



DAF

R
RICARDO

NXP

TNO



**EUROPEAN
TRUCK
PLATOONING**

**DIRK-JAN DE BRUIJN
RIJSWATERSTAAT
20 april 2016**

Rapport - Parlementaire enquêtecommissie Fyra

De reiziger in de kou

FYRA

**What's
GOING ON ?**

No answers – just questions

Secret networkleadership?

Guiding principles change management

Understanding patterns – focus on intervene

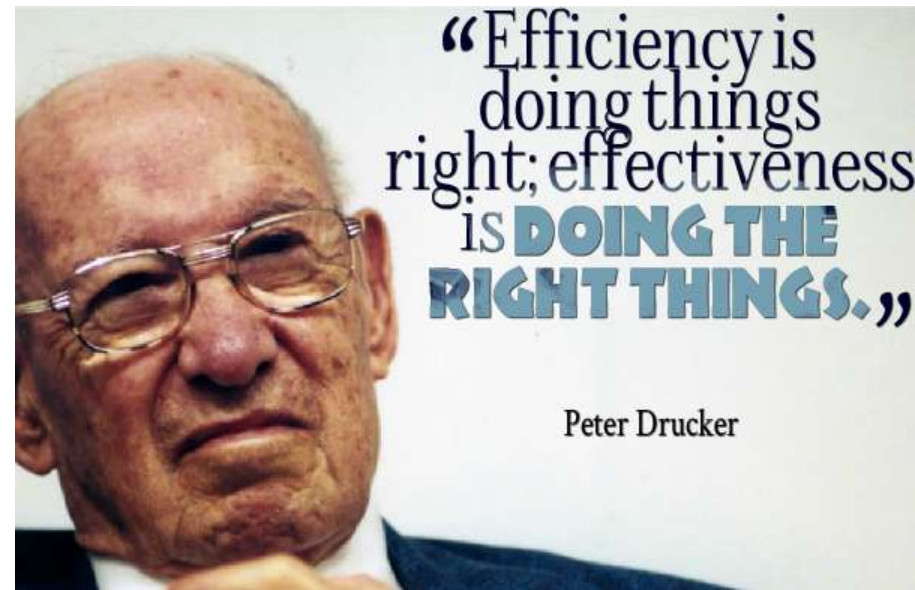
- *What's the short term goal*
- *Inspiring dot on the horizon – focus on customer value*
- *This is the way we work: our habits*





Future: no prediction – just influence of create

Trying to predict the future is like driving down a country road at night with no lights while looking out the back window



If you dream alone: a dream
If you dream together: reality!



www.eutruckplatooning.com
#truckplatooning



Dutch European Presidency 2016

- Public roads: EU corridors
- Crossing borders
- Harmonisation
- Public-private collaboration
- Show it!



Experiencing self-driving vehicles



European agenda
(Declaration of Amsterdam)



European Truck
Platooning Challenge

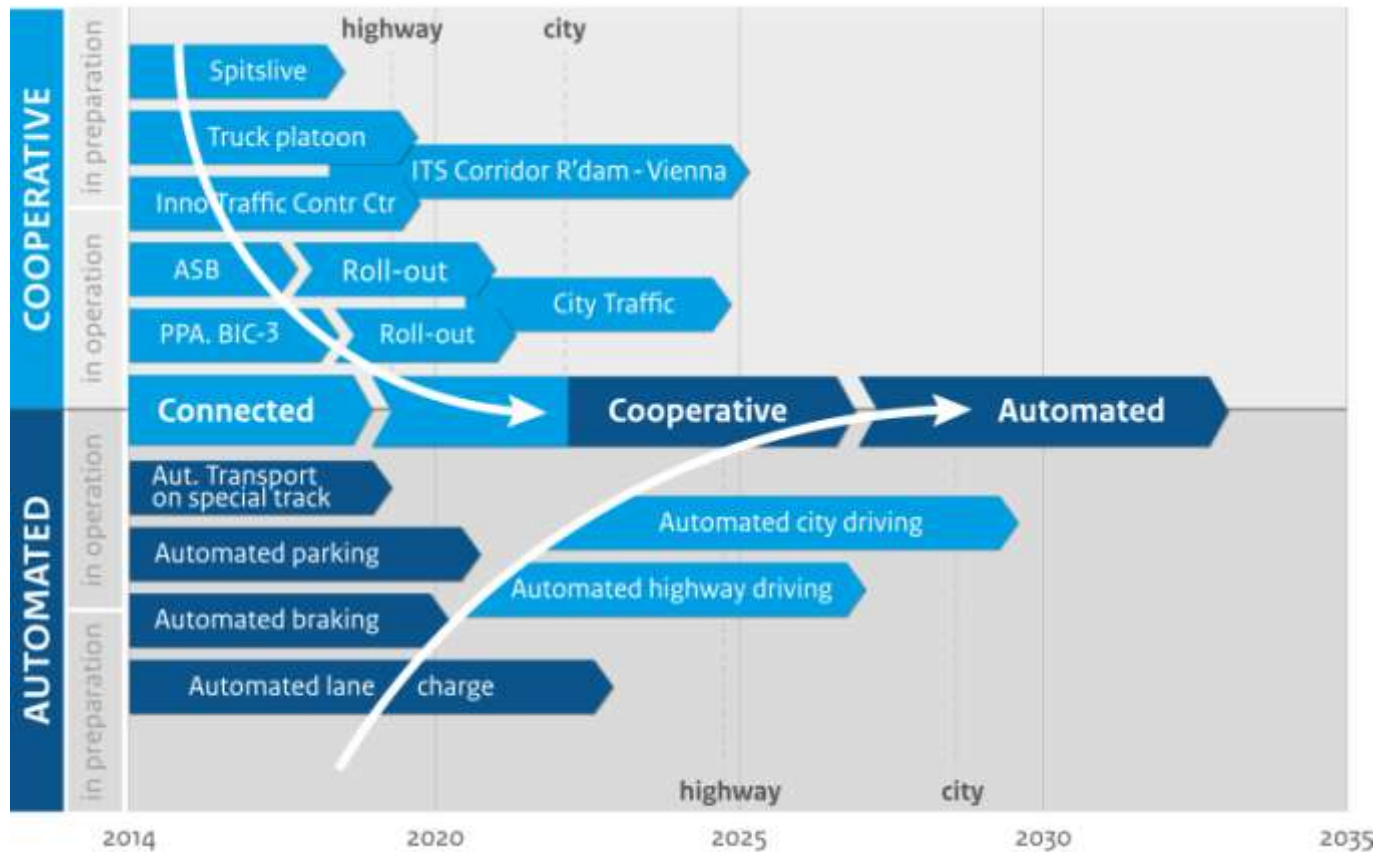
The Dutch EU presidency: joint effort towards a shared approach

























- Automated and connected driving central theme for informal council with transport ministers
- Addressing strategic approach on automated and connected driving
 - Come to a shared strategic agenda: compatible (inter)national legislation, large scale testing
 - Specific actions for cooperation (continuous dialogue)
- Accelerate European cooperation
 - Experience: automated driving with and for EU-ministers
 - European Truck platoon Challenge

Where are we heading for?

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



Definitions for Automated Vehicles

Level	Name	Narrative definition	Execution of steering and acceleration/ deceleration	Monitoring of driving environment	Fallback performance of dynamic driving task	System capability (driving modes)	BAST level	NHTSA level
Human driver monitors the driving environment								
0	No Automation	the full-time performance by the human driver of all aspects of the dynamic driving task even when enhanced by warning or intervention systems				n/a	Driver only	0
1	Driver Assistance	the driving mode-specific execution by a driver-assistance system of either steering or acceleration/deceleration using information about the driving environment and with the expectation that the human driver perform all remaining aspects of the dynamic driving task	 				Assisted	1
2	Partial Automation	the driving mode-specific execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the human driver perform all remaining aspects of the dynamic driving task					Partially automated	2
Automated driving system ("system") monitors the driving environment								
3	Conditional Automation	the driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task with the expectation that the human driver will respond appropriately to a request to intervene					Highly automated	3
4	High Automation	the driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene					Fully automated	3/4
5	Full Automation	the full-time performance by an automated driving system of all aspects of the dynamic driving task under all roadway and environmental conditions that can be managed by a human driver				All driving modes		



= System

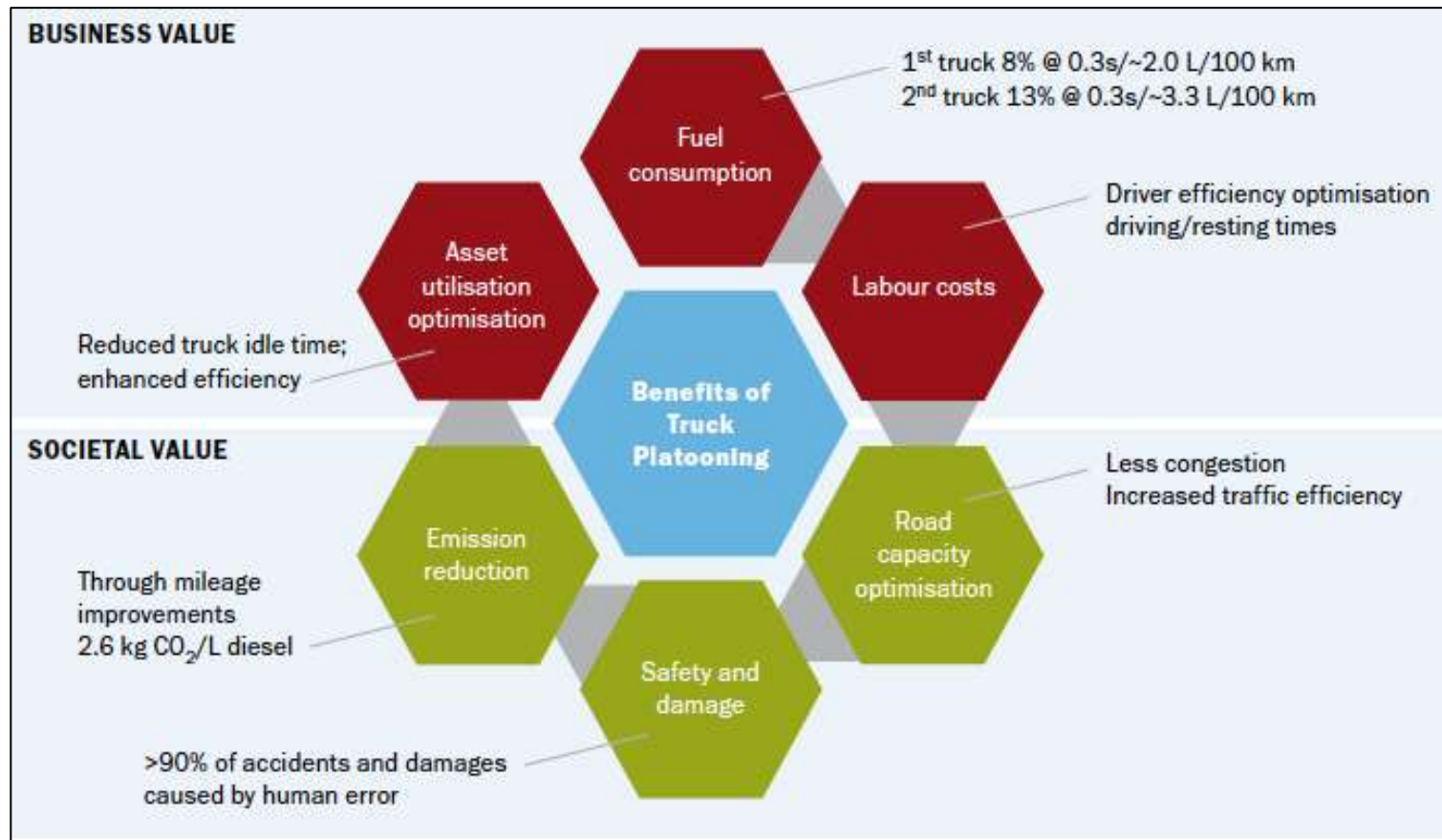


= Human driver



= Some driving modes

Different perspective on mobility and logistics



Three dimensional nature of this Challenge:

- ongoing interaction thinking/doing**
- equal partnership authorities/industry**
- balance technology push/market pull**





Ministry of Infrastructure and the Environment



Rijkswaterstaat
Ministry of Infrastructure and the Environment



Ministry of Transport and Communications



Trafi
Finnish Transport Safety Agency



Vejdirektoratet
Danish Road Directorate

VOLVO



ACEA
European Association of Automotive Suppliers



European Automobile Manufacturers Association

LLEGA LA NUEVA FORMA DE COMUNICARTE CON TRÁFICO.



IVECO



CEDR
Conférence Européenne des Directeurs des Routes
Conference of European Directors of Roads



AutomotiveNL

IRU International Road Transport Union



Lifting Global Trade...
APM TERMINALS
APM Terminals Maasvlakte II

AGENTSCHAP WEGEN & VERKEER

TNO



DAIMLER

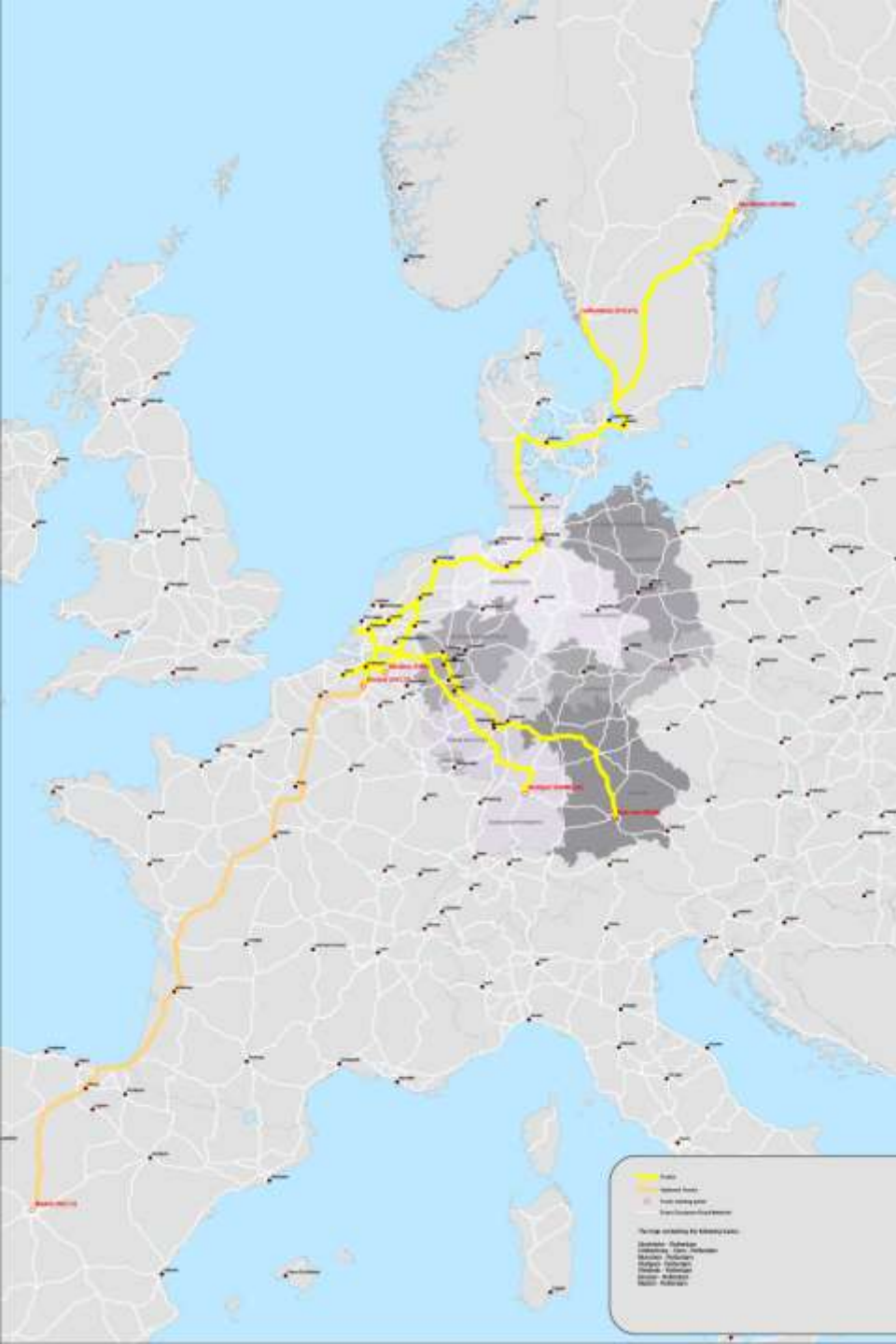


European Truck Platooning Challenge

Starting from:

- Göteborg
- Södertälje
- München
- Stuttgart
- Brussels
- Westerlo

to Rotterdam



Networkleadership



Only together we can make a difference
Long term, large scale



2025

SAE Level 4 multi-brand
commercially available

50%
adoption rate

SAE L5 full autonomy
technology development

Pilot SAE L3/L4 programme
(cross-border multi-brand)

SAE L4 technology
development



3+ Trucks platooning

Cross-border TEN-T
ITS corridor platooning

Platooning communication
protocol standardized

SAE Level 3 & 4
in development

SAE Level 2
commercially available

1%
adoption rate

2020

Multi-brand platooning

Driving and resting times
legislation amendment proposals

Pilot L1/L2 programme
(cross-border, mono-brand)

Vehicle admission
legislation
harmonized

2-trucks and
3-trucks
platooning



Let the network do the job!



Facilitate it with a wide positioning program

- Kickoff/Next level meetings
- Newsletters
- Direct relationship with politics
- Baton blogs
- Website as umbrella
- Storybook



Csf networkleadership

- Clear common goal: energy, inspiration
 - Short-term
 - Long-term: higher purpose
- Shared values: this is how it works
- Shared ownership: let the network do the job, let them shine
- Effective program appearance
- Professional management



Guiding principles



Our Guiding Principles

- Start with the end in mind
- Focus on a shared goal
- Value creation in terms of citizen
- Go forward on the basis of your own responsibility
- Link innovation to the business model
- Confucius proof: show it!
- Build a bridge while walking across it

A black and white photograph of Henry Ford wearing a bowler hat and a suit, standing next to an early 20th-century automobile. The car's steering wheel and dashboard are visible on the left. In the background, several other people in suits are blurred. The quote is overlaid in white, bold, sans-serif text.

**"COMING TOGETHER IS A BEGINNING; KEEPING
TOGETHER IS PROGRESS; WORKING TOGETHER
IS SUCCESS."**

HENRY FORD

 Lifehack Quotes

creating
next generation
mobility



EUROPEAN
TRUCK
PLATOONING

EU
2016