

CCAM

CONNECTED, COOPERATIVE & AUTOMATED MOBILITY



CCAM Association Work Programme 2025 Information and Networking meeting

ccam.eu

Presentation of the Work Programm 2025



Cluster 1 Large-scale
demonstrations: Preparing for
large-scale CCAM demonstrations –
Societal Readiness Pilot



Cluster 2 Vehicle technologies:

Next-generation environment perception for real world CCAM operations: Error-free and secure technologies to improve energy efficiency, cost-effectiveness, and circularity



Cluster 7 Coordination:

Federated CCAM data exchange platform



Cluster 3 Validation:

Integration of human driving behaviour in the validation of CCAM systems



Cross-cluster:

Advancing remote operations to enable the sustainable and smart mobility of people and goods based on operational and societal needs – Societal Readiness Pilot



Cluster 5 Key Enabling Technologies:

Approaches, verification and training for Edge-AI building blocks for CCAM Systems



Cross-cluster: Advancing remote operations to enable the sustainable and smart mobility of people and goods based on operational and societal needs – Societal Readiness Pilot







Cluster 1 Large-scale demonstrations: Preparing for large-scale CCAM demonstrations – Societal Readiness Pilot





Outcome of the discussion

- The need to specify the use-cases for the topic. This has been discussed and further detail this in the large-scale demonstration topic 2026, covering individual and shared mobility, public transport and freight logistics.
- 2. Concerns was raised about the timeline of the topic in relation to the larger topic. The reasoning following the SRIA was explained that there is a need to prepare for the large-scale demonstration action to ensure stakeholder engagement and clearly develop a plan for the coming large-scale demonstration project hat will follow.
- The boundaries for international cooperation was discussed. The break-out participants raised the importance to also consider activities in other regions.
- 4. There is also a need to further clarify and harmonise the CSA and coming IA topic descriptions further. This will be done and the topic recommendations is now consulted with the EC and the member states.
- 5. The differences between Demonstration versus Deployment was discussed. Demonstrations has been described in the SRIA outlining the different methods such as Pilots, FOT and Living Labs. Deployment will follow as a future result from these Demonstration activities.
- 6. The definition of Large-Scale was also discussed. This is an important question, also related to the use-case. Could encompass different aspects such as; number of vehicles, number users and user groups, stakeholders, geographical coverage, duration etc.



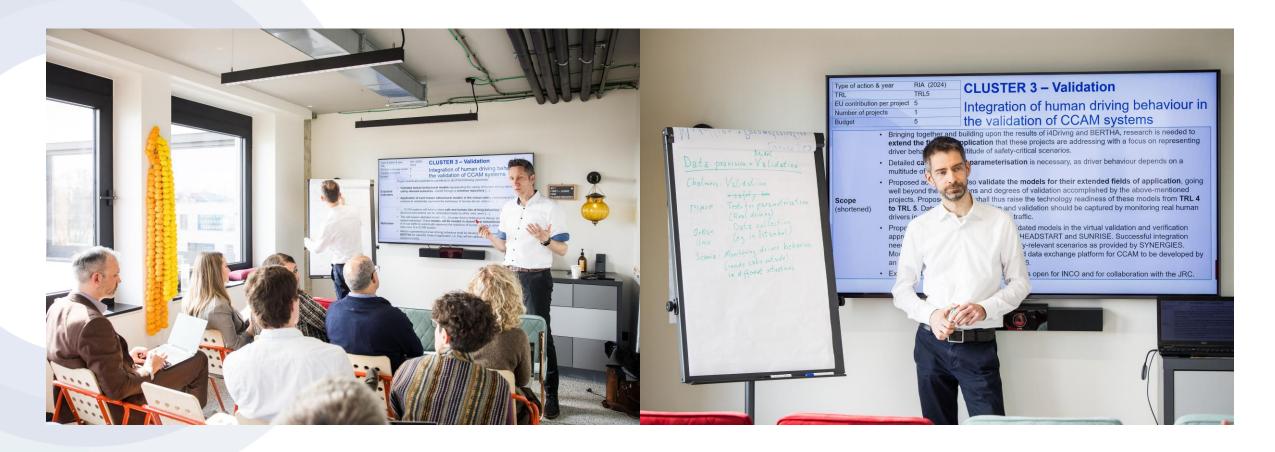
Cluster 2 Vehicle technologies: Next-generation environment perception for real world CCAM operations: Error-free and secure technologies to improve energy efficiency, cost-effectiveness, and circularity







Cluster 3 Validation: Integration of human driving behaviour in the validation of CCAM systems





Interest by CCAM members for Cluster 3

Modelling and Parameterisation

- Syselek: Integration in different simulation environments
- Chalmers: Model development and enhancements
- <u>Lukasiewicz Research Network / PIMOT</u>:
 Model development and development of the simulation environment
- CTU Prague: Need for dedicated simulation environment (?) and modelling based on ethical principles
- <u>Tecnalia</u>: Model development
- IKERLAN: Architecture of model interactions
- ICCS: Carla-based simulation
- Motor Transport Institute: Simulation of driver behaviour, driving simulators, SSH expertise

Data Provision and Model Validation

- <u>BASt</u>: Provision of data from real traffic including vehicle's surroundings
- Chalmers: Validation
- <u>LINKS Foundation</u>: Data provision from cameras in city
- <u>Lukasiewicz Research Network / PIMOT</u>: Tests for parameterisation (real driving)
- AVL: Data from user interaction studies
- <u>Istanbul Okan University</u>: Data collection (e.g. in Istanbul)
- <u>Tecnalia</u>: Driver monitoring and simulator tests
- Scania: Monitoring driver behaviour (inside and outside cab) in different situations including near misses
- IKERLAN: Observation and interpretation with AI
- <u>VTI</u>: Simulator testing (trucks and cars)
- KIT: Provision of data from earlier tests with psychological background
- <u>CTU Prague</u>: Data provision from near misses
- France and Italy: Accident databases
- IRU: Data on behaviour in different vehicles

Integration in Verification and Validation Procedures

- Chalmers: Safety benefit analysis
- <u>Lukasiewicz Research Network / PIMOT</u>: Integration in CCAM validation
- <u>Istanbul Okan University</u>: Integration in CCAM validation linking to OPINA project
- Scania: Integration in synthetic scenarios
- <u>Syselek</u>: Transfer to certification agencies (WP lead?)
- AustriaTech: Integration in new regulation



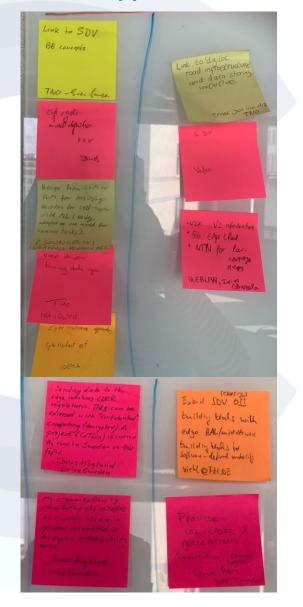
Cluster 5 Key Enabling Technologies: Approaches, verification and training for Edge-Al building blocks for CCAM Systems

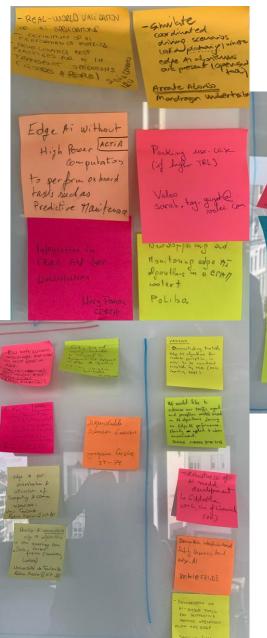






Develop and reshape building blocks and approaches





Develop and demonstrate Al algorithms





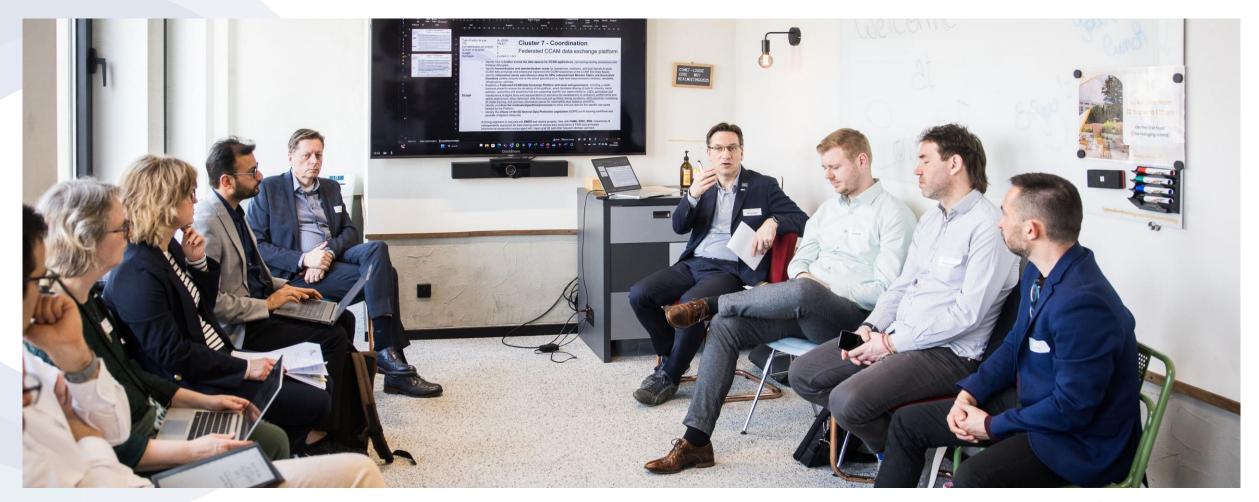
Optimization of models for edge deployment



Tools and approaches for edge AI model monitoring



Cluster 7 Coordination: Federated CCAM data exchange platform





Conclusion

- Several questions have been raised about the type of data that can be covered or considered (e.g. ITS Directive data, R&I project data, Data generated by shared mobility solutions in a city dataspaces, Parking Data...). R&I Project Data sharing is currently addressed by the FAME Test Data Space and sharing of ITS Directive related data is addressed via NAPs and the EMDS. The project should focus on CCAM specific data for all the Use Cases mentioned in the scope. At least all needs and requirements for these Use cases need to be identified.
- The approach should be federated, i.e. connecting different databases and sources, linking data providers with data consumers.
- As it is an Innovation Action it should build on existing tools and technologies (EMDS,...)
- Key points are monetization of data & business models (considering limitations, willingness to pay, competitiveness), data formats and connectors, governance structure (e.g. the strong CATENA-X business model was mentioned)
- Difficulties to identify in-service monitoring requirements and how data can support regulation. The baseline or starting point would be what needs to be shared in case of accident.
- Need to consider new data infrastructure that might be in place when the project starts (e.g. automotive strategy)
- Some projects are addressing already trust related aspects (e.g. AutoTrust, TIARA) or in vehicle monitoring.

