

ELIPTIC Electrification of Public Transport in Cities

Electromobility in Europe - Linking EU research & innovation with
local expertise & deployment

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Horizon 2020
Programme

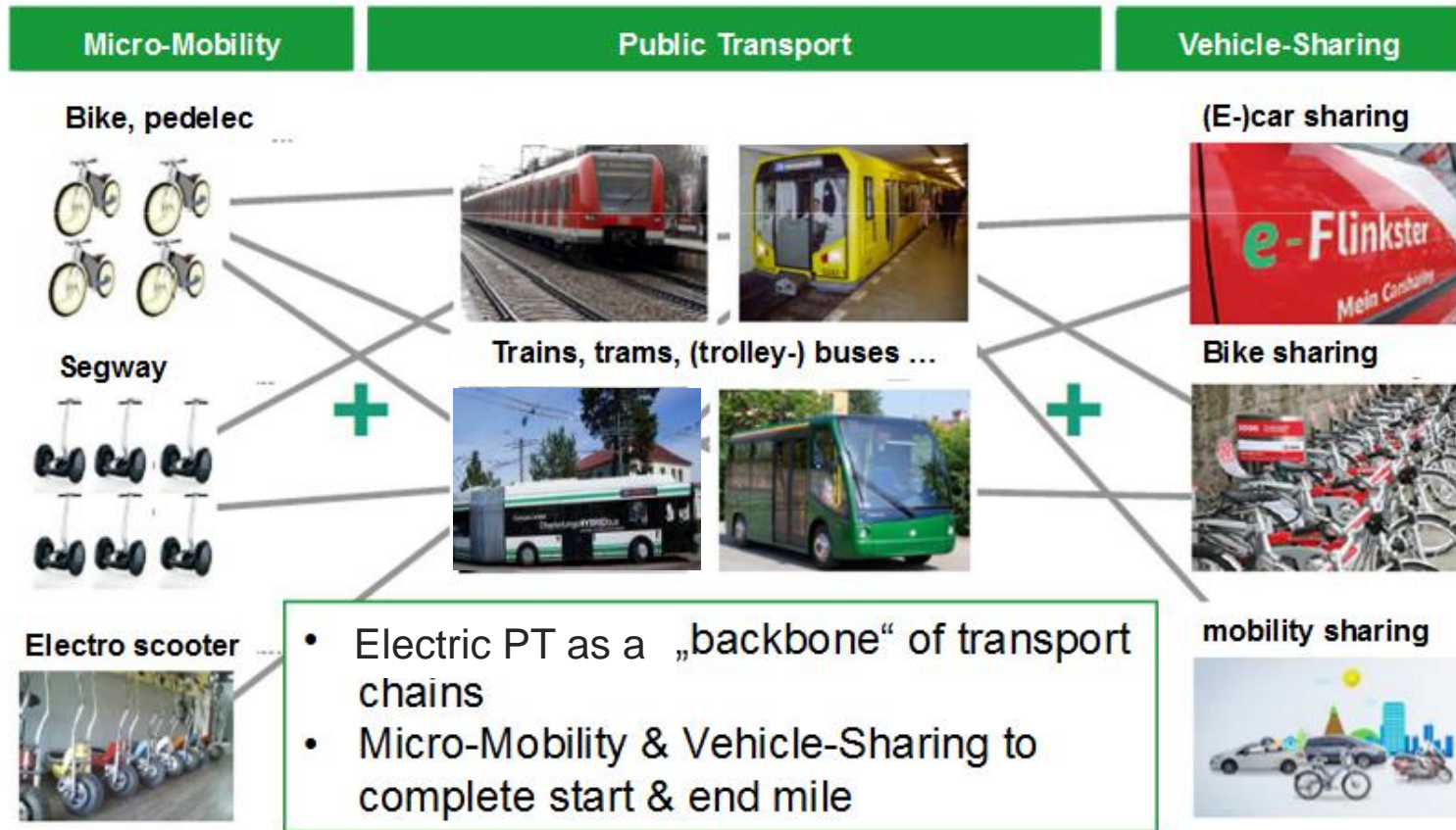
ELIPTIC – electrification of public transport in cities

- Horizon 2020 Research and Innovation project
- 33 partner in 8 Countries
- 20 use cases (demo + feasibility studies)
- Duration, 36 months: 01.06.2015 – 30.05.2018
- Coordinator: Freie Hansestadt Bremen
- Budget: 5,9 Million EUR



Electrification of public transport

Promising strategies and business models to boost the introduction of electric public transport



Objectives

- Evaluate the costs, benefits and operating efficiency of 20 use cases
- Support take-up of business cases and exploitation of project results across Europe
- Develop political support for the electrification of public transport
- Analyse 3 thematic pillars



Three thematic technology pillars

A

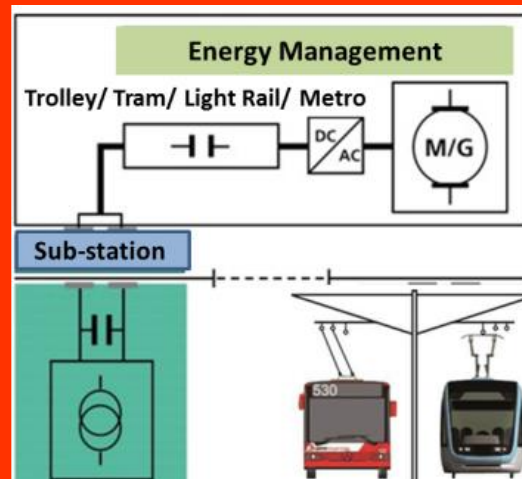
E-buses

Safe integration into existing electric PT infrastructure



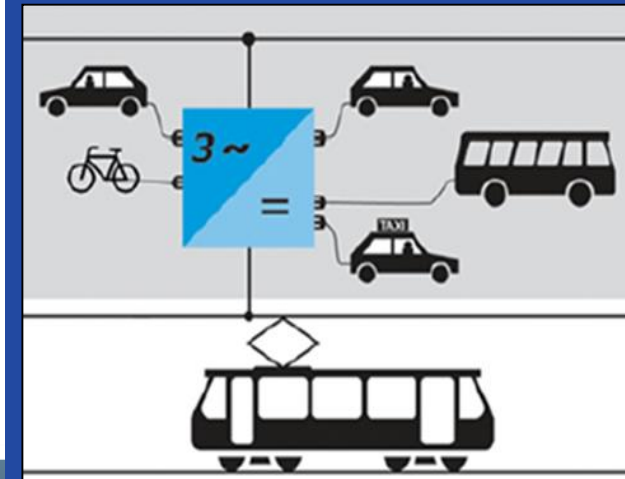
B

Energy efficient electric PT system



C

Multi-purpose use of electric PT infrastructure



Project coordinator: Bremen
Project manager: Rupprecht Consult

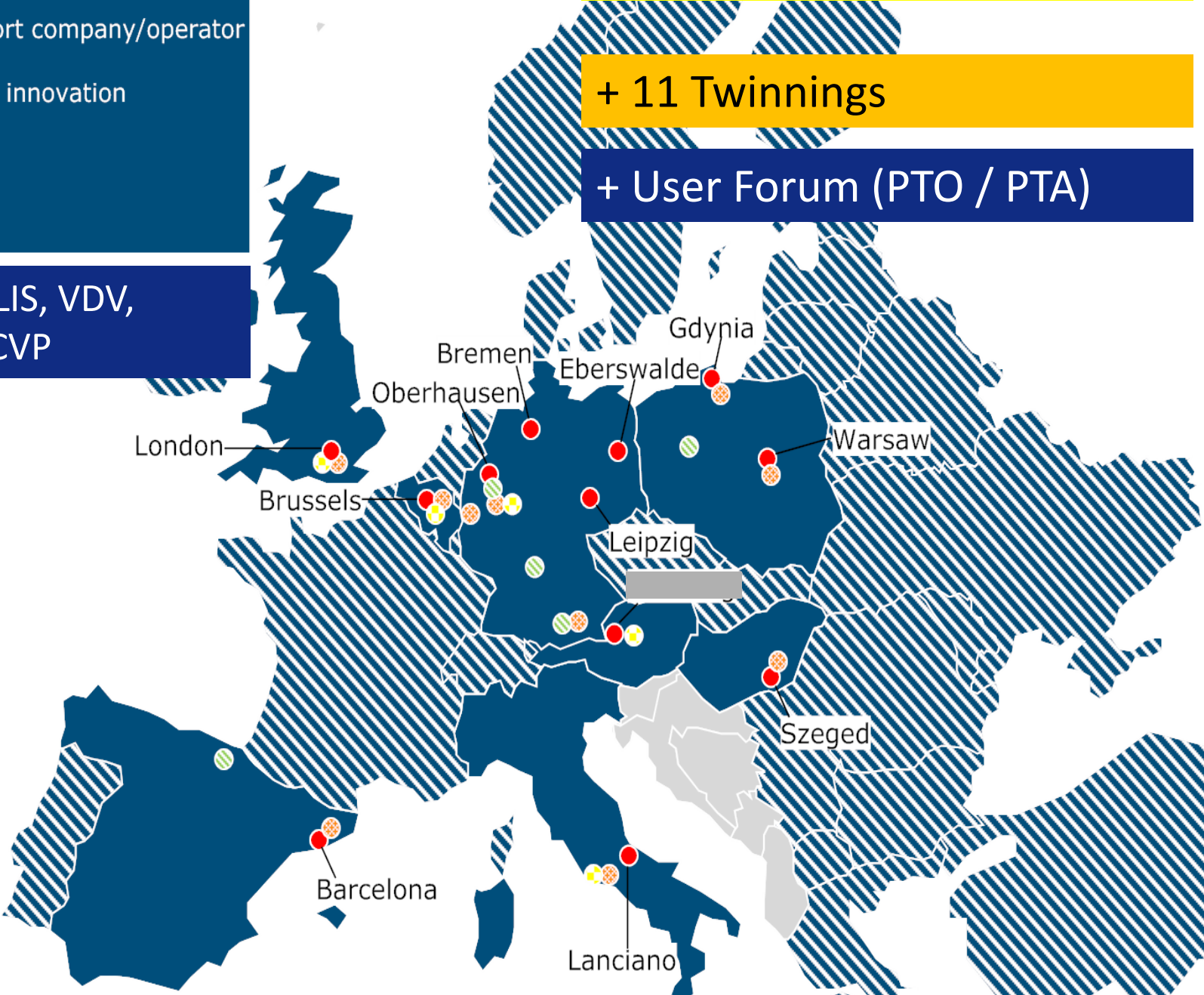
- Public transport company/operator
- Research and innovation
- Industry
- Associations

+ UITP, POLIS, VDV,
ASSTRA, LCVP

20 Use Cases

+ 11 Twinnings

+ User Forum (PTO / PTA)

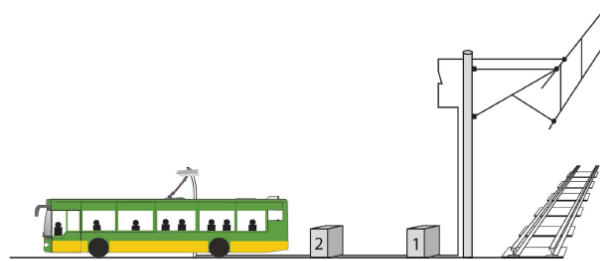


Opportunity (re)charging and overnight charging of electric buses based on metro infrastructure



Barcelona

Opportunity (re)charging of e-buses by using sub-stations and tram catenaries



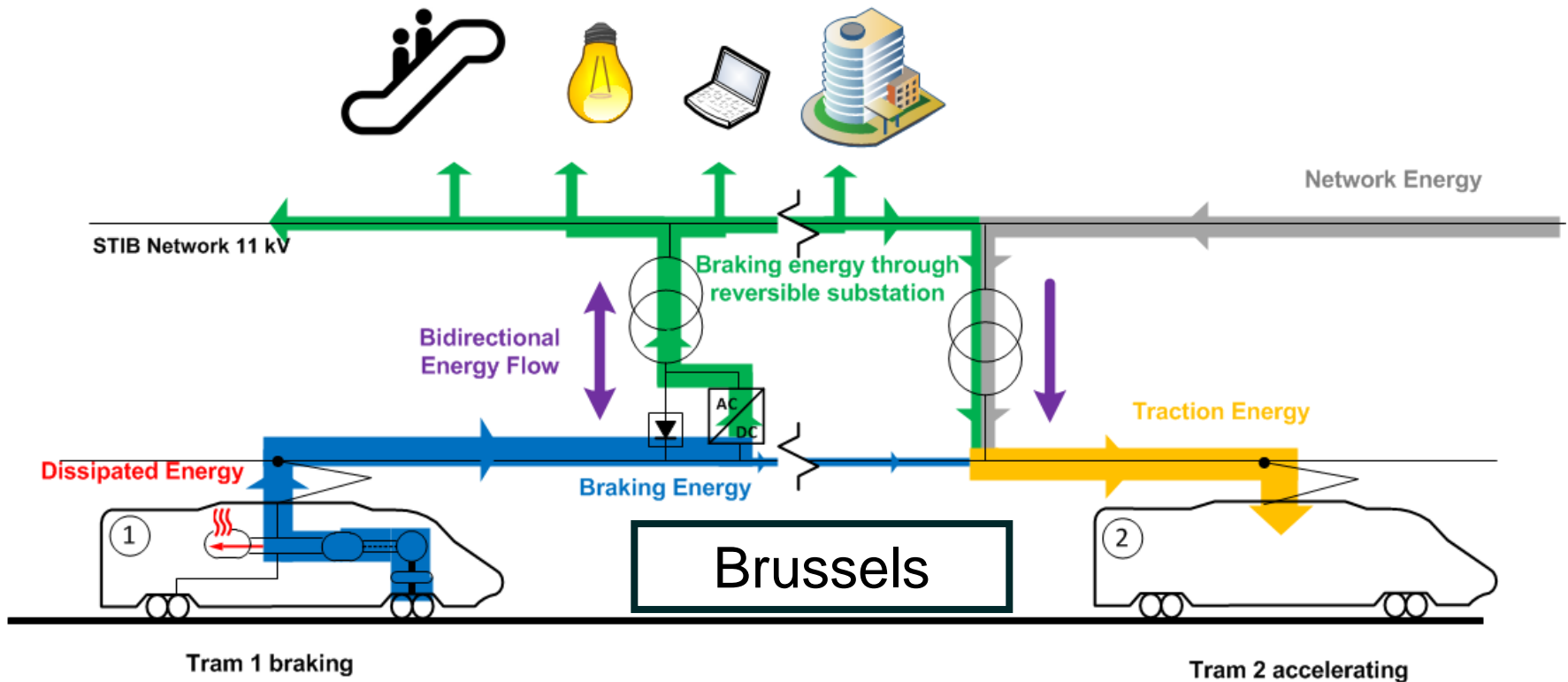
- 1 Outdoor-Schrank mit Leistungsschalter und Überspannungsschutz
- 2 Outdoor-Schrank mit Busladegerät



Oberhausen



Optimised braking energy recovery in light rail network



Preliminary evaluation results

- Selection of KPIs for each Use Case completed
- 20 KPIs on average for each evaluation Categories **(Operations, Energy, Economy, Environment, People)**
- Creation of the NO ELIPTIC scenarios for each Use Case completed
- Creation of the ELIPTIC scenarios for each Use Case in progress

Preliminary evaluation results

- According to KPIs selection, emphasis on **Operations and Costs**, more moderate interest shown for **Energy and Environmental** issues; specifically:
 - **Operations**, “Service” and “Supply” are core impact areas; it is expected demonstrators will improve performance
 - **Economy**, interest on basic expenditures such as fuel and charging infrastructure
 - **Environment**, the focus is on the Emissions impact area

Thank you for your attention!

Website: <http://www.eliptic-project.eu/>

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