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European Common Evaluation Methodology for CCAM

ARCADE workshop on Common Evaluation Methodology for
Automated Driving Tests

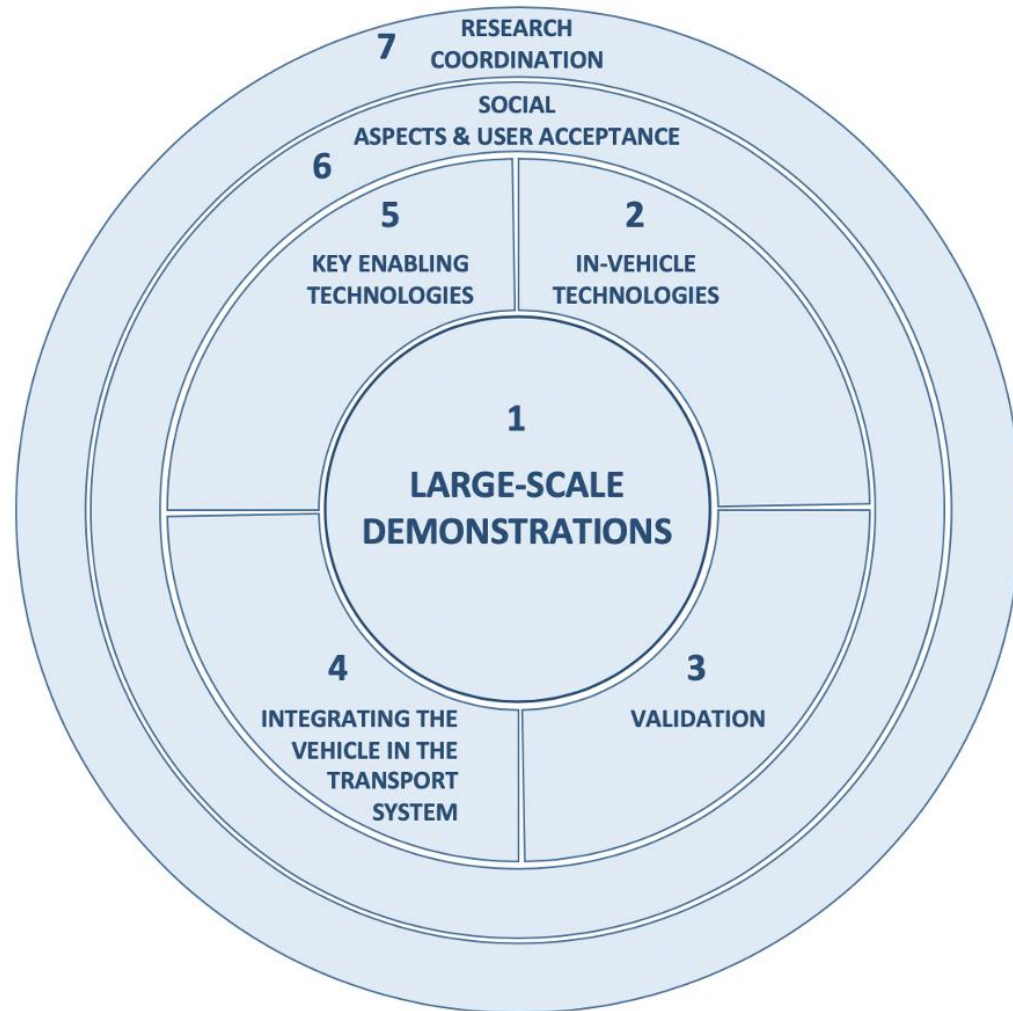
23 Nov 2020

CCAM Partnership

- Combining **connectivity, cooperative systems and automation** will enable automated and fully orchestrated manoeuvres, bringing us closer to **Vision Zero**.
- The goal is to create more **user-centred, all-inclusive mobility**, while increasing **safety, reducing congestion** and contributing to **decarbonisation**.
- CCAM will also enable the provision of **new mobility services for passengers and goods**, fostering benefits for users and for the mobility system as a whole.

**European leadership in safe and sustainable
road transport through automation**

CCAM Partnership



1 Shared automated mobility solutions (11)
Highly automated passenger vehicles (13)
Automated commercial/freight vehicles (14)

2 Environment perception (1)
Passive & active safety (3)
On-board decision making (4)
Human Factors requirements (6.1)

3 Validation of CCAM systems (5)
Validation of Human Factors (6.2)

4 Remote operation and surveillance (7)
Physical and digital infrastructure (8)
Connectivity / Cooperative Systems (9)
Fleet and (mixed) traffic management (12)

5 Cyber-secure electronics (2)
Artificial Intelligence (10)
Data Storage and sharing (21)

6 Societal needs analysis (15)
Socio-economic and environmental impact analysis (16)
Workforce development (22)

7 European framework for testing on public roads (17)
Data exchange platform (18)
EU-wide knowledge base (19)
Common evaluation framework (20)

CCAM Platform

- Testing is essential for:
 - *Further technology development*
 - *Assessing safety and performance of technologies*
 - *Anticipating user and customer expectations*
 - *Analyzing impact on society*
- Many diverse tests are ongoing across Europe
- Coordination is needed for synergies between tests
- Thus the CCAM WG2 should:
 - *Improve exchange of knowledge and experience*
 - *Facilitate data sharing of tests*
 - *Develop common approaches for testing and assessing impacts*

European Common Evaluation Methodology (EU-CEM)

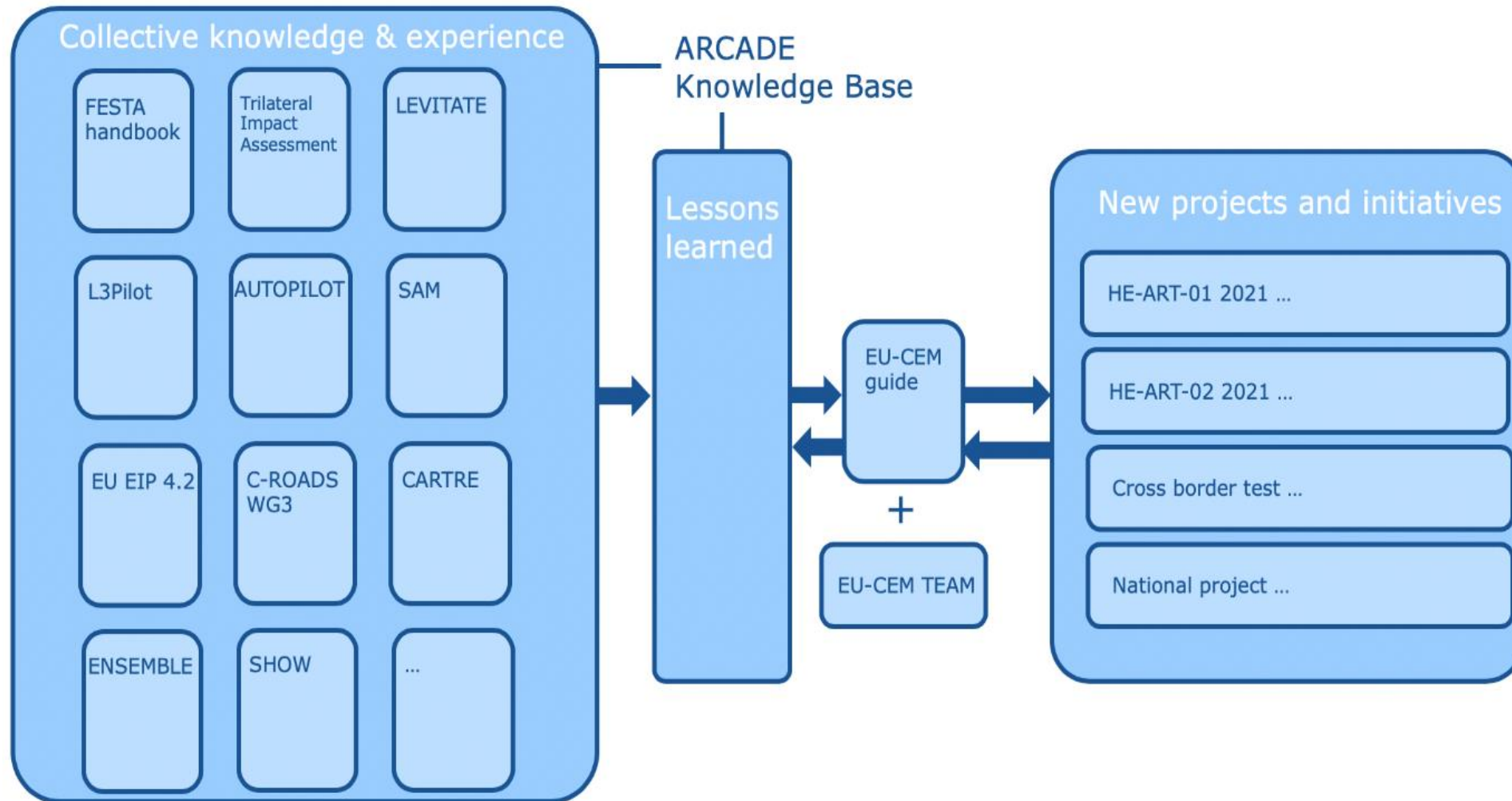
- Preparatory workshops (16, 31 March 2020) with small group of experts
- Comprehensive overview of evaluation initiatives available in the EU
- Objective first session (16 March);
 - discuss the possible scope of EU-CEM,
 - potential strengths and weaknesses of such an approach,
 - gaps in knowledge/expertise for developing it.
- Objective second session (31 March);
 - suitability of the current methodology,
 - first outline of EU-CEM was discussed.
- EU-CEM draft paper presented in CCAM WG2.

European Common Evaluation Methodology (EU-CEM)

The envisioned EU-CEM consists of several elements:

1. Collective knowledge and experience
2. Lessons learned, relevant for evaluation
3. Guide for setting up new evaluations
4. Support team to help setting up new evaluations

European Common Evaluation Methodology (EU-CEM)



Next steps

- Finalize report WG2, publicly available Q1 2021
- Identify gaps in the current methodologies
- Distribute work and activities between: CCAM Platform, CCAM Partnership, CSAs (current ARCADE, HE follow up), projects (current and upcoming)

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19 AUGUST 2020

CAD has the potential to improve road safety and contribute to decarbonisation

Raluca Marian We often hear from our members about the importance of reliable and complete information on new technologies. The ARCADE CAD Knowledge Base is a platform for sharing such information

[Learn more →](#)



29 SEPTEMBER 2020

New recommendations for a safe and ethical transition towards driverless mobility published

On 18 September 2020, the European Commission published a report by the Independent Expert Group on the Ethics of Connected and Automated Vehicles (CAVs). Who should be responsible in case of an acci

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<https://knowledge-base.connectedautomateddriving.eu/>



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Home



Guidelines and Evaluation Methodologies

The methodology section provides impact assessment frameworks and other evaluation and test design related materials. It contains the following subsections:

- The **FESTA Handbook**, the definitive source for Field Operational Test (FOT) methodology, applicable for also other type of field tests
- The **Automated Driving Testing and Evaluation Materials Toolkit**, with links to helpful documentation for each FESTA section
- Information on other **Impact Assessment Frameworks** for Connected and Automated Driving
- The **FOT-Net Wiki and Catalogues**, which are online sources to past Field Operational Tests and their tools
- **System Dynamics Modelling of CAD Impacts**, an uprising evaluation method.

Finally, we have started to collect

- **Ethical Guidelines**

Thank you



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