



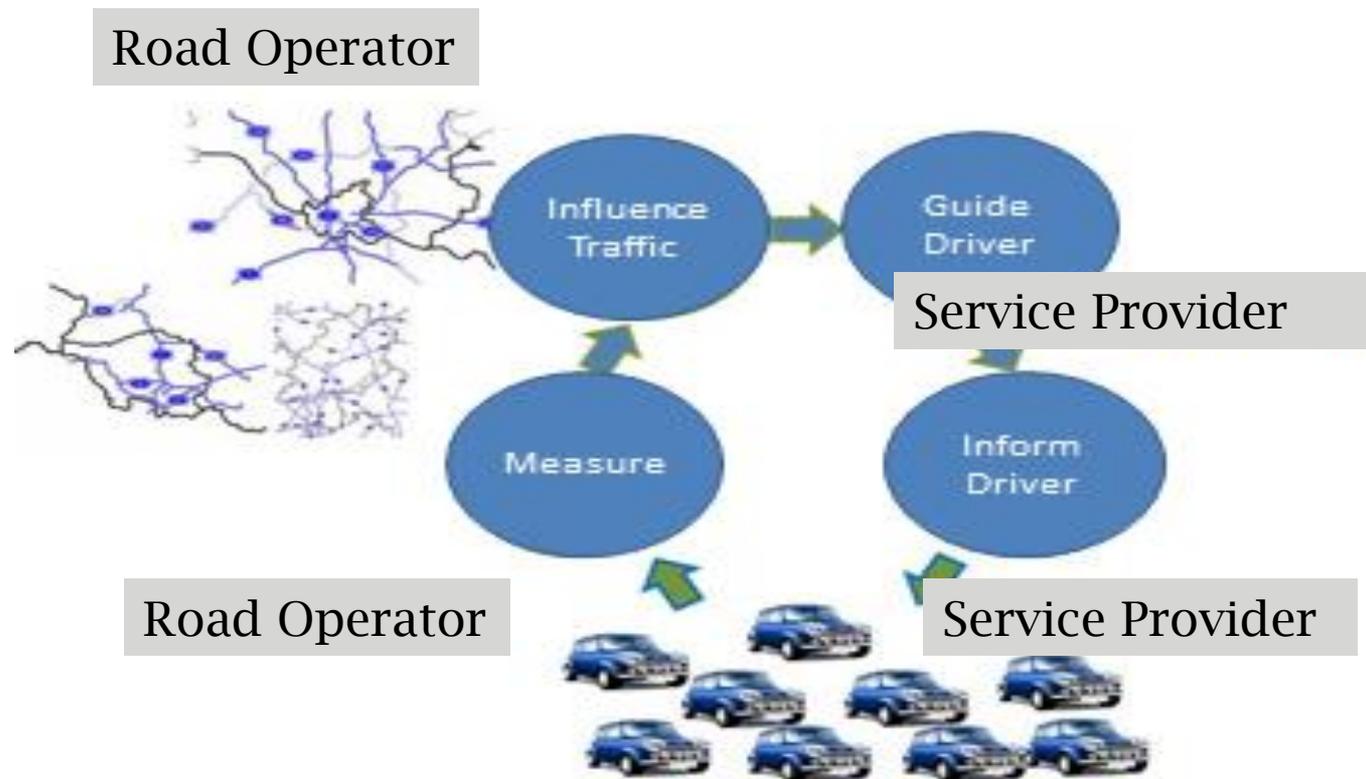
ENABLING VEHICLE INTERACTION WITH
TRAFFIC MANAGEMENT

Enabling vehicle interaction with traffic management

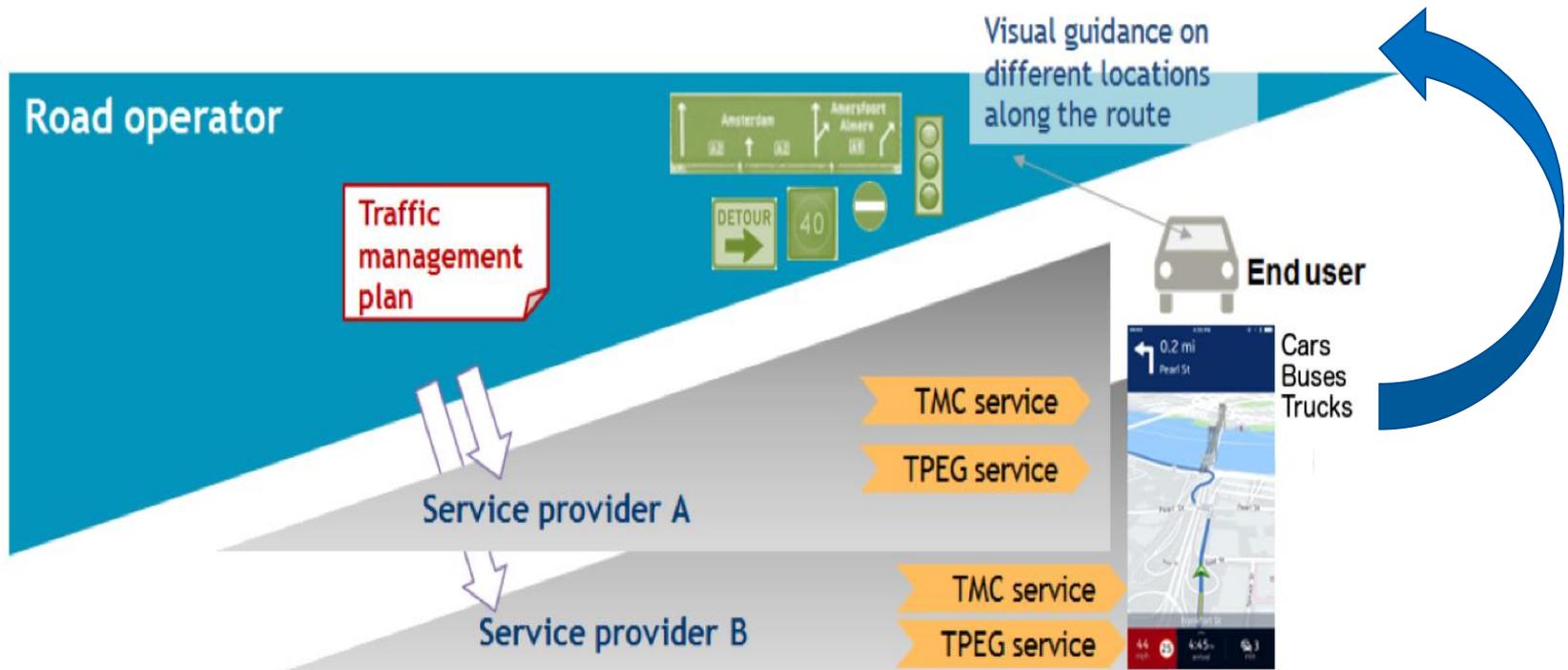
Dr. Johanna Tzanidaki
Director Innovation & Deployment
ERTICO ITS Europe

Traffic Management: Traditional Situation

Road operators & service providers



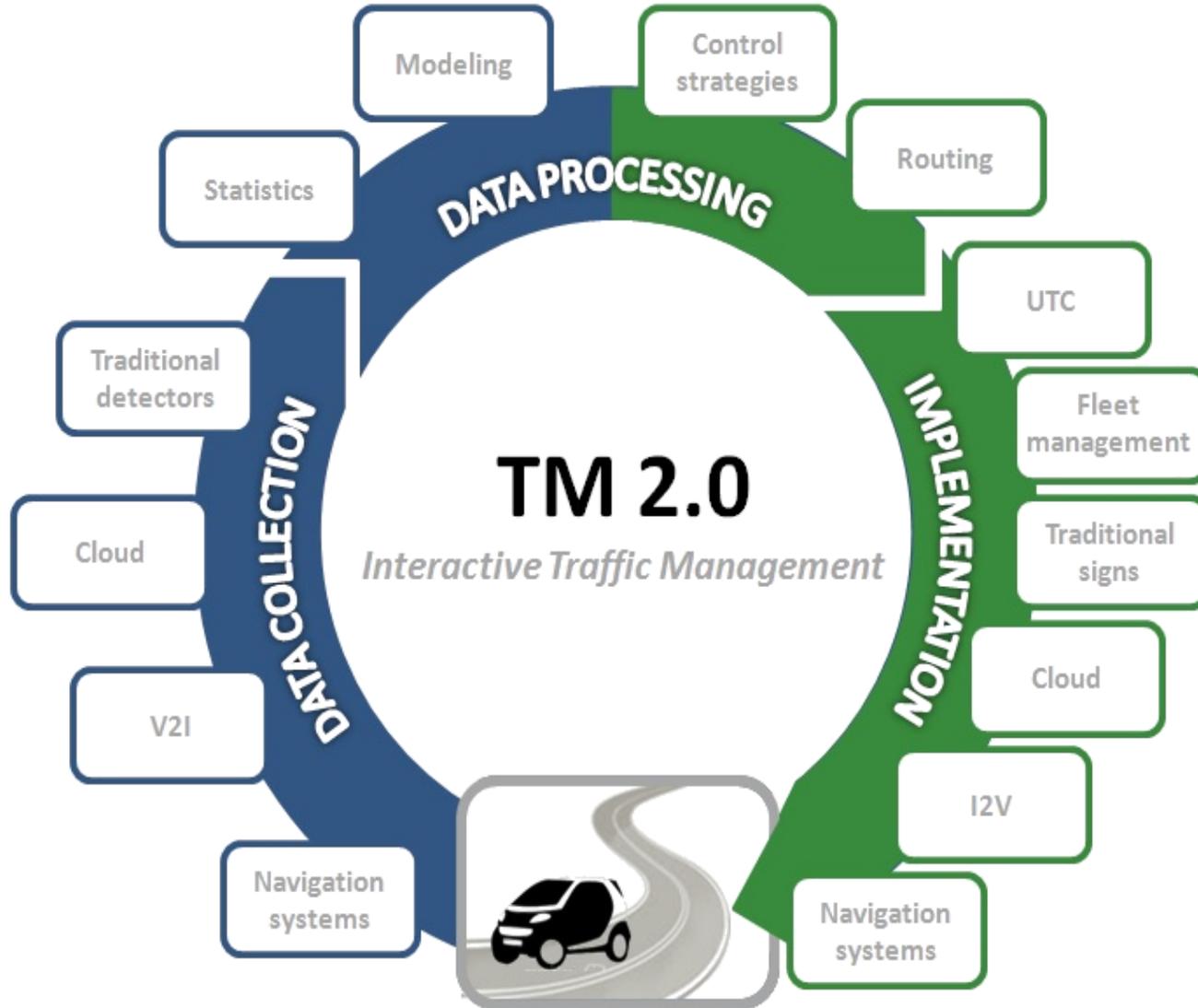
TM2.0 - Towards active Traffic Management



Coherence of

- traffic management plans provided by road authorities with
- dynamic traffic information provided by traffic service providers with
- guidance provided by navigation service providers

The TM 2.0 Process



TM 2.0 added value for stakeholders

City administrators / traffic managers

-  *avoid congestion and traffic collapse*
-  *avoid unnecessary emissions*
-  *improve TMP complementing or replacing loop detectors and enhancing accuracy*
-  *TMPs measures reach driver directly*
-  *FCD-enabled TM even in roads with no ITS (scalable)*

Drivers

-  *avoid congestion: more relaxed driving*
-  *receive relevant regional information in-vehicle*
-  *improved road safety through smoother traffic flow*
-  *best route options aligned with TMPs*

Traffic information service providers

-  *provide best route option for the destination (not only fastest)*
-  *provide information that goes beyond congestion*
-  *provide solution (best route option) not the problem (congestion info) well in advance*
-  *regional information becomes part of an integrated service*

Masterplan of TM 2.0: Timeline



- To set up TM 2.0 pilot schemes (2018)
- Certification of TM 2.0 systems and services (2019) (C-ITS deployment)
- Deployment of TM 2.0 services in mixed traffic (2020)
- TM 2.0 for Cooperative, connected and automated mobility CCAM (2025)
- TM 2.0 networks (2028) (CCAM) + TM as part of MaaS (2030)

Task Forces I - Concluded

Title	Topic
Viability analysis and recommendations	collected the experiences and lessons learned from recent European initiatives and projects in the domain of innovative traffic management
Barriers and enablers	survey the latest developments and trends which may facilitate the development of innovative traffic management services and the areas where more work is needed and specific actions should be undertaken
Principles for data	provide the basis for data exchange between traffic management plans and procedures and in-car service providers, which should enable TM 2.0 services. most important TM 2.0 services <ul style="list-style-type: none"><li data-bbox="929 1339 1734 1386">• Advanced navigation services<li data-bbox="929 1396 1875 1428">• Adaptive and dynamic traffic

Task Forces II - Concluded

Title	Topic
Deployment steps	Identification of steps that need to be taken towards the concrete deployment of the TM 2.0 concept in selected geographical areas
TM 2.0 Quantification of Benefits	Definition of a methodology for the Quantification of Benefits of TM2.0 by simulating TM 2.0 on two specific cities (Verona and Thessaloniki)
Role of Automation in Traffic Management- Phase 1+2+3	assess how the gradual road presence of automated vehicles, at automation level 3 and above, will affect the current Traffic Management practice

Task Forces III –Concluded

Title	Topic
Contractual agreement and schemes	Suggest elements facilitating contractual agreement and schemes facilitating win-win cooperation and development of Business Models for the relevant stakeholders. Define why TMCs would exchange TMPs with Service Providers (different levels of cooperation: mandatory forwarding of TMPs to optional forwarding of TMPs) and related Business Models
Exchange of Best Practices on deploying TM 2.0	Based on concluded task force: identify Best Practices on the deployment of aspects (individual components) of the general TM 2.0 concept, and collect them on a template/Survey format (on roles of stakeholders, etc.)

Task Forces IV – Concluded

Title	Topic
Guidelines for stakeholders: Public Authorities as Service Providers	Further develop the concept of TMP exchange and the role of the Public Authorities
Traffic Management and links to other modes and interfaces	Speed up the development of innovative solutions for advanced active traffic management by linking to intermodal and syncromodal interface (focus logistics)
Masterplan	develop a short (2020), medium (2025) and long-term (2030) vision and to agree on a roadmap for the TM 2.0 Platform for the period 2020-2030.

Task Forces V – Ongoing

Title	Topic
TM 2.0 – Maas	work towards defining the functionalities of TM 2.0 (influencing & informing on traffic) and how these enable MaaS services. It will also aim at piloting the results at urban & motorway level and Extending this “proof of concept” towards multi-modal services .
TM 2.0 as trusted network	The TF will define Elements of Trust, TM 2.0 modules (Step-based approach on implementing TM 2.0 in practice) and TM 2.0 “ seal ” (awarded to TM practices upon request)

TM2.0 current members (1)

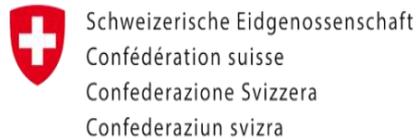
Associations



Vehicle Manufacturer



Public Authorities



Swiss Confederation

Swiss Federal Roads Authority FEDRO



TM2.0 current members (2)

Research



Service Providers



Suppliers



TTI





Shaping intelligent mobility for Europe together