Dutch European Presidency

- Public roads: Eu corridors
- Crossing borders
- Harmonisation
- Technology push and market pull
- Public-private collaboration
Where are we heading for?

Automation, connectivity and cooperative (driving) eventually come together (necessary for public goals)

Source: Talking Traffic
We have a dream

2020
Different perspective on mobility and logistics

**BUSINESS VALUE**
- Fuel consumption
- Asset utilisation optimisation
- Labour costs
- 1st truck 8% @ 0.3s/2.0 L/100 km
- 2nd truck 13% @ 0.3s/3.3 L/100 km
- Driver efficiency optimisation driving/resting times
- Reduced truck idle time; enhanced efficiency

**SOCIETAL VALUE**
- Benefits of Truck Platooning
- Emission reduction
- Road capacity optimisation
- Safety and damage
- Less congestion Increased traffic efficiency
- Through mileage improvements 2.6 kg CO₂/L diesel
- >90% of accidents and damages caused by human error
We need to anticipate on global trends

- Urbanization
- Smart data
- Multimodal transport
- Ageing
- Goods become services
- Sustainability
Automated and connected driving an opportunity for Europe!

- More efficient use of road capacity
- Economic growth and Competitiveness
- Reduce Emissions
- Enhance road safety
- More efficient use of road capacity
- Use travel time for other purposes
- Efficient logistics
- Social inclusion
- Enhance mobility
- Enhance mobility
- Enhance mobility
- Enhance mobility
We need orchestration to prevent patchwork of rules in smart mobility

Time to act is now!

National authorities for roads and exemption are active

Automotive industry involved 100% of truck manufacturers

ICT, Telecom, Freight and Logistic industries
Process improvement versus EU-standards?

A  Vehicle

B  Road

C  Behaviour
Joint forces to accelerate deployment and market introduction

4 major challenges

- Harmonized legalisation
- Adapt social conditions
- Stimulate innovations
- Ensure compatibility on EU-level
For the first time:

- Open Roads
- Real traffic
- Cross border
- Large scale
Vision Truck Platooning 2025

**2025**
- SAE Level 4 multi-brand commercially available
- SAE Level 3 full autonomy technology development
- Pilot SAE 1, 2, 3 programme (cross-border multi-brand)
- SAE 14 technology development
- 3+ Trucks platooning
- Cross-border TEN-T ITS corridor platooning
- Platooning communication protocol standardized
- 50% adoption rate

**2020**
- SAE Level 3 & 4 in development
- Multi-brand platooning
- Driving and resting times legislation amendment proposals
- Pilot 1, 1, 2 programme (cross-border, mono-brand)
- Vehicle admission legislation harmonized
- 2-trucks and 3-trucks platooning
- 1% adoption rate

**2016**
- National highway legislation exemption
- European research and technology development
- First tests and demos

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**In Preparation**
- Research & Development
- In Practice
- Business

<table>
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<tr>
<th>Safety &amp; Security</th>
<th>User Acceptance &amp; Human Behaviour</th>
<th>Logistics &amp; Business</th>
<th>Technology</th>
<th>Legal</th>
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**European Truck Platooning Challenge**
SAE Level 1 exemptions for cross-border platooning

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**EU 2016**
Vision Truck Platooning 2025

- Vision for the future:
  - the need for real-life testing
  - dealing with open questions
  - next steps to take
  - governance

Safety and security
Technology
Legal
Logistics business
User acceptance and human behaviour
Infrastructure
Vision Truck Platooning 2025

EU competitive transport industry
Towards Vision Zero
General public acceptance
CO₂ emission reduction from transport
All EU Highways cross-border access

European Automobile Manufacturers Association
Conférence Européenne des Directeurs des Routes
Conference of European Directors of Roads
Rijkswaterstaat
Ministerie van Infrastructuur en Milieu
International Road Transport Union
European Association of Automotive Suppliers
Association of European Vehicle and Driver Registration Authorities