FAST SAFE GREEN SOCRATES2.0

Socrates2.0 Cooperation Framework

The Socrates2.0 project

In the European project SOCRATES2.0, a consortium consisting of eleven public and private organisations try different ways of working together to realise new or enhanced smart traffic information and navigation services. The partners are defining and piloting sustainable public-private cooperation and business cases in traffic management, resulting in the so-called Socrates2.0 Cooperation Framework. This is an important step in the direction of implementation of future (in-car) smart mobility services.

The SOCRATES2.0 Cooperation Framework

All Socrates2.0 partners believe that by cooperating more business opportunities for private partners can be developed, more cost effective traffic management for public authorities achieved, and, maybe most importantly, better services for road users and communities provided, thus creating a so called "Win-Win-Win" for all stakeholders. The goal of Socrates is to test if this added value is actually created by a closer cooperation and find out how this can lead to a sustainable business cases for all stakeholders.

To facilitate this, the Socrates2.0 partners created a Cooperation Framework consisting of a set of cooperation models and enabling "Intermediary roles" to support these cooperation models. The cooperation models are based on the level of maturity of the collaboration (figure 1). The basic level comprises of simple agreements for sharing public and private traffic data, based on agreed data exchange formats ("Exchanged data"). Bringing the cooperation a step further, partners can create a common view of current and predicted traffic situations on a network, based on the shared data ("Shared view"). The most mature level of cooperation arises when based on the created common view, partners develop and implement coordinated actions and services towards communities of travelers ("Coordinated approach").

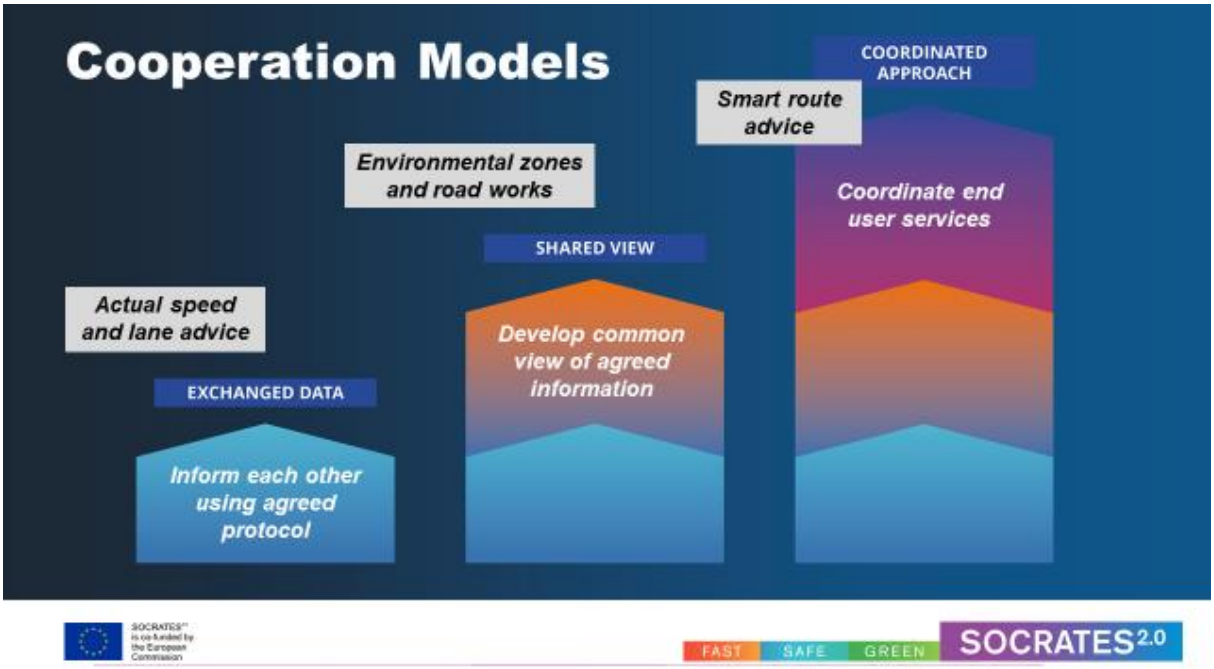

Figure 1 – The SOCRATES$^{2.0}$ Cooperation models

Enabling the cooperation models, Socrates$^{2.0}$ partners developed the "Intermediary Roles" Strategy Table, Network Monitor, Network Manager and Assessor.

Dependant on the level of maturity of the cooperation, partners need functions to actually exchange data, develop a common view and define the coordinated approach to road users. Added to that, impact also needs to be evaluated in order to create feedback to the cooperation (Figure 2).

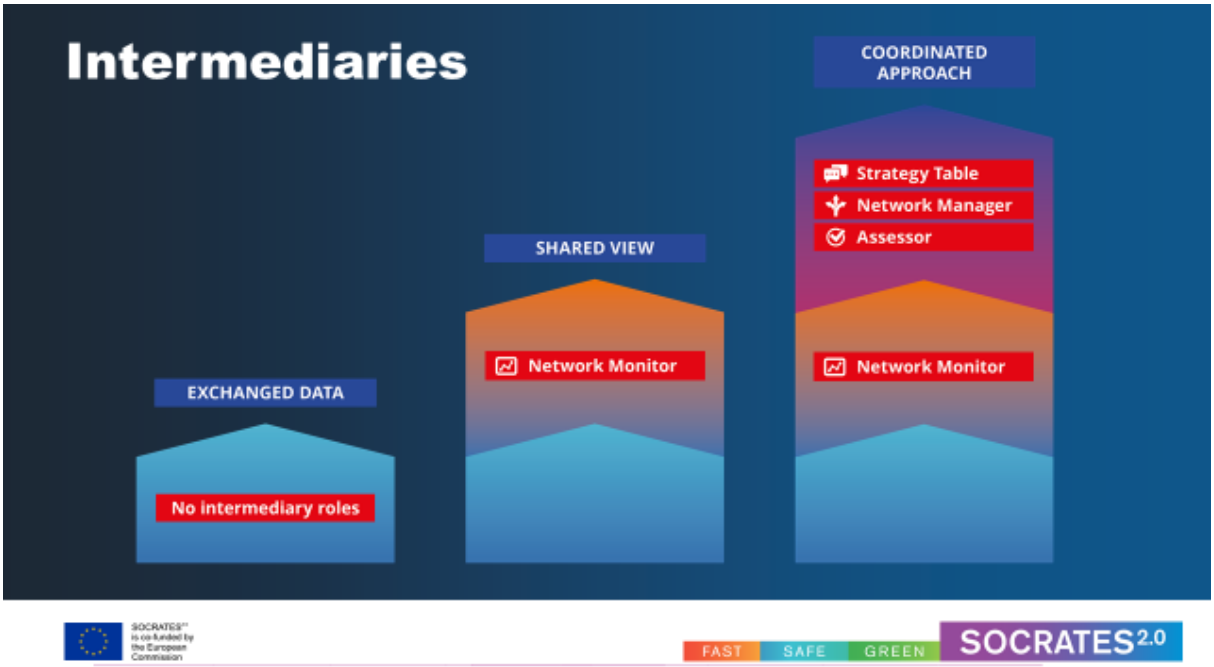

Figure 2: Intermediary roles

When partners decide to cooperate by sharing their data and based on that create a common view, the Network Monitor functions need to be implemented. This implies providing data collection, -fusion and -completion activities and determination of the common current (and if possible predicted) state for a pre-defined use case related network and indicators. Partners then can base their own services on a higher quality based shared view.

When partners aim for a joined approach to inform the road user, they need to decide on common goals (KPI's) and confront them with the current (or predicted) traffic state and identify effective measures to solve (potential) problems. By executing assessment of impact partners can then determine what measures are effective and create impact.

The level of cooperation is determined at the Strategy Table. This is the meeting place <counsel/assembly> to establish and monitor strategic cooperation between public and private parties. It focuses on finding common goals of both public and private partners, which then are being translated into measurable KPI's. When necessary and agreed, the Strategy Table will also define guidelines and principles for ranking and/or rewarding the level of impact delivered by public and private parties. This to be monitored by the Assessor.