WP 2017 Call: Automated Road Transport (ART) 3 topics

#H2020TransportInfo
Connected and Automated Driving
EC initiatives

- Digital: Roundtable on CAD
- Research: R & I: STRIA / Horizon 2020
- Transport: C-ITS Platform Phase II
- Industry: GEAR 2030 WG CAD

Common objective:
Accelerated deployment of Connected and Automated Driving

- Common responsibility
- Shared leadership

Member States
Stakeholders
Public co-funding
Private investments
Call on "Automated Road Transport"

- Key priority in the H2020 Transport Research programme
- Indicative budget for 2 years: € 114 Mio
  - 2016: € 64 Mio (4 topics)
  - 2017: € 50 Mio (3 topics)
- Focus of the Call
  - Support the short term introduction of automated driving systems for passenger cars, trucks and urban transport
  - "Large-scale Demonstration Projects" to test technologies in complex traffic and driving conditions
Priorities for 2017 Call

Safe AD systems in complex traffic situations

Vehicle-driver interface

User and social acceptance

Connectivity for advanced level of automation

Road infrastructure

R&I priorities

Priorities for 2017 Call

Automation Pilots
<table>
<thead>
<tr>
<th>Topic</th>
<th>Title</th>
<th>Action type</th>
<th>Stages</th>
<th>Budget (EUR Mio)</th>
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<tr>
<td>ART-02</td>
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<td>IA</td>
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<td>ART-04</td>
<td>Safety and end-user acceptance aspects of road automation in the transition period</td>
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<td>ART-06</td>
<td>Coordination of activities in support of road automation</td>
<td>CSA</td>
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**Notes:**
- **CSA** = Coordination and Support Action; **IA** = Innovation Action; **RIA** = Research and Innovation Action
- 20 Jan '16: Stage I
- 29 Sep '16: Stage II
- 26 Jan '16
Objectives:

- To actively **support demonstration pilots** carried out at National and European levels
- **To setup a platform for sharing** and **re-using data and experiences** from different ART projects
- To establish a **joint stakeholders forum** in order to:
  - coordinate and harmonize **ART approaches at European** (e.g. strategic alignment of national action plans for automated driving)
  - and **international level** (in particular with the US and Japan)
- To create a **solid knowledge base** of all European activities
- To work on **future visions, potential impacts** and **research gaps**

Start: October 2016 (24 months)

Budget: EUR 3 Mio
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(1) **Topic ART-01-2017 (IA)**
ICT infrastructure to enable the transition towards road transport automation

- **Challenge:** Addressing the issue of connectivity required for advanced level of automation and the architecture of ICT-Infrastructure
- **Scope:** Development, testing and real-life validation of ICT infrastructure architectures; Integrating ICT technologies, systems and functions to enable the transition towards road vehicle automation
- **Expected impact:**
  - To contribute to knowledge of required ICT-infrastructure architectures
  - To provide input feeding into standardisation
- **Estimated EC contrib. per proposal:** EUR 5-15 Mio
(2) Topic ART-03-2017 (IA)
Multi-Brand platooning in real traffic conditions

- **Challenge**: to foster Europe-wide deployment of platooning in real-life, mixed-traffic conditions of heavy duty vehicles
- **Scope**: to develop, test and validate platooning concepts, technologies and functionalities on a real (preferably cross-country) corridor
- **Expected impact**
  - To demonstrate feasibility and reliability of multi-brand platooning systems
  - To contribute to increase sustainability of transport system
- **Estimated EC contrib. per proposal**: EUR 15-20 Mio
(3) Topic ART-07-2017 (IA)

Full-scale demonstration of urban road transport automation

- **Challenge**: Proving reliability, safety, robustness of fully automated road transport in complex scenarios in urban areas

- **Scope**:
  - To demonstrate fully automated vehicles in urban areas in full-scale tests at Pan-European level
  - Fully integrated into existing public transport systems
  - To be tested in urban/suburban areas in complex traffic scenarios
  - To assess user acceptance and effects on transport demand and modal transfer

- **Expected impact**:
  - To contribute to the development of modern, more efficient urban transport systems with reduced impacts on climate change, air pollution, noise, health, accidents

- **Estimated EC contrib. per proposal**: EUR 10-15 Mio

- **SMEs participation & Int. Cooperation encouraged**: twinning with projects funded by US DOT foreseen