EU CAT Initiatives Coordination and Deployment Support

Dr. Stephane Dreher
Senior Manager Innovation & Deployment, ERTICO – ITS Europe
European Commission Policy Initiatives
COORDINATION, CONNECTIVITY INFRASTRUCTURE AND ARTIFICIAL INTELLIGENCE

Coordination of R&I and Testing activities
• Declaration of Amsterdam, High Level Meetings, GEAR 2030
• Single EU-wide platform for CCAM

Deployment of connectivity infrastructure and services in support of AV
• 5G for Europe: An Action Plan, COM(2016) 588
• European C-ITS Strategy (C-ITT Platform, C-Roads
• A Space Strategy for Europe, COM(2016) 705

EU Strategy on AI & High-Level Expert Group on AI
• Ethics Guidelines for Trustworthy AI
• Policy and Investment recommendations for trustworthy AI
• A Definition of AI: Main Capabilities and Disciplines
Cross-border Corridors
Connectivity Projects

**ICT4CART**
Deploys and tests ICT infrastructure for Connected & Automated Road Transport
- 36 months (09/2018 – 08/2021), 10MEuro, 21 partners
- 4 Test sites (AT, DE, IT, X-Border)

**5GMOBIX**
Deploys 5G New Radio and Core Networks with evolved road infrastructure for executing CCAM Trials at Cross-Border corridors
- 36 months (11/2018 – 10/2021), 27MEuro, 21 partners
- 8 Trial sites (FI, FR, DE, NL, CH, SK, X-Border GR-TU, ES-PT)

**UTOPILOT**
IoT and Big Data enhancing the driving environment perception and enabling new mobility services
- 36 months (01/2017 – 12/2019), 25MEuro, 45 partners
- 6 Test sites (FI, FR, IT, NL, ES, SK)

**CONCORDA**
Assessing hybrid connectivity technologies.
- Contributes to EU-wide interoperability and continuity of services
- Ensures compatibility with C-ITS services
- 30 months, 20MEuro, 26 partners
- 5 pilots (NL, BE, FR, GE, SP)
Project’s Objectives

HEADSTART will define testing and validation procedures of CAD functions including:

- its key enabling technologies (i.e. communication, cyber-security, positioning)
- by cross-linking of all test instances such as simulation, proving ground and real world field tests
- to validate safety and security performance according to the needs of key user groups (technology developers, consumer testing and type approval)

**PROJECT FACTS**

- **Duration:** 01.2019 – 12.2021 (36 months)
- **Consortium:** 17 partners, 9 Member States
- **Coordinator:** Applus IDIADA, Mr. Álvaro Arrue
- **Website:** https://www.headstart-project.eu
Actions for the Coordination of CAD R&I and Testing

ARCADE COORDINATION AND SUPPORT ACTION

- Strategic Challenges for AD
  - National plans alignment
  - Future Research Needs
- R&I Projects concertation
- International cooperation
- CAD knowledge consolidation
- Methodologies, Policies & Standards
Main Results from the CARTRE CSA

Knowledge consolidation and situation analysis
• Position papers
• EU, national and international projects
• Contribution to EU R&I Roadmaps (ERTRAC CAD, STRIA ART)
• National Roadmaps analysis (> 50 roadmaps and action plans, > 80 Pilots)
• National Testing regulations & licence exemptions (19 EU countries)
• Situation in emerging markets (7 countries)

Methodologies and Guidelines
• FESTA Handbook Update (FESTA, FOT-Net, FOT-Net 2, FOT-Net Data, CARTRE)
• Data Exchange Framework
• Impact assessment framework and KPIs
# R&I Projects Concertation

## CAD PROJECTS BY THEMATIC AREA

<table>
<thead>
<tr>
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<th>Technology &amp; Vehicle</th>
<th>Systems &amp; Services</th>
<th>Society &amp; Users</th>
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*Technology & Vehicle: In-vehicle enablers, Connectivity, Human Factors, Deployment, Infrastructure

*Systems & Services: Big Data, AI, New Mobility Services, Freight & Logistics, Safety Validation & Roadworthiness Testing, Policy & Regulatory Needs, User awareness, Ethics, Socio-economic assessment

*AASHTO International Day | 21 October 2019 | ERTICO.COM
Roadmap and Action Plan Analysis

WHAT THEMES DO THE ROADMAPS AND PILOTS ADDRESS?

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<th>Socio-economic assessment and sustainability</th>
<th>Safety validation and roadworthiness testing</th>
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<th>In-vehicle technology</th>
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SIS 50 Possible Actions For Public Authorities and Cities to facilitate Automated Driving
Thursday, 24 October | 11:00 – 12:30 | Room 330
Single EU-wide Platform on CCAM Support

WG1
Develop and EU Agenda for testing

WG2
Coordination and cooperation of R&I and testing activities

WG3
Physical and digital road infrastructure

WG4
Road Safety

WG5
Connectivity and digital infrastructure

WG6
Access to and exchange of data & Cybersecurity
Data Sharing Framework

Revised from FOT-Net DSF adapted to needs from automation pilots (SAE, Driver inside/outside, cooperative messaging) and requirements from the GDPR ((EU) 2016/679)

Methodology
- FOT-Net Data Sharing Framework
- Project agreements
- Training
- Application procedures
- Financial models
- Data and metadata descriptions
- Data protection

Dissemination
- Data Catalogue + Agreement with Data Provider

Storage and Access
- Repositories and e-infrastructures + Data category access model
- Open archives
- Access models
- Data provision after end of project

Data Exchange Platform
Trilateral High-Level Impact Assessment Framework

- Classification of evaluated system/service
- Direct and indirect impacts: 12 impact areas
- Impact mechanisms & paths
- Recommendations for experimental procedures
- Recommendations for data sharing
- KPI repository

International survey on most important KPIS

- Monitor how the framework is used
- Updates based on lessons learned