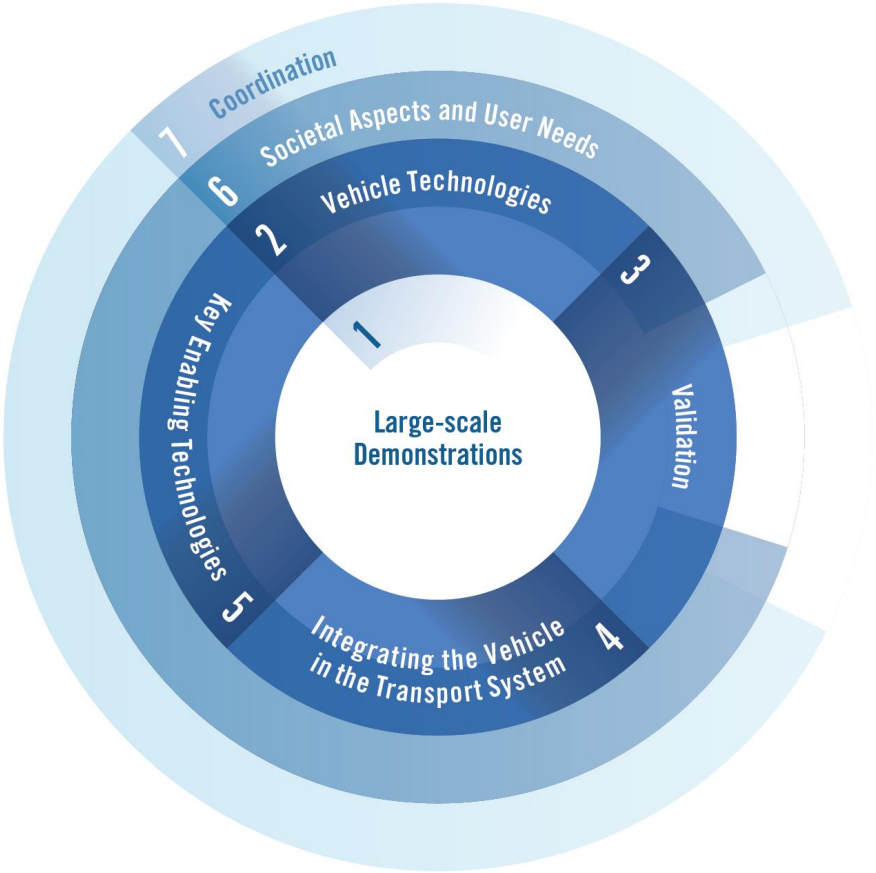
Increase safety in road transport

Strengthen competitiveness of European industries



Reduce negative impacts from road transport on environment

Ensuring inclusive mobility and goods access for all

CCAM

CONNECTED, COOPERATIVE & AUTOMATED MOBILITY

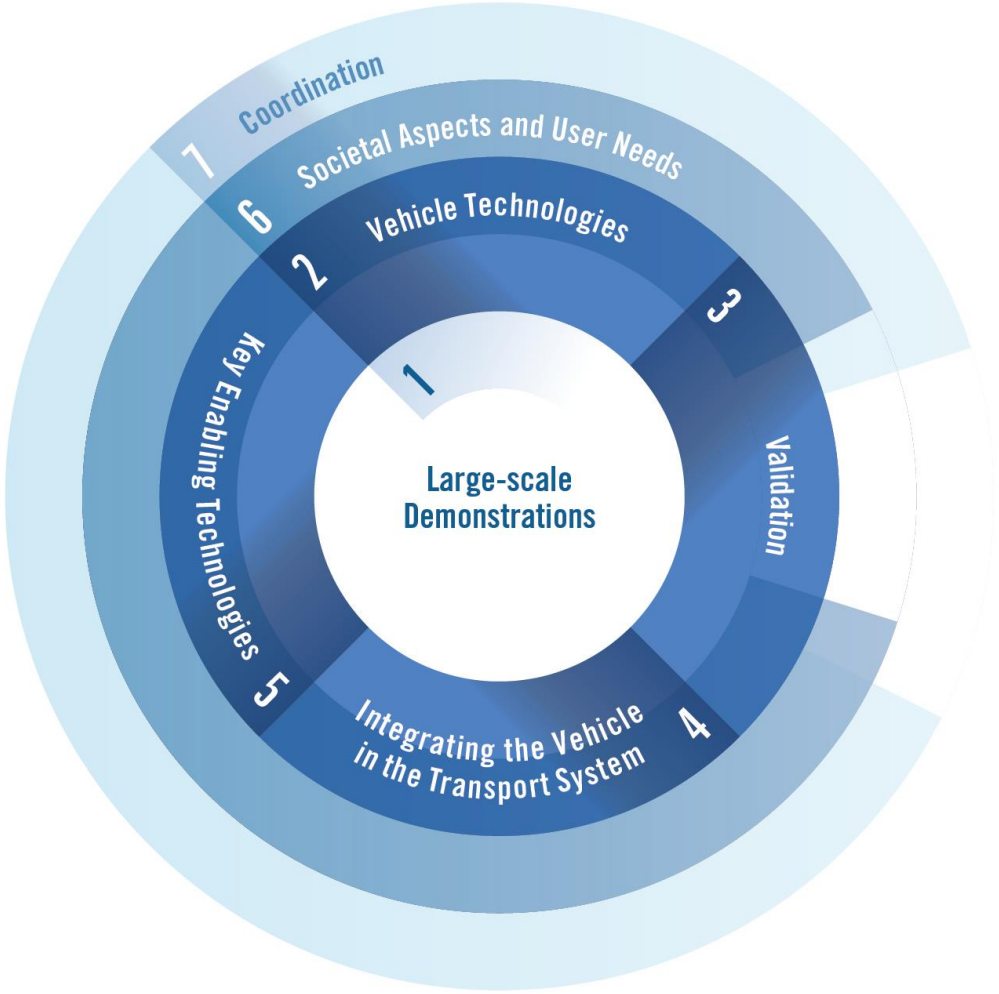
European leadership in safe and sustainable road transport through automation

CCAM PARTNERSHIP

Successful implementation requires understanding:

- the **user needs and societal aspects** of mobility
- technical details, contributions, requirements and risks from **key enabling technologies**
- the overall **transport system** requirements and set-up
- what **vehicle technologies** are required and how to implement them
- how to **validate** safe system functioning

Finally **demonstrate** all aspects at a **large scale**



CCAM SRIA: OBJECTIVES & IMPACTS

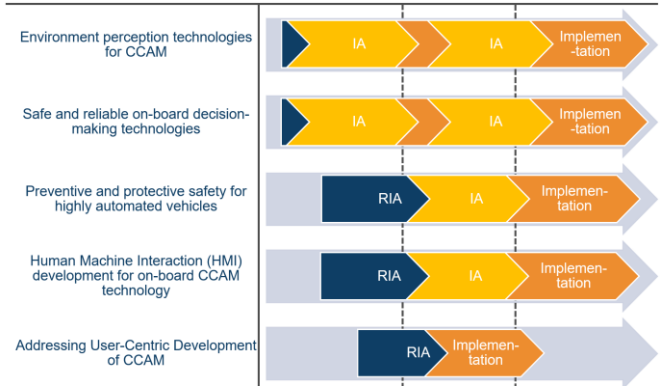
SO1: Validated safety and security, improved robustness and resilience of CCAM technologies and systems.	GO1: Safe and efficient co-existence between automated and non-automated “conventional” traffic for a long transition period of mixed traffic while overall reducing number of fatalities and injuries in road transport.	**Expected Societal Impact 1:** Improving **safety** and **security** of the transport system drastically
SO2: Secure and trustworthy interaction between road users, CCAM and “conventional” vehicles, infrastructure and services to achieve safer and more efficient transport flows (people and goods) and better use of infrastructure capacity.	GO2: Increased efficiency of transport flows (people and goods) leading to better use of infrastructure capacity and preservation of public space while reducing transport emissions and congestion	**Expected Societal Impact 2:** Meeting **societal needs** for **mobility** while **reducing environmental** impacts and strengthening our economy
SO3: High public acceptance and adoption of CCAM solution by 2030 with a clear understanding of its benefits and limits as well as rebound effects.	GO3: Making Europe a world leader in the deployment of connected and automated mobility for people and goods with more focused long-term investments in R&I, development and pre-deployment of CCAM.	**Expected Economic Impact:** Maintain and **extend industrial leadership** for new jobs and economic growth all over Europe
SO4: Better coordination of public and private R&I actions, large-scale testing and implementation plans in Europe.	GO4: Support the creation, dissemination and capitalisation of knowledge to accelerate the development and improvement of CCAM enabled solutions	**Expected Scientific Impact:** **Strengthen** leadership in all technological and societal aspects of CCAM through targeted **knowledge** and **capacity building**

CCAM SRIA: OPERATIONAL OBJECTIVES

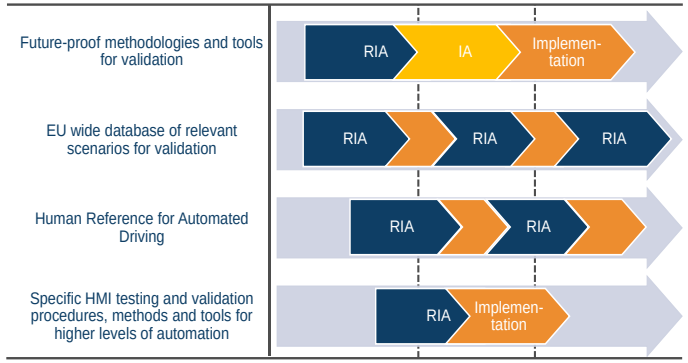
Common methodologies available to validate the safe system function of CCAM use cases by 2026. Accepted safety standards for automated mobility on public roads by 2027. Enable trustworthy interaction between all traffic participants and CCAM by 2028.	SO1: Validated safety and security, improved robustness and resilience of CCAM technologies and systems.
Large-scale demonstration of user-oriented and well-integrated CCAM solutions for mobility of people and goods in at least 30 demonstration sites across Europe by 2030. Societal impacts are sufficiently addressed and assessed by 2030.	SO2: Secure and trustworthy interaction between road users, CCAM and “conventional” vehicles, infrastructure and services to achieve safer and more efficient transport flows (people and goods) and better use of infrastructure capacity.
Increased public awareness of demonstrated benefits for users and society by 2030.	SO3: High public acceptance and adoption of CCAM solution by 2030 with a clear understanding of its benefits and limits as well as rebound effects.
In 2021, establish a long-term coordination framework for R&I and large-scale testing activities. Improved synergies for public and private implementation plans to deploy CCAM solutions by 2027. A common evaluation framework fostering exchange and reuse of R&I results by 2024. Exploit new and emerging knowledge fields for large scale demonstrations in 2027. Expand and disseminate the knowledge base on CCAM solutions during the entire Partnership duration.	SO4: Better coordination of public and private R&I actions, large-scale testing and implementation plans in Europe.

CCAM SRIA: ENABLERS AND OUTCOMES.

Cluster 2

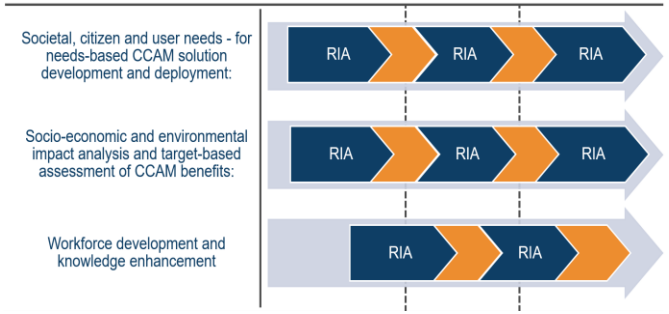


Cluster 3

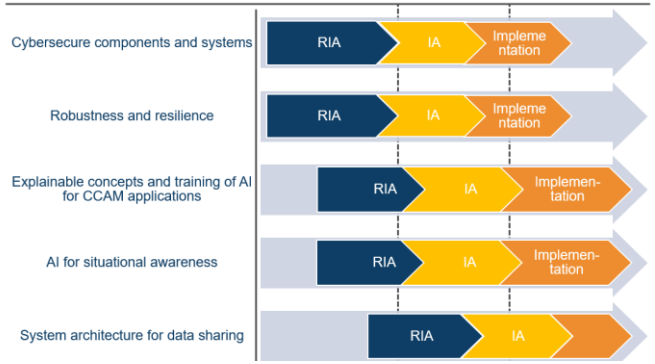


Cluster 7 is accompaniing the whole process

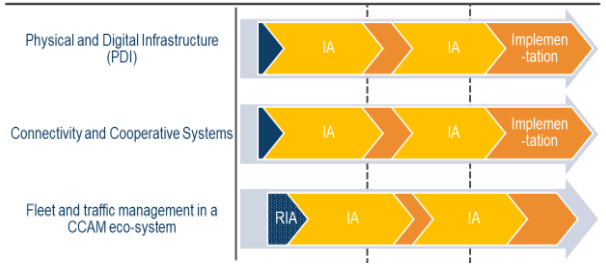
Cluster 6



Cluster 5



Cluster 4



Cluster 1

Selected Use Cases in Limited Operational Design Domains:

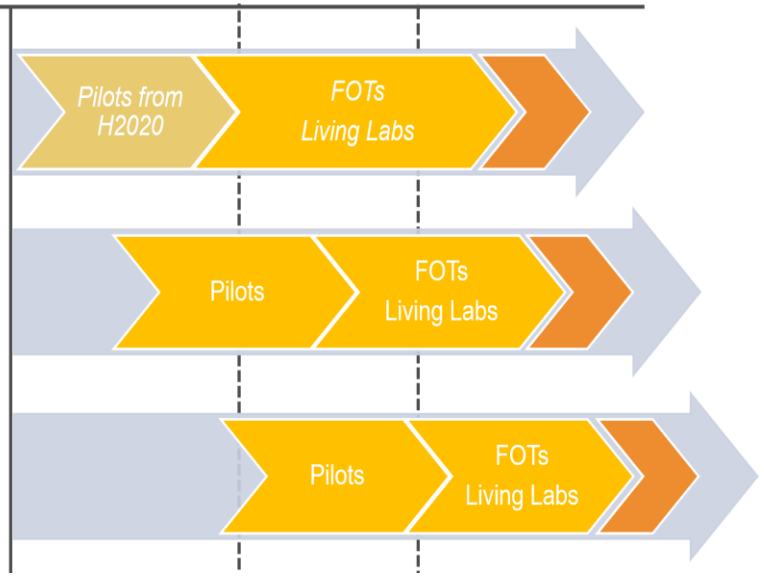
e.g. restricted traffic in confined areas such as parking and terminals

Combined Use Cases in Extended Operational Design Domains:

e.g. mixed traffic on selected infrastructures on highways and corridors

Complex Combined Use Cases in Large Integrated Operational Design Domains:

e.g. mixed traffic on urban, regional highways and rural roads



CCAM SRIA: CLUSTER 2 IS KEY ENABLER.

- Tomorrow's highly automated vehicles will rely on advanced solutions to 'sense-think-act', enabling safe interaction with other road users and providing protection in the case of emergency.
- It is essential to ensure the safety of all road users, and the well-being of the vehicle occupants.
- The aim is to deliver the most efficient and effective future solutions which have been proven to be safe and reliable.
- Significant technical challenges must be overcome through focused, applied research and innovation.