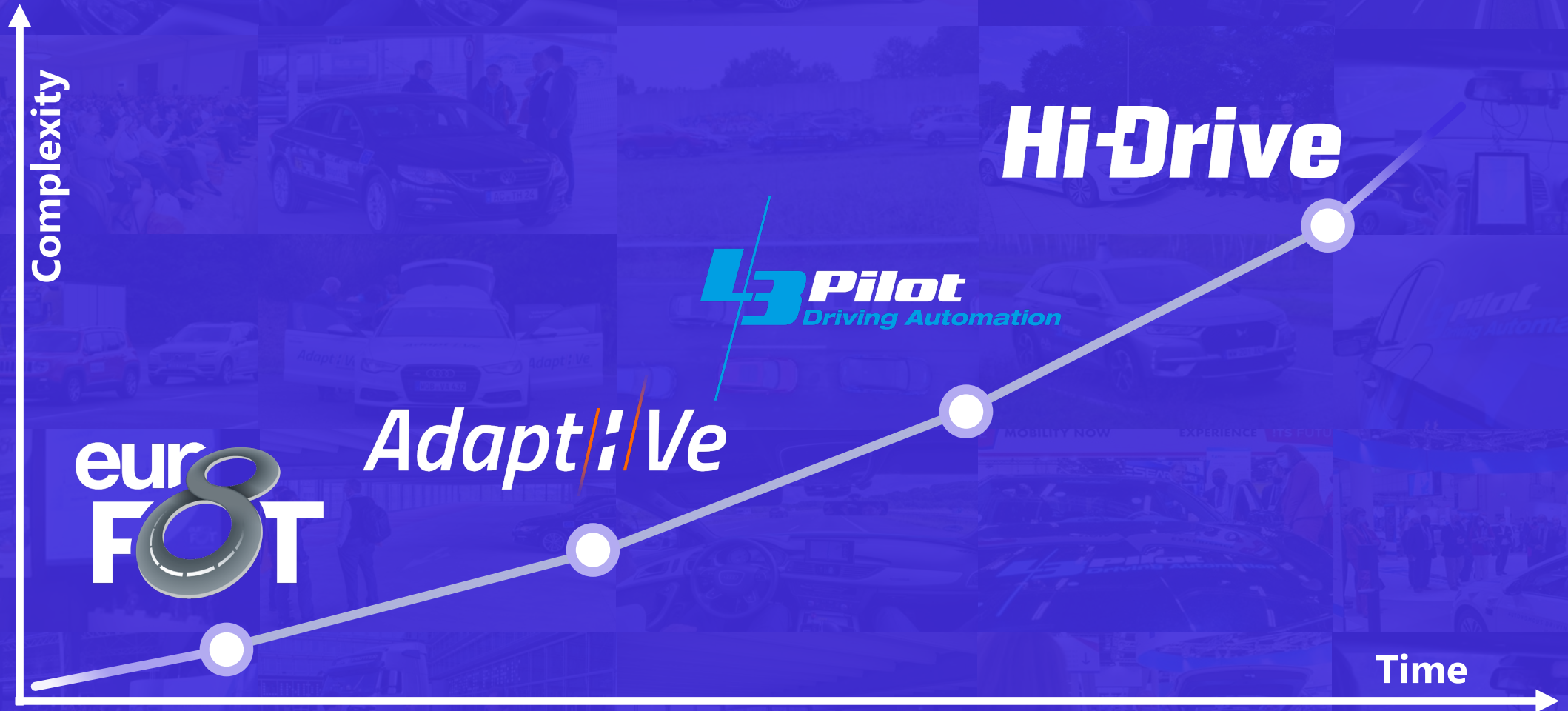


## Fostering knowledge and skills: The importance of EU flagships projects

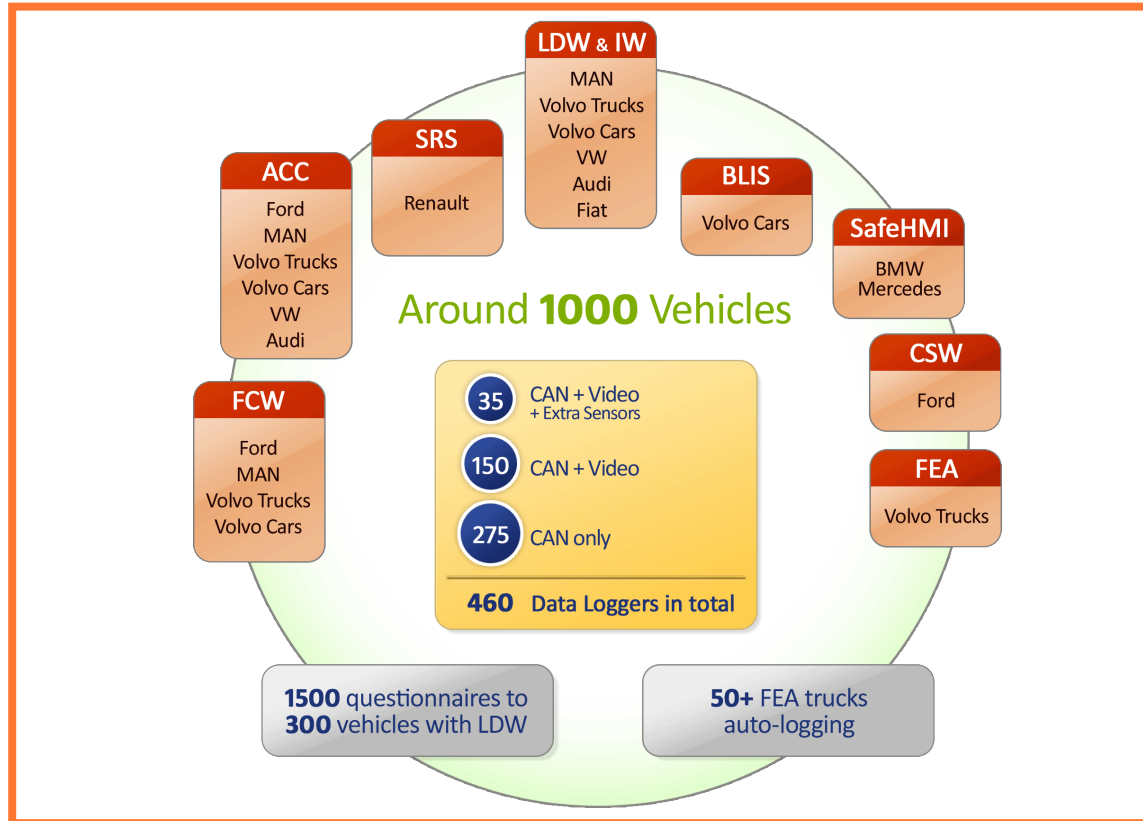
5 May 2023, Brussels

Aria Etemad – Volkswagen AG

Our history of automated driving: carrying the legacy forward



# Our history: ADAS FOT with series production vehicles



## Longitudinal control functions

- Forward Collision Warning (FCW)
- Adaptive Cruise Control (ACC)
- Speed Restriction System (SRS)

## Lateral control functions

- Blind Spot Information System (BLIS)
- Lane Departure Warning (LDW)
- Impairment Warning (IW)

## Advanced applications

- Curve Speed Warning (CSW)
- Fuel Efficiency Advisor (FEA)
- Safe Human Machine Interaction (SafeHMI)

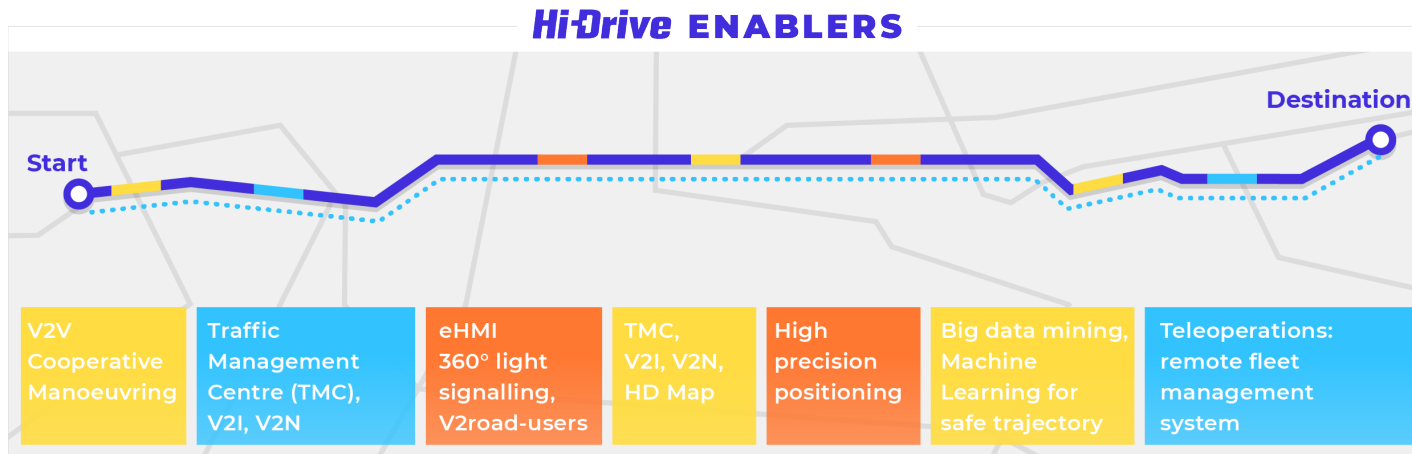
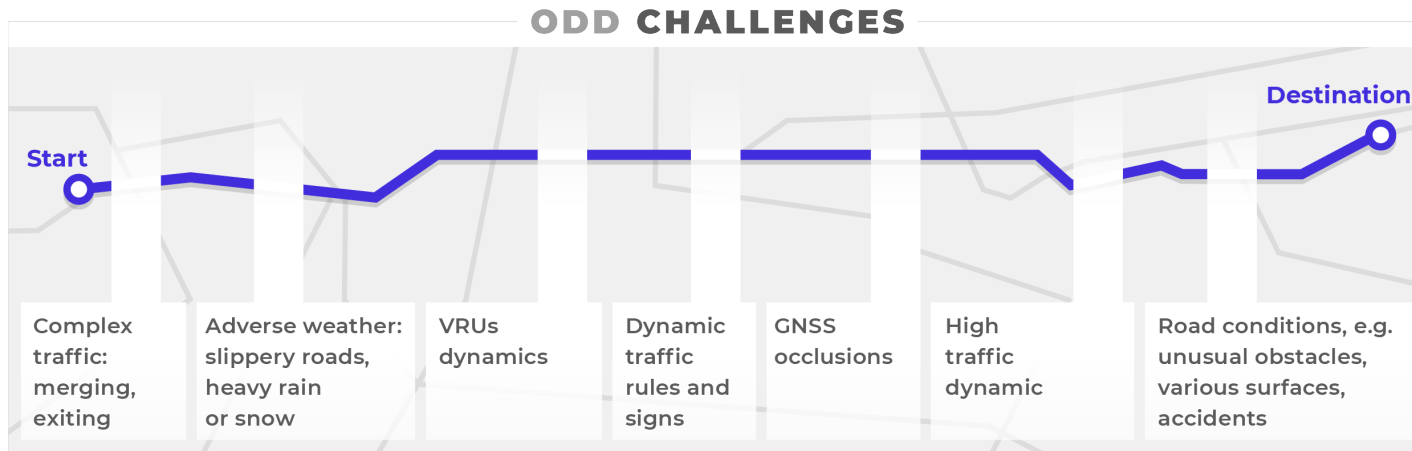


**Hi-Drive**  
Designing Automation

## **PUSH TOWARDS HIGHER AUTOMATION**

- Robust and reliable automated driving
- Extended and defragmented ODDs
- Interoperability across countries and brands

# Defragmentation of the Operational Design Domain (ODD)



**ODD**

**MANUAL DRIVING**

**AUTOMATED DRIVING**

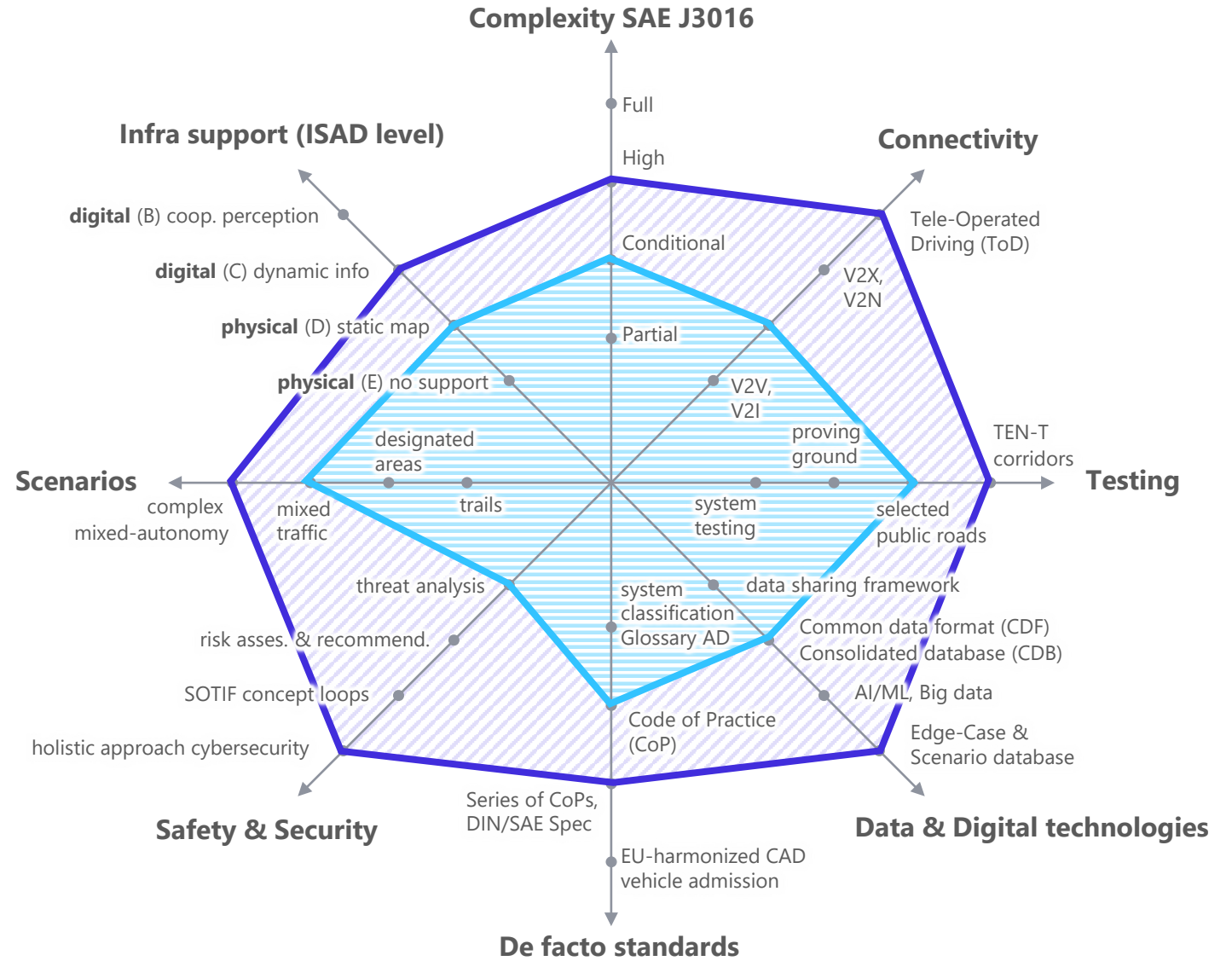
**Cybersecure, interoperable, interactive and user-aware vehicles**

# Challenges: technology



Hi-Drive

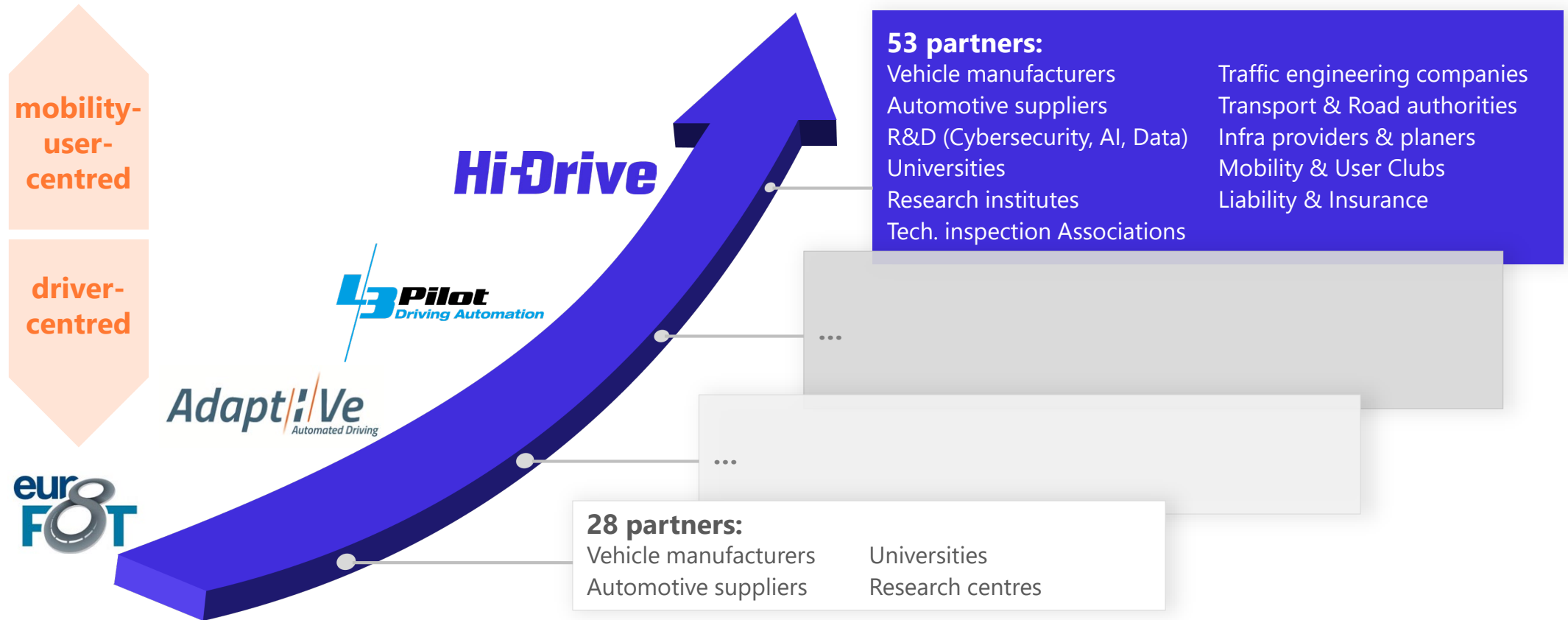
Hi-Drive



# Partners

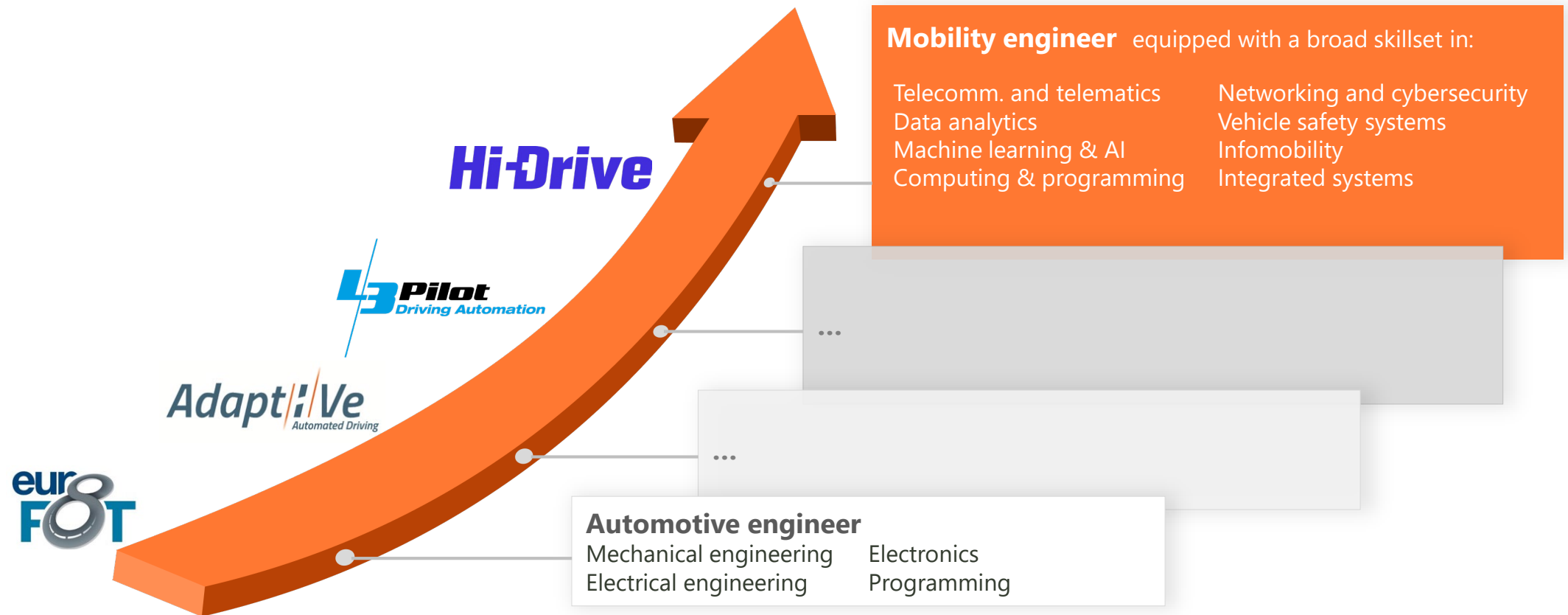


# Partnerships: Evolvement of stakeholders

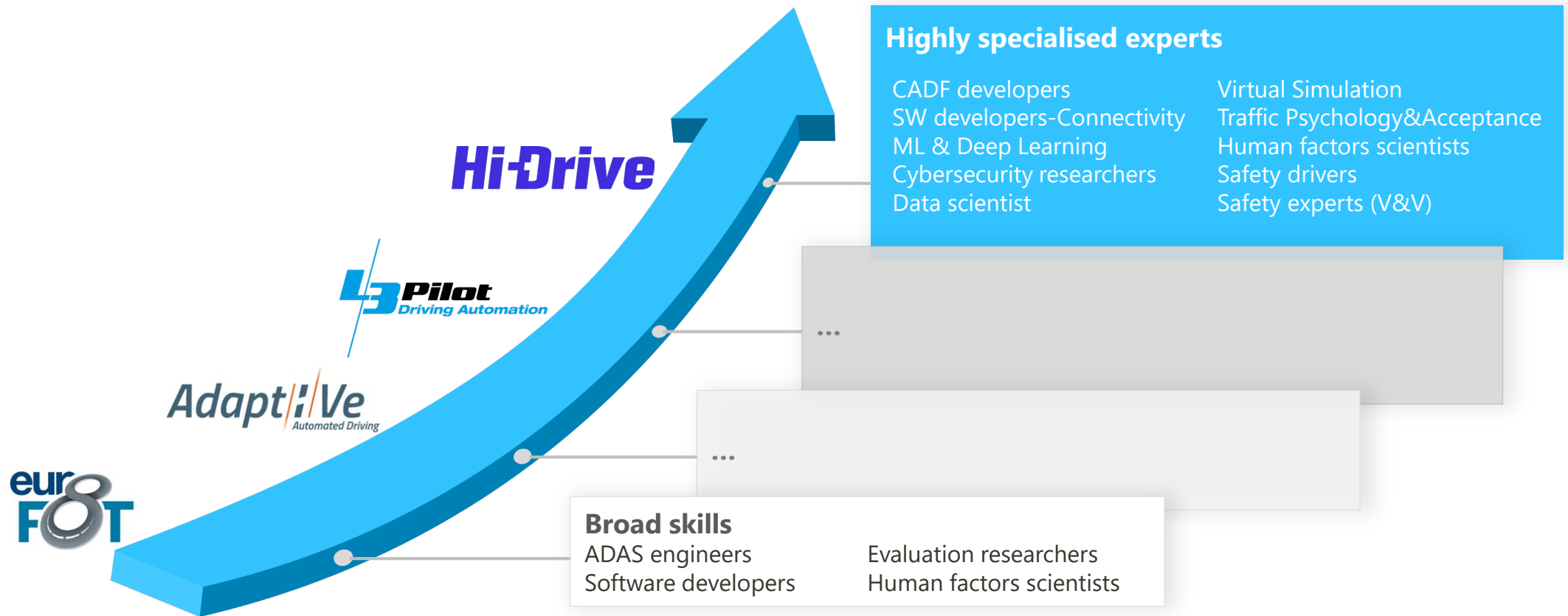




# Automotive workforce: from engineer to multi-talent



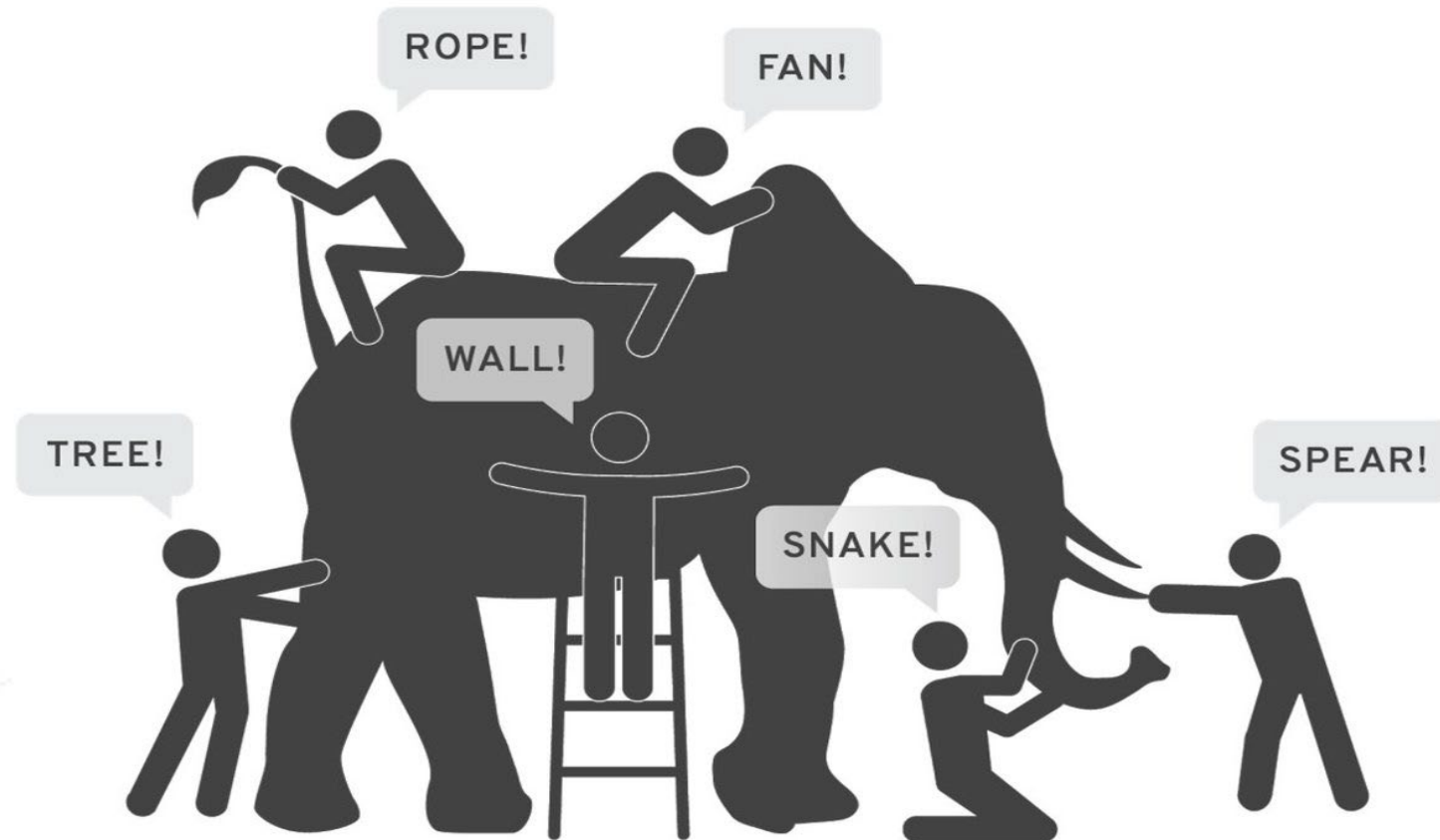
# Future workforce: evolvement of skills



## Example: Common technology understanding as a basis for development

### #CCAM

evokes different connotations to different people...



# Fostering knowledge and skills

## The importance of EU flagships projects

### Hi-Drive collaboration platform enables industry and academia partnerships:

- **Re-skilling of the existing talent pool**  
Exposes experienced engineers to key areas of emerging technology, thus adapt to the upcoming knowledge gap
- **Preparing future workforce**  
Develops specialist skills in key areas and prepares a pipeline of talents to meet current and future workforce needs
- **Creating a “sense of belonging”**  
Establishes a diverse environment empowering knowledge exchange and a sense of belonging to the the CCAM community
- **Constant adaptation of university courses and training programs**  
Increases the educational value chain and bridges the gap between talent and technology
- **EU- and world-wide knowledge harmonisation**  
Knowledge transfer through collaborative R&D, webinars, summers schools and public database

# Example: Knowledge sharing

The image shows a laptop displaying the Hi-Drive website. The website has a blue header with 'Hi-Drive' and navigation tabs for 'CONCEPT', 'PROJECT', 'DOWNLOADS', and 'NEWS & EVENTS'. The main content area is yellow and titled 'DATA'. It features a section for '3DHD CityScenes: High-Definition Maps in High-Density Point Clouds' with a 3D visualization of a city street scene. Below the image, there is text describing the dataset and its availability. A large blue banner with the URL 'www.hi-drive.eu/data' is overlaid on the right side of the laptop screen.

The background shows a Zenodo record page for the dataset. The page title is '3DHD CityScenes: High-Definition Maps in High-Density Point Clouds'. It includes a search bar, a user profile 'philippe.stehlik@ict.de', and statistics for views and downloads. The page also features a 'Publication date' of September 16, 2022, a DOI of 10.5281/zenodo.7085090, and a list of keywords including 'measurement driving', 'high-definition (HD) maps', 'map deviation detection', 'map verification', 'point clouds', 'LiDAR', 'traffic signs', 'traffic lights', 'poles', 'roadside lines', and 'construction sites'. The page also lists the authors and their contributions.

# Example: Knowledge transfer

**Hi-Drive**

**CODE of PRACTICE  
LIVE WEBINAR**

**Friday, 17 February 2023  
10:00-12:00 UTC+1**

**CoP**

**Hi-Drive**

**1ST SUMMER  
SCHOOL**

**September  
06 + 07 | 2023**

**AKS Hotel  
PORTO HELI, GREECE**

**eucar**  
EUROPEAN COUNCIL FOR AUTOTIVE R&D

Co-funded by the European Union under Horizon 2020 programme Grant Agreement No. 101006654

Example | Automated Driving Risks and Coverage Interaction with Mixed Traffic

Category	Related Phases
Overall Guidelines & Recommendations	System Design
ODD Vehicle Level	Safety assessment
ODD Traffic System & Behaviour Design	Requirements and OOD
Safeguarding Automation	Setting
Human-Vehicle Integration	V2X Communication
	Artificial Intelligence
	Human Vehicle Integration
	Data Collection and Management
	Simulation tools
	Networks/Platforms

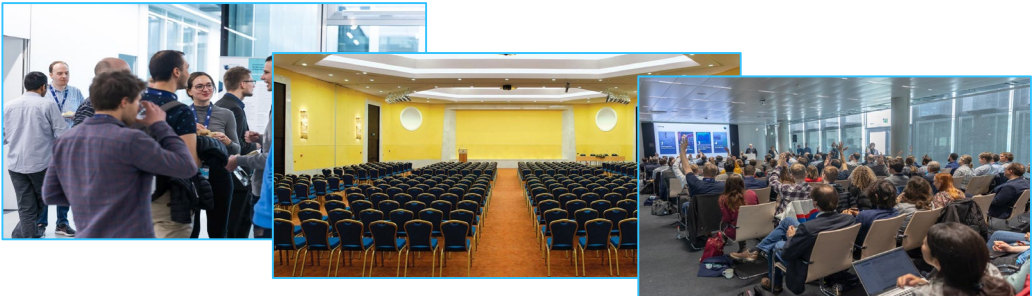
Expressing the multiple dimensions of a CoP question

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michele.giorelli@aptiv.com

Download all webinar presentation here:  
[www.hi-drive.eu/downloads](http://www.hi-drive.eu/downloads)





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YOUR KIND ATTENTION.

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**Hi-Drive**

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