



# ARCADE ERTRAC Stakeholder workshop

5<sup>th</sup> and 6<sup>th</sup> February, Brussels

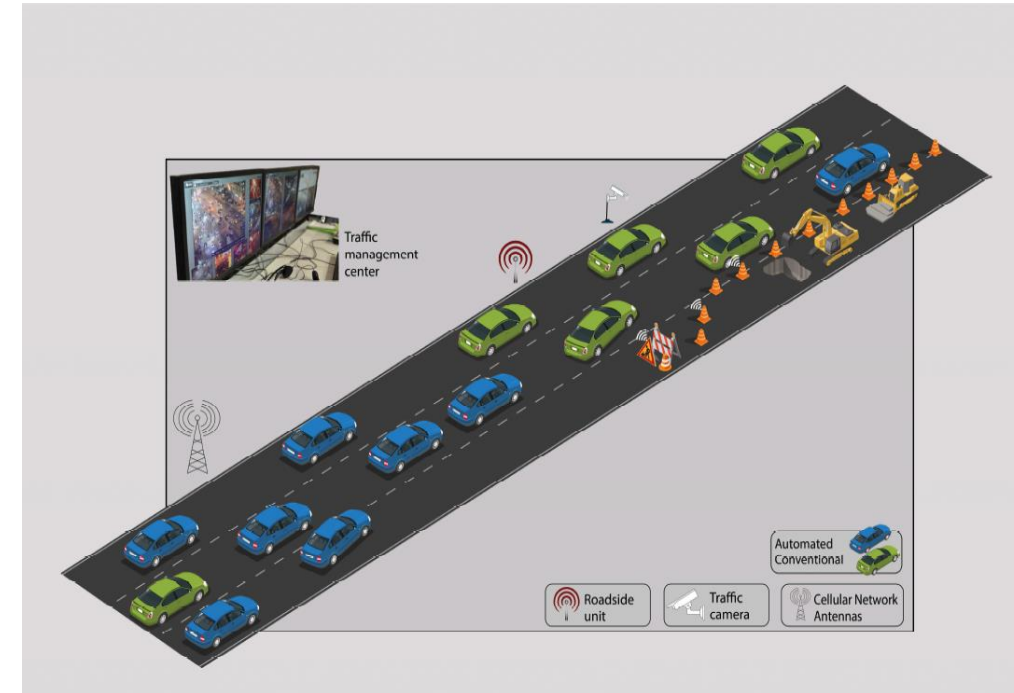
## Scenario introduction

[name of presenter, company]



# PDI: Scenario 2030

- Digital road representation (DRR) is accessible for each vehicle, including
  - **Static HD-Maps** (e.g. OD or OLM)
  - **Semi dynamic** strategic information
  - **High dynamic** and reliable **tactical** information
- Additional **road furniture** is installed where needed (landmarks, smart beacons etc...)
- High accuracy and reliable **vehicle ego localisation** is established even without GNSS
- A common layer model including **specifications of interfaces and ODDs** is established in the CAD domain
- Access to DRR by **multimodal communication** (ITS G5, 5G etc...) and its message formats is defined and established
- **New message types from instructure** are supporting CAD (local and global)
- Standards for **collective perception** are defined (LDM, CPM etc...)
- Vehicle sensors and connectivity are contributing to **self-update map procedures**
  - Static for map updates
  - Dynamic available from new service providers for realtime operating smart Traffic Management Centers



Cooperative lane change automation on highways (Inframix)

# NMS: Scenario 2030

- Level 4 vehicles used for shared automated mobility are deployed in commercial scale in mixed traffic
- Influencing factors
  - Operational and business models defined in urban and peri-urban areas
  - Operating costs decreased
  - Investments costs high and growing (e.g. for infrastructure)
  - User acceptance high (availability, high level of information, intermodality, accessibility, equity)
  - Political support remained uncertain and depending on the local economic conditions and regulatory framework
  - Data sharing issue solved
  - Digital and physical infrastructure deployed in some urban and peri-urban areas (despite cost, maintenance included)
  - Interoperability of systems and services is available and standards in use



# Big Data & AI: Collaborative & Connected Transport Area

- Roadmap to a single European Transport system
  - Collaboration between vehicles, physical and digital infrastructure and citizens (Big Data)
  - Adapting to the needs of each other (this could include New Mobility Services including Public Transport needs)
  - Adapting to their current situation (AI)
  - Create the technological building blocks for seamless communication and computation on vehicles, cloud etc.
  - Common standardised ITS EU model
  - Common policy framework all over EU
  - Define an appropriate regulatory EU framework



# Freight & Logistics: Scenario 2030

Freight and logistics will witness in 2030 drastic changes that will impact the sector and its operations. The novelties will mainly take place in hub-to-hub freight operations and on open roads.

- High level of automated vehicles is used in pilot operation, primarily for hub-to-hub freight flows, e.g. from ports to terminals and through selected freight transport corridors on the TEN-T network where required infrastructure adaptation. Need for further infrastructure – CAV adaptation.
- Cooperative (CACC) truck platooning is available and used regularly on European highways in mono-brand and multi-brand freight operation
- Professional drivers is still in demand, despite higher level automated transport operations, but driver shortage will not represent a critical problem for the industry. The job for professional drivers and fleet operation is under change which will require new skills for both drivers, operators, maintenance and management.

# Thematic Areas

## PDI

Technically solved  
Costs still high



## New Mobility Service

- Operating and Infrastructure costs high and not completely deployed
- User acceptance solved
- Operational and business models defined
- Political support uncertain

## Data&AI

Standards  
Technically solved  
(collaboration, V2X)  
Common Policy framework

## Freight

Drivers still needed  
Infrastructure not ready



# Thank you!



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