

SHOW 3rd Pan-European Workshop

State of play: Connected, Cooperative and Automated Mobility (CCAM)

*Suzanna KRAAK
DG Research and Innovation
European Commission*

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Policy context



December 2019

- Increasing the uptake of **zero-emission vehicles**
- Making **sustainable alternative solutions** available to the public & businesses
- Supporting **digitalisation & automation**
- Improving **connectivity & access**

February 2020

- Establishment of EU-wide common, interoperable data spaces including a **Common European mobility data space**
- Review of the ITS Directive and its Delegated Regulations
- Stronger coordination mechanism **federating National Access Points**

December 2020

- Making the EU transport system **sustainable, smart and resilient**
- **Automated mobility** deployed at large scale by **2030**
- **82 initiatives** in 10 key areas
- Deployment and management of ITS and connected and automated mobility, facilitate cross border AV, recharging infrastructure, 5G

December 2020

- Deliver at least **100 climate-neutral and smart European cities** by 2030
- Ensure these cities are **experimentation and innovation hubs** to support all European cities to become climate-neutral by 2050.
- **112 Mission Cities** selected

Cooperative, Connected and Automated Mobility (CCAM)

CCAM has the potential to:

- Bring us on the path towards near zero road fatalities
- Increase accessibility of mobility services
- Help reduce harmful emissions from transport by making traffic more efficient

Main objective

Accelerate the deployment of innovative CCAM systems and services for passengers and goods

EC vision

We want CCAM solutions that

- are fully integrated in the transport system, accompanied by the right support measures by the public sector
- support new mobility concepts, shifting from a driver-centred to mobility-user oriented approach



European Partnership on CCAM

Ambition:

- Support the development and market uptake of connected and automated mobility and logistics services and systems.

European Partnership objectives:

- Better align EU R&I efforts in the field of CCAM
- Develop and implement a coherent long-term agenda to coordinate investments in R&I and pre-deployment
- Implement large-scale demonstrations of inclusive and user-oriented CCAM solutions for people and goods across Europe by 2030.

Budget: 1 Billion € (500 M€ EC contribution)

State of play:

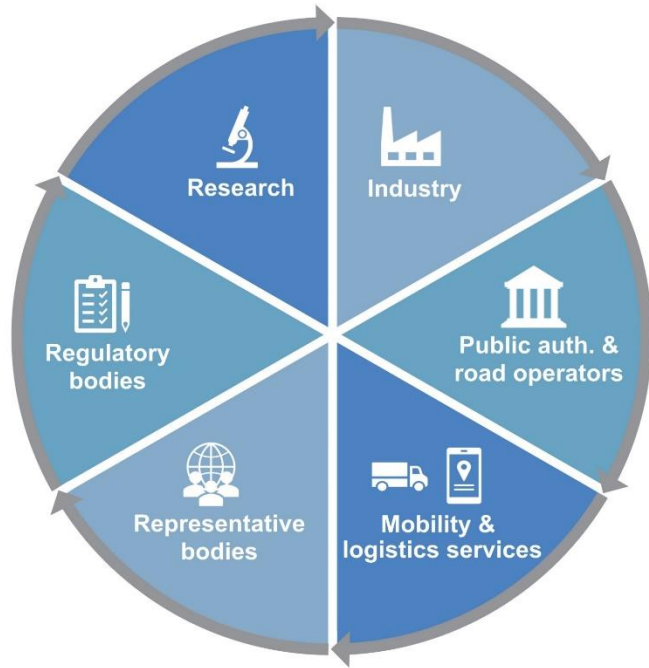
- Strategic Research and Innovation Agenda (SRIA) published
- MoU between the Commission and Partners signed in 2021
- Projects resulting from first HE Calls started in Q3 2022
- WP 23-24 under final review for publication Q1 2023





European Partnership on CCAM

Partnership sectors and stakeholders

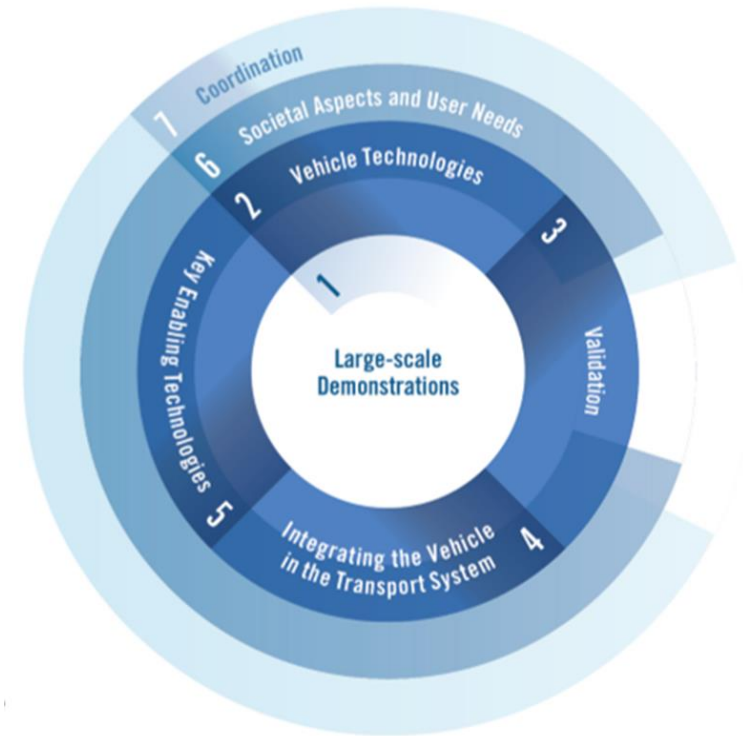


→ 187 member companies / organisations

Partnership website:

<https://www.ccam.eu/>

Strategic Research & Innovation Agenda

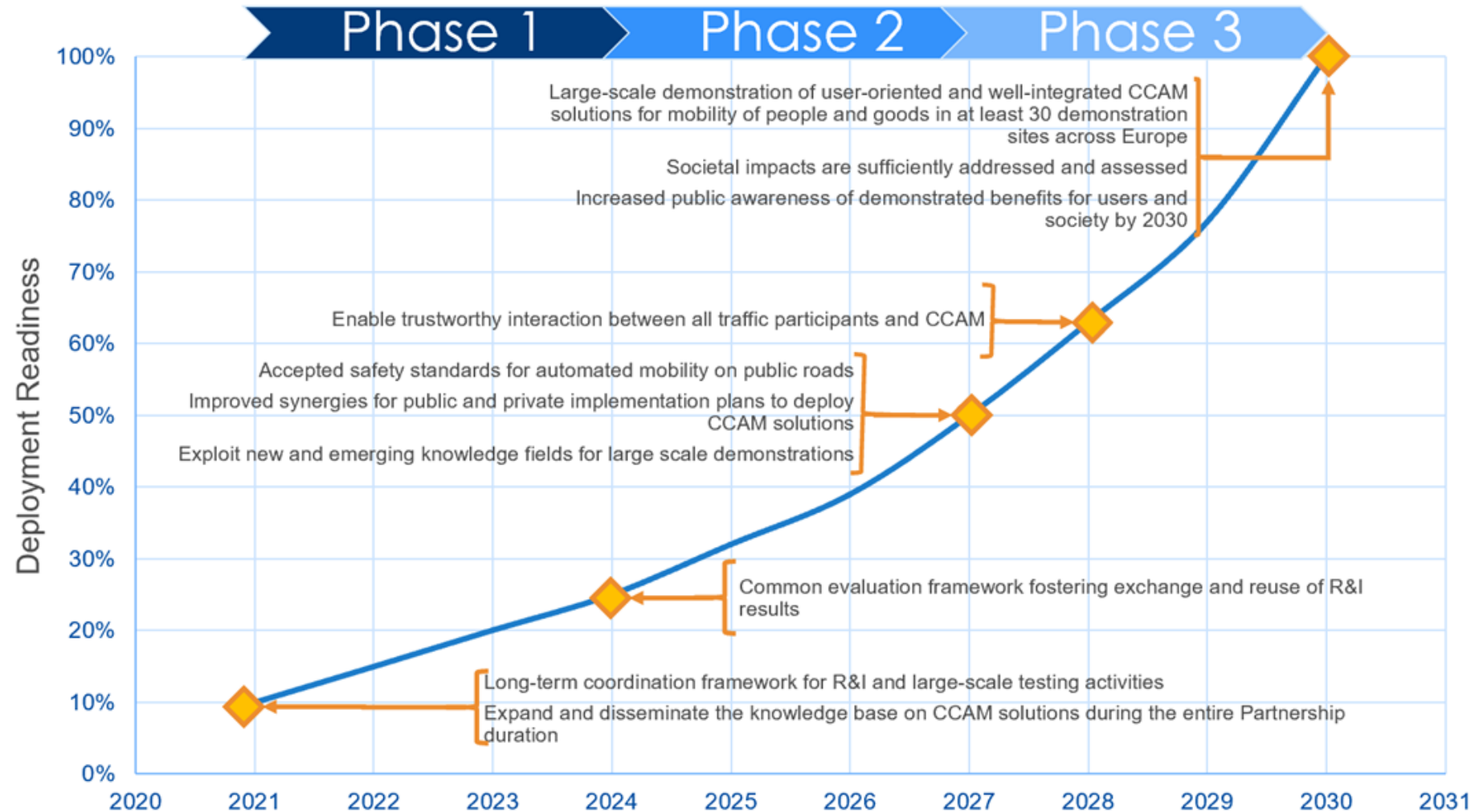


→ Multiannual roadmap to guide the Partnership

→ Describes the portfolio of activities, resources, and timeline for 7 key R&I areas.

Planning for CCAM implementation 2021-2030

- ❑ Phase 1 – Developing the building blocks
- ❑ Phase 2 – Advancing technical maturity
- ❑ Phase 3 – Trials and living labs all over Europe



Horizon Europe – CL5 Climate, Energy and Mobility

Vehicle technologies

- On-board perception and decision-making technologies for complex environmental conditions

Validation

- Safety validation of CCAM systems

Integration transport system

- Physical and Digital Infrastructure, connectivity and cooperation

Key enabling technologies

- Cyber secure and resilient CCAM

Societal aspects/ user needs

- Socio-economic/ environmental impacts & user needs

Coordination

- Coordination of large-scale demos and EU-wide knowledge base

WP 2023-2024

- Co-drafted with CCAM Partnership
- Under internal review
- Publication Q1 2023

Focus areas

- Large-scale demos of shared, automated and zero-emission mobility solutions in cities
- Generation of scenarios and validation of CCAM technologies and systems
- Optimised and inclusive on-board experience of CCAM solutions
- Mixed traffic orchestration
- Hybrid artificial intelligence
- Impact on jobs and education

WP 2021

- 6 topics
- 10 projects funded
- Projects start in Q3 2022
- Total EU funding: 67.3 M€

WP 2022

- 5 topics
- 8 projects funded
- Projects start in Q3 2022
- Total EU funding: 84.2 M€

Large-scale demos

- European demonstrators for integrated shared automated mobility solutions for people and goods

Vehicle technologies

- HMI and occupant protection technologies

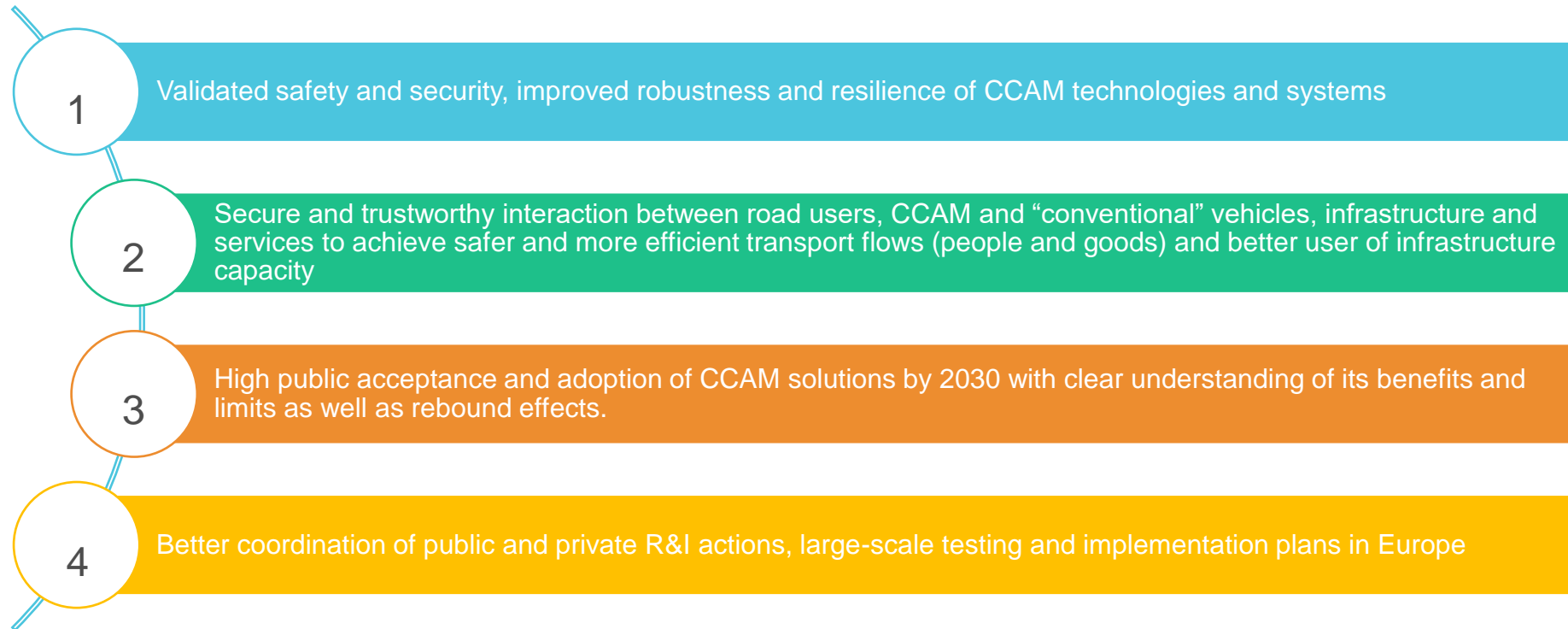
Key enabling technologies

- Explainable and trustworthy AI concepts, techniques and models

Integration transport system

- Fleet and traffic management systems

CCAM priorities and challenges



- Advance the technological maturity
- Scale up demonstrations to identify R&I needs
- Involvement of local and regional actors
- Integration into transport ecosystem and with other modes
- Diversify use-cases
- Alignment with national strategies
- Harmonise investments
- International collaboration

= Towards smart and sustainable mobility !

Thank you



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