CCAM Association 5th General Assembly

29 June 2022, 8:30-17:00 (CET), Brussels

Draft minutes

Contents

Participants

<u>Chairmen</u>
Armin Gräter, BMW
Eckard Steiger, Bosch
Serge Van Dam, Netherlands Rijkswaterstaat

<u>Members' representatives</u>

Organisation	Representative
5GAA	Thomas Linget
Aalto University	Claudio Roncoli
ACCIÓ	Riánsares López
ACEM	Veneta Vassileva
AIT	Wolfgang Ponweiser
ANEC	Boštjan Okorn
Applus IDIADA	Adrià Ferrer
AustriaTech	Wolfram Klar
Vejdirektoratet Danish NRA	Bo Ekman
BMK - Austrian Federal Ministry for Climate Action	Michael Nikowitz
Bosch	Christian Scharnhorst (observer)
CDV	Adam Skokan
CEDEX	Alejandro Lanuza García
CEDR	Konstantinos Andreopoulos
Ceit	Alfonso Brazalez
CERTH/HIT	Evangelos Bekiaris
Chalmers	Magnus Granström
Cidaut	Javier Romo
City of Helmond	Patrick Hofman
CLEPA	Edoardo Mascalchi (observer)
CLEPA	David Storer
CNRS	Tanguy Janin
CONEBI	Jana Hrčková
Coventry University	Kevin Vincent
CTAG	Pablo Dafonte
DAF Trucks N.V.	Jeroen Vandenhoudt
DEKRA	Thomas Jaeger
DENSO	Alexander Kiening
DLR e.V.	Svenja Hainz
EARPA	Christof Schernus
EPoSS	Gereon Meyer
ERF	Rik Nuyttens
Ericsson	Maciej Muehleisen
ERTICO	Stephane Dreher (observer)
ERTICO -ITS Europe	Johanna Tzanidaki

EUCAR	Stefan Deix
FEV Europe GmbH	Dimos Gatidis
FIA Region I	Laurianne Krid
Finnish Transport and Communications Agency Traficom	Mikko Räsänen
Flemish Agency for Roads and Traffic	Kristof Rombaut
Forvia	Anna Rossi
Fundacion Tecnalia Research & innovation	Sergio Diaz
HERE Technologies	Andrea Soncin
Huawei Technologies	Jan Ellsberger
IBDiM	Agnieszka Lukasiewicz
ICOOR	Giulia Renzi
IFP Energies nouvelles	Adlène Benkenida
ika, RWTH Aachen	Nicolas Wagener
INdra	Mauro Gil
Innovate UK	Louise Mothersole
Institute of Communication and Computer Systems (ICCS)	Panagiotis Lytrivis
IVEX	Quentin De Clercq
Karlsruhe Institute of Technology (KIT)	Eckhard Szimba
KFV	Hatun Atasayar
Łukasiewicz Research Network – Automotive Industry Institute	Konrad Małek
Metropolia University of Applied Sciences	Azat Kuitunen
MICHELIN	Clémence Routhiau
Ministry of Infrastructure and Watermanagement NL	Erik Vrijens
Mondragon University	Arrate Alonso Gomez
Mosaic Factor	Stefano Persi
Motor Transport Institute	Malgorzata Pelka
NAITEC	María Pedrosa
NTTDATA	Patricia Jiménez Barceló
Otokar	Elif Toy Aziziaghdam
RDW, Dutch Type Approval Authority	Tiffany Vlemmings
RISE - Research Institutes of Sweden	Sofia Ohnell
Royal HaskoningDHV	Ravi Chaudhary
SAE Europe	Jacob Bangsgaard
Scania CV AB	Jan Dellrud
Technical research centre of Finland VTT Oy	Merja Penttinen
TechworksHub	Gunwany Dhadyalla
TNO	Sven Jansen
TNO	Gerbrand Klijn Hoving (observer)
TNO	Bastiaan Krosse (observer)
Transport Innovation Association	Inga Ablingienė
Trinity College Dublin	Derek Ross
Universidad Carlos III de Madrid	Arturo de la Escalera
Universidad Politécnica de Madrid	Jorge Alfonso Kurano (observer)
Universidad Politécnica de Madrid	José E. Naranjo
Universidade do Porto	José Pedro Tavares
Université Gustave Eiffel	Claude Marin-Lamellet
University of Groningen	Nynke Vellinga

University of Leeds	Oliver Carsten
University of Naples Federico II	Vincenzo Punzo
University of Surey, UK	Ahu Ece Hartavi KARCI
Vicomtech	Oihana Otaegui
Volkswagen AG	Aria Etemad
Volvo Cars	Mikael Ljung Aust
Volvo Group	Mats Rosenquist
Vrije Universiteit Brussel	Evy Rombaut
VTI	Ingrid Skogsmo
WMG - Warwick University	Mehrdad Dianati
Yunex Traffic (A Siemens Business)	Franz Schober

Guests

ERTRAC	Xavier Aertsens
European Commission	Andrea de Candido
TNO Traffic and Transport	Joëlle Vandenbroek
Czech Ministry for Transport	Teresa Ciskova
French Ministry for Research	Pierre Pacaud
Transport Malta	Pierre Montebello
Transport Malta	Ronald Attard Pullicino
Rijkswaterstaat	Rino Brouwer

Administration
Isabelle Cavé, CCAM Association
Bianca Cerrato, EU Communication (communication consultant for CCAM)

I- Procedure

1.1 Registration and signature of the Participants List
Upon arrival, participants were asked to sign the participants list and were reminded of their voting right or their observer status.

1.2 Welcome by the Chairman
Armin Gräter welcomed the participants. He confirmed that **at least half of the Members were present or represented** (50% quorum) and therefore the General Assembly was competent to vote during the meeting.

Upon Armin Gräter's invitation, Andrea De Candido (European Commission, DG Research & Innovation) gave a few words of introduction, setting the scene for the meeting. He expressed the European Commission's satisfaction to see that one year after the signature of the MoU, the Partnership gathers all relevant (public and private) stakeholders around the same table to agree on future priorities. The Commission strongly welcomes the collaboration established with the CCAM Association in drafting the CCAM part of Horizon Europe Work Programmes. WP23-24 is being finalised and will be adopted and published at the end of this year. Insisting

that the success of CCAM would build on projects, Andrea De Candido indicated that the signature of grant agreements has just been completed for projects selected under the 2021 call and that projects under 2022 call will be signed in a few weeks. He finally encouraged the Association to look ahead, towards the final years of the partnership and beyond Horizon Europe. He emphasised the need to jointly demonstrate the impact and added value of the CCAM Partnership, in view of the future evaluation of Horizon Europe (starting in 2024-25) and its novelties such as Partnerships.

1.3 Approval of the Agenda
Armin Gräter briefly presented the agenda of the meeting.
Decision: The agenda was approved.

1.4 Approval of the Minutes of the General Assembly from 29 June 2021
Armin Gräter informed that the minutes were distributed in advance of the meeting.
Decision: The minutes of the General Assembly of 14 December 2021 were approved.

II- Administration & Statutory Matters

2.1 Review and endorsement of applying members and resigning members

Isabelle Cavé (CCAM Secretariat) informed the General Assembly about the resignation of the following members (taking effect in the end of 2022):
- 5.2.1.2. Automotive supply chain, **ESI Group**, France
- 5.2.2.1. Universities, **Oulu University of Applied Sciences**, Finland
- 5.2.2.1. Universities, **CeADAR** - National Centre for Applied AI, Ireland
- 5.2.2.1. Universities, **Halmstad University**, Sweden
- 5.2.5.2. Platform or cluster at national or regional level, **Aurora Snowbox**, Finland

Isabelle Cavé listed the membership applications, that were received by the Secretariat since the previous General Assembly and validated by the Administration Board:
- 5.2.1.1. Automotive manufacturers, **Otokar**, Turkey
- 5.2.1.2. Automotive supply chain, SME, **IVEX**, Belgium
- 5.2.1.2. Automotive supply chain, SME, **Sensible 4**, Finland*
- 5.2.2.1. Universities, **Coventry University**, UK
- 5.2.2.1. Universities, **University of Porto**, Portugal
- 5.2.2.2. Research institutes, R&D providers, **CEDEX**, Spain
- 5.2.2.2. Research institutes, R&D providers, **CNRS**, France
- 5.2.3.4. Other services: insurance, maintenance, repair, etc., **CSI**, Italy
- 5.2.4.3. Local and regional authorities and transport authorities, **The City of Gdansk**, Poland
- 5.2.5.1. Stakeholder representation association at European level, **SAE Group Europe**, Netherlands

Decision: The General Assembly approved all the new membership applications.

Isabelle Cavé welcomed the ten new members and indicated that these additions bring the number of CCAM members to 194 in total for this year (including 13 UK-based organisations).

2.2 Approval of 2021 accounts

Serge Van Dam presented the accounts for the year 2021 (aggregated by the accountant), which were included in the working documents sent in advance.

He reminded that the annual membership fees are the only source of revenue for the association. At the end of 2020, when the association was being set up, the optimistic scenario was an income of 211.500 € (estimating that about 100 members would join the first year). More members than expected joined the association and the income coming from membership fees reached 329.500 € in 2021. When created, the Association benefited from a cash advance from ERTRAC (40k€), which does not appear on the accounts, as it was reimbursed within the year, with no cost.

Serge Van Dam compared the allocation of expenses in 2021, with the estimated budget for 2021. He highlighted that 2021 was an unusual year, because the association started its activities in April and the number of meetings was limited due to the pandemic.
The personal costs were lower than anticipated because staff was recruited only once the association was created, in spring. Some costs will be carried forward in 2022 (e.g. website, which will be invoiced in 2022, and costs related to graphics and documents production, as the SRIA was published only in 2022). In total 91.000€ were spent in 2021, whereas 152.000€ were anticipated. Serge Van Dam confirmed that the Association is in a good financial situation.

Decision: <u>The General Assembly approved the 2021 accounts and discharged the members of the Administration Board from the 2021 accounts.</u>

In addition, Serge Van Dam briefly reminded the members of the estimated budget for 2022, which was approved by the General Assembly in December 2021, and which is following its course. The estimated income is 381.000€ in membership fees, in addition to the reserves coming from the 2021 financial year (220.000€).

2.3 Election of new Board member

Eckard Steiger informed the General Assembly that he must resign from his position of CCAM Vice-Chair, due to a change of position within Bosch. He said he enjoyed contributing to the creation and launching of the Partnership and expressed his gratitude for the members' trust. Armin Gräter thanked him for his valuable contribution over the past two years, especially during the founding phase of the association.

To replace Eckard Steiger and fulfil the role of Vice-Chair until the end of the Board's current mandate (April 2024), the application of Christian Scharnhorst (Bosch) was presented to the

General Assembly by the Administration Board. Christian Scharnhorst's application is supported by CLEPA and was the only one that fulfilled all criteria listed in the call for candidates launched in May 2022.

Christian Scharnhorst introduced himself. He serves as a director in the division Cross-Domain Computing Solutions in Bosch. His responsibilities include defining go-to-market strategies in highly automated driving solutions, supporting MaaS and TaaS. He has been working for Bosch since 2001 in various positions related to the automotive business, including at corporate level from 2014. Over the last decade, he looked at the disruptive changes in the automotive industry, and at the consequences that his company could draw from this ongoing transition.

There was no remark or question from the General Assembly.

Decision: In absence of any objection, the General Assembly elected Christian Scharnhorst as CCAM Vice Chair.

Armin Gräter welcomed Christian Scharnhorst to the Administration Board and Executive Group, and he said that he looks forward to their collaboration in this renewed team.

2.4 Election of members of the Partnership Delegation per membership category

Armin Gräter presented the background information about the election of members of the Partnership Delegation.

Following the call for candidates launched on 4 May, the Secretariat received applications in two categories.

In the category "5.2.3.4 Other services: insurance, maintenance, repair, etc.": one application was received from Adrià Ferrer (IDIADA). A vote was held online within the membership category to confirm his election.
Decision: The General Assembly approved the nomination of Adrià Ferrer as Partnership Delegate.

In the category 5.2.5.3 Civil society representation: one application was received from Laurianne Krid (FIA). As the FIA is the only member in this category, an election was not necessary within the category.
Decision: The General Assembly approved the nomination of Laurianne Krid as Partnership Delegate.

In the categories "**5.2.3.2. Mobility providers for the transport of passengers**" and "**5.2.4.1. National Ministry**", no applications were received. Armin Gräter reminded the General Assembly that for these categories, the call for candidates remains open until two weeks before the next General Assembly. Armin Gräter emphasized the need for the Mobility providers' category to be represented in the Partnership Delegation, as a key sector for the large-scale demonstrations to come. The national ministries should also be represented in

the Partnership Delegation, even if they are already represented through the States Representatives Group.

2.5 Information on the interpretation of the statutes

Some clarification was given by Serge Van Dam in response to a question previously received on how to interpret the Association Statutes regarding plenary attendance and the composition of the Executive Group.

As regards **plenary attendance**, each member has only one delegate with voting power in the General Assembly. One other representative can be allowed upon Secretariat's approval, but as an observer without voting right. The Statutes say that this will be allowed only on exceptional cases, without defining what this means. The intention was to limit the number of participants, also considering organisational and catering costs for physical meetings.

As regards the **Executive Group composition**, the wording of Article 13.7 is slightly different depending on the linguistic version of the Statutes. The (not legally binding) English version of Article 13.7 says: "Each member of the Executive Group shall be a delegate of a Member. Shall he/she no longer be a representative of this Member, he/she shall resign from his mandate of Executive Group member." The (legally binding) French version does not use the word "delegate" and says that a member of the Executive Group must be a "representative" of a member. The intention was to oblige people who would change job or retire to step down from their Executive Group position. The article was not meant to limit the Executive Group members to only the General Assembly Delegates. Therefore, the Statutes do not prevent a member of having both a Delegate in the General Assembly and a Member of the Executive Group (two different persons), nor having several representatives or positions in the Executive Group.

The General Assembly noted this information.

2.6 Adoption of Code of Conduct regarding Compliance with EU competition rules

Serge Van Dam introduced the Code of Conduct, whose draft was circulated in advance with the working documents. As outlined in the Statutes of the Association (Article 8.5), each member of the CCAM Association commits to comply with the European Union regulations in the field of competition and antitrust, and to fight against bribery and corruption. The Code of Conduct aims to complement the Statutes by clarifying relevant EU antitrust rules, while outlining the principles followed within the Association to ensure compliance by all members.

The draft is similar to the code of conduct adopted by EGVIAfor2Zero, as well as those used in ERTRAC, CLEPA, and other European associations.

Decision: The General Assembly adopted the Code of Conduct.

2.7 Information on UK's participation in Horizon Europe

Louise Mothersole (Innovate UK, UK NCP for Mobility) gave an update on UK's association to Horizon Europe and the practical modalities for UK organisations willing to participate in Horizon Europe projects. Her PowerPoint presentation is attached[1].

She highlighted that UK organisations are very keen to work with the European and international community to solve the challenges around implementation of CCAM. She encouraged CCAM members to include UK organisations within consortia. If the UK's association is agreed by the time projects reach Grant Agreement signature phase, the EU will fund the UK participant. If not however, the UK government will fund the UK participant.

The General Assembly noted this information.

III- Activities and Strategic discussions

3.1 Information on ongoing and upcoming activities

Armin Gräter gave a brief report on the **two last Partnership Board meetings**, which took place on 17 March online and on the previous day (28 June) in Brussels. In addition to the work done on Horizon Europe Work Programme 2023-24, one of the main results was the adoption of the Additional Activities Plan 2021-22, based on the information collected among members on their contributions to the CCAM activities which are not funded by the CCAM calls in Horizon Europe. The information collected was processed and compiled by the Secretariat before being presented to the European Commission. Armin Gräter indicated that all in all, the total volume of activities stated was in the range expected. He specified that one third of members replied to the survey carried out in January-February 2022 and said that he was hoping for more feedback in the next round.

Armin Gräter also mentioned the open discussions on the current and following Work Programmes, the organisation of next phases of the Partnership, the revision of the SRIA and the role of the States Representatives Group.

Serge Van Dam reported on the **activities of the States Representatives Group**. 21 Members States were represented at the last meeting on 16 February, hosted by France (online). Member States appreciate the value of coordinating and exchanging their plans for CCAM. The hosting of meetings will rotate according to the Presidencies of the Council of the EU, the next one being therefore hosted in Prague by Czech Republic, during the Czech Presidency on 29 November.

Tereza Čížková (Czech Ministry of Transport) gave an outlook for this **next SRG meeting**, whose agenda is being defined based on priority areas identified in March. The meeting could

---

[1] Addendum: Commission Implementing Decision of 28.6.2021 pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council on the adequate protection of personal data by the United Kingdom states on page 3 "The Commission has carefully analysed the law and practice of the United Kingdom. Based on the findings developed in recitals (8) to (270), the Commission concludes that the United Kingdom ensures an adequate level of protection for personal data transferred within the scope of Regulation (EU) 2016/679 from the European Union to the United Kingdom."

address the following topics: regulatory frameworks for testing (current framework, gaps and needs), digital infrastructure and 5G (identification of funding and deployment needs for testing and large-scale pilots), and priorities in R&I (synergies with FAME project - mapping activities). The meeting will also include the election of the SRG's chair, who will be invited to Partnership Board as an observer.

On behalf of the Executive Group, Stephane Dreher (ERTICO, cluster leader of cluster 7) gave a brief **report on the first CCAM Multi-cluster meeting**, which gathered more than 100 participants in Brussels on 31 March. The objective was twofold: (i) taking stock of the work done so far by the CCAM Clusters, in particular on the Horizon Europe Work Programmes, and (ii) engaging members in the development of future activities (Work Programmes and SRIA). Representatives from the EC were present (Philippe Froissard and Ludger Rogge from DG RTD, Geert Van der Linden from DG MOVE) and were pleased to see such a coordination between all the CCAM Clusters. Members appreciated the possibility to get directly involved in the clusters, while Cluster Leaders were satisfied with the feedback received and with the opportunity to coordinate across clusters. Concretely, suggestions given by participants were taken into account in the following round of comments exchanged with the EC on the draft WP 2023-24. The highlights from the discussions were gathered in a report, which is available to all members.

Stephane Dreher and Armin Gräter encouraged members to participate to the second CCAM Multi-cluster meeting in autumn. Members can send one or several experts, depending on the focus points and thematic areas that will be defined for the meeting, without limitation of number of participants per organisation (unlike General Assemblies).

Finally, Armin Gräter gave a short update on the **Work Programme 2023-24 and CCAM topics**, whose list is included in the PowerPoint presentation attached. He indicated that the call 2023 would be open from early May 2023 to early September 2023 and that the timing for the 2024 call will be similar the following year. Even if this timing does not seem ideal because it includes the August holiday season, Armin Gräter underlined that consortia can start working on their proposals once both calls will be published in December 2022 and do not need to wait until the opening of call.

<u>The General Assembly noted the update on the ongoing and upcoming activities.</u>

3.2 Presentation of national plans for R&I in CCAM

Serge van Dam briefly introduced the presentation of national plans for R&I in CCAM. He underlined how important this is for the effectivity of the partnership and thanked already the four speakers, Tereza Čížková from Czech Republic, Pierre Pacaud from France, Erik Vrijens from Netherlands and Pierre Montebello from Malta. The presentations are attached to the minutes.

Tereza Čížková informed about the automotive industry, the coordination role of the Ministry of Transport and the current activities and strategies. Furthermore, infrastructure and testing as well as innovation and start-ups were explained. Other activities comprise a project on the

legal framework, the ethics commission, public acceptance and awareness and international cooperation.

Pierre Pacaud gave his presentation on behalf of Xavier Delache and Aymeric Audigé. He firstly presented the National Strategy as a public-private working process with a vision for deployment. He then gave a regulatory overview and the actual status of strategic actions. He also described the French 2030 framework program and its objectives. The concrete R&D projects and deployment framework was finally presented.

Together with Rino Brouwer and Joelle van den Broek, Erik Vrijens described the goals and the moonshots that drive the Dutch strategy, and they gave an outlook to smart mobility 2030. They talked about the example of "Digital Infrastructure for the Future of Mobility" in detail, including 5 work packages from Technical Coordination to Validation Lab. Finally, they indicated the CCAM R&D needs in the Netherlands, in particular CCAV's approval and field operational trials.

Pierre Montebello presented Malta's approach to CCAM. He firstly explained the special situation of the island being very small with a lot of tourists and a high passenger car density. This includes a dense public transport network, which is cost-free as of October 2022. Pierre then presented Malta's sustainable mobility approach with significant national incentives for purchase of electric cars, bikes, trucks and coaches. On autonomous mobility he mentioned two pilot projects currently running, Malta's strategy for piloting automated vehicles, and its active participation in European activities.

3.3 CCAM strategy and SRIA update - Breakout sessions

The afternoon was devoted to interactive discussions and brainstorming sessions on the CCAM strategy and the SRIA update.

Attendees were engaged in two consecutive sessions. Each session started with a warm-up exercise consisting of taking position on some challenging statements. In each session, the discussion was then structured around three key questions, asked by the moderators and addressed by a subgroup of participants. The questions were answered individually and/or by pairs of participants, before being discussed within the subgroup.

3.4 Presentation of session results and conclusions

Session 1: Technology in the mobility system: cooperation with other partnerships

---

Challenging statements (warm-up exercise):
Ubiquitous Level 4 CCAM: "is around the corner" ⇔ "will never come"
Intelligence for Level 4 CCAM will be: "in the cloud" ⇔ "in the car"
Who will win the race for CCAM? "China" ⇔ "US" ⇔ "Europe"

Discussions around 3 key questions:

What technology paths need to be considered as enablers of CCAM in the future?
Moderators/Rapporteurs: Oihana Otaegui - Edoardo Mascalchi

- Perception: more resilient perception systems are needed, as well as new sensor development. Sensor systems should be more cost-efficient to allow affordable perception and cooperative systems.
- On-board decision-making: how to cope with a lot of information and systems. How to use AI, understand how it works. Machine learning for complex situations.
- Use of data: how to use the data generated on board of the vehicle. Cooperative systems. Dealing with the data, using data as an enabler. Which data to share from vehicles for road maintenance. Harmonisation for data.
- Data sharing, data reliability: How to ensure that the data in the traffic system (coming from different sources) is reliable and trustworthy. How to better combine different sources of data, e.g. mobility data spaces, data ecosystem, V2X to support CAVs and traffic management
- Connectivity and cooperation needs: vehicle vs cloud: how to link processes altogether. 5G, 6G etc. connectivity is needed for over-the-air updates. What to do with coverage and bandwidth gaps of connectivity?
- Cybersecurity: we need to ensure that cybersecurity is in place, and to know how to deal with attacks.
- Standardisation: standardisation and harmonisation are needed along the whole system (not only vehicle)

Which issues require a better collaboration across the clusters of the CCAM partnership?
Moderators/Rapporteurs: Serge Van Dam - Johanna Tzanidaki

- Big data, storage and analysis, data collection (from real operations, not only tests), data sharing
- AI addressed from different clusters: data from sensors, big data

- <u>Societal validation and user needs</u>: trust building on Common Evaluation Methodology (CEM), including common KPIs. Validation according to balanced values (economic, climate, social, technology)
- <u>HMI</u> should be looked at in different clusters, targeting various groups: drivers, passengers, other road users
- <u>Safe communication</u> (not only in the car, but all the encompassing technologies to go to Level5), backwards compatibility
- <u>Cybersecurity</u> and life-cycle testing ("banana-wave concept" meaning that a product is not optimal in production but gets improved in customer use)
- <u>Regulation and compliance</u>: a missing cluster in CCAM?
- More attention should be given to the whole picture, the <u>system of systems</u>. In order to look at how the different technologies work together (vehicle+driver, vehicle+infrastructure). Identify the gaps in technology or what technology cannot solve.

What links should CCAM build with other technology-related Horizon Europe partnerships?
Moderators/Rapporteurs: Gereon Meyer - David Storer

- Focus on other partnerships, but also beyond partnerships: a very <u>open wide-ranging approach</u> is needed. CCAM could look e.g. at the off-road sector and the synergies between on-road and off-road, rail sector, aviation sector, defence area, especially given the current geopolitical situation in Europe, military and civil applications of cybersecurity and IA.
- Cooperation with sectors and partnerships should focus on providing <u>societal benefits</u>. Force the affordability (for everyone) side.
- <u>Relevance of working with the stakeholder groups, in particular cities</u>. We need to develop solutions that can find a way to the market. This must be done by involving the users. However, working with cities will be challenging, as a huge investment in (physical and digital) infrastructure is required to implement CCAM.
- <u>Gaps in other partnerships</u> that we need to fill, e.g. virtual testing, cloud technologies.
- <u>Contribution of CCAM to circular economy,</u> e.g. raw materials, vehicle-to-grid.

Session 2: Large-scale demonstrations: needs and outlook

> **Challenging statements (warm-up exercise):**
> *"CCAM is mostly for freight" / "CCAM is mostly for passengers"*
> *"CCAM is mostly for commercial vehicles" / "CCAM is mostly for passenger vehicles"*
> *"CCAM will only work in cities" / "CCAM will only work in rural areas"*

Discussions around 3 key questions:

Why do we want to do large scale demonstrations in 2030?
Moderators/Rapporteurs: Ingrid Skogsmo - Xavier Aertsens

- What motivates "large"? To demonstrate transferability of the solutions. And have enough time and size. Need very large number of kilometres driven to demonstrate safety. - to support deployment e.g., extension of ODD, or solve specific issues of specific situations.
- Safety: We have to build safety, which will be needed to build trust, which will bring acceptance, demand and impact. This should involve also naïve users.
- Data gathering: very large amounts of data are needed (to assess and demonstrate e.g. impact, safety).
- Field Operational Trials (FoT)-type studies in order to assess impact, to know the state of the art, to know what is the true impact of (level2) systems that are already on the market.
- Understanding the business models in all relevant sectors like road operators, mobility providers – real solutions to be used in real environments.
- Larger and longer projects. There is a strong urge for 4 to 5 year-projects to go beyond just making a showcase, but to develop and bring solutions to reality and to market. To understand the scale of costs. Look at Mobility as a Service (MaaS) solutions. We need to involve a lot of citizens, in many different locations, in their daily mobility schemes.

What large scale-demonstrations do we need?
Moderators/Rapporteurs: Bastiaan Krosse – Stephane Dreher

- More focus on smaller cities and rural areas.
- Combine all CCAM dimensions: different vehicles and transport modes, different automation levels, different road users, cross-border actions on different types of road and surfaces. We should not take all these mixes individually but do a smart combination of them.
- Pilots should be replicable, scalable and sustainable. People should be able to continue using the solutions after the end of the pilot.
- Join forces with other partnerships like 2Zero for example, or within the different sectors
- Demonstrations need to base on existing or pre-developed solutions, so that the effects in society can be measured.
- Intermodality and traffic management should be an essential part of future projects.

How should we do large-scale demonstrations?
Moderators/Rapporteurs: Mats Rosenquist and Armin Gräter

- The question of how to match available technologies with the use cases should be addressed in the call texts. This will help projects bring together all the necessary stakeholders.
- Regional, national and EU regulations need to be considered. Even international exchange should be considered to this regard.
- We need to develop a Code of Practice on how to do large scale demos. Use L3-pilot's example.

- Learn from <u>Field Operational Trials</u>, as smaller versions of Large-scale demonstrations. Learning from customer operations before the solution comes to the broad market.
- Consider <u>data sharing</u>, not only for itself but by giving added value to the data holder. Mechanisms to allow that the FoT that is sharing data has a benefit in delivering data to others.
- Out-of-the-box ideas: Apply <u>the principles of Scrum/Agile</u> methodology of project management to testing, i.e. invest in testbeds and Living lab infrastructure without knowing in advance what will be the applications/use cases/ outcomes. Why not "allow to fail"? It is already allowed in research but not easy when you build cars…
- How should <u>living labs</u> be set up? Living labs should:
  - Be in real-world environment, in daily traffic, with citizens in daily life.
  - Include the whole value chain of transport (passengers or freight)
  - Include all stakeholders, who will become project partners
  - Be based on a data space (not on data sharing)
  - Use the Common Evaluation Methodology
  - Include an emergency centre for quick reaction (security approach)
  - Study societal effects
- Large-scale demonstrations need to cover a large variety of use cases and cities. This will probably need <u>new shapes of management and funding</u> (even beyond CCAM). The joint topic with 2Zero/Cities Mission is an example that we should extend further.

IV- Upcoming conferences and meetings

Armin Gräter presented the calendar for 2022 activities. CCAM-organised events are in bold.

17-22 July 2022	ARTS 2022 &Trilateral meetings – Los Angeles
18-22 September 2022	ITS World Congress -Los Angeles
4 October 2022	EC workshop "Supporting innovations in road transport: Horizon Europe and its synergies with other EU programmes" – online – organised by Ludger Rogge
12 October 2022	International Mobility Summit (Electronomous) - Copenhagen – joint session with 2Zero
Autumn 2022	**Multicluster meeting – Brussels – no limitation in number of participants per organisation**
14-17 November 2022	TRA -Lisbon
29 November 2022	**CCAM States Representatives Group Meeting -Prague**
December 2022	**CCAM Partnership Board meeting**
December 2022	**CCAM Association 6th General Assembly**
End of the year 2022	**Publication of WP2023-24**
February 2023	H2020RTR Conference -Brussels
March 2023 tbc	**States Representative Group meeting (Sweden)**
3-4 May 2023	EUCAD (co-organised by the EC and the FAME project) - Brussels
22-24 May 2023	ITS European Congress -Lisbon
Early May → Early September 2023	**CCAM call 2023 open**

IV- Any Other Business

It was suggested by two attendees to provide name tags (indicating name/organisation) and a participants list for future CCAM meetings if conducted as an in-person meeting.

V- Final remarks

Armin Gräter closed the meeting by thanking the participants for the fruitful discussions held during the day. He was pleased to see such a collaborative mindset among the participants, and more generally within the Association, which he is happy and honoured to chair. He looks forward to working within a renewed team and with new Members onboard.