Cooperative dynamic formation of platoons for safe and energy-optimized goods transportation

Submitted by the expert from Scania

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Agenda

• Technology steps of platooning
• Incentives for platooning
• Scania test site
• COMPANION
Agenda

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Technology steps
Agenda

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Incentives for platooning

- Increased safety
- Lowered fuel-consumption
- Higher road capacity
Lowered fuel consumption
Increased safety

Contributing factors in an accident

- Driver: 90%
- Vehicle: 10%
- Environment: 30%
Higher road capacity

Manually

Platoning
Agenda

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Scania test site

- Scania Transportlaboratorium
- Södertälje - Helsingborg
- Large scale test
- AiCC
Experiences

- 379006 Kilometers of Platooning
- 38 vehicles
- 130 drivers
Results – fuel consumption

3 seconds
-2% ✓ Verified

2 seconds
-5% ✓ Verified

1 second
-7% 🕒 To be verified
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COMPANION
Budget: €5,4 million
Received funds: €3,4 million
PM: 452
Start: 1/10 – 2013
www.companion-project.eu
COMPANION - Challenges addressed

- Safe and efficient control of inter-vehicle distance
- Formation of platoons
- User acceptance
- Business model
- Standardisation
- Legal solutions
COMPANION - Legal solutions

• Regarding the USE of the companion
  To drive trucks in a platoon in public roads

• Regarding the Systems for semiautonomous driving.
  Systems that permit the use of trucks in a semiautonomous driving in a platoon.
Thank you for your attention!