

CCAM and Internet of Mobility

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HELLENIC REPUBLIC
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Mobility is changing the world

- Open mobility to prevent social exclusions among the population
- Mobility is critical to support future's community hubs and economic activity
- The current vehicle-centric ecosystem will move to user-centric
- Mobility as a Service alternative to ownership: Instead of vehicle ownership, service-based transport will be adopted like-new car subscription services, private hire car providers or car-sharing schemes



Cooperative,
Connected and
Automated
Mobility (CCAM):
reshaping the
way we travel
and move!

- CCAM enables 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

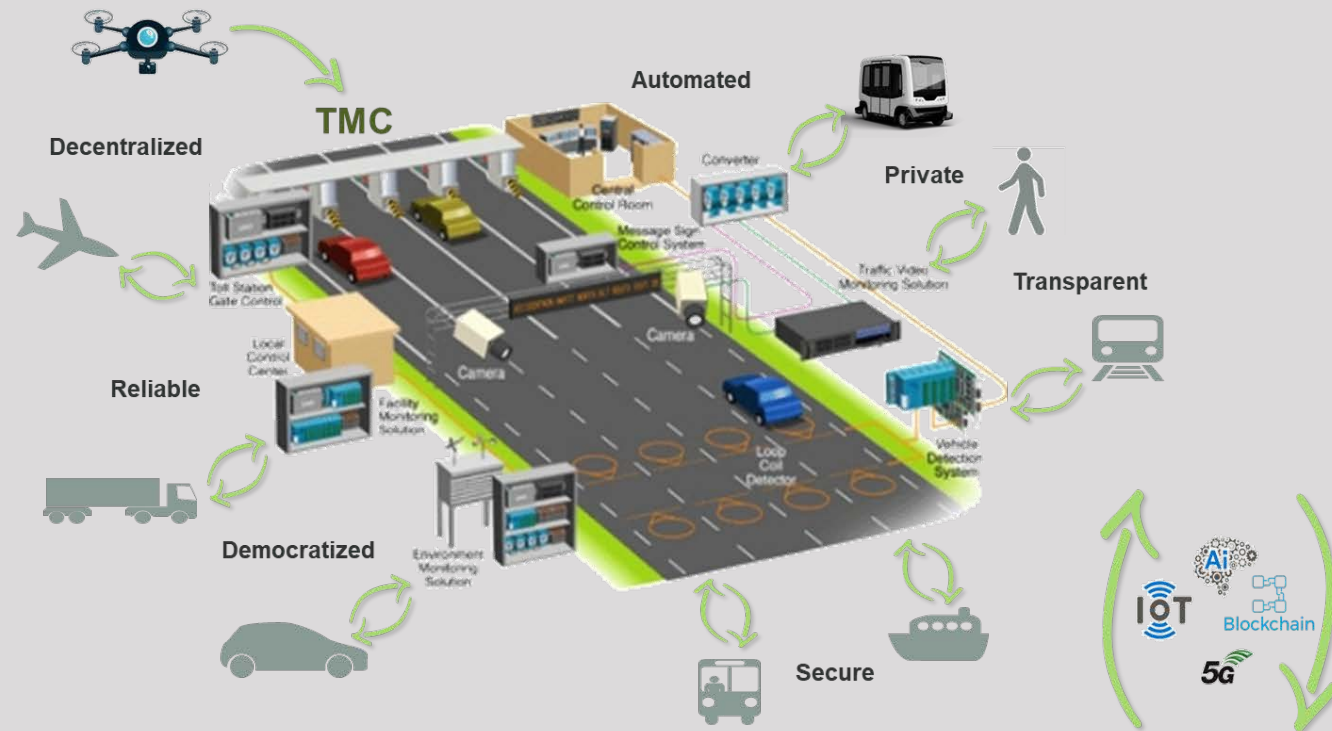
**CCAM
Technology
Enablers**

- **Physical Infrastructure:** Advanced network sensors and RSUs, new visual signs and elements, smart pavements
- **Intelligent Management Control - Advanced Traffic Management Systems:** The “brain” of Infrastructure
- **Communication Networks-Ubiquitous Connectivity** (5G, Distributed Optical Fibers)
- **IT Security Infrastructure:** Confidentiality, Integrity, Availability
- **Artificial Intelligence:** Situational awareness and decision making
- **Big Data:** Seamless, continuous and effective data sharing by many actors
- **Blockchain:** Dealing with issues of trust without intervention by individuals
- **Virtual Cross Border Communication:** Vehicles “Roaming” connected to home countries services

CCAM technology enablers facilitate next-generation transport, fleet management, energy, goods and services delivery: leading to a fast, smooth, safe, socially acceptable and beneficial to all MOBILITY participants

CCAM
Technology
evolution to the
Internet of
Mobility

The Internet of Mobility



Internet of
Mobility: All
technology in
one global
network

- Internet of Mobility: ALL THE CCAM TECHNOLOGY INTEGRATED WITH ONE NETWORK

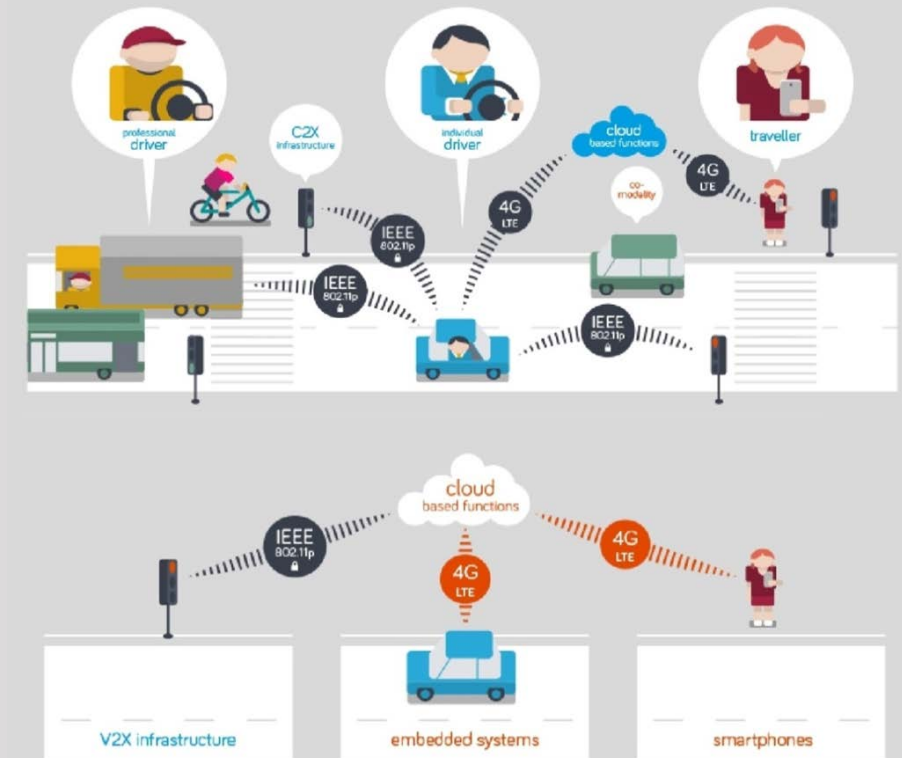
Data – the key element of future mobility is often referred to as the future oil, increasing the safety, convenience and enjoyment of journeys, while ubiquity can enhance in-vehicle entertainment, commerce, job opportunities and even health



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Mobility as a Service with its own "Internet"

- Harmonized methodologies and tools for implementation, verification and validation
- Common and ubiquitous communication technologies
- A homogeneous approach to further develop and exploit advanced technologies (AI, Blockchain, Big Data etc.)
- Design of a system architecture for data sharing with the required quality of data, combination of multi-source data and storage in a harmonized approach
- More efficient traffic management
- An incentive for various sectors new players to get involved in Mobility

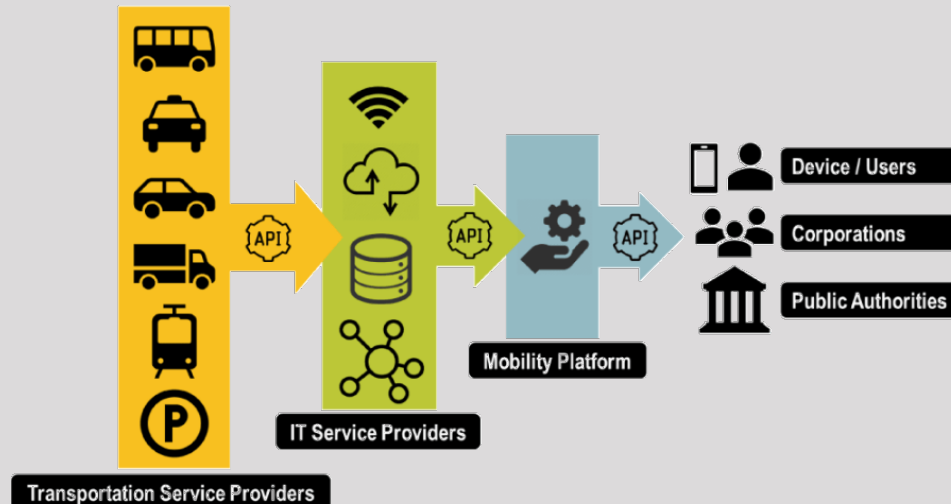


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Internet of
Mobility &
Business
Opportunities

Opportunities arise for:

- Synergies of different sectors (freeway managers, car manufacturers, IT companies, content providers, insurance companies, etc.)
- New services based on Data Fusion and Artificial Intelligence (driving and analytics applications, traffic optimization, personalized driving instructions, personalized ads)
- New completed packages ("players" that will offer "all in one" packages)
- New start-up companies



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Internet of
Mobility and
social benefits

- Facing climate change by global carbon emissions reduction
- Customers can travel on different modes of transport (from different service providers) by using one payment platform: MaaS Global company has developed a product called Whim with a monthly subscription. Customers can plan individual journeys via different means of transport
- It could increase productivity, bring a new travel experience, change the roles of future employees. By this way, economic growth, social inclusion, space optimisation, environmental benefit, and social wellbeing are more than ever possible



Internet of Mobility and social benefits

- Less time lost in traffic congestion
- More time for creative activities, education, entertainment, social life
- More profitable time by automating shopping, connecting to your job and making payments while driving
- Decrease in the total cost of ownership (TCO)
- Better traffic management with smart priorities and smart vehicle tips
- Better quality of life for handicapped, young and older people

Therefore

A movement towards smart societies

Next steps of the Internet of Mobility

- Social awareness and education
- New governance models for devoting resources to small-scale pilot projects, to test new applications and provide potential platforms for future growth
- Develop cross-sector partnerships and alliances
- Deploy a new mobility business model by using pilots like a Mobility aggregator platform based on advanced technologies
- Alignment of financial, business and operating models



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Thank you!

Any questions?



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