



#### Transmodel enhancements:

# Towards smarter public transport information across Europe

Ulf Bjersing,

**CSO** 

Hogia Public Transport Systems AB



## TRAVELLERS NEED INFORMATION THAT IS:



- Dependable
- Relevant
- Consistent

### TRAVELLERS NEED INFORMATION THAT IS:

9-12 JUNE
STOCKHOLM 2019
GLOBAL PUBLIC
TRANSPORT SUMMIT

- Dependable
- Relevant
- Consistent

#### Across different:

Transport modes









### TRAVELLERS NEED INFORMATION THAT IS:

- Dependable
- Relevant
- Consistent

#### Across different:

- Transport modes
- Transport providers











Public Transport Authority

PT Operator

PT Operator

PT Operator

### TRAVELLERS NEED INFORMATION THAT IS:

- Dependable
- Relevant
- Consistent

#### Across different:

- Transport modes
- Transport providers
- Output channels























Public Transport Authority

PT Operator

PT Operator

PT Operator

#### MANY SYSTEMS INVOLVED



































Public Transport Authority

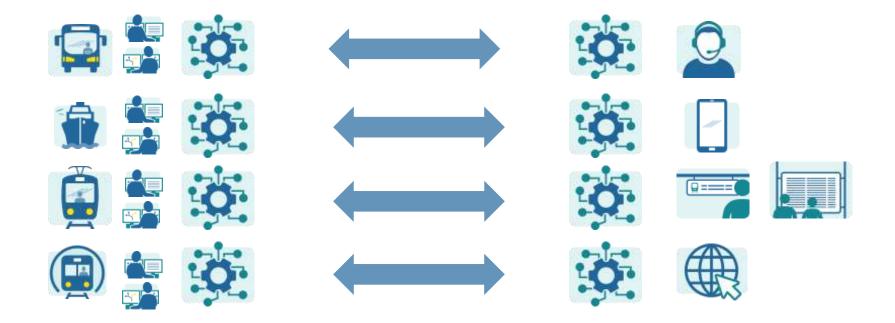
PT Operator

PT Operator

PT Operator

### DIFFERENT SYSTEMS MUST INTERACT





### BUT DO DIFFERENT SYSTEMS UNDERSTAND EACH OTHER?



It will be much easier to achieve the goal of interoperating systems, if all the systems in question are using similar definitions, structures and meanings for their data.

We need a common language for public transport!

### TRANSMODEL - EUROPEAN STANDARD EN 12896

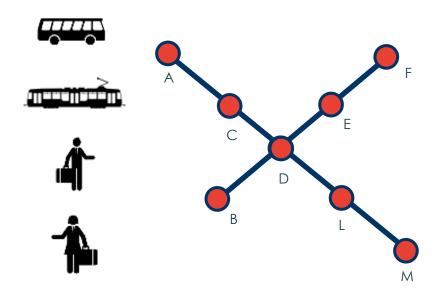


It provides:

- A conceptual data model for the public transport industry.
- Consistent data semantics across different types of implementations

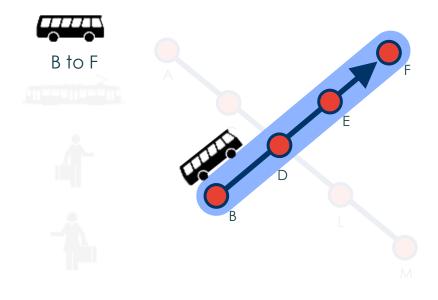
### **EXAMPLE: JOURNEY AND TRIP**



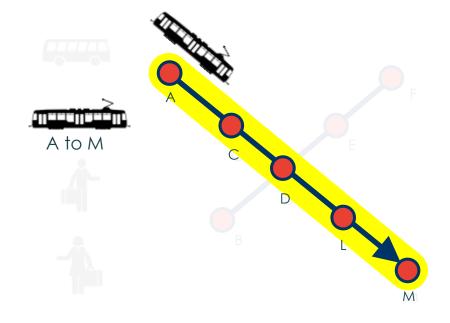


## TRANSMODEL – SERVICE JOURNEY



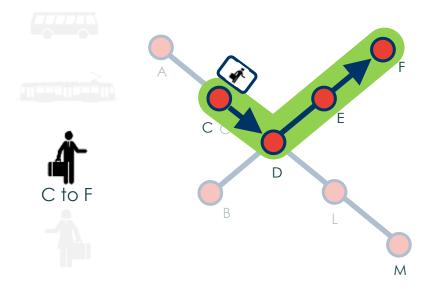


## TRANSMODEL – SERVICE JOURNEY





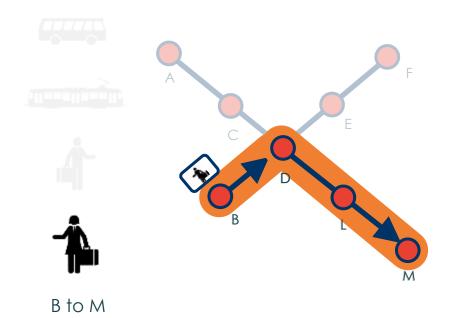
## TRANSMODEL – PT TRIP





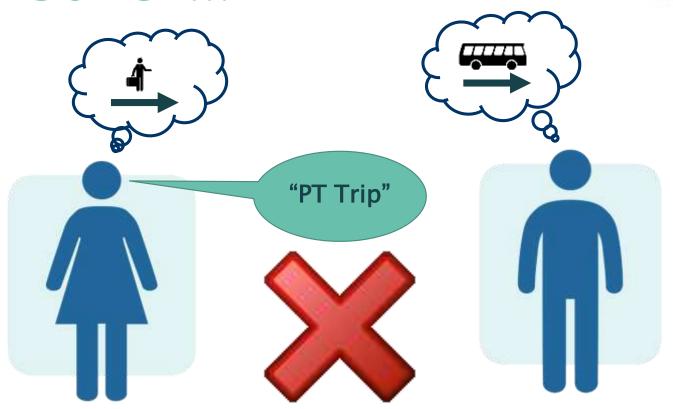
## TRANSMODEL – PT TRIP





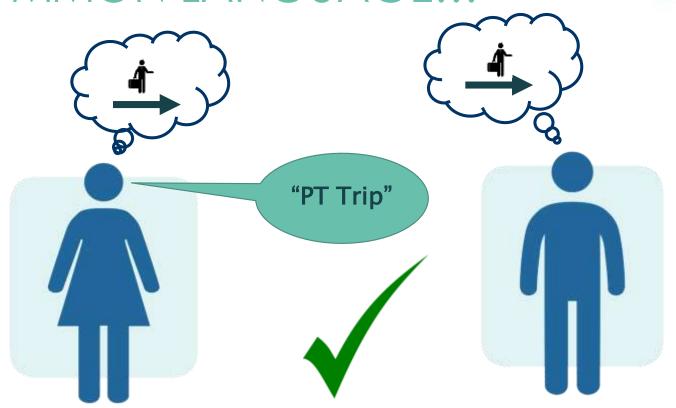
## NOT HAVING A COMMON LANGUAGE...





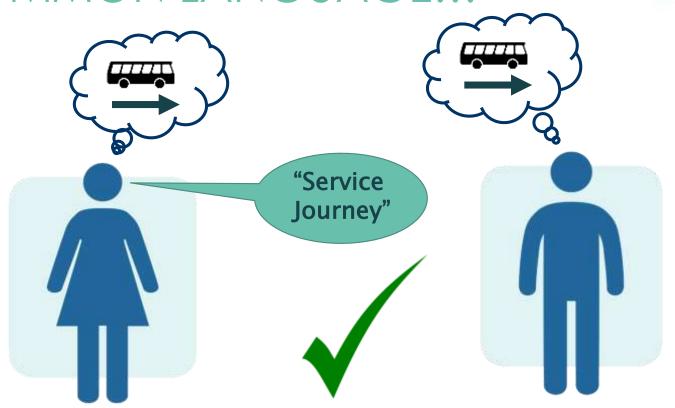
## HAVING TRANSMODEL AS A COMMON LANGUAGE...





### HAVING TRANSMODEL AS A COMMON LANGUAGE...





#### WATCH TRANSMODEL VIDEO



https://www.youtube.com/watch?v=dTt1xdwmzs0#action=share

#### TRANSMODEL V5.1 -> V6



Following the acceptance by the European Commission of a proposal from CEN, funding was granted for a team of experts, to update the Public Transport Reference Data Model (EN12896) known also as Transmodel.



#### TRANSMODEL V5.1 -> V6



Following the acceptance by the European Commission of a proposal from CEN, funding was granted for a team of experts, to update the Public Transport Reference Data Model (EN12896) known also as Transmodel.

#### Expert team:

- Kasia Bourée, KBIC, France
- Christophe Duquesne, Aurige, France
- Ulf Bjersing Hogia, Sweden
- Nicholas Knowles Steam Intellect, UK
- Fabrizio Arneodo, 5T, Italy
- Stuart Reynolds Reynolds Consultancy Ltd, UK
- Andrej Tibaut University of Maribor, Slovenia





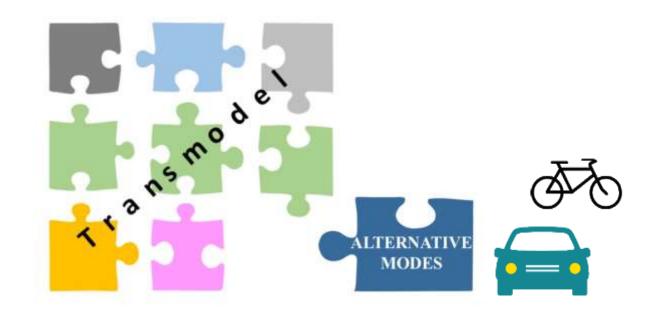


Example: Added support for alternative modes

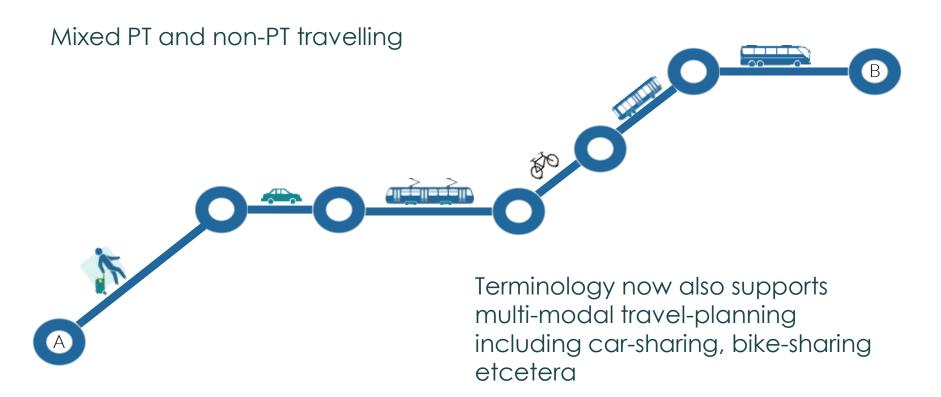




Example: Added support for alternative modes







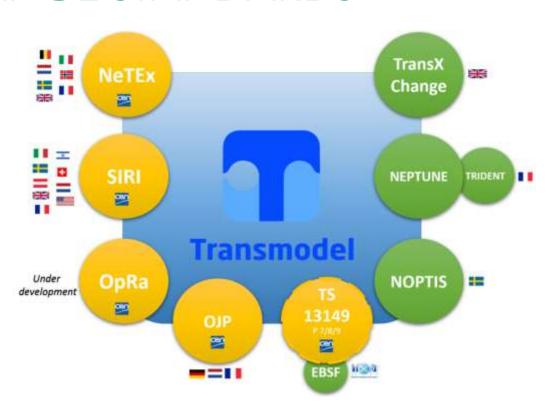


#### Added support for

- Accessibility information
- Detailed description of stations and terminals
- Train coupling
- And much more

### TRANSMODEL –BASIS FOR DATA EXCHANGE STANDARDS





### TRANSMODEL - EXCHANGING INFORMATION ACROSS EUROPE





EU regulation - Provision of EU-wide multimodal travel information services.

Starting in 2019, the EU Member States are committed to make their public transport information available using Transmodel-based formats at National Access Points.

#### CONCLUSION



 Transmodel provides matching definitions, structures and semantics for PT data allowing coherent, precise and efficient data exchange across domains

 Use Transmodel as the starting point when defining new data exchange protocols!

Let us cooperate to give the travelers good quality unified travel information



#### **THANK YOU**

http://www.transmodel-cen.eu



