Rijkswaterstaat
Ministerie van Infrastructuur en Milieu

Reinventing the steering wheel?

From systems to services in traffic management…

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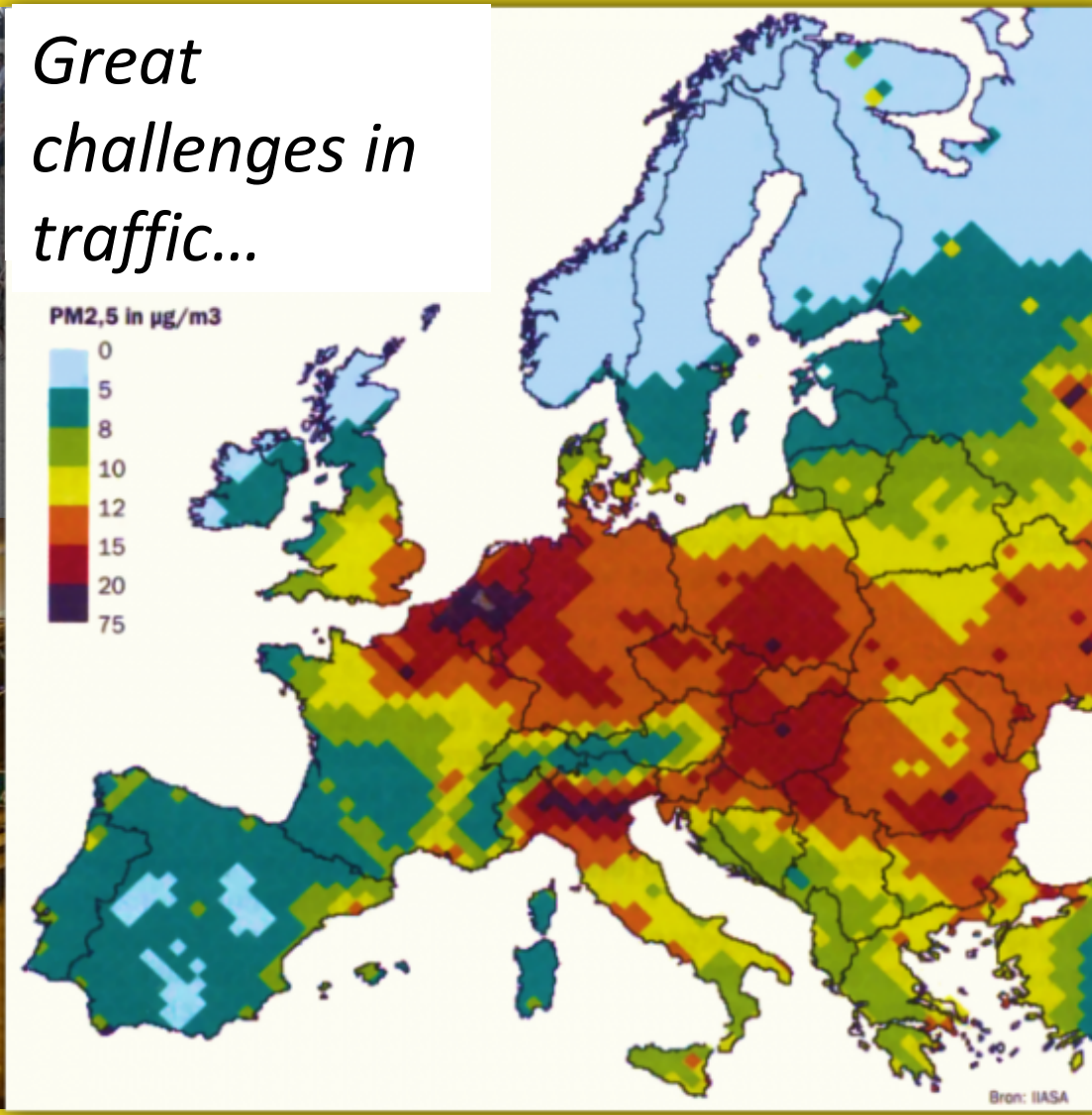
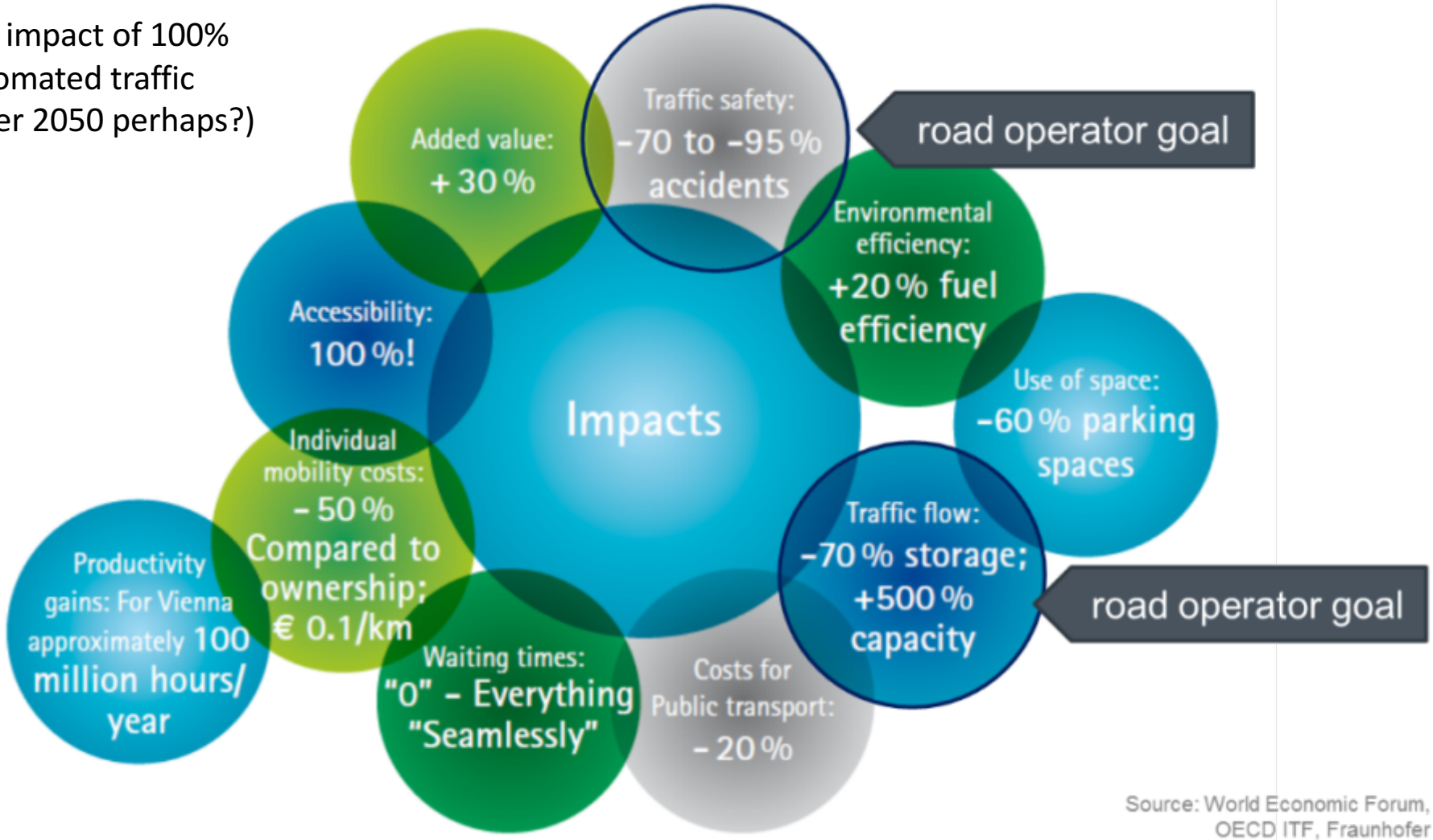
Great challenges in traffic…



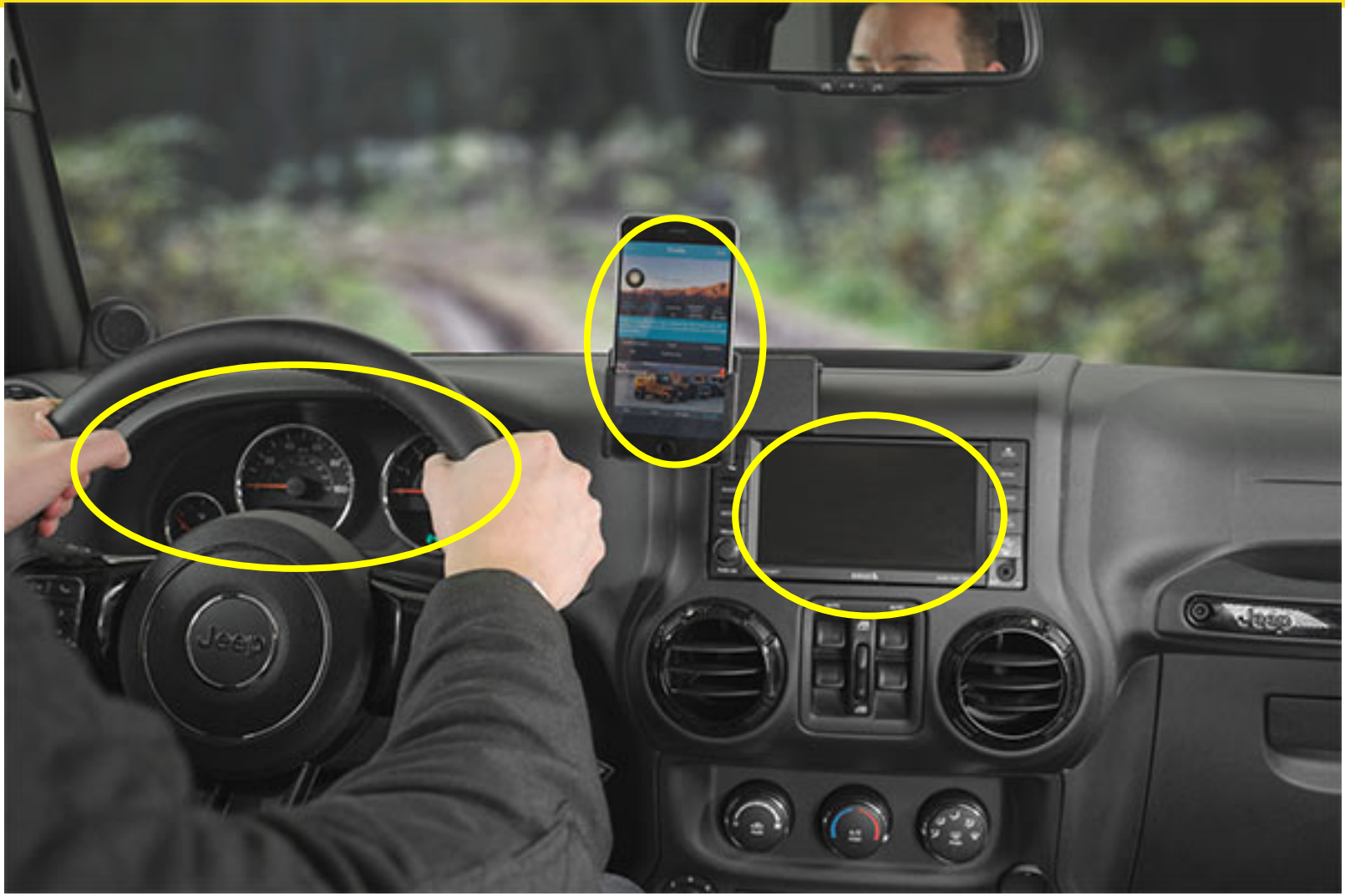
Great opportunity's?

The impact of 100% automated traffic (after 2050 perhaps?)



Human factors…

Triple distraction?



Context

- More (dense) traffic, more congestion
- Legal uncertainty, but high fines and liability
- Higher speed limits
- Conflicting policies
- High average age of car fleet, pricy updates of navigation systems
- More stress and time pressure
- Not just drivers, cyclists as well

Innovation dilemma

Innovation

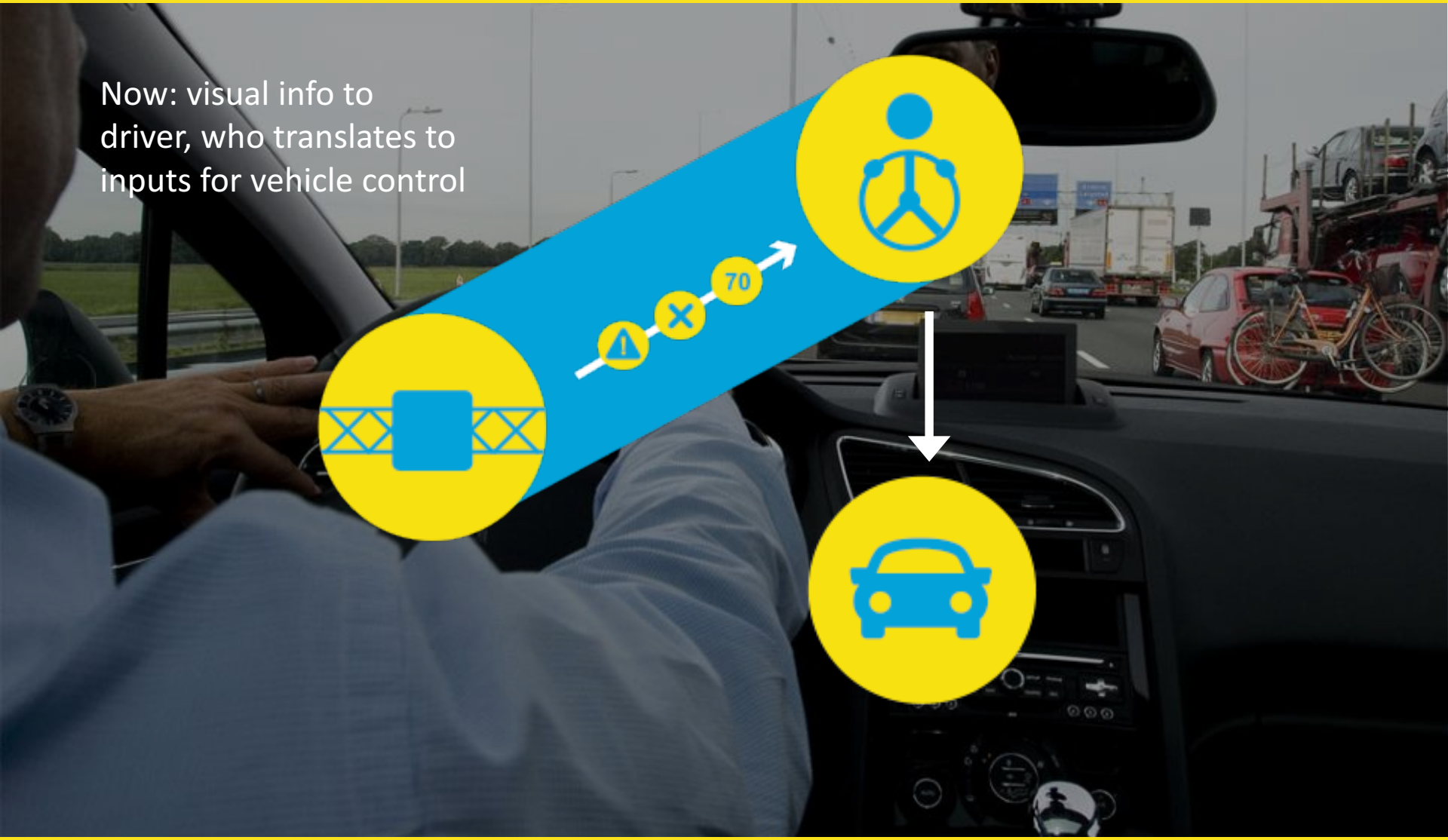
Operation

?

Strategic insights:

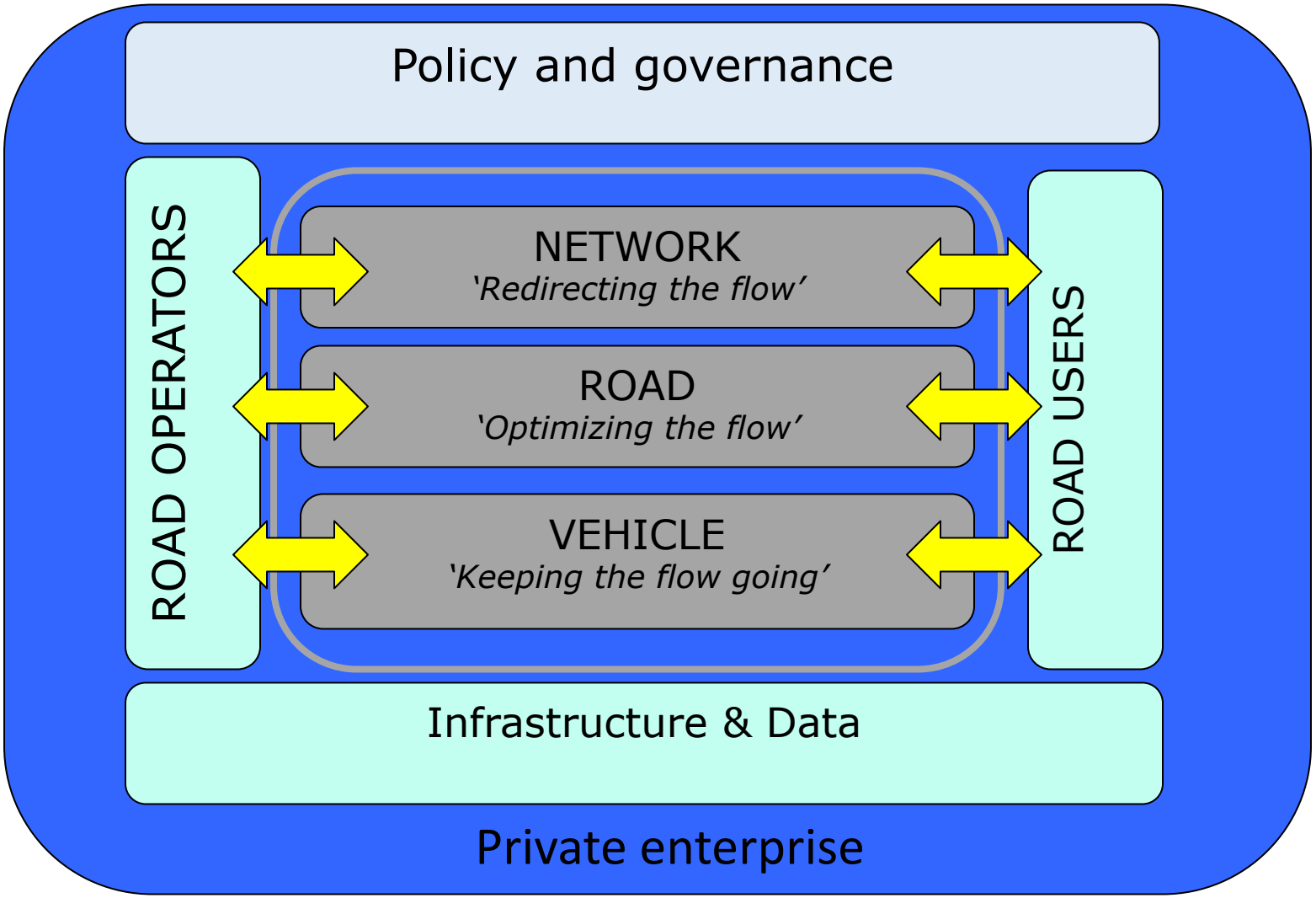
- The future is undecided, we create it together
- Innovations cannot escape the S-curve
- ’Mixed fleet’ is the new normal for decades to come
- Human factors: Avoid further complicating the driving task
- Road operators run a 24/7 life and death business that requires proven technology
- Alliances and cooperation are essential, no one can do this alone!

Now: visual info to driver, who translates to inputs for vehicle control



2030: visual info digitally available for AV's, in return for vehicle data

Traffic management 2030



Traffic Management 2030: vision of RWS

- RWS takes system responsability for traffic: Safety first, then managing for flow and emissions
- All vehicles will by then be somehow connected: A complete realtime operational picture of traffic will emerge, together with big data and AI this will lead to high granularity traffic forecasts
- Cybersecurity and privacy by design as starting point, road pricing will by then become a game-changer
- Unknown: can convergion of automated, electric and shared become disruptive?

Traffic Management 2030: vision of RWS (continued)

- Network: Joint proactive traffic management together with employers/fleetowners/transporters makes congestion prevention possible through voluntary slot management
- Road section: Platooning and speed management of AV's increases road capacity by optimizing traffic flow
- Vehicle and driver: ADAS systems, AV's and ITS services sharply reduce the amount of incidents

Impact on RWS

- We will need to join forces with other road operators
- Smart application of innovations in our processes: Building value cases for investment through efficiency gains
- Embrace automation to gain more effect in existing TM instruments.
- Substantial development needed of data(chians), digital infra and smart systems to be ready in time
- Close and direct cooperation with OEM's and telco's essential, together we create the traffic system of the future.
- Form alliances with stakeholders in mobility (logistics and mobility management): involve 'before' and after' in TM
- Educating staff, building knowledge and organizing for agility