L3Pilot
Driving Automation

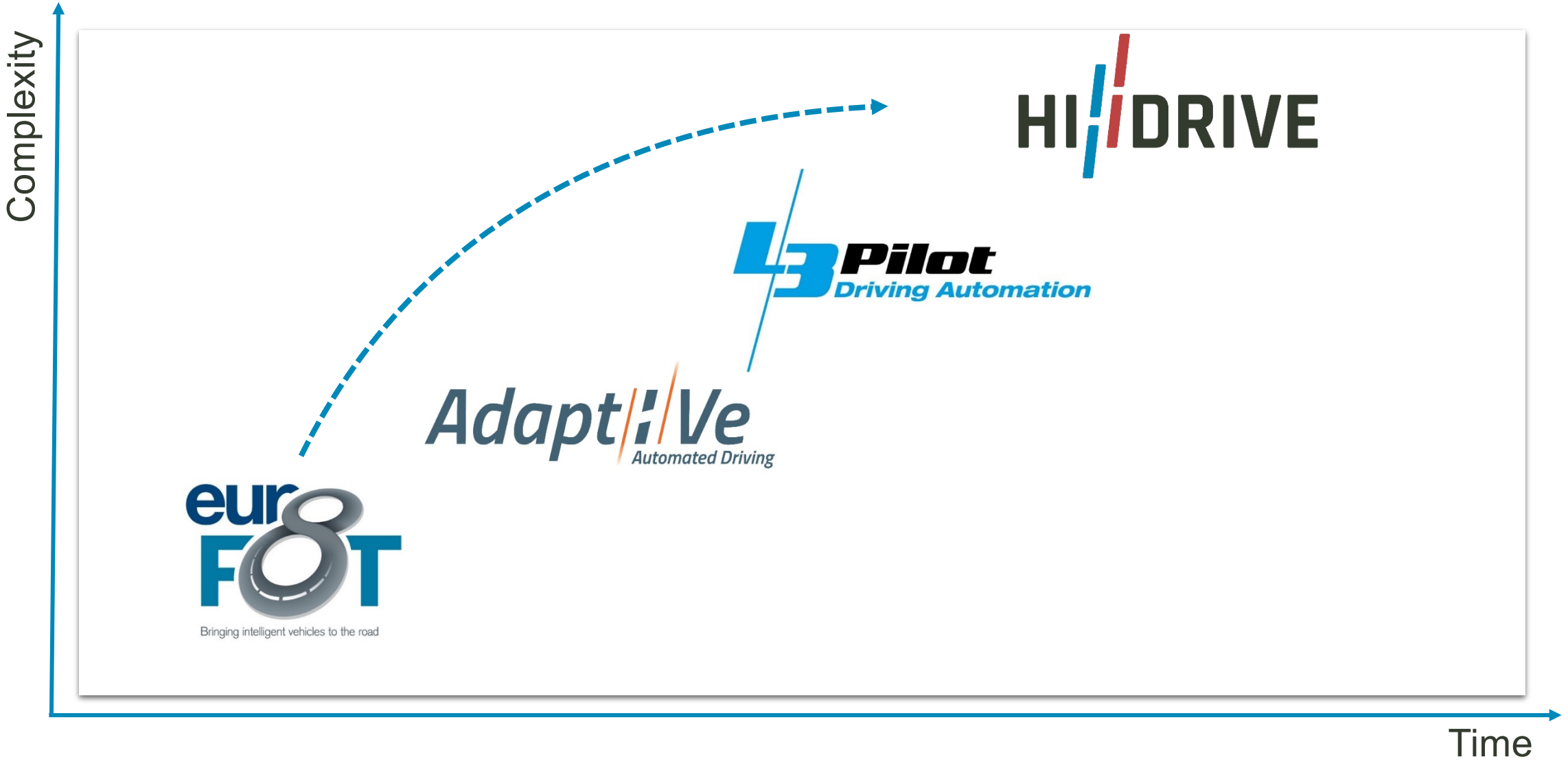
OUTLOOK

Hamburg 2021

Aria Etemad
Volkswagen Group Innovation

VOLKSWAGEN
AKTIENGESELLSCHAFT

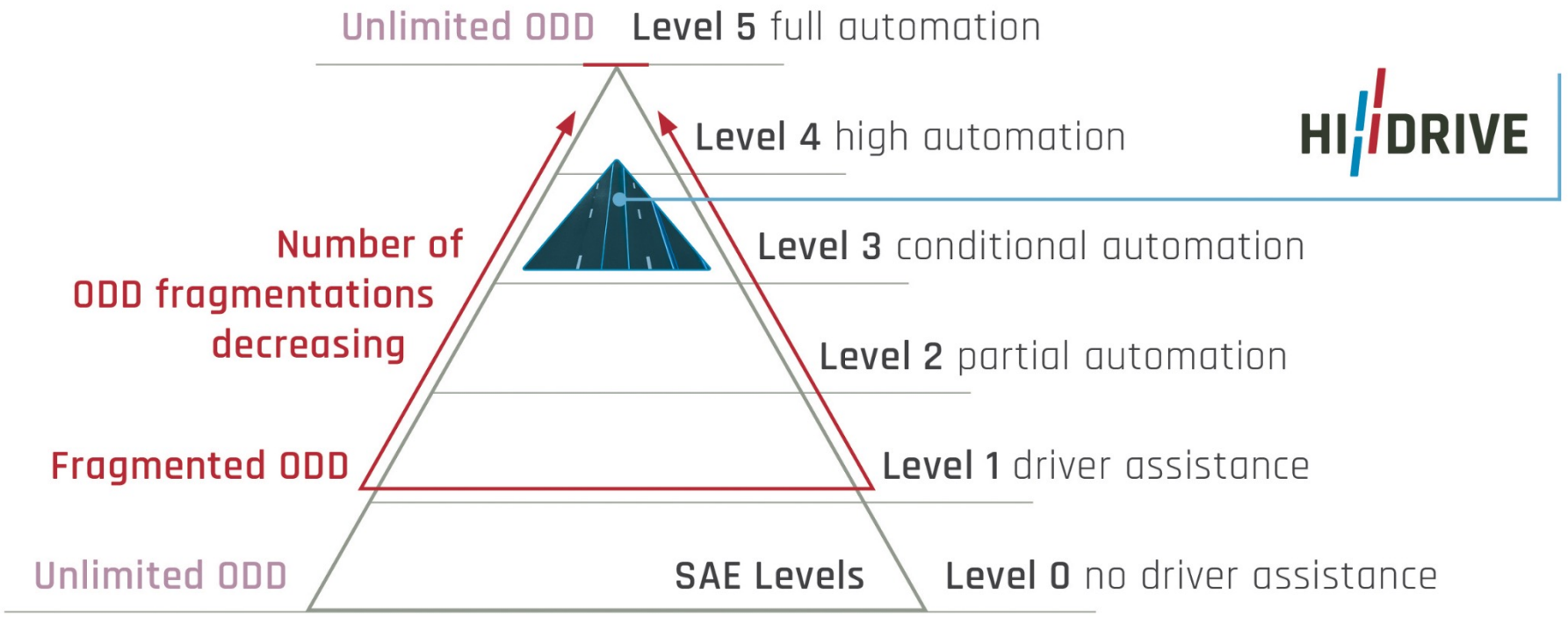
Our history: long lasting successful collaborations



Vision: Make automated driving robust and reliable

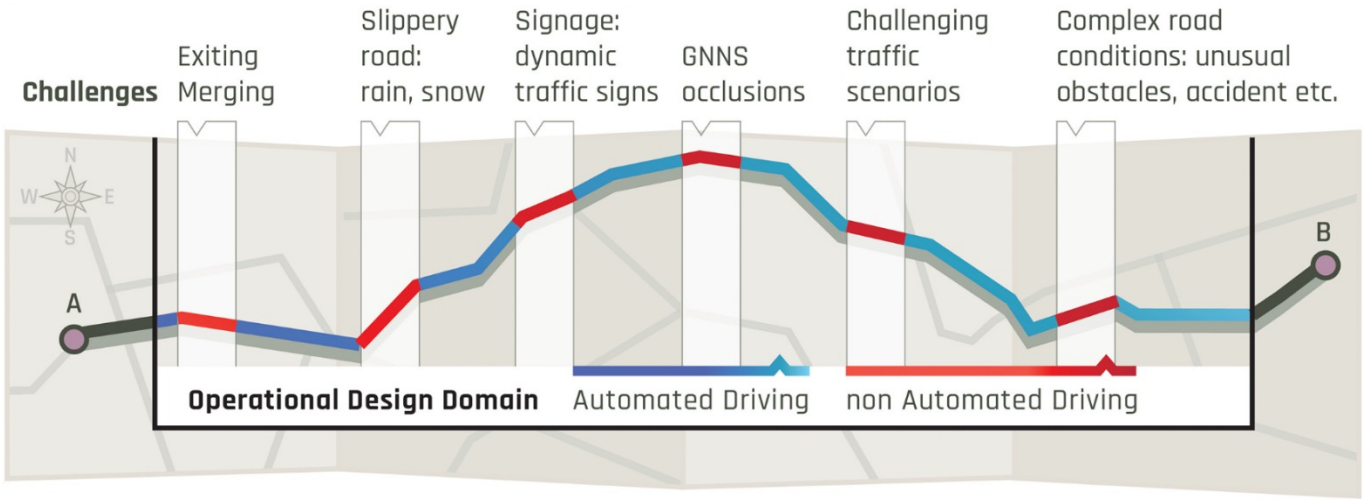
Project goal: Addressing challenges toward the deployment of higher automation

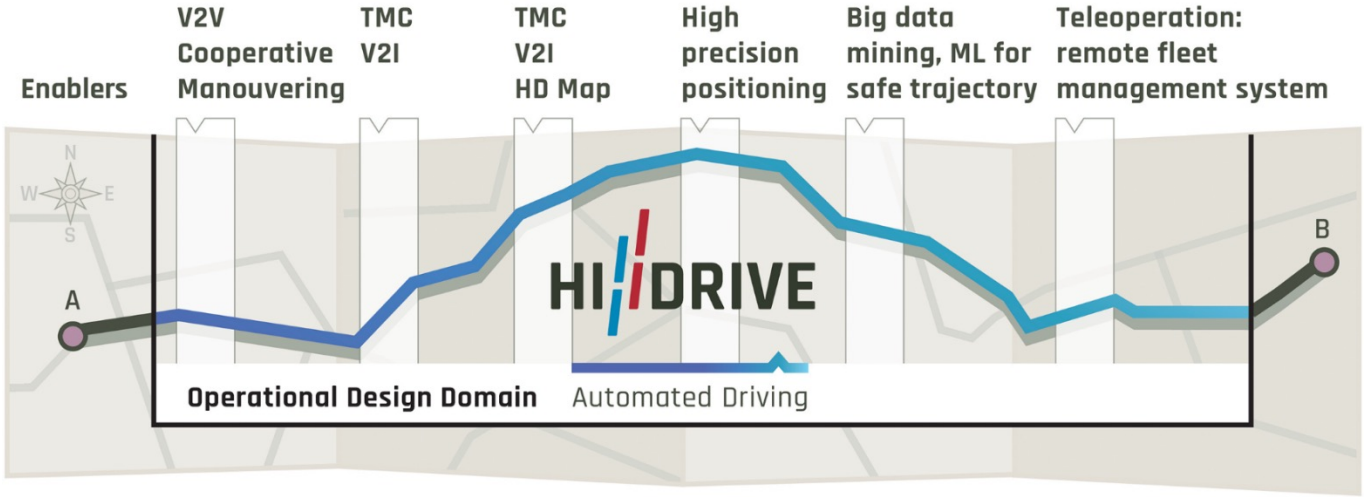
OOD extension …. How to get rid of fragmentations in Operational Design Domain?



Challenges toward the deployment of higher automation

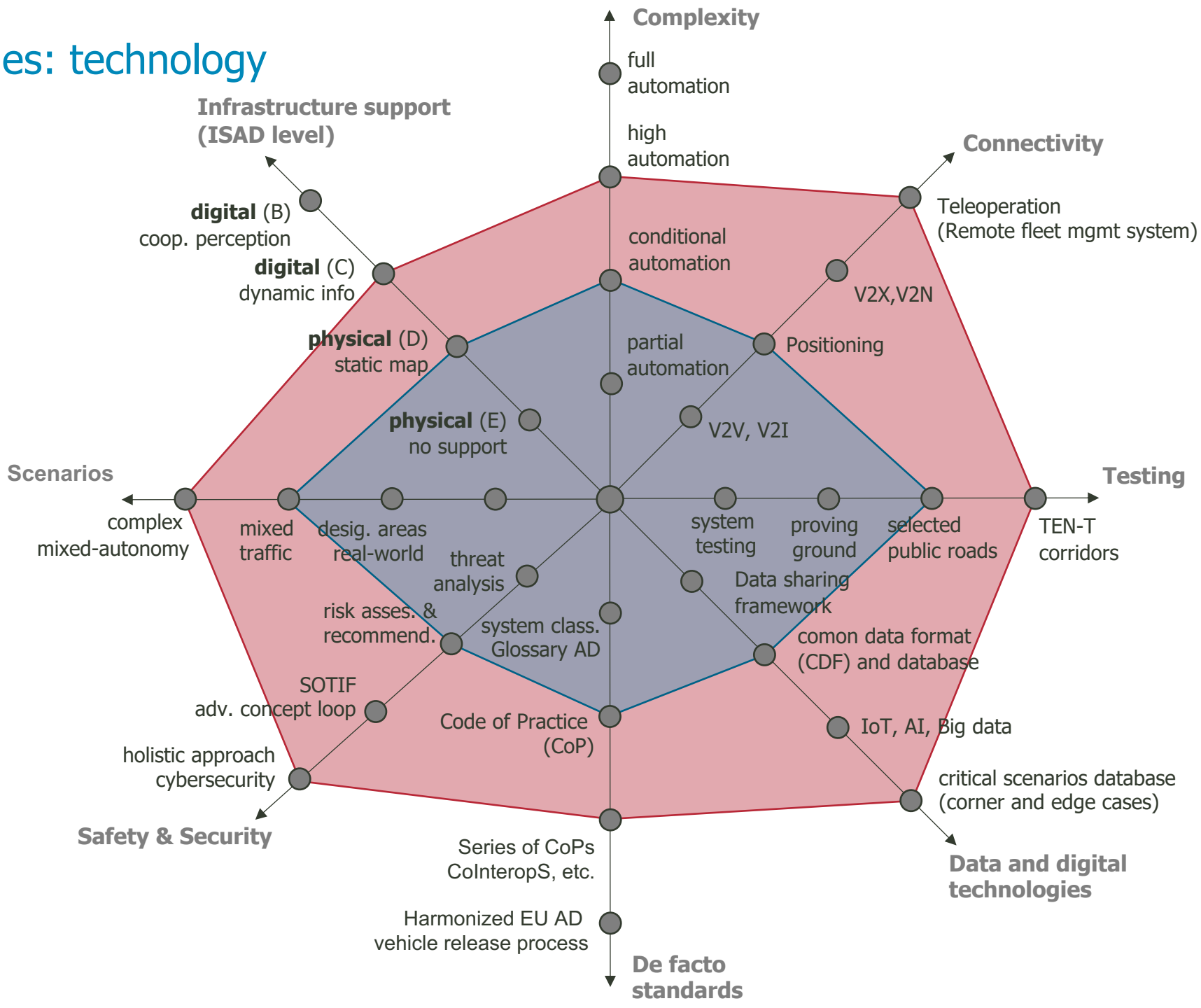
How can fragmentations in ODDs be eliminated?





Extended & Continuous ODDs on interoperable European roads

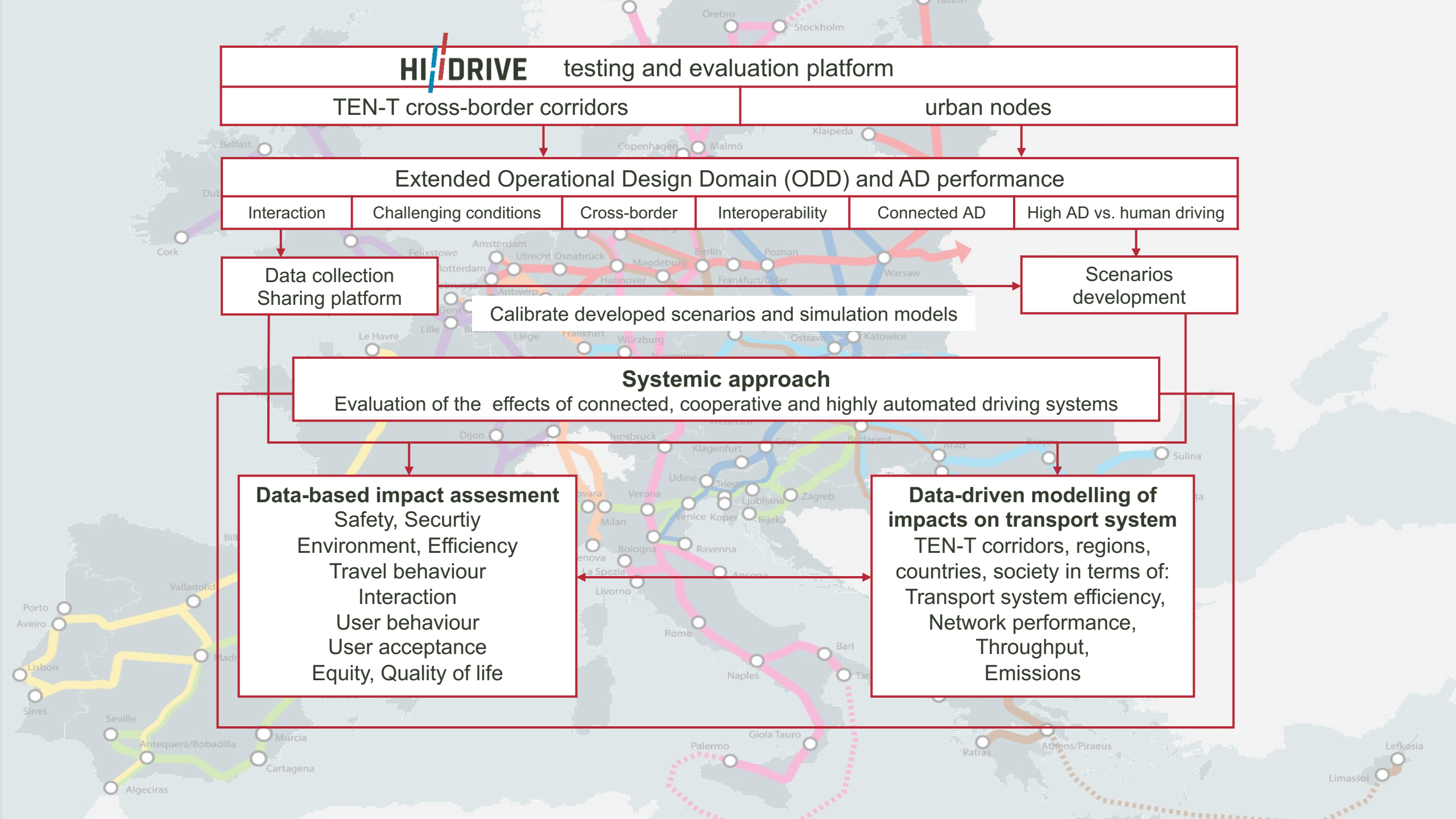
Challenges: technology



HI DRIVE

Hi-DRIVE

L3Pilot and SoA


HI DRIVE testing and evaluation platform
TEN-T cross-border corridors
urban nodes
Extended Operational Design Domain (ODD) and AD performance
Interaction
Challenging conditions
Cross-border
Interoperability
Connected AD
High AD vs. human driving
Data collection
Sharing platform
Calibrate developed scenarios and simulation models
Scenarios
development
Systemic approach
Evaluation of the effects of connected, cooperative and highly automated driving systems
Data-based impact assesment
Safety, Securtiy
Environment, Efficiency
Travel behaviour
Interaction
User behaviour
User acceptance
Equity, Quality of life
Data-driven modelling of impacts on transport system
TEN-T corridors, regions, countries, society in terms of:
Transport system efficiency,
Network performance,
Throughput,
Emissions

Project partners

HI DRIVE

OEMs

VOLKSWAGEN AKTIENGESELLSCHAFT

BMW GROUP

CRF

Ford

HONDA The Power of Dreams

HYUNDAI

STELLANTIS

LAB

SEAT

TOYOTA

VOLVO

VOLVO VOLVO GROUP

Suppliers

APTIV

FEV

BOSCH

Valeo

NNG

ARILOU Automotive Cyber Security Part of NNG Group

zenseact

AAI AUTOMOTIVE ARTIFICIAL INTELLIGENCE

Researchers

DLR Deutsches Zentrum für Luft- und Raumfahrt German Aerospace Center

ICCS

ika | RWTH AACHEN UNIVERSITY

CHALMERS UNIVERSITY OF TECHNOLOGY

SNF CENTRE FOR APPLIED RESEARCH AT NHH

TNO innovation for life

UNIVERSITÀ DEGLI STUDI DI GENOVA

UNIVERSITY OF LEEDS

VTT

WIVW

WMG THE UNIVERSITY OF WARWICK

TU Delft

CTAG

INSTITUT VEDECOM

Traffic engineering

PTV GROUP

Deployment

IRF International Road Federation Fédération Routière Internationale Federación Internacional de Carreteras

TÜV SÜD

FIA

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Thank you for your kind attention.

Aria Etemad
Volkswagen Group Innovation

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The team behind L3Pilot

L3Pilot Driving Automation

FINAL EVENT

Hamburg 2021

ITS World Congress