

Traffic, fleet and ODD management for highly automated vehicles

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- Operational Design Domain – specified by the OEM & ADS provider
- The role of the road operator with regard to ODD?
- ISAD levels could be used to specify support to automated driving
- Should infrastructure support also include ODD management, e.g. restrictions to use of automated mode or ODD?
- Need for ODD-ISAD framework



- There should be a common ODD-ISAD (Infrastructure Support for Automated Driving) framework to ensure safe operation of AVs. Who should be the champion of such a framework?

- Needed especially in specific situations
 - » Incident sites
 - » Roadworks
 - » Road and winter maintenance actions
 - » Events
 - » High risk locations
 - » Etc.



- Specific situation: end of ODD
- Possible need to carry out Minimal Risk Manoeuvre
- Worst scenario for traffic management: large number of vehicles need to make MRM at the same location
- MRMs must not result in a gridlock



- Who should determine the Minimal Risk Manoeuvre allowed on a specific road section?

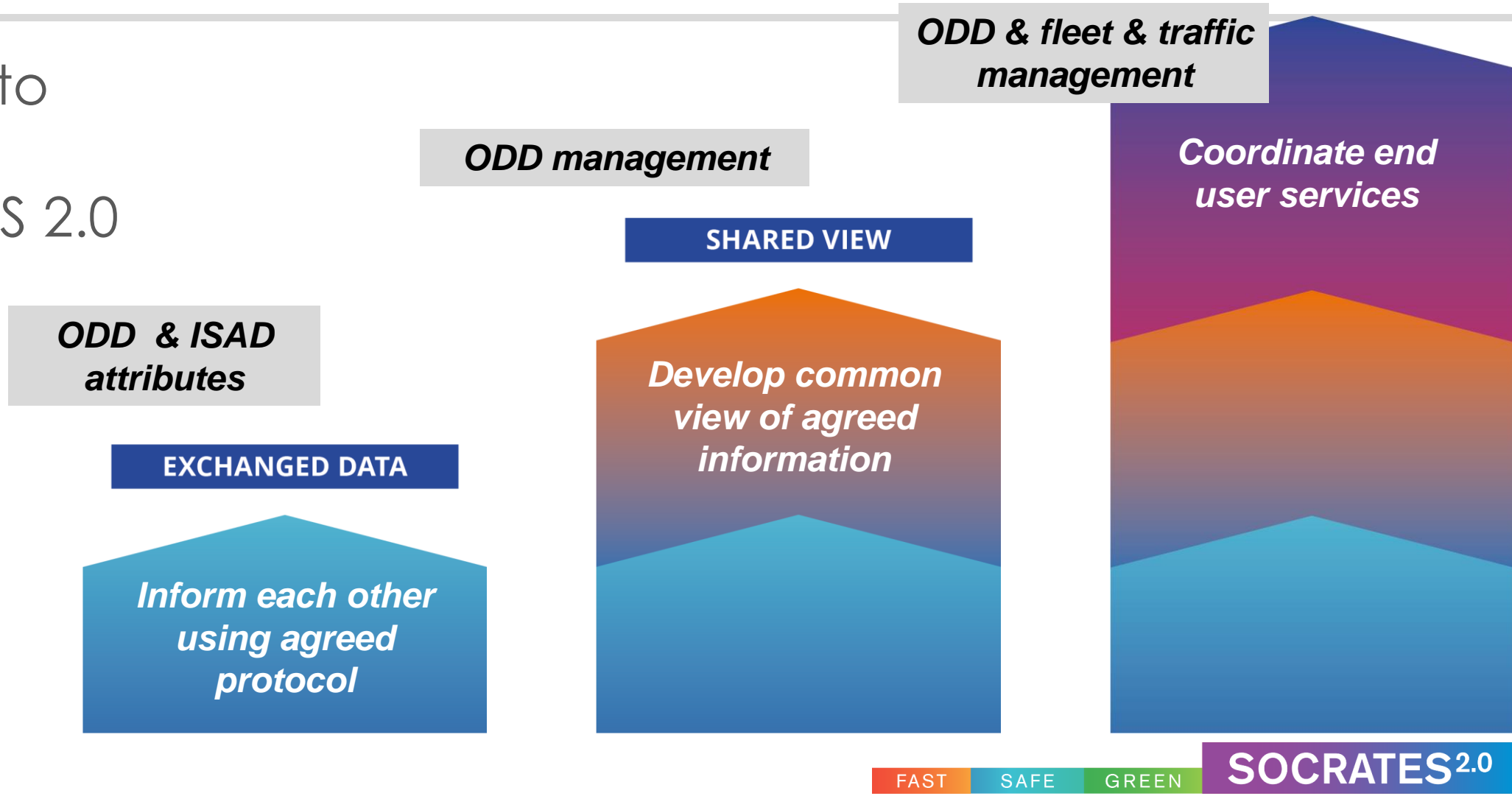
- Fleet management of AVs is a necessity for some use cases
 - » Robot taxis
 - » Shuttles
 - » Road haulage
 - » Etc.
- Remote supervision of fleet
- Close interaction and cooperation of fleet and traffic management
- Likely resulting in integration in the future



ODD & fleet & traffic management

COORDINATED APPROACH

- Analogy to TM2.0 & SOCRATES 2.0



D2.1	Vehicle fleet penetrations and ODD coverage of NRA-relevant automation functions up to 2040
D3.1	Intermediate report of the state of the art on the impact of automated and connected vehicles
D4.1	Intermediate report on infrastructural consequences
D3.2	Impacts of automation functions on NRA policy targets
D4.2	Infrastructural consequences of connectivity and automation, and recommendations for their implementation
D5.1	Draft road map - road operator core business affected by connectivity and automation
D5.2	Road map for developing road operator core business utilising connectivity and automation

Internet site: www.mantra-research.eu