Cooperative ITS Corridor
Rotterdam – Frankfurt - Vienna
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Innovation in Forest, Fuel and Freight
How can Horizon 2020 make the Core Network Corridors greener?
Brussels, 28 April 2016
• **Cooperative systems** in transport
  – What are they?
  – Why do we want them?
  – What is our policy to achieve this?

• **Implementation** of cooperative systems
  – What happened until now?
  – Why is the Cooperative ITS Corridor special?

• **Status of the Cooperative ITS Corridor**
  – What was achieved?
  – What is the planning?

• **Summary**
Cooperative systems in transport

- **Cooperative systems** in transport
  - Vehicle to Vehicle communication (V2V)
  - Vehicle to Infrastructure (V2I and I2V)
Cooperative systems in transport

• Cooperative systems: Will they contribute to policy delivery?

| totally disagree | | | | totally agree |
|------------------|------------------|------------------|------------------|
| traffic management | road safety | travel information | environment |

Questionnaire

• Approached:
  • policy-making organisations (mostly ministries)
  • up to 20 persons per country
  • electronic questionnaire
  • phone-calls if no replies
• 36 replies from 25 EU countries

Source: CVIS-project
Cooperative systems in transport

- Cooperative services to deliver transport policies

<table>
<thead>
<tr>
<th>Road user</th>
<th>Services</th>
<th>Policy goals</th>
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<tbody>
<tr>
<td>Choice to travel</td>
<td>Travel assistant</td>
<td>Influence travel demand</td>
</tr>
<tr>
<td>Choice transport mode</td>
<td>Navigation assistance</td>
<td>Stimulate sustainable transport</td>
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<tr>
<td>Choice moment to travel</td>
<td>Driving assistance</td>
<td>Spread travel demand</td>
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<tr>
<td>Route choice</td>
<td></td>
<td>Increase reliability travel time</td>
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<tr>
<td>Driving behaviour</td>
<td>Maneuver assistance</td>
<td>Optimize efficient use road network</td>
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<tr>
<td>Anticipate and react</td>
<td>Emergency call</td>
<td>Stimulate smooth traffic flows</td>
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<td>Report incidents</td>
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<td>Improve livability</td>
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<td></td>
<td></td>
<td>Prevent accidents</td>
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<td></td>
<td></td>
<td>Deal with incidents</td>
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</table>
Dutch policy on ITS

Programme
Connecting Mobility
• Input from “5 November Group”
• Transition 2013 - 2023

Transition paths
• From collective to a smart mix of collective and individual services
• A changing role of roadside equipment
• From local/regional to nationwide traffic information and management
• From business to government to business to consumer/business
• From ownership of data to maximum openness and availability of data
• From government supervision to public private collaboration
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• **Summary**
• Development cooperative systems and projects
On 10th June 2013 ministers representing the Netherlands, Germany and Austria, the countries initiating the corridor, signed the Memorandum of Understanding
• **Main partners** Cooperative ITS Corridor
Implementation of cooperative systems

- **Cooperative ITS Corridor**
  - Starting with two services:
    - Roadworks warning (RWW)
    - Probe Vehicle Data (PVD)
  - but even more important:
    - providing a base for further developments
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• **Summary**
• Status and planning Cooperative ITS Corridor
**Roadworks in the Netherlands – safety measures**

- Motorway Traffic Management system (MTM) on 40% of the motorways, with gantries each 500-800 m, showing red crosses in case of lane closures
- If no MTM present, a mobile system is used for stationary roadworks
- Test motorway A16 (proof of concept)
• Test motorway A16 (proof of concept)
  – First message, at a big distance, cellular communication
• Test motorway A16 (proof of concept)
  – Second message, more detail about lay-out roadworks, Wifi-p communication
• **Test motorway A16 (proof of concept)**
  
  – Third message, speed limit 90 km/h, Wifi-p communication
Status of the C-ITS Corridor

- Test motorway A16 (proof of concept)
  - Fourth message, speed limit 70 km/h, Wifi-p communication
• Test motorway A16 (proof of concept)
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• **Summary**
• The Cooperative ITS Corridor provides an international base for standardized and forward-looking cooperative ITS services
  – Cooperative ITS services are expected to have positive impacts regarding road safety, traffic efficiency and sustainability
  – The Cooperative ITS Corridor will implement the first international cooperative services
  – This is a joint effort from public and private actors, including road operators, the automotive industry and mobility service providers
  – The corridor is expected to become an international base for the further introduction of cooperative services in Europe
Thank you for your kind attention
Questions?

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