

A large, stylized white graphic of a charging cable with a two-pronged plug, curving from the left side of the slide towards the bottom right.

# **Improving the EV charging experience within cities and for longer trips: the eCharge4Drivers project**

**Prof. dr. Lieselot Vanhaverbeke**

MOBI – Vrije Universiteit Brussel



4

Years



32

Partners



12

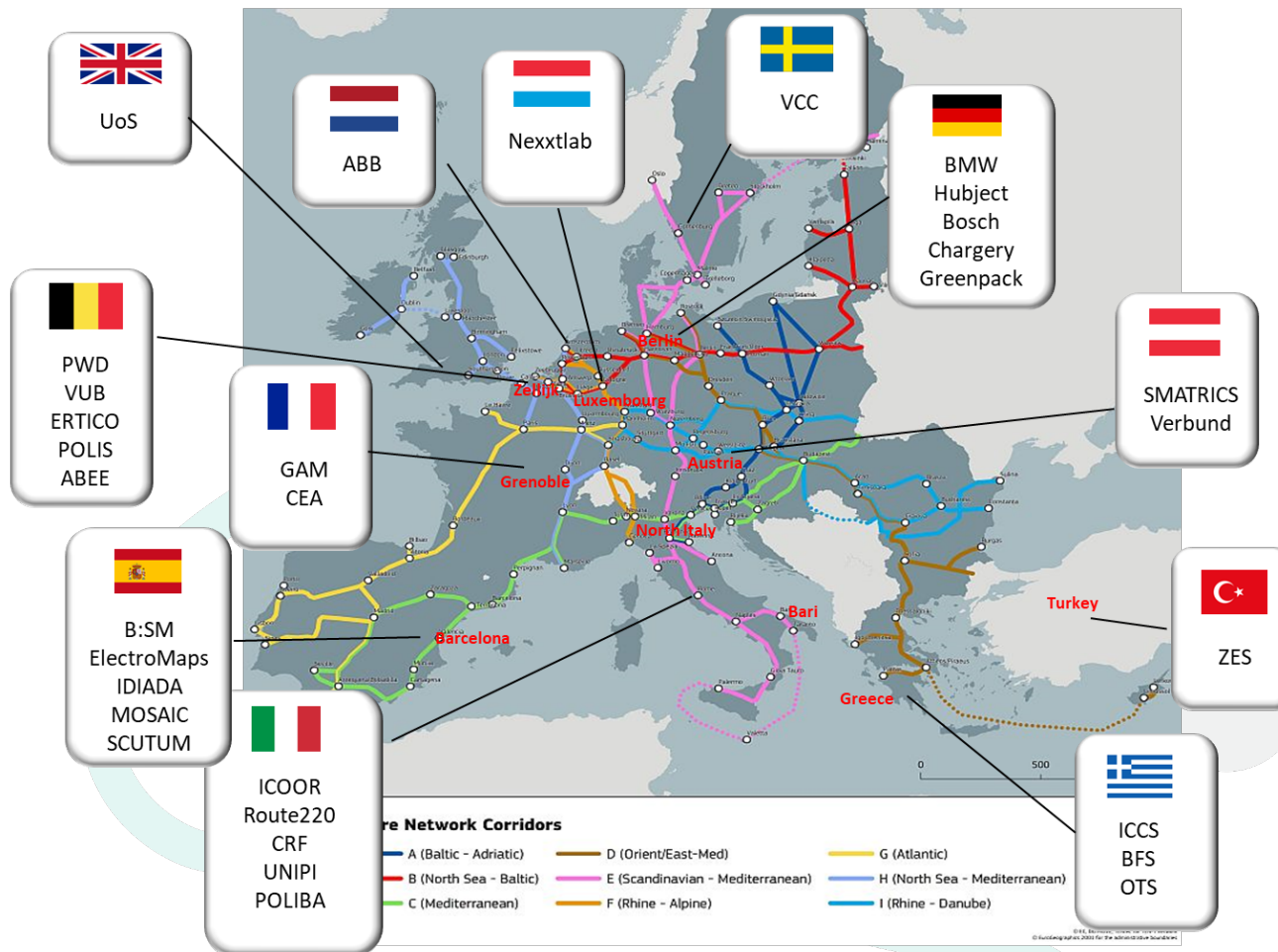
Countries



10

Demonstration  
areas

# eCharge4Drivers at a glance



**Call identifier:** H2020-LC-GV-2018-2019-2020

**Topic:** GV-10-2017 "Demonstration (pilots) for integration of electrified L-category vehicles in the urban transport system"

**EC funding:** 14,424,526.39 €

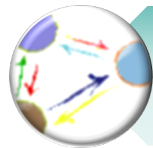
**Duration:** June 2020 – May 2024

Demonstrations in **ten** areas to cover needs for urban and for longer trips

# Challenges



**Improve comfort of charging**



**Enable services interoperability and provide appropriate information to users**



**Promote smart charging solutions**



**Propose standardised charging options for LEVs**



**Support the wide deployment of charging infrastructure**

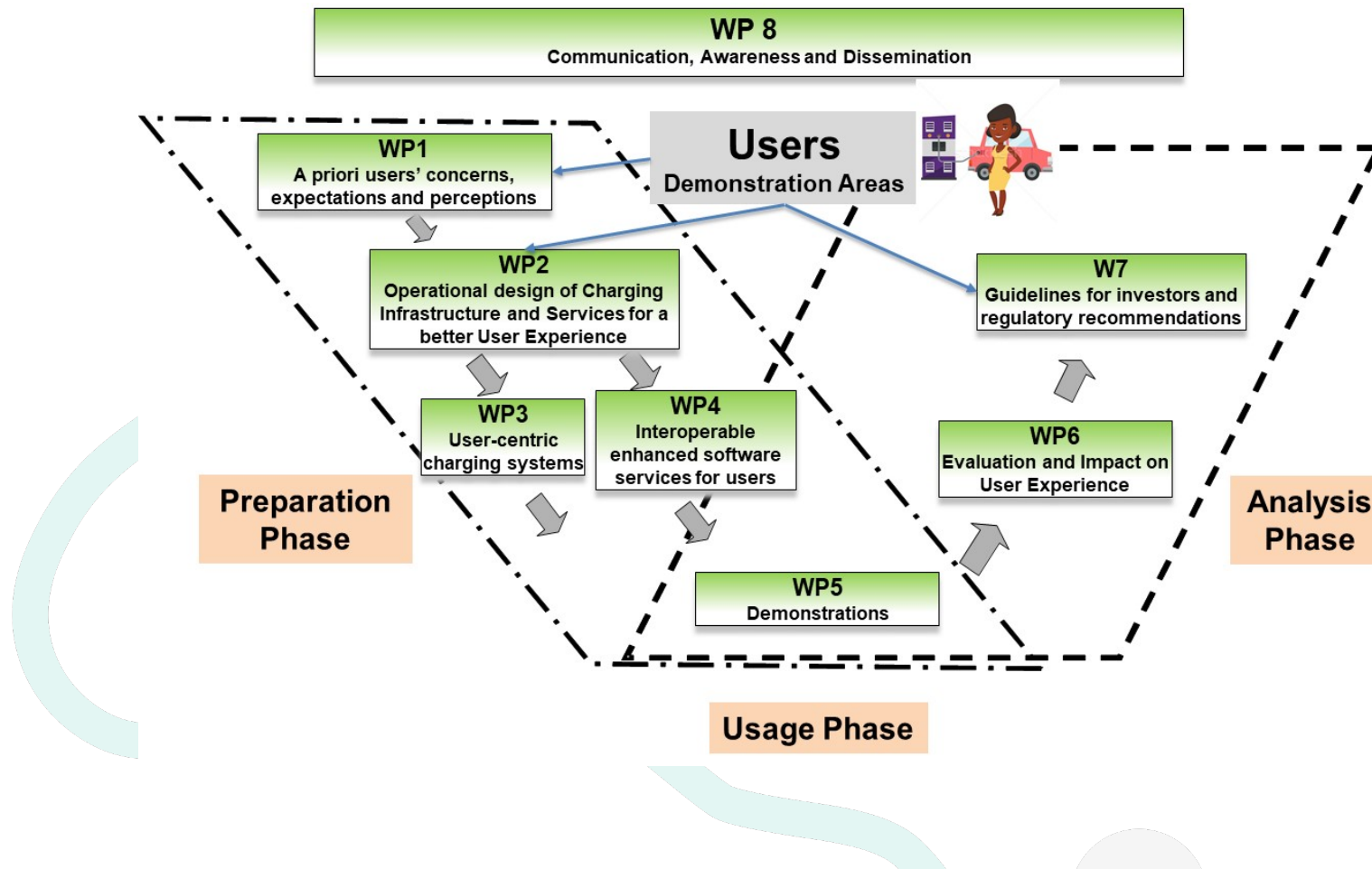


# Strategic objectives



- Develop and demonstrate **user-friendly charging stations** and smart charging solutions for passenger vehicles and LEVs
- Enable and demonstrate **interoperability of end-to-end communication** (ISO 15118 Plug & Charge feature and OCPP) and provision of **enhanced information to the EV users**, before, during and after a charging session
- Maximise benefits (i.e. reduce costs) for the users via **efficient** charging stations and charging components, **smart power management modules and smart charging strategies**
- Deploy and demonstrate **innovative charging solutions** for on-street residential charging for passenger vehicles (mobile charging service, charging points on lamp posts) and **standardised battery swapping stations** for LEVs
- Understand the user needs so that its charging solutions and services substantially **improve the user charging experience**
- **Accelerate the deployment** of charging infrastructure and other charging services in a sustainable and user-centric way

# Methodology





eCHARGE  
4DRIVERS



[@Charge4E](https://twitter.com/Charge4E)



[eCharge4Drivers](https://www.linkedin.com/company/eCharge4Drivers)



[info@eCharge4Drivers.eu](mailto:info@eCharge4Drivers.eu)



[www.echarge4drivers.eu](http://www.echarge4drivers.eu)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 875131 (Innovation Action)

## Speakers



Matilde Chinellato,  
Eurocities



Juan Gimenez Pla,  
Instituto de  
Biomechanica de  
Valencia (IBV)



Javier Julve,  
Electromaps

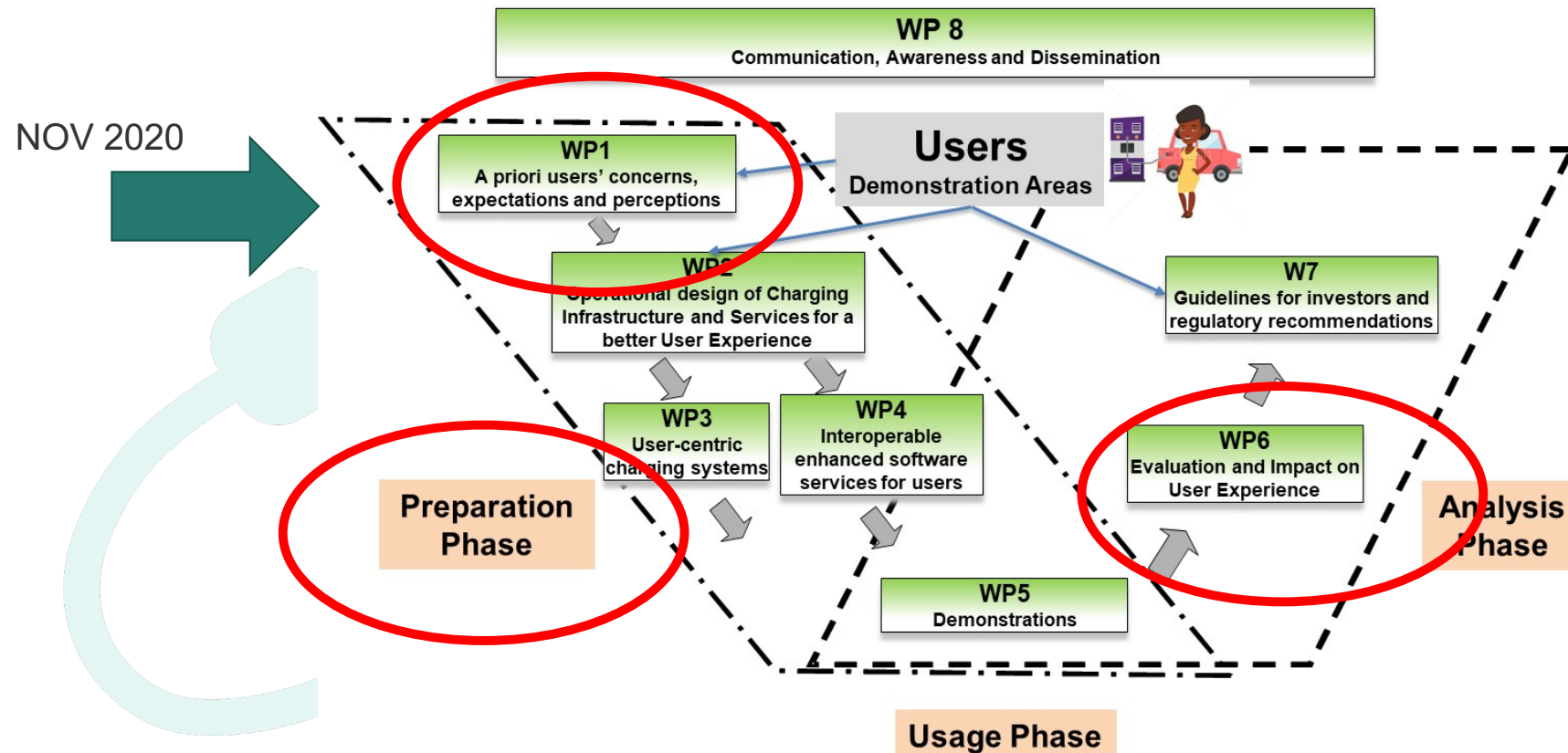


# eCharge4Drivers Survey

**Prof. dr. Lieselot Vanhaverbeke**

MOBI – Vrije Universiteit Brussel

# Concerns, expectations and perceptions: a priori measurement



# Respondents



- EV drivers
- Non-EV drivers

- Specific segments
- LSP
- Taxi drivers

# Content of survey for EV drivers



- Socio-demographics
- Vehicle
- Motives of using an EV
- Mobility & parking behavior
- Charging behavior
- Satisfaction of infrastructure/service (CIS-diagnostic)
- Technology acceptance (UTAUT-model)
- App-based services





# Content of survey for non-EV drivers

- Socio-demographic
- Intention to buy an EV
- Reasons to buy an EV
- Motives of using an EV
- Mobility & parking behavior

# Survey in 9 countries



## Cities



Barcelona (ES)



Grenoble-Alpes (FR)



Berlin



Luxembourg



Zellik (BE)



Bari (IT)

## Regions



Austria



Northern Italy



Greece



Istanbul & Western Turkey

# Stay tuned...



Website: [www.echarge4drivers.eu](http://www.echarge4drivers.eu)



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