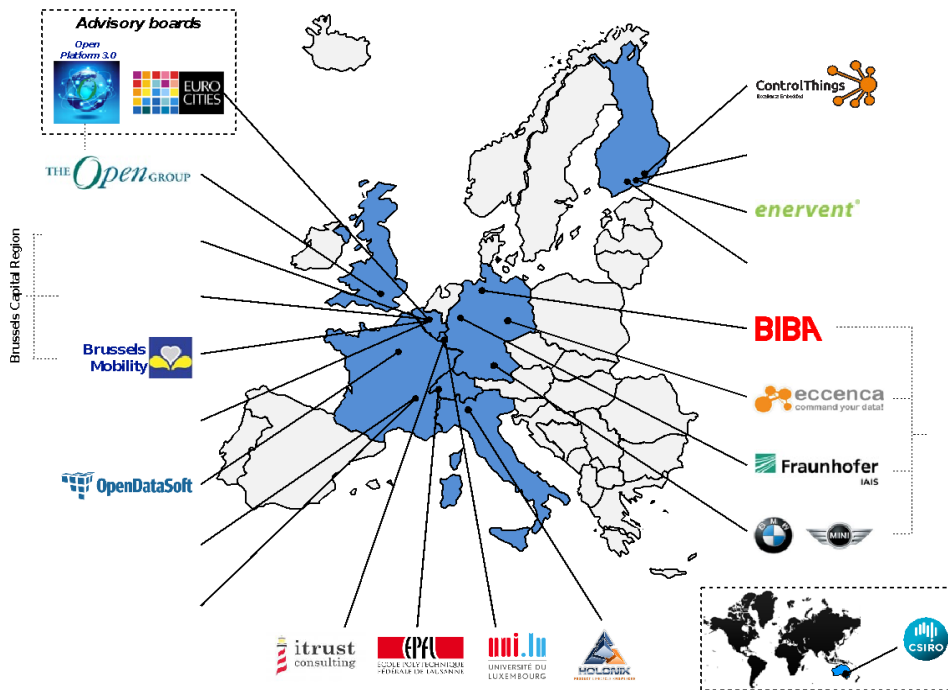




Building an IoT Open Innovation Ecosystem for Connected Smart Objects



22 partners
 10 countries
 9 mln budget
 2016-2019
 Horizon2020

<http://www.biotope-project.eu/>



European Commission

Horizon 2020
 European Union funding
 for Research & Innovation

**FORUM
 VIRIUM
 HELSINKI**

Challenges for IoT development

- There are over 400 IoT platforms.
- Lack of widely adopted standards.
- Development happens in vertical silos that don't communicate.
- Silos hinder the creation of cross-industry, cross-platform and cross-organisational services
 - Lack of **interoperability**, openness and transparency
 - Inhibit **co-creation** of products and services
 - Conventional business models often dictate over technological realities.



bloTope solution



- Standardised Open APIs to enable interoperability between today's vertical IoT silos
- Robust IoT framework for security, privacy & trust
- Large-scale pilots in smart cities that provide concept proof and reference implementation.
- Business models, bloTope ecosystem

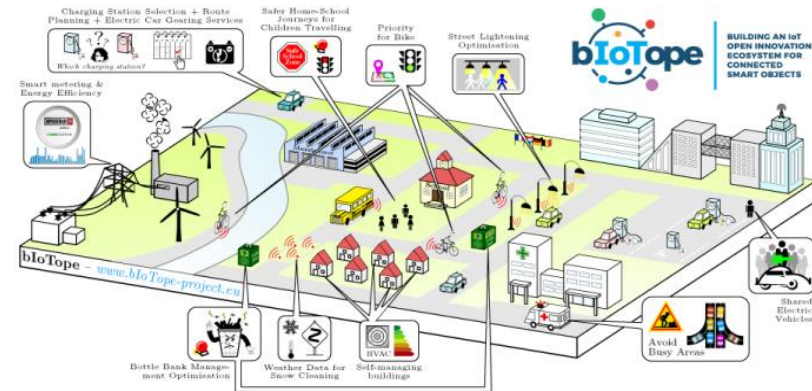
O-MI & O-DF

- Provides peer-to-peer communication and real-time interaction between devices (IoT)

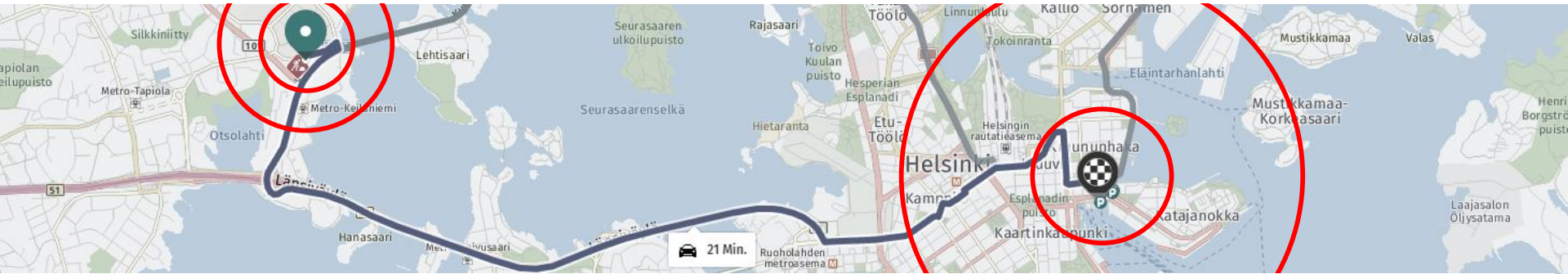
O-MI: Framework to publish and consume real-time information

O-DF: Represents a data payload for IoT applications

Comprehensive documentation available!



Smart Mobility & Building case



Pre-Conditioning



Realtime Traffic Information



Smart Charging



Driver identification and data usage



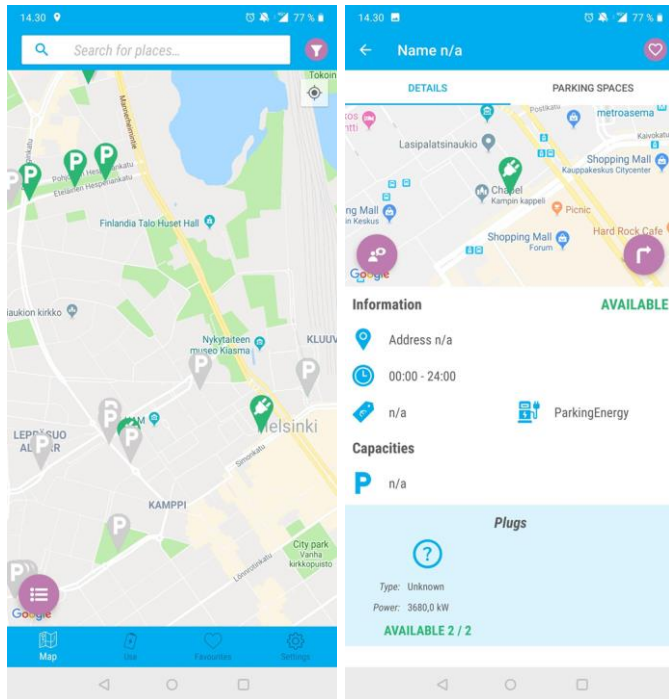
Smart Parking

Helsinki Pilot Goals - Phase I & II

- Create charging infrastructure and develop SmartMobility services.
- To utilise the current electrical infrastructure (pre-heating)
- To create an open **ecosystem** for charging services that integrate different service providers.
- Integrate existing parking services
- Create a 'client' for residential parking and charging integration



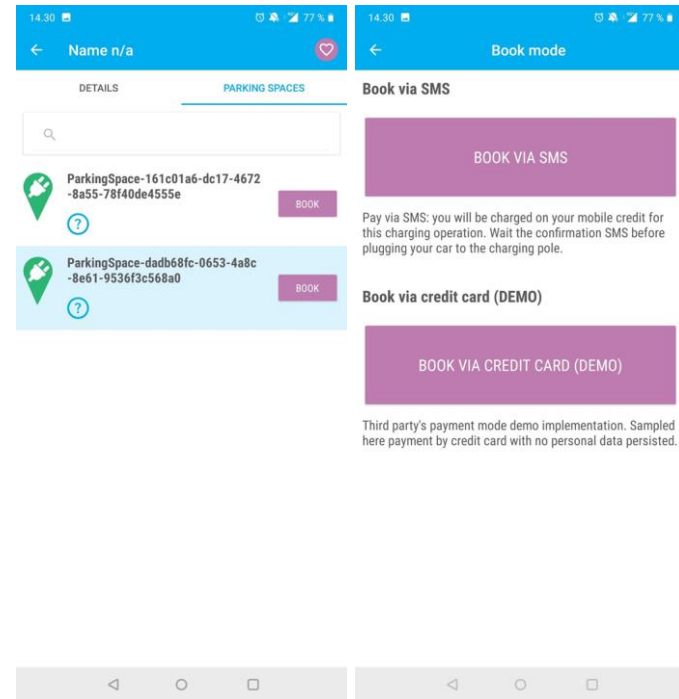
Helsinki pilot phase II



Map view of charging and parking places

Features & info

- Service provider
- Plug type
- Availability
- Price info



Booking and payment system

No authentication required

SMS payment for pilot purposes

A mobile payment system to be implemented.

