Standardisation of Automated Valet Parking

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NIEDERSÄCHSISCHES FORSCHUNGSZENTRUM FAHRZEUGTECHNIK

Technische Universität Braunschweig

AGENDA

Motivation

Project SynCoPark

Parking garage for research purposes Braunschweig



Agenda

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Research Projects Automated Valet Parking

Project V-Charge
(2011-2015)



Source: VWVortex



Source: elEconomista.es

Cooperation
Bosch, Daimler,
Car2Go
(since 2015)



Source: Audi Blog

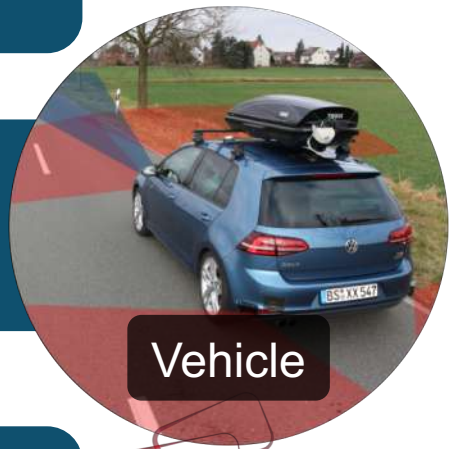
Audi parking
garage-pilot
(2013)

SUMMARY

Cooperation / projects between defined partners in specified parking environments



Intelligence



§ $ Few consideration of legal framework or economical questions

SYNCOPARK

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PROJECT



Period

10/2018 – 12/2020

Funding amount

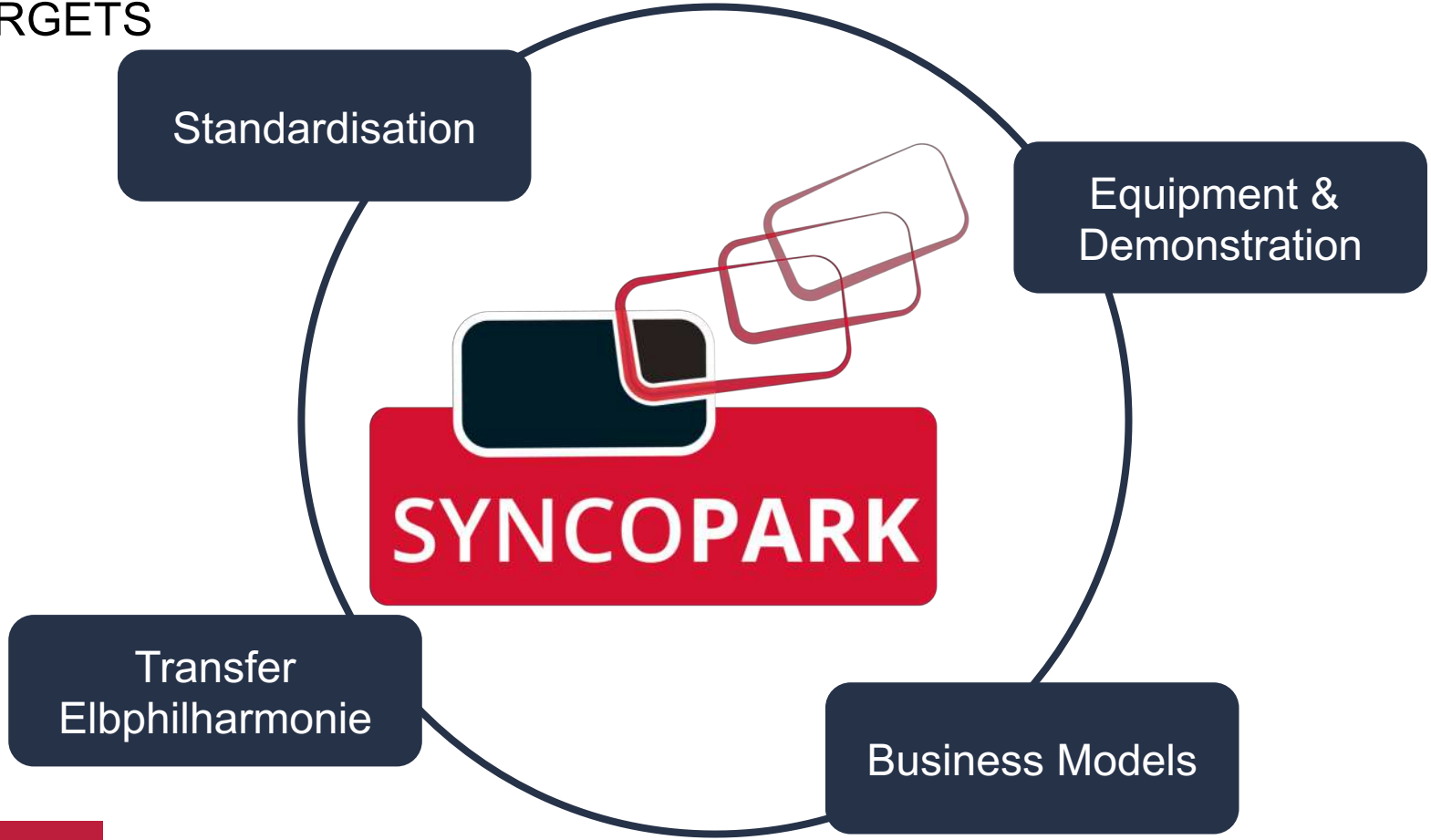
2,5 Mio. €

SYNCOPARK

Synergies from **Co**operation and Standardisation in manufacturer-independent Automated **Park**ing

Federal Ministry of Transport and Digital Infrastructure

TARGETS


Standardisation
Equipment & Demonstration
SYNCOPARK
Transfer Elbphilharmonie
Business Models

Standardisation

Standardisation
Automated parking procedures and hardware equipment for infrastructure and vehicles

OEM-independent
Creation of manufacturer-independent interfaces

Maximization of automation
with available hardware


Photo: Samuell Zeller



Equipping
the parking garage in Braunschweig with digital infrastructure

Equipment & Demonstration

Function development
of advanced and cooperative parking functions from entrance to exit

Demonstration
with test vehicles from NFF

Drivers for automated valet parking

[1]

Efficiency

Safety

Time-saving

Comfort

Environment

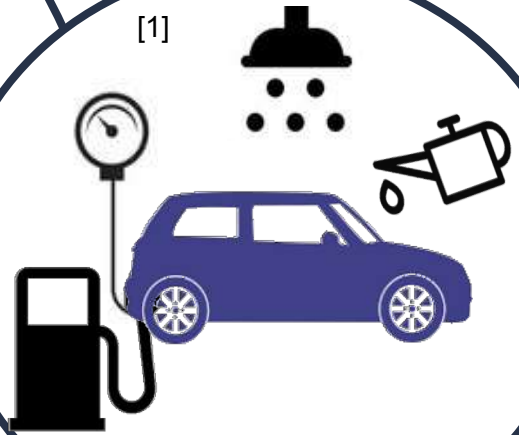
Business Models

Customer analysis
Customer Co-Creation

New business segments
in terms of profitability and efficiency

Legal framework
Owners of rights and responsibilties

[1]



[1] Qualitative interviews with customers [aip]

Transfer
on the parking garage of the
Elbphilharmonie Hamburg

Demonstration
on the
ITS World Congress 2021

Transfer
Elbphilharmonie



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LOCATION





TESTFELD NIEDERSACHSEN
Für automatisierte und vernetzte Mobilität

Test field: Autonomous driving

DK4.0

Intersection for research purposes

DESCRIPTION

653 parking slots in total

Installation of sensors and further digital infrastructure possible



Server und working area with view to the parking area



Reseach area with 15 reserved parking places

Project Partners













Associated Partners











AN IMPORTANT STEP IN THE DIRECTION OF NATIONWIDE AUTOMATED VALET PARKING.

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