



Virtual Conference UrbanSmartPark

Project Lead: NFF

16 December 2020



 EIT Urban Mobility is supported by the EIT,
a body of the European Union

Agenda

Time	Topic	Speaker
9:00 – 9:30	Welcome and Introduction to the Project	Silvia Thal, Adrian Sonka (NFF)
9:30 – 9:40	Requirements from the City's Perspective	Robert Gaycken (City of Hamburg)
Session 1: Customer co-created parking services design		
9:45 - 10:35	Determining and Meeting the Need for Parking-related Services – Market Analyses and Services Design	Robert Gaycken (City of Hamburg), Antje Fricke (NFF)
10:35 – 10:45	Coffee break	
10:45 – 11:05	Implementation of the Services Platform	Julian Lindner (Fraunhofer)
Session 2: Automated parking solutions		
11:10 – 11:30	Implementation of Automated On-Street Parking: Requirements and Challenges	Marcel Kascha (NFF)
11:35 – 11:45	Legal Requirements of AVP in Germany	Lara Schmidt (NFF)
11:50 – 12:20	Verification and Validation of Automated Valet Parking System - Safety Challenges and Solutions	Alexandru Forrai (Siemens)
12:20 – 13:00	Lunch break	
13:00 - 13:20	Customer Acceptance and HMI Development of Autonomous Parking Service	Jakub Sliva (Skoda), Jiri Plihal (UTIA)
13:25 – 13:45	Eye Tracking Assessment & Innovative Parking Solutions	Tomas Tichy, Premysl Toman (CVUT)
13:45 – 14:00	Impressions of Demonstration Event in Hamburg, Discussion and Closing	Silvia Thal (NFF)



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Round of Introduction

NFF NIEDERSÄCHSISCHES
FORSCHUNGSZENTRUM
FAHRZEUGTECHNIK

Ein Zentrum der TU Braunschweig

INSTITUTE
OF
AUTOMOTIVE
ENGINEERING

aip

§ I INSTITUT FÜR
RECHTSWISSENSCHAFTEN



ŠKODA

Industry
Skoda,
Siemens TASS

SIEMENS
Ingenuity for life

Fraunhofer

Research
NFF, Fraunhofer, UTIA,
ČVUT

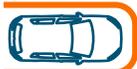
Hamburg

Cities
Hamburg, (Helmond)



CTU

CZECH TECHNICAL
UNIVERSITY
IN PRAGUE



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 Urban Mobility

EIT KIC Urban Mobility



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Introduction to KIC (Knowledge and Innovation Community)

- **Integrity**

Every KIC is a legally independent organization bringing together approx. 50 partners from different disciplines based on a contractual partnership / collaboration with the EIT

- **Long-term Strategic Approach**

Every KIC runs over a minimum of 7 years, expendable to 14 years with the goal to operate independently and financial sustainable

- **Effective Management**

Organization is run by a CEO & management team on a Central and Co-Location level

- **Autonomy and Flexibility**

Every Co-Location Center coordinates its organization and their activities in an independent structure

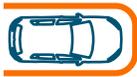


FIGURE 2-6: The KIC innovation model (source: EIT Health Campus, presentation by Dr. Ursula Muhle)

The KICs of the EIT



EIT: The European
Institute of Innovation
and Technology



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The EIT KIC Urban Mobility

EIT Urban Mobility **engages** people, **connects** communities, **accelerates** market opportunities and re-imagines **public spaces**. An innovation community to **educate** and **inspire** mobility solutions for 21st century cities.

We aim to become the largest European initiative for transformation of Urban Mobility, with EIT co-funding of up to **400 million EUR (2020-2026)** to make this happen!

Industry

Automotive & Transport
 TRATON SEAT SKODA

Insurance
 achmea

Retail & Logistics
 COLRUYTGROUP

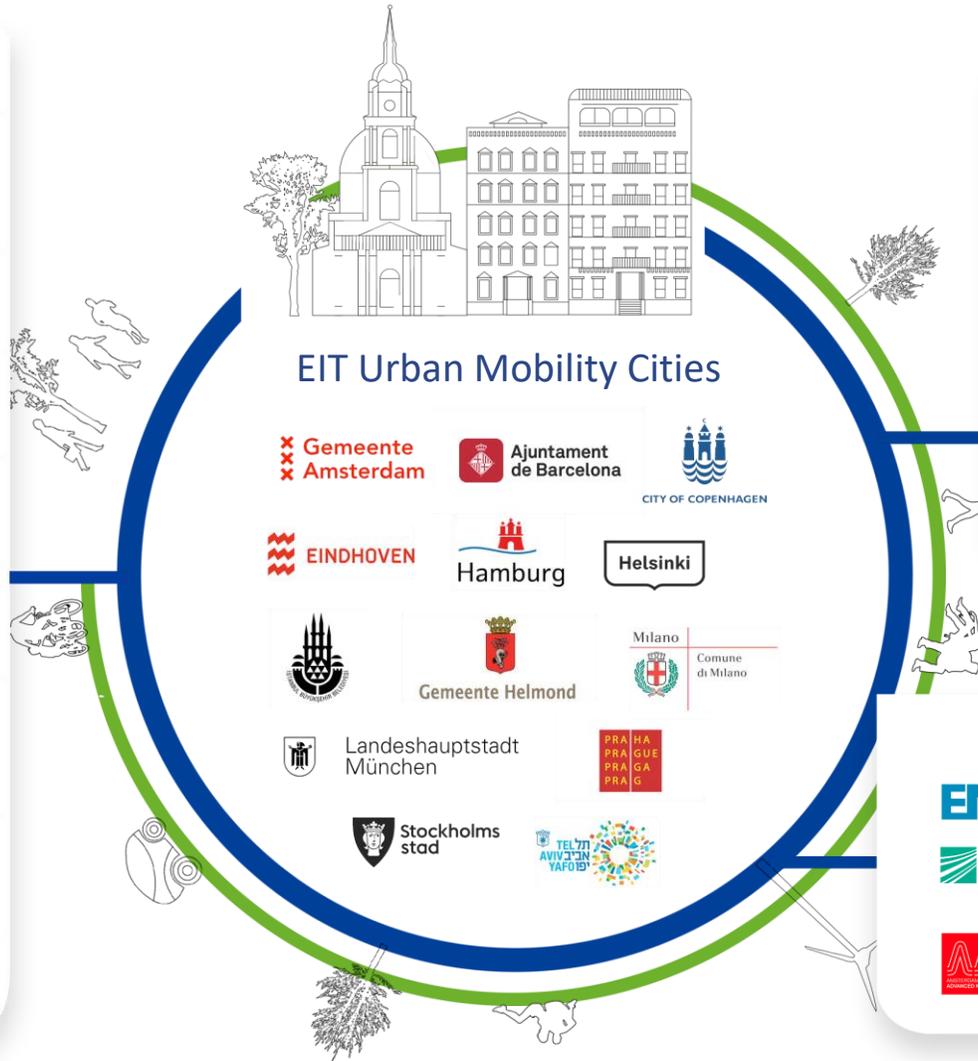
Energy
 e-on MOL

Engineering & Consulting
 TRACTEBEL ENGIE altran

Software Integration Solutions
 AMADEUS ORACLE
 tomtom

Soft & Hardware Technologies
 SIEMENS tassinternational
 ZONE CLUSTER NONPROFIT LTD.

Start-up / Scale-up / Accelerator
 unternehmertum
Center for Innovation and Business Creation at TUM



Universities / Education

TECHNION Israel Institute of Technology TU/e

Aalto University KTH UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH

CTU TUM DTU

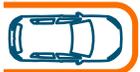
MŰEGYETEM 1782 EPFL

Knowledge institutes / RTOs

ENEA CARNET FUTURE MOBILITY RESEARCH HUB CTAG

Fraunhofer UTIA

AAS NFF NIEDERSÄCHSISCHES FORSCHUNGSZENTRUM FAHRZEUGTECHNIK Ein Zentrum der TU Braunschweig



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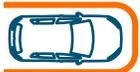
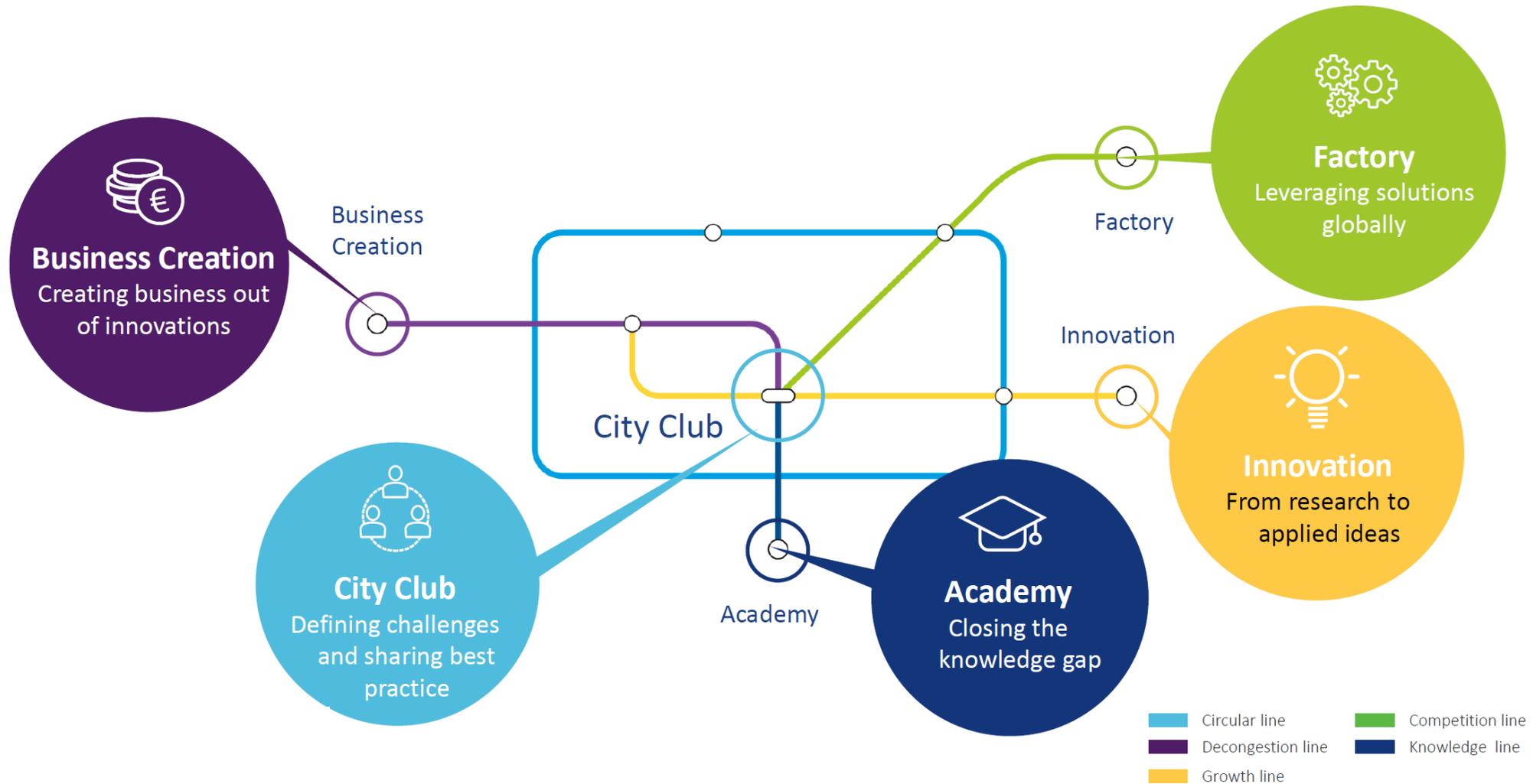
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the cities of
tomorrow

Funding Tracks of EIT Urban Mobility



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Introduction to UrbanSmartPark - Project Facts

12 MONTH PROJECT DURATION
600,000 € FUNDING VOLUME

5 WORK PACKAGES

8 PARTNERS

3 COUNTRIES

850,000 € PROJECT BUDGET



Motivation

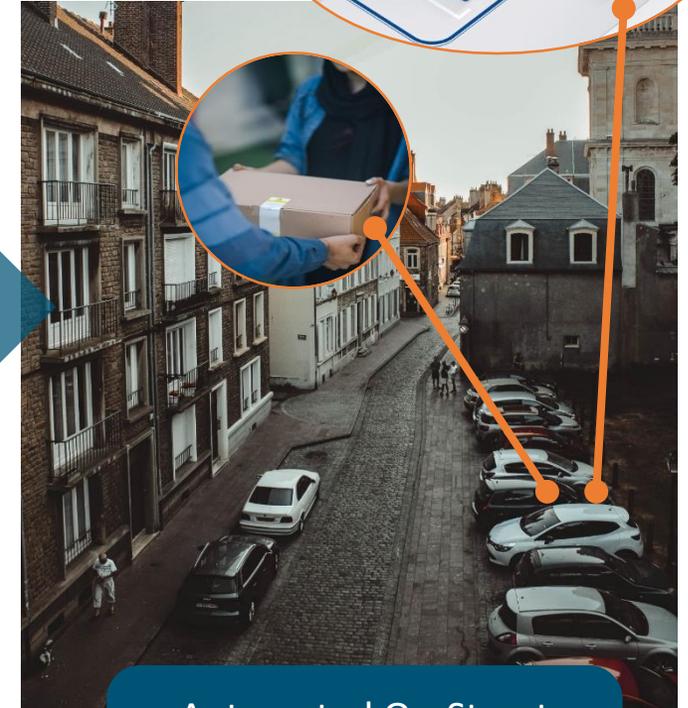
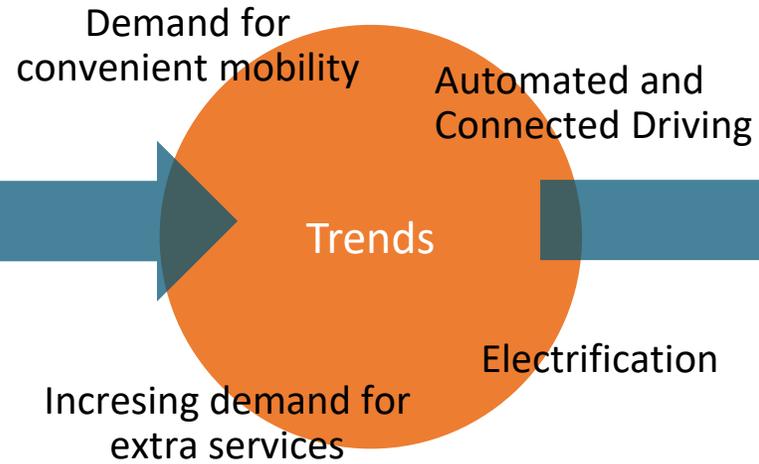
Increases congestion & emissions

Annoying Time-consuming Causes accidents

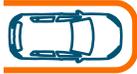
No added value Occupies valuable public space



Manual On-Street Parking



Automated On-Street Valet Parking and Additional Services



Aim of the Project

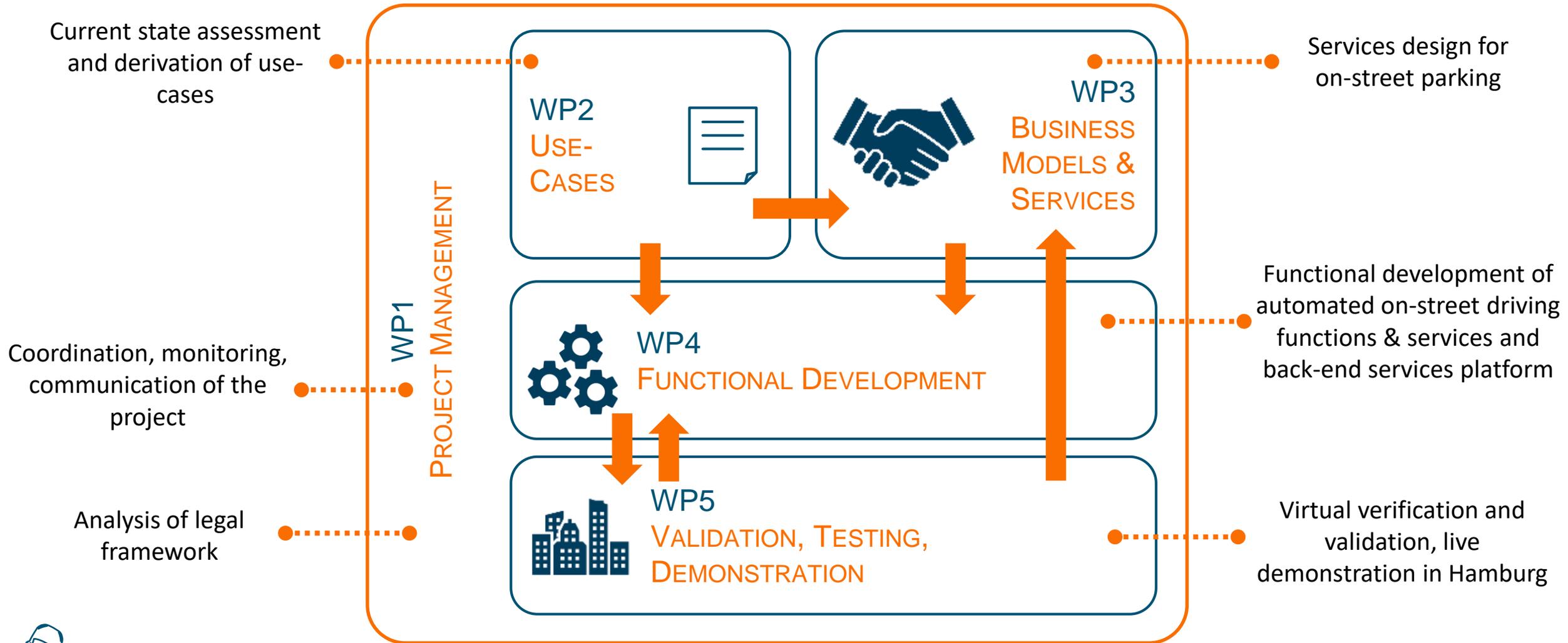
The project UrbanSmartPark focusses on the development and pilot demonstration of automated vehicles that simplify **driverless on-street inner-city parking** and provide a broad range of possibilities for **parking-related services**.

Narrowed down to the two main objectives:

1. Design of customer-centric services provided by a services platform
2. Implementation and demonstration of automated on-street parking and services

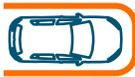
By the end of the project the prototypical implementation of automated on-street parking and parking-related services will be conducted in test vehicles and demonstrated in Hamburg with a **high outreach** increasing **technology awareness and technology acceptance**. Based on holistic market studies and customer surveys, **customer-centric services**, innovation and technology-driven on the one hand, close-to-market on the other hand, are elaborated and designed.

Workplan



One Project Year UrbanSmartPark

Kick-Off Event
01/20



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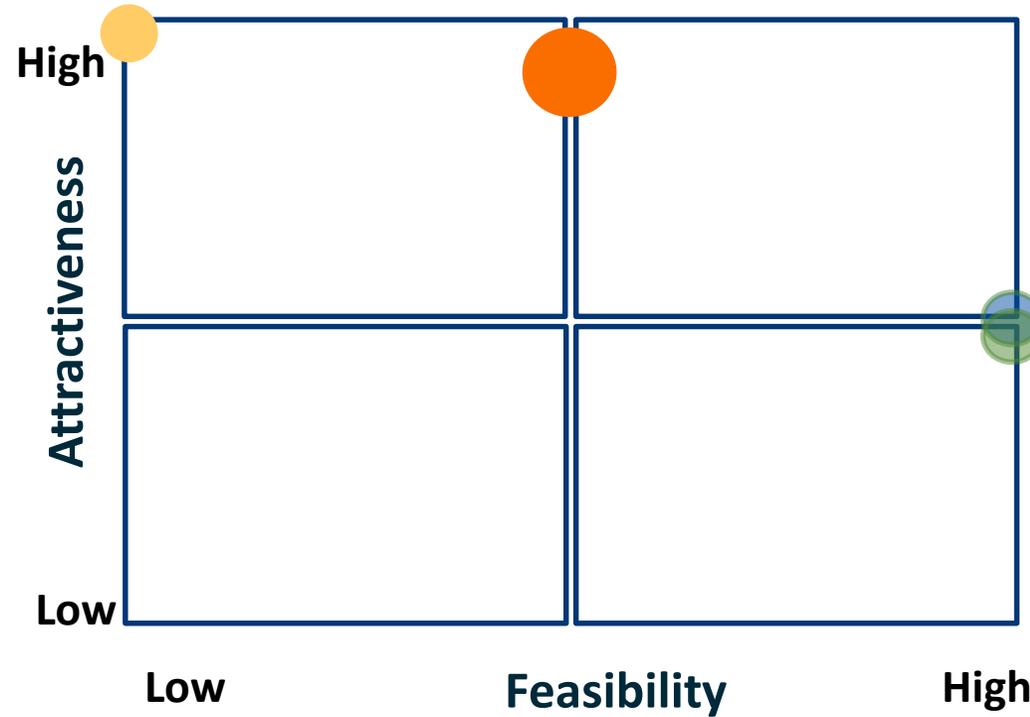
 Urban Mobility

One Project Year UrbanSmartPark

Kick-Off Event
01/20



Use-Cases defined
04/20



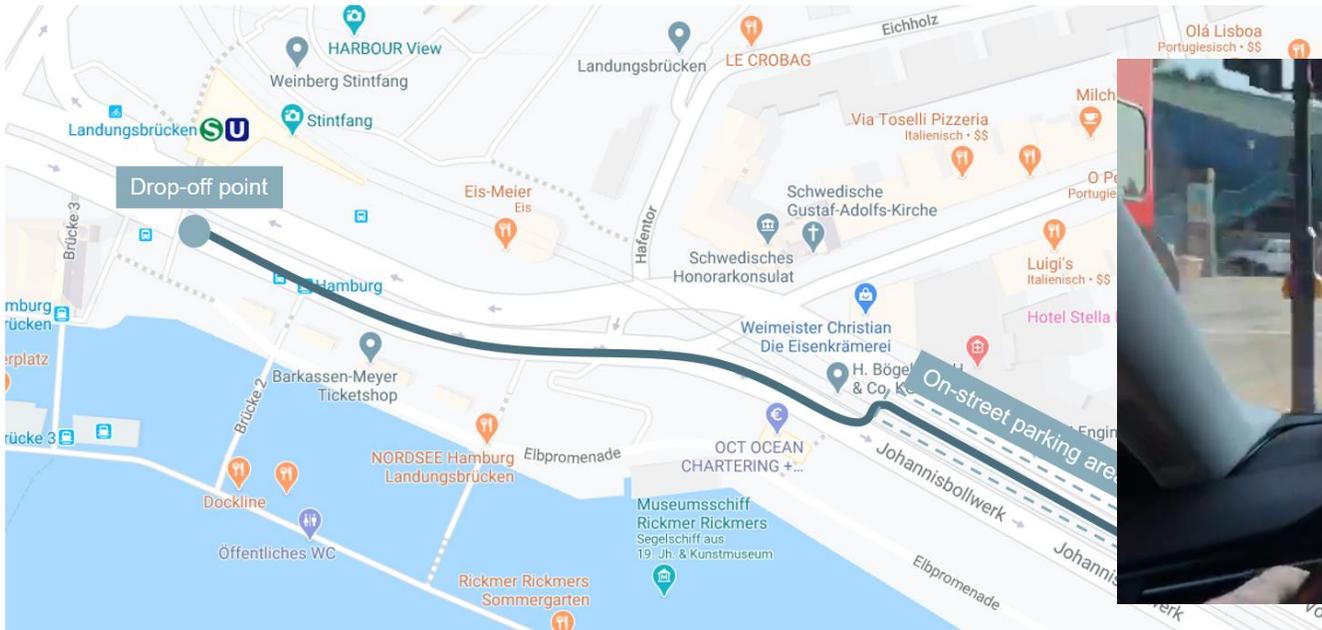
One Project Year UrbanSmartPark

Kick-Off Event
01/20



Use-Cases defined
04/20

Demonstration Area in
Hamburg defined. Start
of Functional
Development.
06/20



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 Urban Mobility

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Kick-Off Event
01/20



Use-Cases defined
04/20

Demonstration Area in
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Development.
06/20



Start of Customer
Surveys
07/20



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Kick-Off Event
01/20



Use-Cases defined
04/20

Demonstration Area in
Hamburg defined. Start
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Development.
06/20

First Digital Twin of
Demonstration Area
08/20



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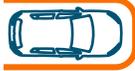
Use-Cases defined
04/20

Demonstration Area in
Hamburg defined. Start
of Functional
Development.
06/20

First
Demo



Customer Experience
Assessment on
eRapid
11/20



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Kick-Off Event
01/20



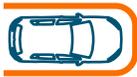
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Customer Experience
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11/20

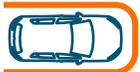
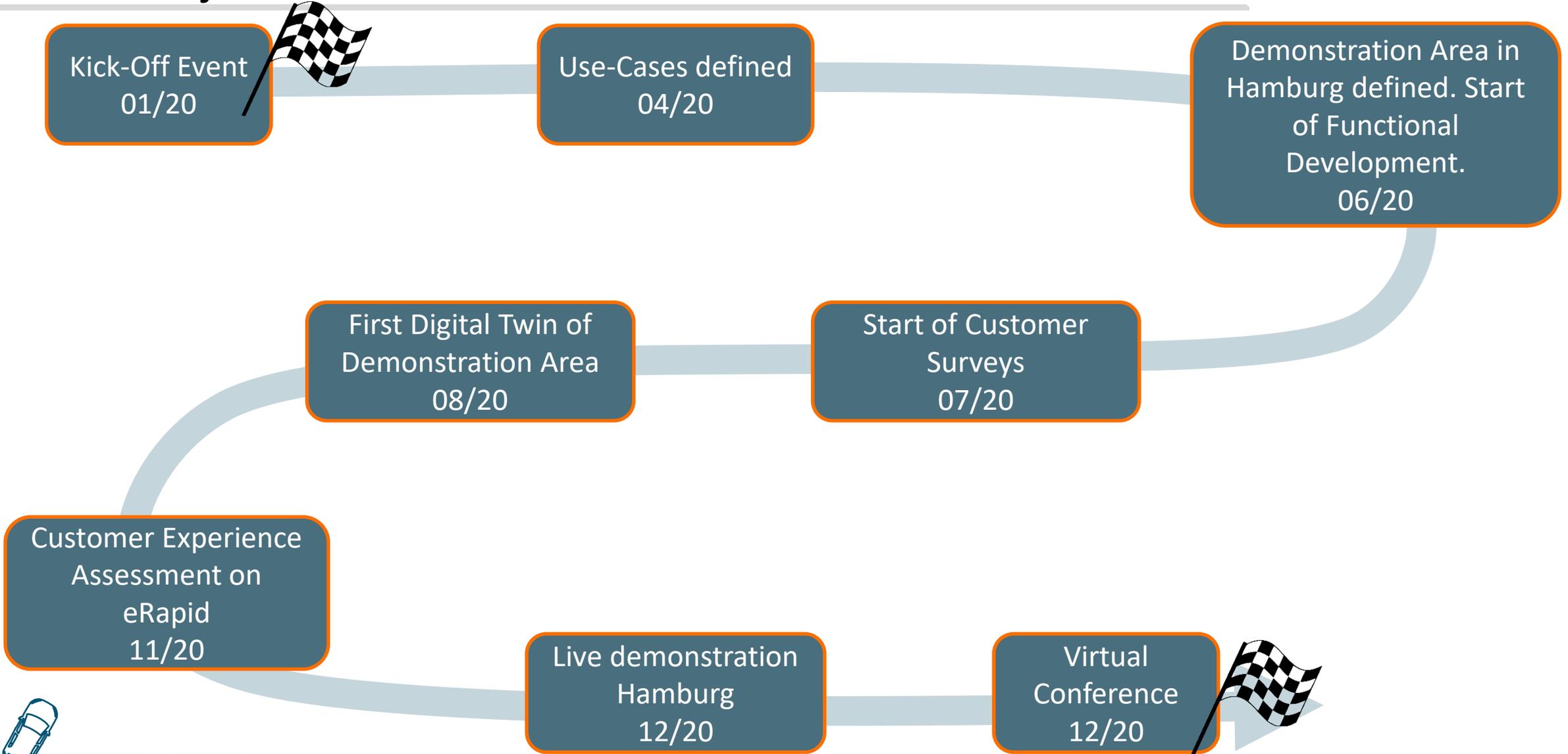
Live demonstration
Hamburg
12/20



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One Project Year UrbanSmartPark



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