TPEG for Cycling

NAPCORE Mobility Data Days
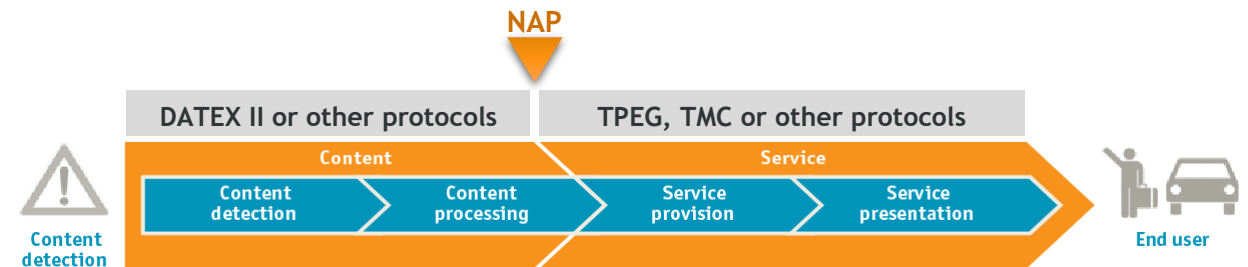
Matthias Unbehaun
TISA Executive Director
Nov 2023, Budapest

TISA
Traveller Information Services
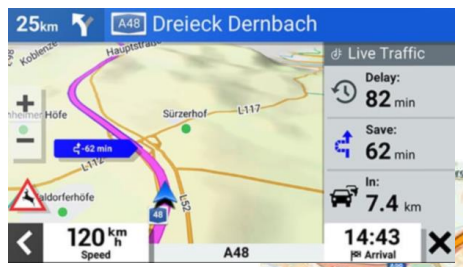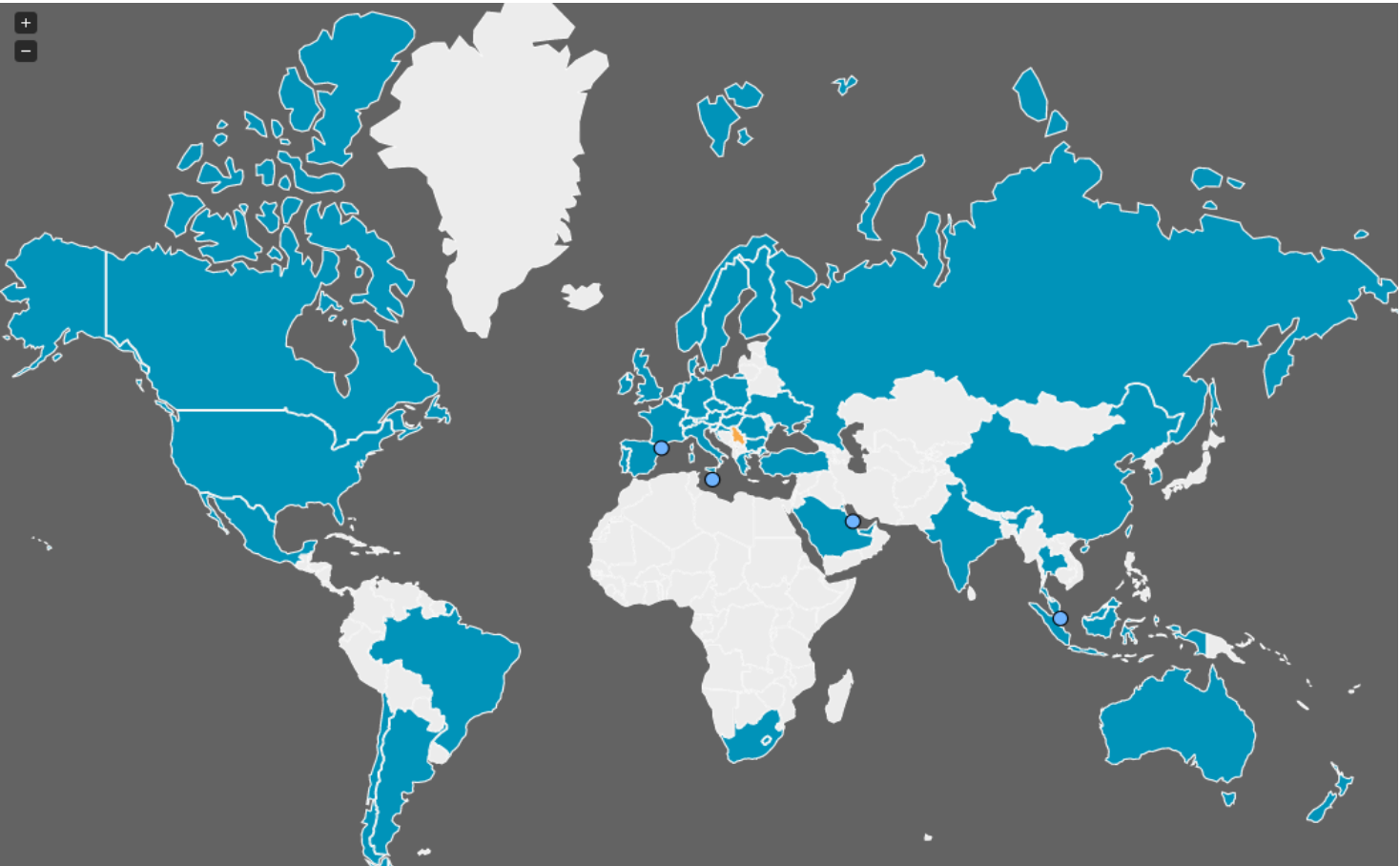Association

TPEG2 — a toolbox

TPEG2 is a set of international standards for the provisioning of **real-time** traffic and traveller information **services to end users.**

- Traffic Event Compact (TEC)
- Traffic Flow Prediction (TFP)
- Weather Information (WEA)
- Parking Information (PKI)
- Fuel Price Information (FPI)
- Road and Multimodal Routes (RMR)
- Emergency Alerts and Warnings (EAW)
- Electromobility Information (EMI)
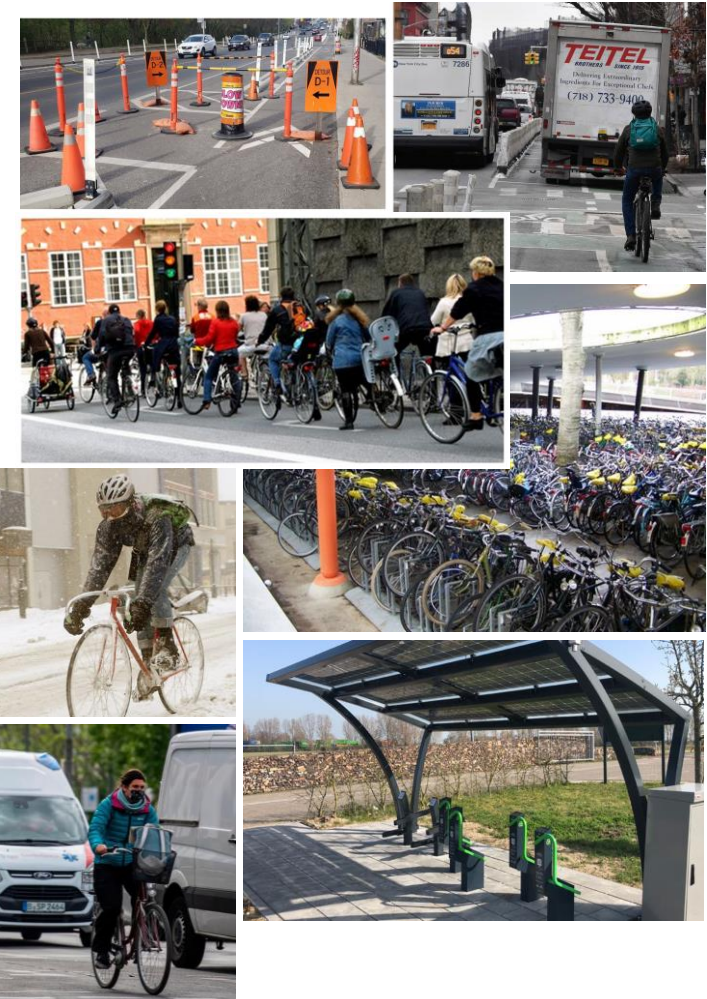
... plus some more applications and housekeeping protocols

TPEG Coverage worldwide (2023)

Some ideas how to use TPEG Technology for informing Cyclists

- Traffic Event → bicycle path closures (planned) and blockages (unplanned)

- Traffic Flow Prediction → bicycle traffic congestions

- Bike Parking Information → major problem in some cities like Amsterdam or Copenhagen

- Weather Information → surely affects bike riders' decisions on mode of transportation

- Emergency Alerts and Warnings → does of course also affect bicyclists

- E-bike Charging Information → "Electric bicycle sales are growing 16x faster than general cycling." *(source: electrek.co)*

DATEX II & TPEG2 could have a head-start …

- DATEX II and TPEG2 work 'hand-in-hand', Road Operators and Service Providers know how to use it
- TISA can, based on the renovated TPEG2 Protobuf with AMQP/MQTT quickly turn around a TPEG-4-Cycling protocol suite

… but there are some Challenges

- sufficiently accurate maps for bike paths and bike lanes
- location referencing (bicycles ≠ cars)
- useful & non-distracting user interface for cyclists

Who is in the lead?

What is the underlying business case?

TISA
Traveller Information Services
Association

www.linkedin.com/company/tisa-traveller-information-services-association/

info@tisa.org

www.tisa.org