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**Cooperative proactive traffic management  
in the Metropolitan Region of Amsterdam**



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# Problem description

The problem is twofold:

- More infrastructure demand than supply causes severe congestion in the densely populated Metropolitan Region Amsterdam (*main cause*)
- Start of re-routing measures to distribute traffic over the available network when congestion already has established itself (*current measures inadequate*)



# Proposed Solution

Pro-active traffic management: re-routing traffic while the chance on congestion is increasing but traffic is still flowing

How?

- Public and private partners build a common (predicted) operational picture and common goals, KPI's, and conditions for re-routing
- Orchestration of cooperative proactive traffic management by establishing intermediary roles

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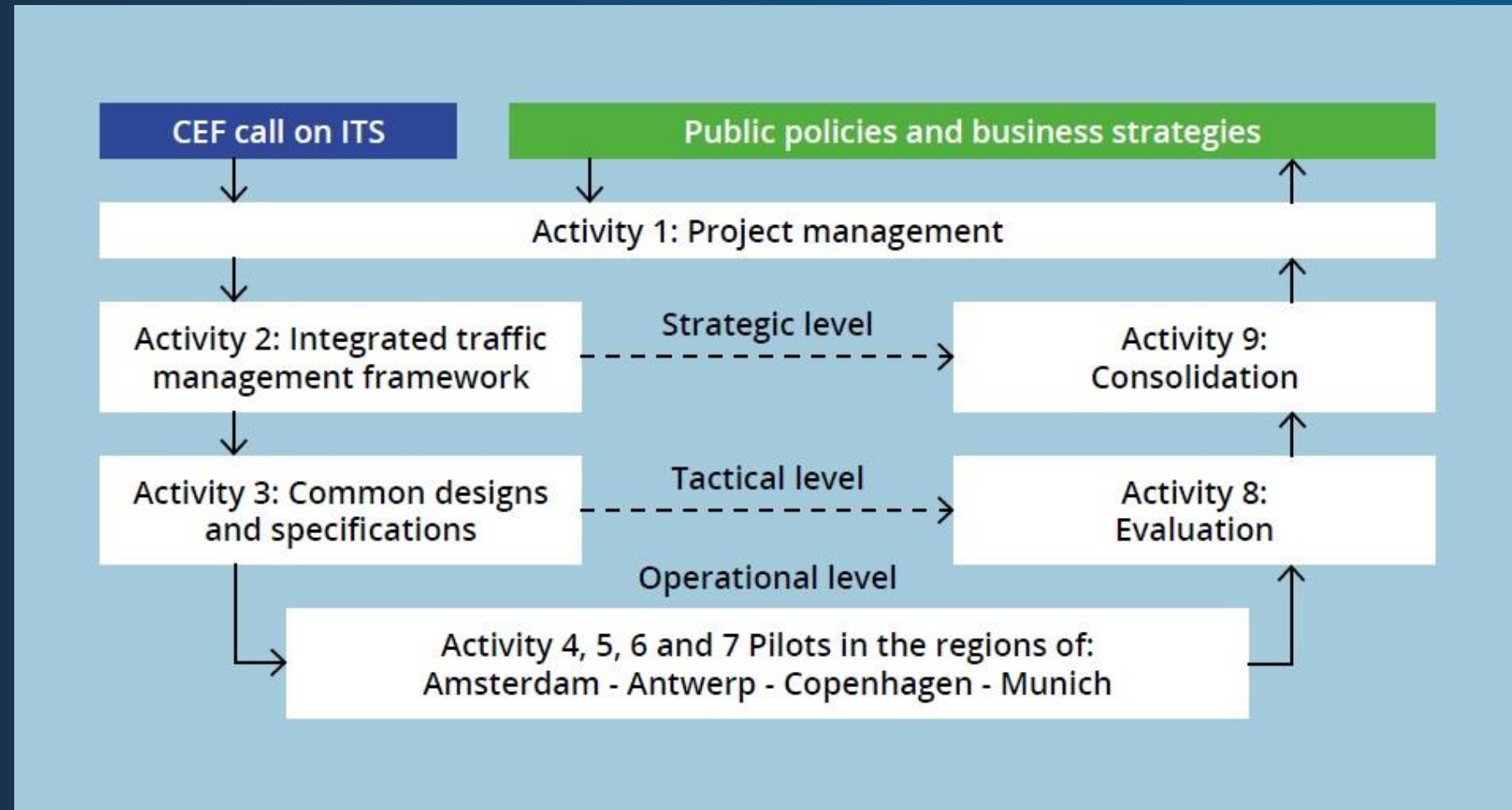


<https://socrates2.org>

# Project set-up

V-model:

- > Framework
- > Design
- > Piloting
- > Evaluation
- > Consolidation



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# Pilot Site Amsterdam, active partners:

- Coordinated and Integrated Traffic Management
- Public and Private partners active at an operational level:
  - 5 Data providers (Be-Mobile, BMW, HERE, NDW, TomTom)
  - 3 Road Authorities with TMC (Municipality Amsterdam, Province North Holland, RWS)
  - 4 Intermediaries (MAPtm, NDW, RWS, Technolution)
  - 4 End-User Service Providers (Be-Mobile, BMW, BrandMKRS, TomTom)
  - 1 Co-financer (CEF-EU)



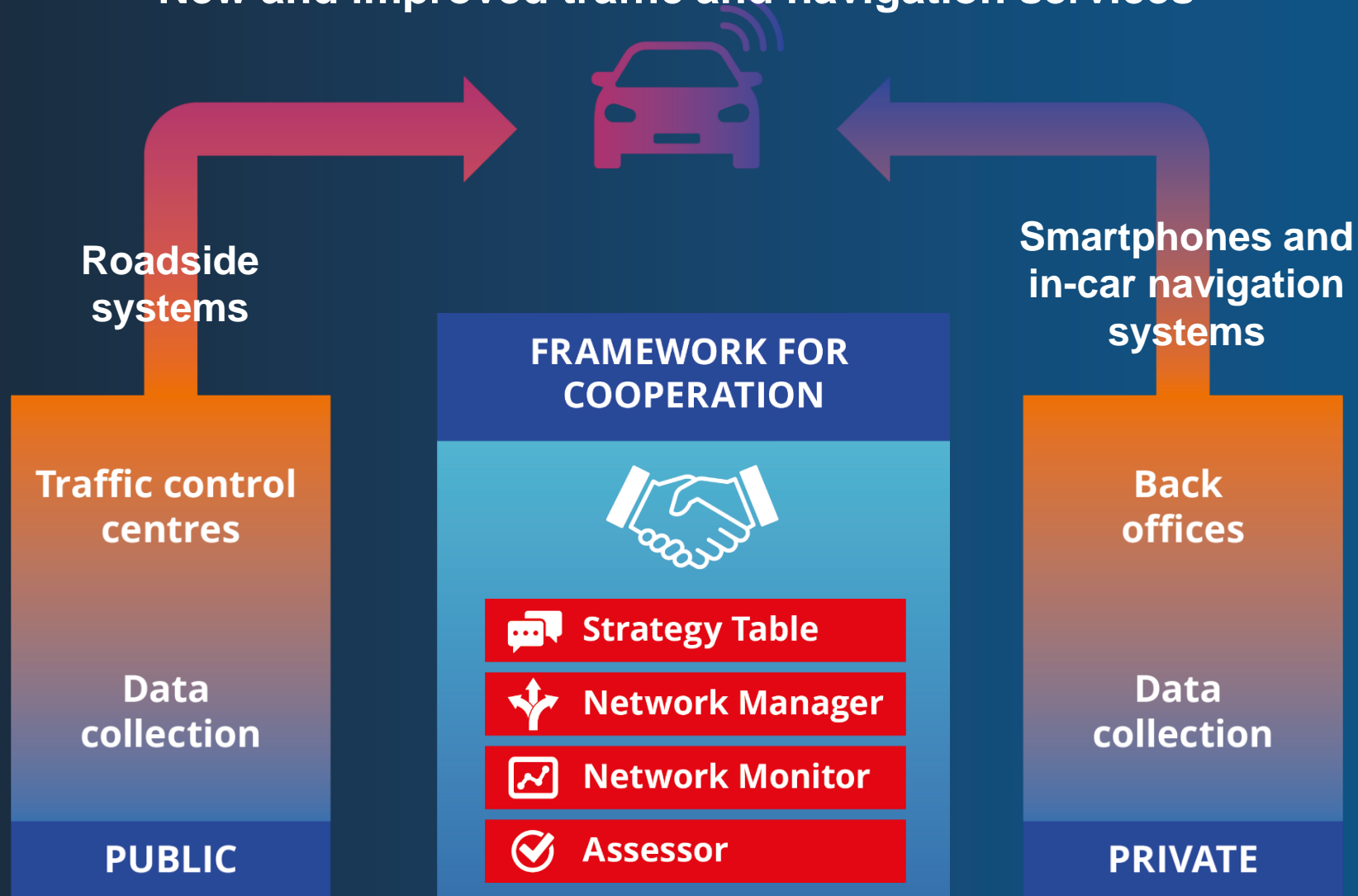
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# New and improved traffic and navigation services



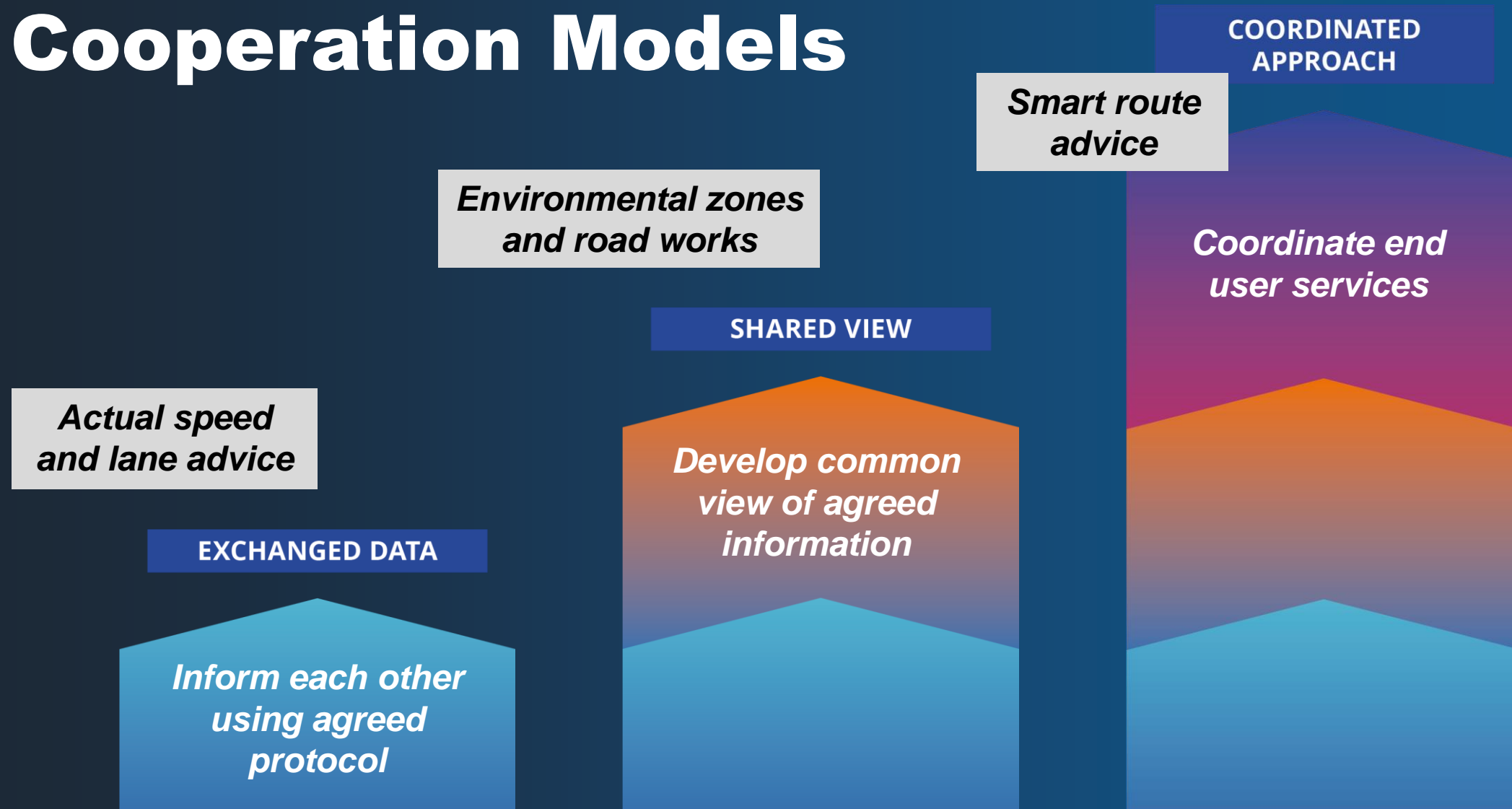
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# Cooperation Models



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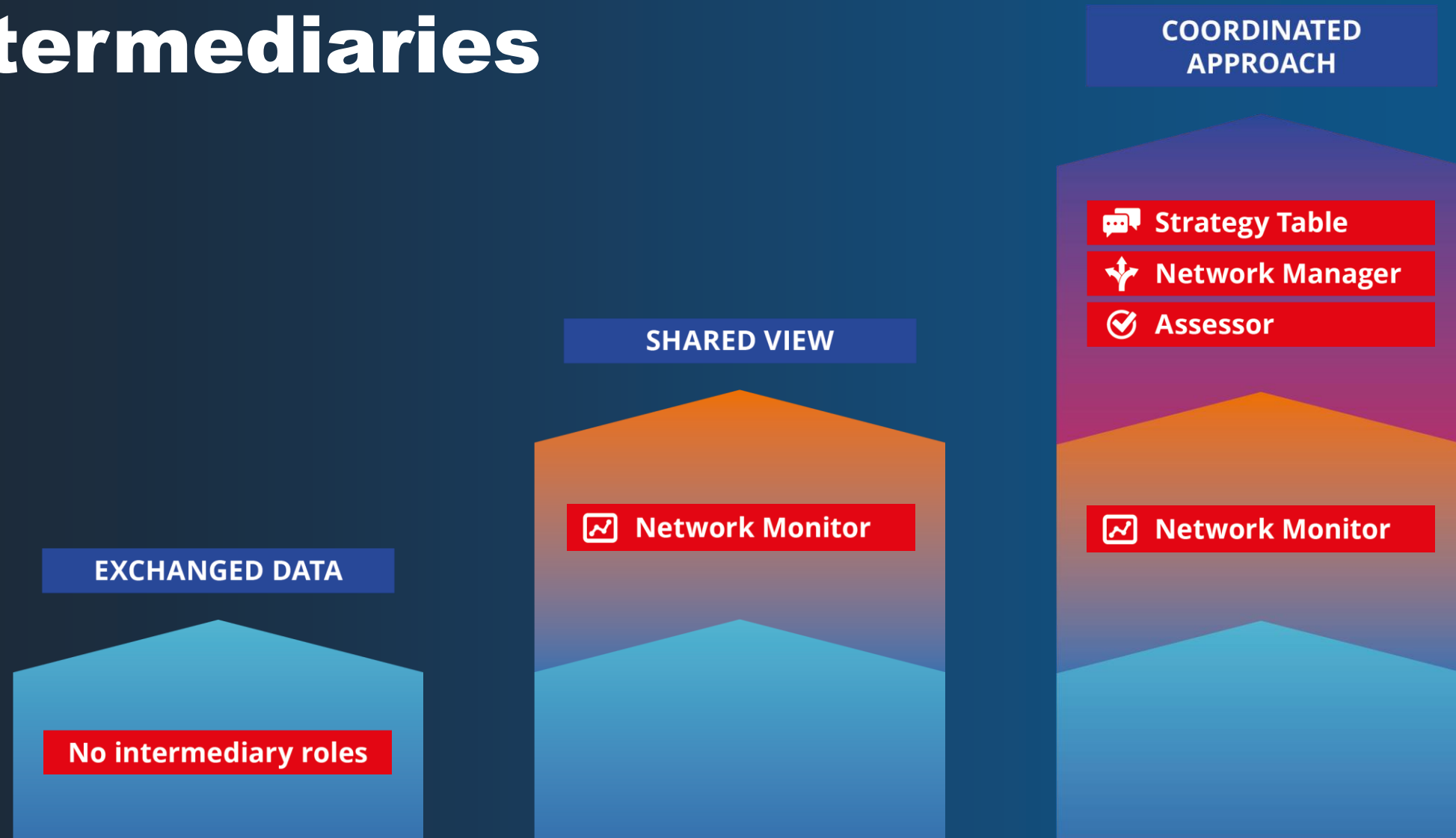
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# Intermediaries



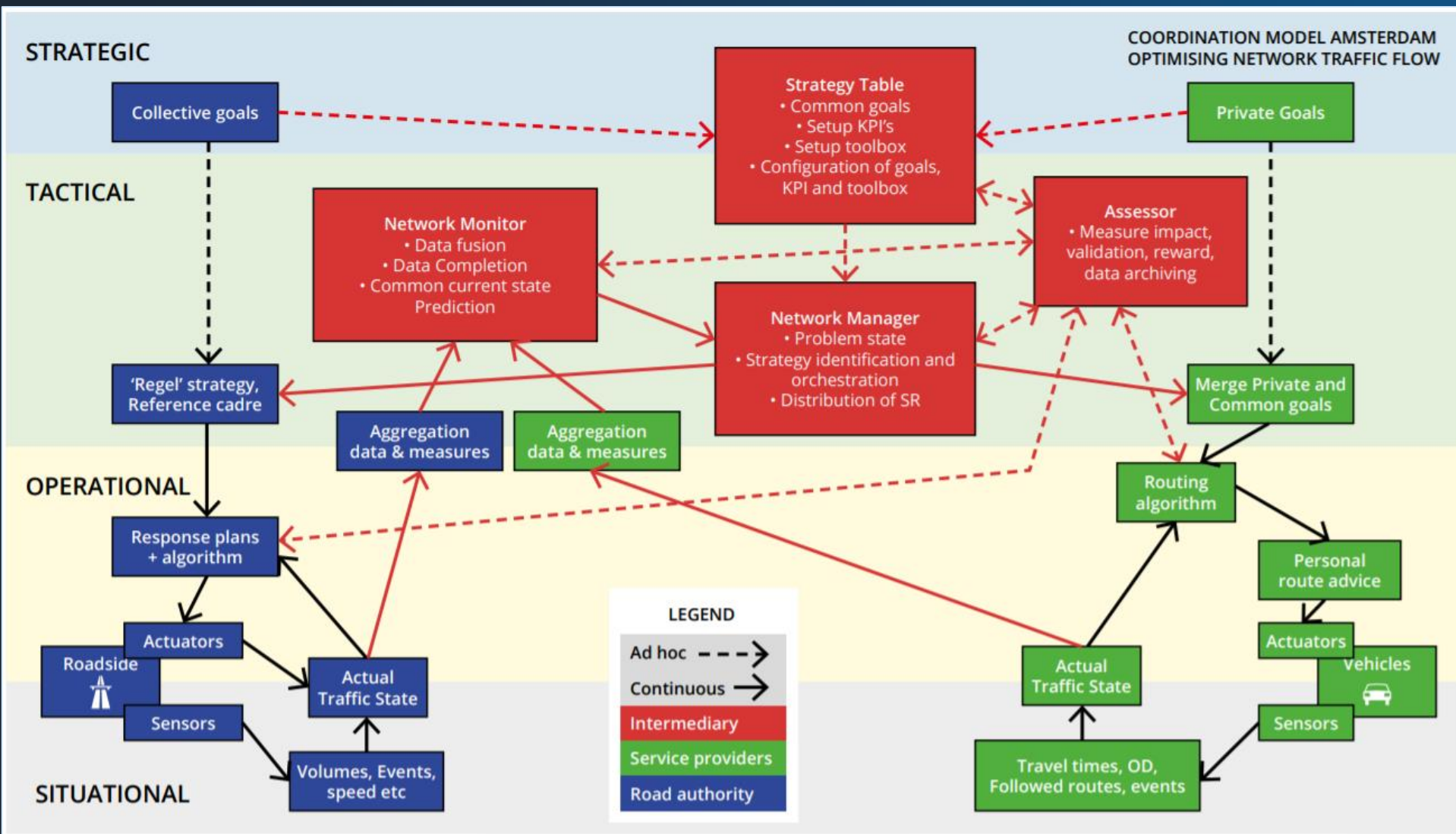
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## Public data providers

- NDW

## Private data providers

- Be-Mobile, BMW, TomTom, HERE

## Public and Private services to end users

- Rijkswaterstaat, Province North Holland, Amsterdam
- Be-mobile/Flitsmeister, BMW, TomTom, BMKRS

## Strategy Table

- MAPtm, NDW
- Rijkswaterstaat, Province North Holland, Amsterdam
- Be-mobile/Flitsmeister, BMW, TomTom, BMKRS

## Network manager

- Rijkswaterstaat and Technolution

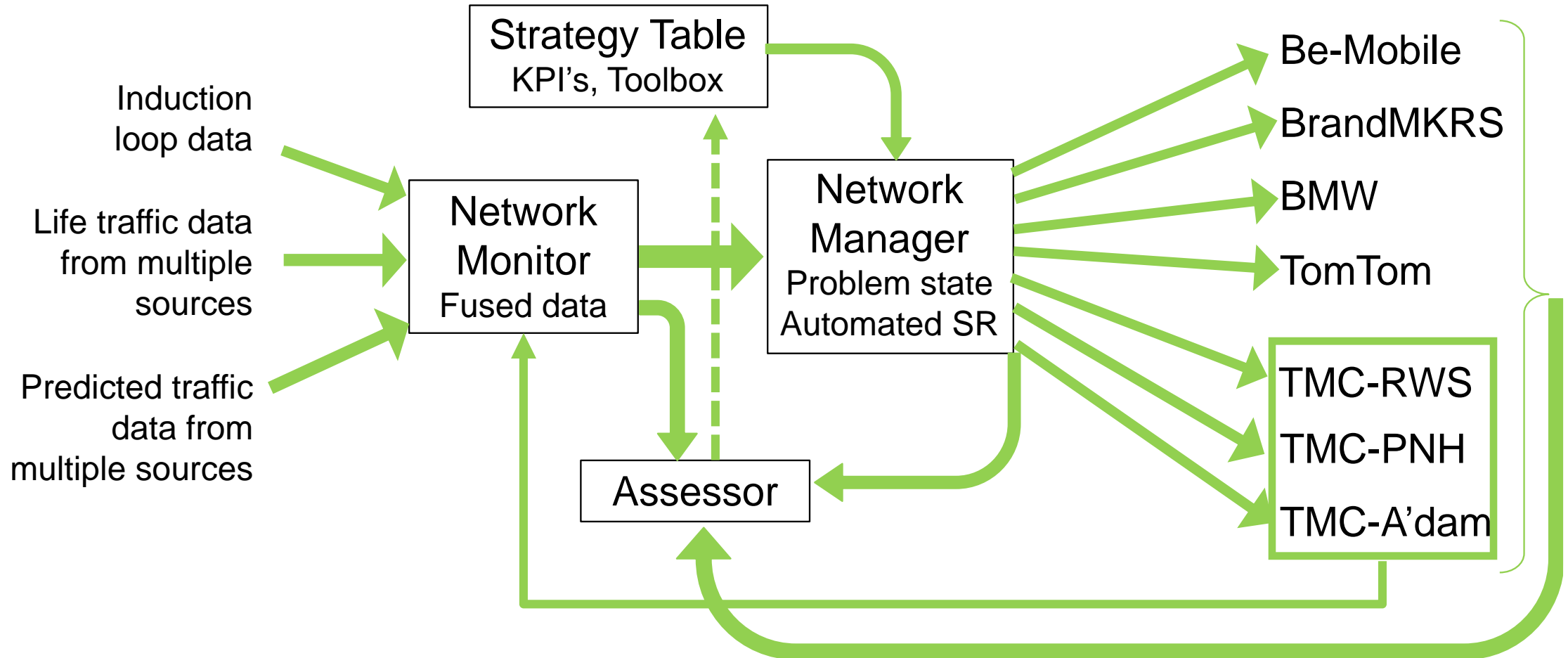
## Network monitor

- NDW

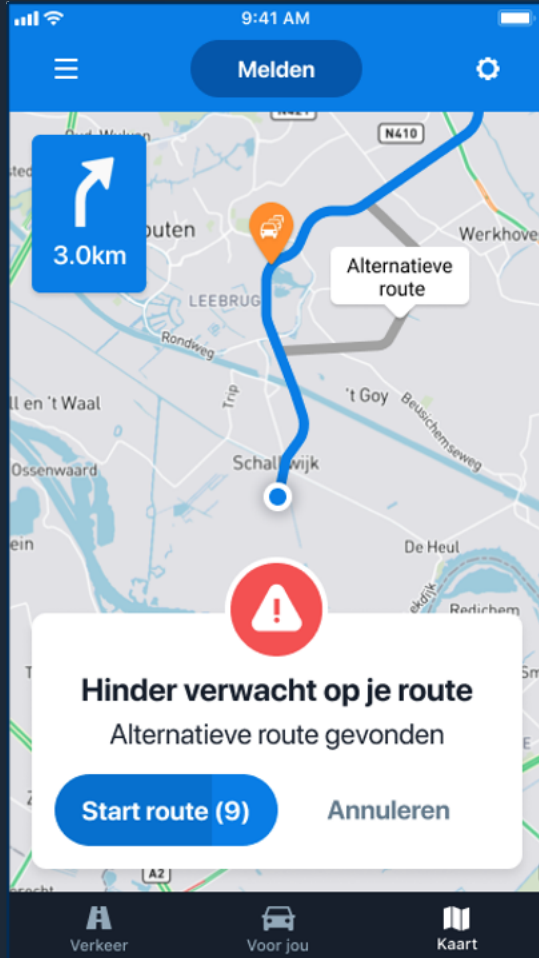
## Assessor

- MAPtm

# Overview information flow (high level)



# End-user Service BeMobile / FlitsMeister



1	NMa: <b>"AVOID Link X"</b>
2	FM: Identify all ongoing <b>trips A</b> that will <b>pass Link X</b>
3	For those trips: Calculate <b>fastest alternative route B</b>
4	If travel time B – travel time A < +15 minutes: <b>Offer to re-route via B (showing different messages depending on cause)</b>
5	User <b>accepts</b> offer: <b>New route B</b> which avoids Link X
6	User <b>rejects</b> offer / does nothing: <b>Route A</b> via Link X is kept



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