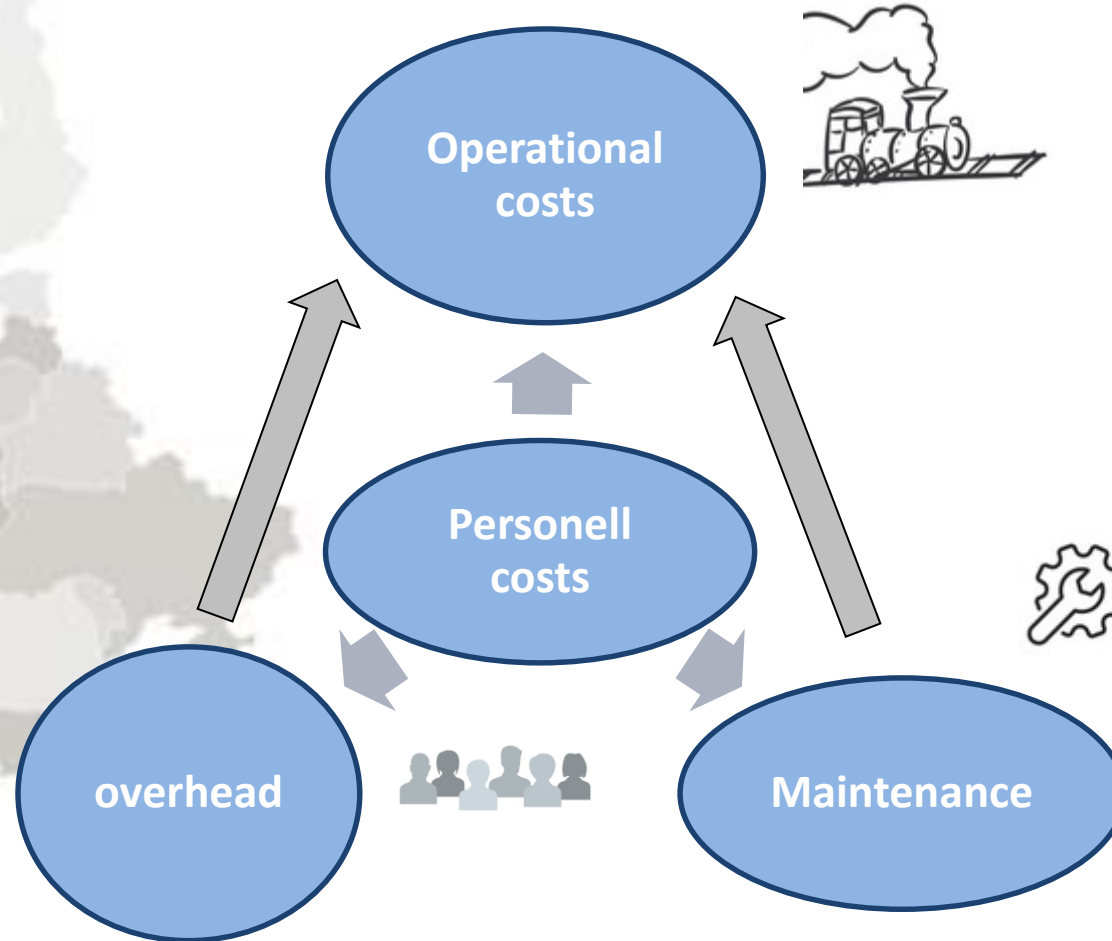
Challenges in the European railway sector

- Data can be collected on different aggregation level



Challenges in the European railway sector

- Cost composition can differ
 - Where are personnel cost included?
 - Definition of cost factors differ between sectors

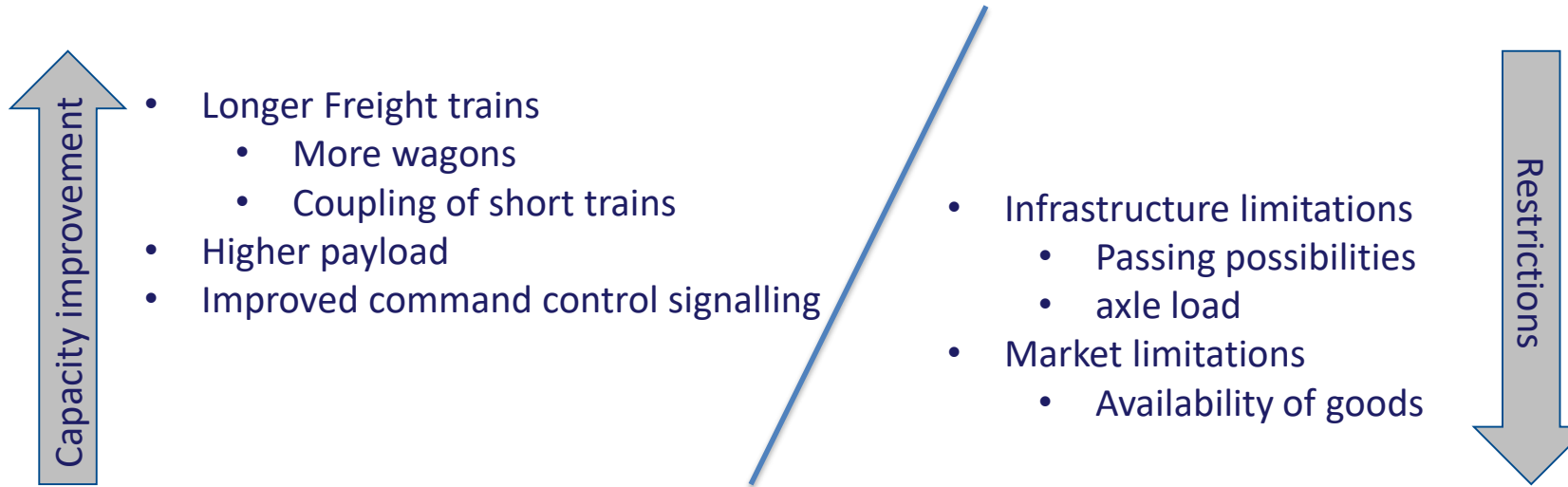


Challenges in the IMPACT-2 project

- Data for freight train definition
- Value of time data for modal shift calculation



Freight - various ways to reach a goal



More capacity through more homogeneous train mix → faster shorter freight trains vs.

More capacity through longer heavier freight trains



Freight - aggregation level

- The whole transport chain from terminal to terminal including marshalling yards must be considered
→ reference parameters must be provided for a lot of assets like locomotives, wagons, terminal, yard, infrastructure, and operation
- Where does aggregation and averaging data make sense and where not ?
- Differentiation into three categories : single wagon, block, and intermodal trains



Modal Shift results - Value of Time

- Value of Time = **How much value the traveller puts on reductions in travel time in monetary terms**
- Travellers' valuation of improvements in journey time/waiting time/delay time differ depending on country GDP, socio-economic characteristics, possibilities to use the time travelling productively etc
- IMPACT-2 results for the regional scenario show that Shift2Rail innovations have the potential to increase rail demand by:
 - 118% using French valuations
 - 102% using Swedish valuations
 - 58% using EEU valuations
- differences in the passenger valuation of time have a large impact on modal shift results



Thank you for your attention!

Feel free to ask questions

Contacts

IMPACT-2

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