DRIVE SWEDEN

Drive Sweden Lunch & Learn

Road authorities' role in deployment of connected and automated mobility

With
Petter Åsman and Johnny Svedlund, Swedish Transport Administration Trafikverket
Antoine de Kort at Netherland’s Ministry of Infrastructure and Water management
Moderated by Rodrigue Al Fahel
1 June 2023

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Vision

Sweden takes a leading role
in leveraging digital technologies
to shape a more sustainable transportation system.

With support from

VINNOVA
Sweden's Innovation Agency

Swedish Energy Agency

FORMAS

Strategic innovation programmes

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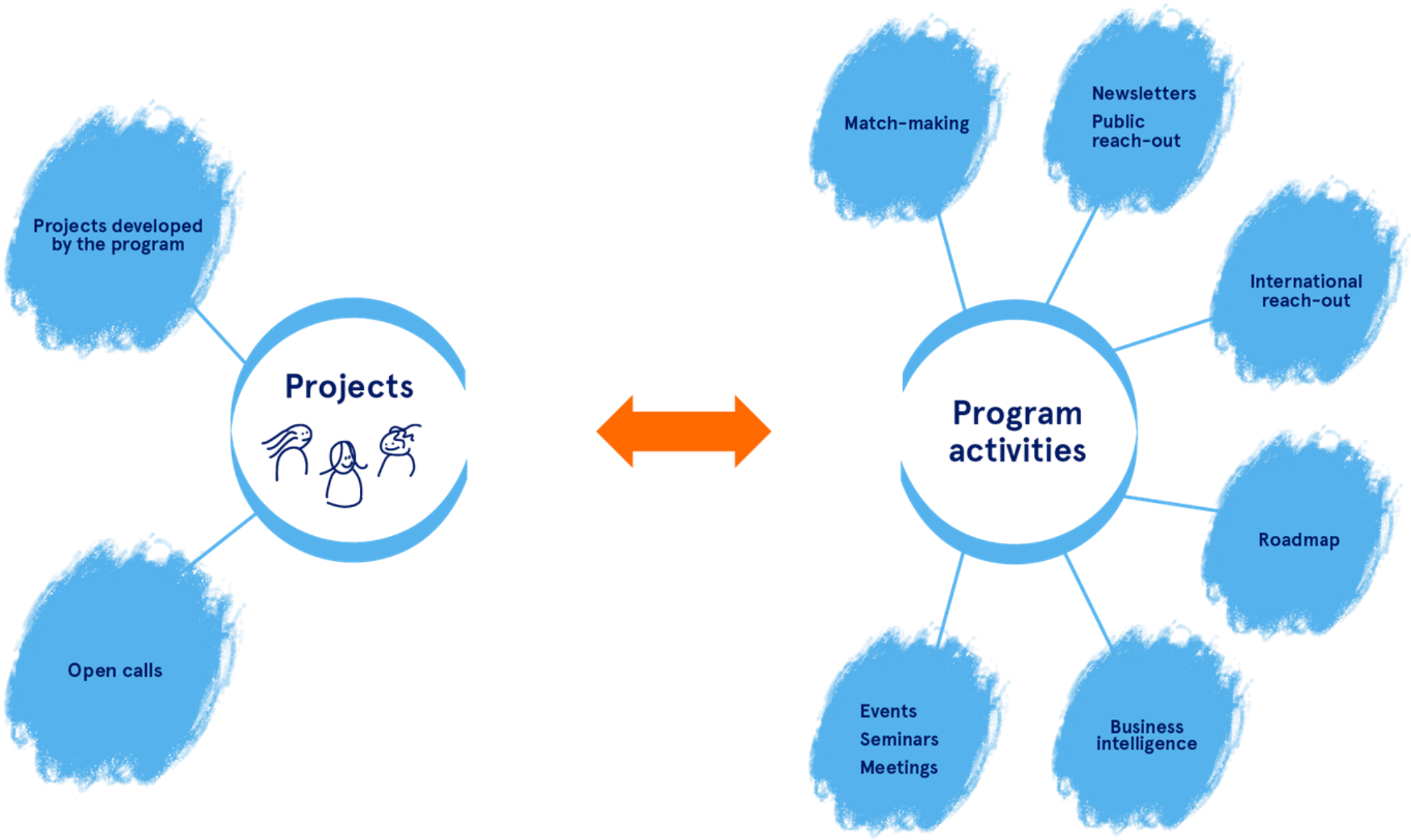
Projects developed by the program
Projects
Open calls
Match-making
Newsletters
Public reach-out
International reach-out
Program activities
Roadmap
Events
Seminars
Meetings
Business intelligence

CCAM States Representatives Groups meeting

- CCAM States Representatives Groups meeting, 16th of May 2023 in Sweden
- Over 60 representatives from 20 member states in Europe
- Main theme: What is road authorities´role in deployment of connected automated mobility?

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TRAFIKVERKET

What is road authorities' role in deployment of connected automated mobility?

1st June 2023

Petter Åsman, Johnny Svedlund
Swedish Transport Administration

Questionnaire

- Physical infrastructure
- IT & communication infrastructure
- Data and services

1. Physical infrastructure

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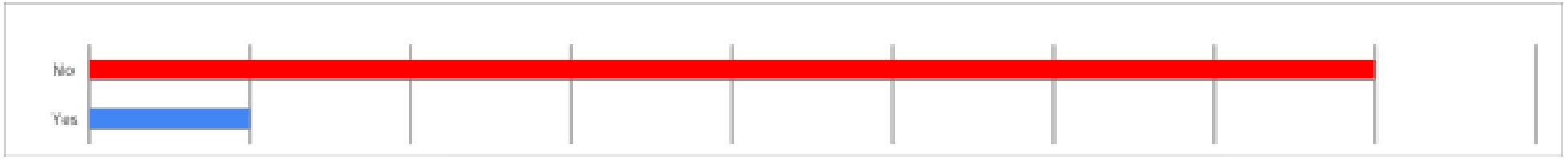
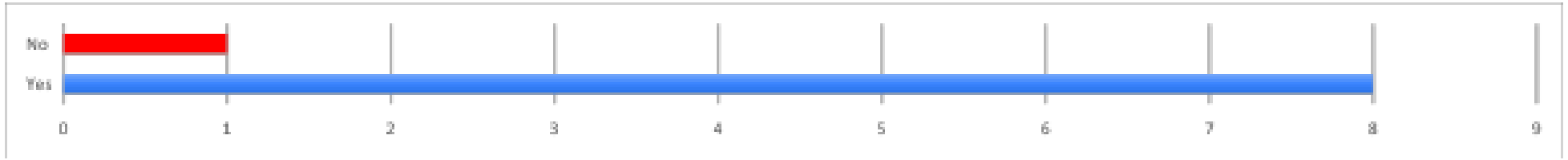
1.1 We expect to make major investments in the road transport system to significantly expand the Operational Design Domain (ODD) of connected cooperative and automated vehicles



1.2 We expect that all types of new CCAM vehicles should be able to operate safely within the existing infrastructure with the exception of minor investments where the benefits may outweigh the costs of the investment



1.3 We expect that all types of new CCAM vehicles should be able to operate safely within the existing infrastructure with no additional Investments

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2. IT & communication infrastructure

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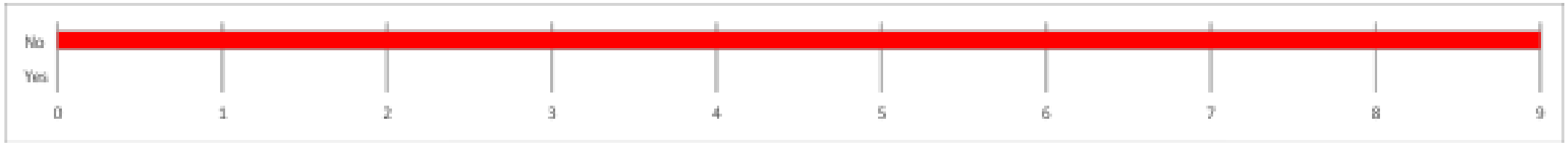
2.1 It is most likely that that road authorities will be responsible to invest in, operate and manage IT-communication infrastructures



2.2 We expect that road authorities will remain technology- neutral, but will provide assistance and promote cooperation with commercial actors in investing, operating, and managing IT-communication infrastructure for CCAM

2.3 We expect that the commercial actors will establish, provide and apply its own business models for the development and operation of IT-communication infrastructure for CCAM

TRAFIKVERKET

3. Data and services

TRAFIKVERKET

3.1 Automated vehicles will use their sensors and automated features, along with digital data and services from commercial entities and road authorities, to operate safely

3.2 Automated vehicles will use their sensors and automated features along with digital data solely from road authorities to operate safely

3.3 Automated vehicles will use their sensors and automated features along with data from other surrounding vehicles, to operate safely – no digital data from road authorities or commercial entities needed

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Roadmap – Digitalisation of the Road Transport System

- The roadmap indicates proposed measures and areas where the Swedish Transport Administration either leads or participates in the development
- Discuss and collaborate with other actors to build knowledge and continuously increase the ability to utilise the potential of digital solutions in the road transport system

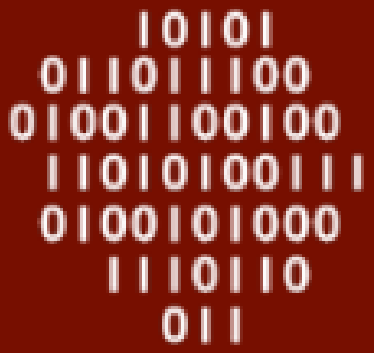
TRAFIKVERKET

Swedish Transportadministration positions

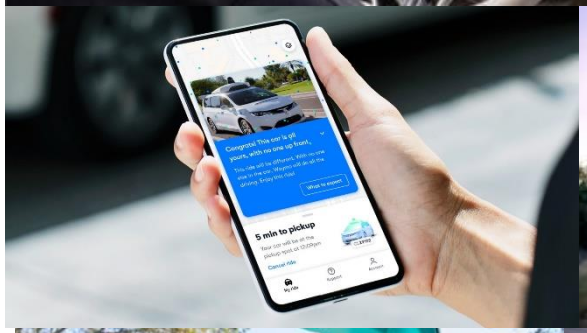
Physical road infrastructure

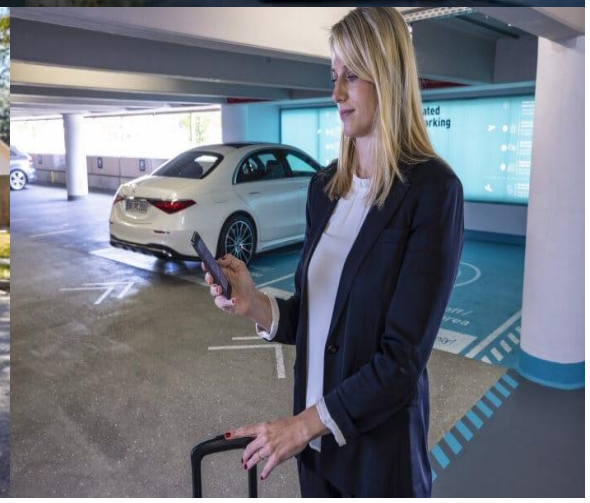
IT and communication infrastructure

Data and information management



Thank you!





Ministry of Infrastructure and Water Management

Implementing ALKS and ADS in the Netherlands

Antoine de Kort

National Taskforce ADS

Lunch & Learn webinar DriveSweden

1 June 2023

Agenda

- A brief historical perspective
- The national taskforce ADS: why, how, what ?
- Impact for road authorities: some reflections
- Questions and discussion

A brief historical perspective

summer 2022:
the revised General Safety Regulation

harmonised regulations for the
EU type approval of
Automated Driving Systems (ADS):

1. **Automated Lane Keeping System**
   (ALKS – R157 UN/ECE)
2. Driverless and dual mode
   Automated Driving Systems
   on predefined routes or in fixed areas
   in small series (ADS Implementing Act)

Managed implementation of automated vehicles

requires a national task force

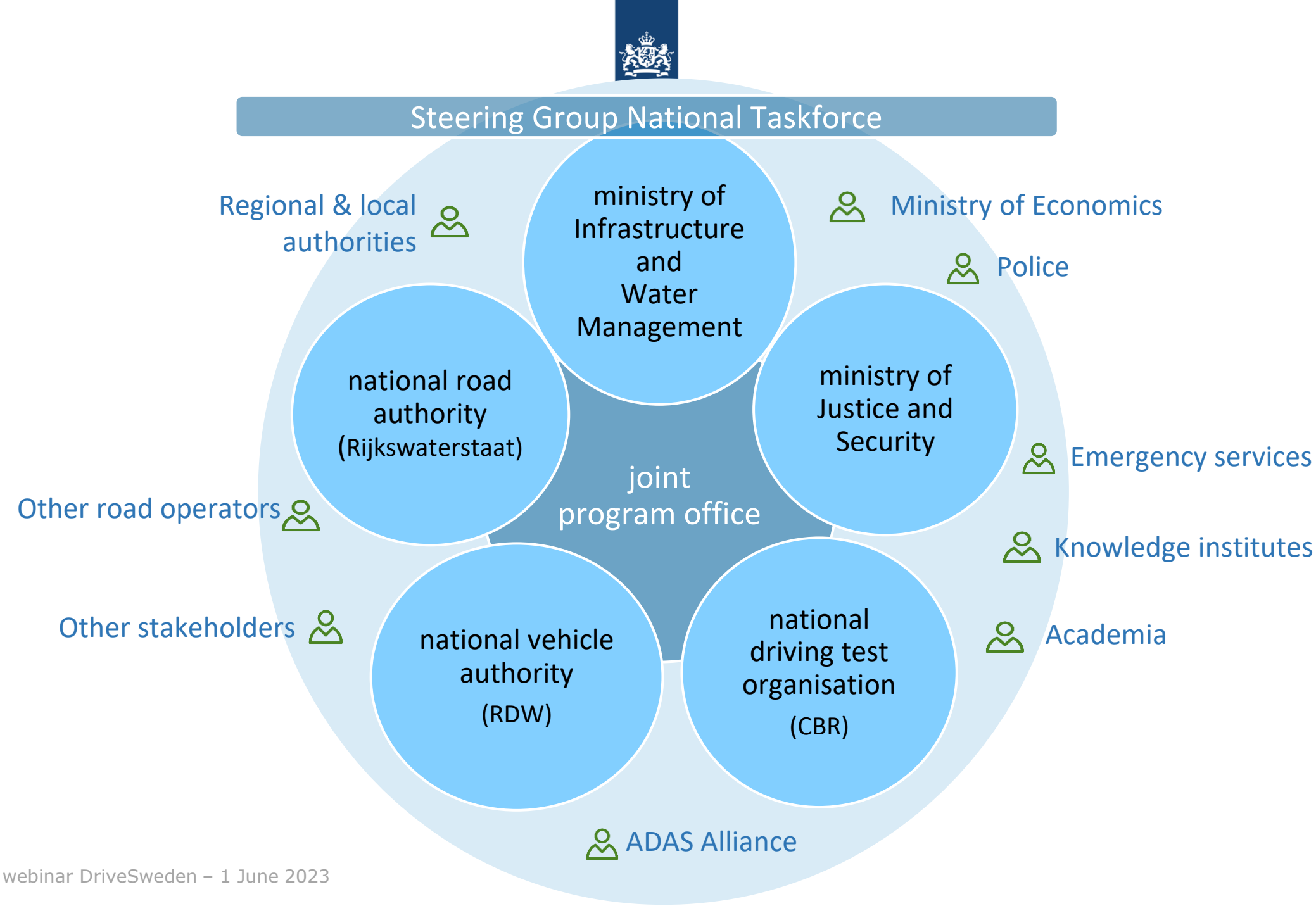
Game changer for the mobility system

affects

Large and diverse group of organisations

requires

Joint plan of action
Pooling of expertise
Programmatic approach


Steering Group National Taskforce
ministry of Infrastructure and Water Management
national road authority (Rijkswaterstaat)
ministry of Justice and Security
joint program office
national vehicle authority (RDW)
national driving test organisation (CBR)
Regional & local authorities
Ministry of Economics
Police
Emergency services
Knowledge institutes
Academia
ADAS Alliance
Other road operators
Other stakeholders

Working together on five main objectives

- ADS vehicles to drive safely and predictably in the Netherlands
- Smooth and well-executed approvals by the Netherlands
- Human skills and responsibilities well defined and enforced
- Public and stakeholders engaged
- Opportunities for the Netherlands maximised

Joint plan of action: 13 work packages

Ensuring safe operation in NL

- Providing info & guidance
- Containment of use
- Enabling testing on public roads in NL

Approvals in NL proceed well

- Preparing RDW for validation, approval and registration
- Arranging comprehensive assessments

Human skills and responsibilities clearly defined

- Allocating responsibilities human-vehicle
- Enforcement & prosecution
- Human driving skills and training

Engaging public & stakeholders

- Training bodies in direct contact with AVs on the road
- Involving citizens and stakeholders

Maximising opportunities for NL

- Deploying promising use cases
- Monitoring and evaluating the implementation process
- International regulations are suitable for NL

Information document for highways in NL

(Pre-)deployment of ‘Useful use-cases’

Hub-to-hub automated
logistics in off-peak hours.

Smart mobility.
Dutch reality.

Automated Public Transport
on Bus lanes and last-mile solutions.

Impact on road authorities: some reflections

- AVs have to adapt to the infrastructure and road traffic, like any other road user (not vice versa)
- provide traffic scenarios for validation of ALKS/ADS by EU type approval authorities
- identify road sections and areas for the containment of use of ADS
- learn what driving characteristics make AVs different from ‘conventional’ vehicles
- start collecting data about local impact on road safety and traffic flow
- start developing post-crash protocols and training road inspectors, road maintenance workers etc.
- still too early to extend ADS functionality by traffic management

Questions and discussion

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September 7

Forming the Future at Forum

Welcome to sign up!

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Thank you!

drivesweden.net
linkedin.com/company/drive-Sweden

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