Pitch Cooperation models and intermediaries

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Slide 1 Title slide

I am going to tell you some more about:

- WHY public and competing private parties work together in the SOCRATES2.0 project
- HOW the SOCRATES 2.0 framework enables the cooperation
- WHAT role so called intermediaries play in order to achieve a win-win-win

Slide 2 Partners and cities

SOCRATES2.0 is a European project in which public and private partners are realising smart traffic services and traffic management in the regions of Amsterdam, Munich, Antwerp and Copenhagen. The partners in SOCRATES2.0 define and experience sustainable public-private cooperation and business cases in traffic management.

Within SOCRATES we are applying a new cooperation framework to a set of joint services within the context of 4 pilot sites in Amsterdam, Antwerp, Copenhagen and Munich. Our goal is to test and validate the cooperation framework with different end user communities, and up to 6,000 travelers in Europe.

Slide 3 Cooperation leading to better services

Until a few years ago, road users were mainly informed and advised by road authorities in case of busy traffic, roadworks or events via roadside systems or via the radio. The road authority uses detection loops in the road and cameras for this.

Nowadays, service providers (such as vehicle manufacturers, suppliers of navigation services) also have a lot of current traffic information. With this information they inform road users (via in-car systems or mobile devices)

about the fastest or shortest route. Among other things, they obtain the information from road users who use the services during their journey (Floating Car Data) or use the data that the car records via various sensors in the vehicle (vehicle data).

By combining this public and private data, road authorities and service providers can use their advice in a coordinated manner. But that must be properly arranged (who is responsible for what, who makes the decisions and who communicates which route etc). For this reason, a new cooperation framework has been developed in SOCRATES that will be tested in practice.

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Slide 4 Win-Win-Win

In short, within SOCRATES2.0 the divided worlds of private serviceproviders and public road authorities come together, resulting in a win-win-win for all actors in the traffic management eco-system.

- Most importantly, a win for <u>road users and communities</u> with better services through a better facilitated journey,
- a win for the <u>traffic management centers</u> with enhanced overview and insights and new methods to implement traffic management,
- and a win for <u>service providers</u> that will deliver these new messages and are able to offer better end-user services.

* More elaborated:
<u>*Road users*</u>
- *Fast, safe, efficient routes*
- *Valid, consistent traffic information*

- *Personalised advice*

Road authorities/traffic centres
- *Better monitoring (FCD, origin-destination info, common operational picture)*
- *Improved traffic management measures*
- *In-car traffic management services via service providers/car industries*
- *Opportunities for cost reductions*

Service providers/automotive industry
- *Better services to their customers*
- *B2G business opportunities*
- *New services, new markets*
- *Collective benefits of automated and self-driving cars*
- *Improving safety and reducing pollution of automated and self driving cars*

Slide 5 Cooperation models and use cases

The project partners have developed the so-called SOCRATES2.0 framework on public-private traffic management. The framework defines different ways of working together and different new roles that are necessary to make the cooperation work. The cooperation framework helps public and private organizations, to setup and run interactive traffic management services.

In SOCRATES three levels of cooperation have been defined:

1. Some use cases can simply be realized based on agreements about availability and exchange of traffic data, for example actual speed and lane advice.

2. Some use cases need further cooperation, where partners create a common view of the current and even the predicted traffic situation on a network together, for example information and navigation services on road works and environmental zones.

3. And in some use cases a coordinated approach is the best option. The public and private partners develop and implement coordinated actions and services for road users. A shared view is being used as input for the coordinated actions. For example smart navigation and

parking advice to event locations or smart individual navigation advice to optimize the traffic flow on a network.

Slide 6 Intermediairies

The various use cases and coordination models each ask for one or more facilitating roles to enable the interaction between public traffic centres and private back-offices. In SOCRATES we call them intermediaries, which roles are being fulfilled by different OCRATES partners. We identified 4 roles: Strategy Table, Network Monitor, Network Manager and Assessor. The more complex the cooperation model *(Exchanged Data, Shared View or Coordinated Actions)* the more intermediary roles are needed to enable a shared view or coordinated actions. And in some cases the impact of all services/actions needs to be evaluated.

Slide 7 Intermediary roles

Let's take a closer look at the cooperation. To begin with, different partners share their (traffic related) data. This data from different sources is collected and handled by the so called <u>Network Monitor</u>. The monitor improves/enhances and distributes the data. For example, for the use case 'optimizing network traffic flow' within SOCRATES, the Network Monitor is responsible for compiling both the actual and predicted traffic state based on different dataflows from different partners.

The actual and predicted traffic state on a network is combined by <u>the Network Manager</u>, who also defines the (traffic)problem and potential effective measures to solve the problem based on available (public and private) services. <u>Serviceproviders</u> receive so-called Service Requests from the Network Manager, and will translate these requests into traffic- and navigation services for road users.

The Network Manager is guided by the input from the so-called <u>Strategy Table</u>. All involved partners (public and private) are invited to this table to identify the goals for traffic management and translates these into measurable KPIs for traffic management.

The Assessor collects, validates and reports the impact (value) of public and private services to the defined KPIs. The Assessor can also be responsible for implementation and management of a reward system based on the reported impact of services to specific KPIs.