



Application use cases based on vehicle-infrastructure interaction

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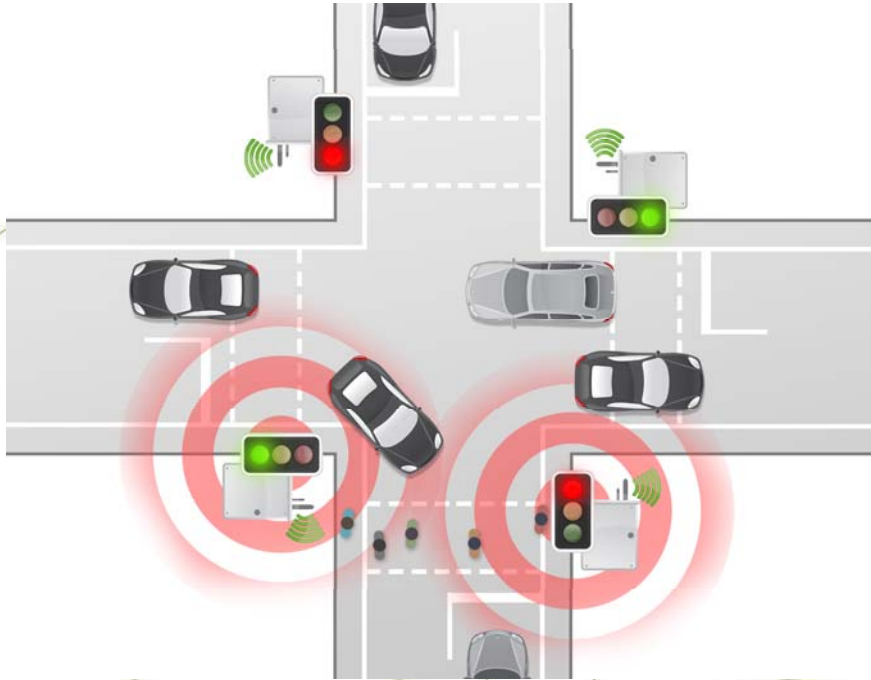


Vehicle-Infrastructure Interaction

Themes:

- Traffic signal control
- Driving behaviour
- Route guidance
- Network usage

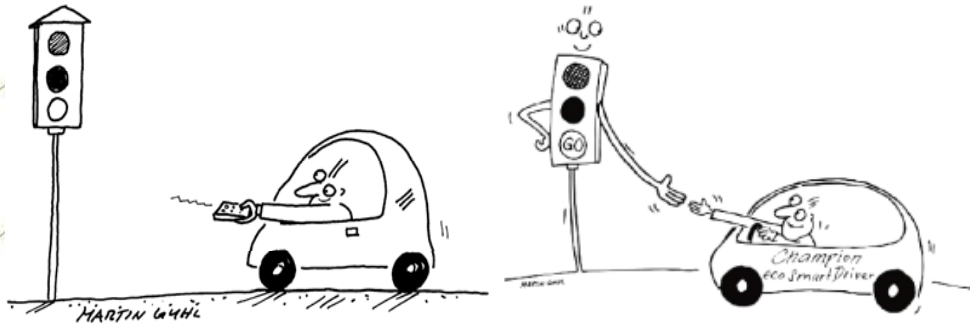
Traffic signal control



Cooperative Awareness Message (CAM)

- Vehicle presence
- Vehicle arrival time
- Vehicle classification

- Traffic signal timing
- Traffic signal priority

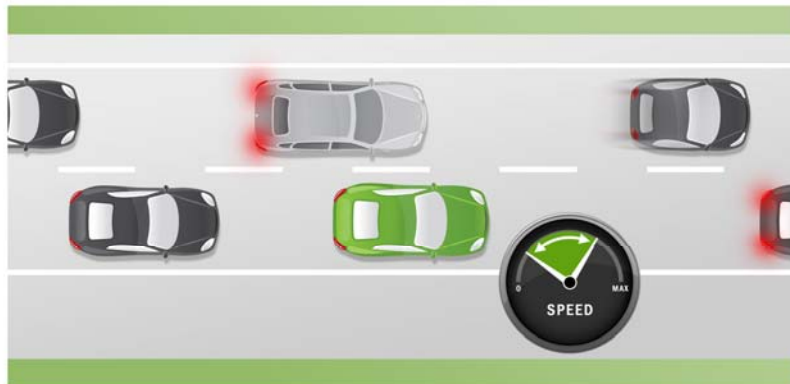
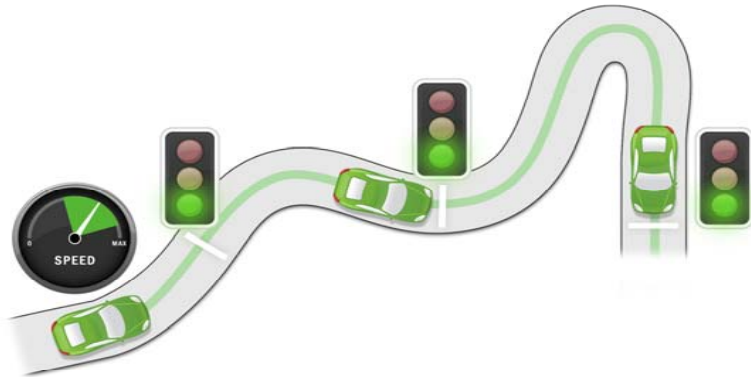


November 20-21, 2013

interactiVe – eCoMove Joint Final Event

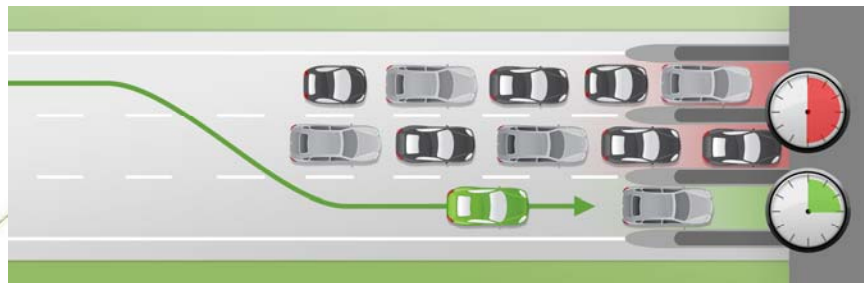
The logo for eCoMove, featuring a green leaf-like shape above the text "eCoMove" in a bold, sans-serif font.

Driving behaviour (longitudinal)

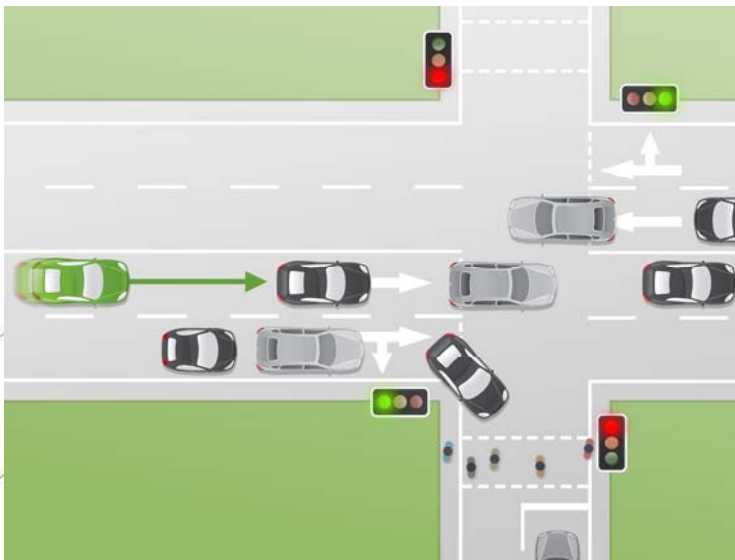


- Traffic Signal Phase Data Message (TSPDM)
- Speed and Lane Advice Message (SLAM)
- Intersection Topology Message (ITM)
- Vehicle velocity profile
- Traffic signal timing
- Traffic flow stability

Driving behavior (lateral)

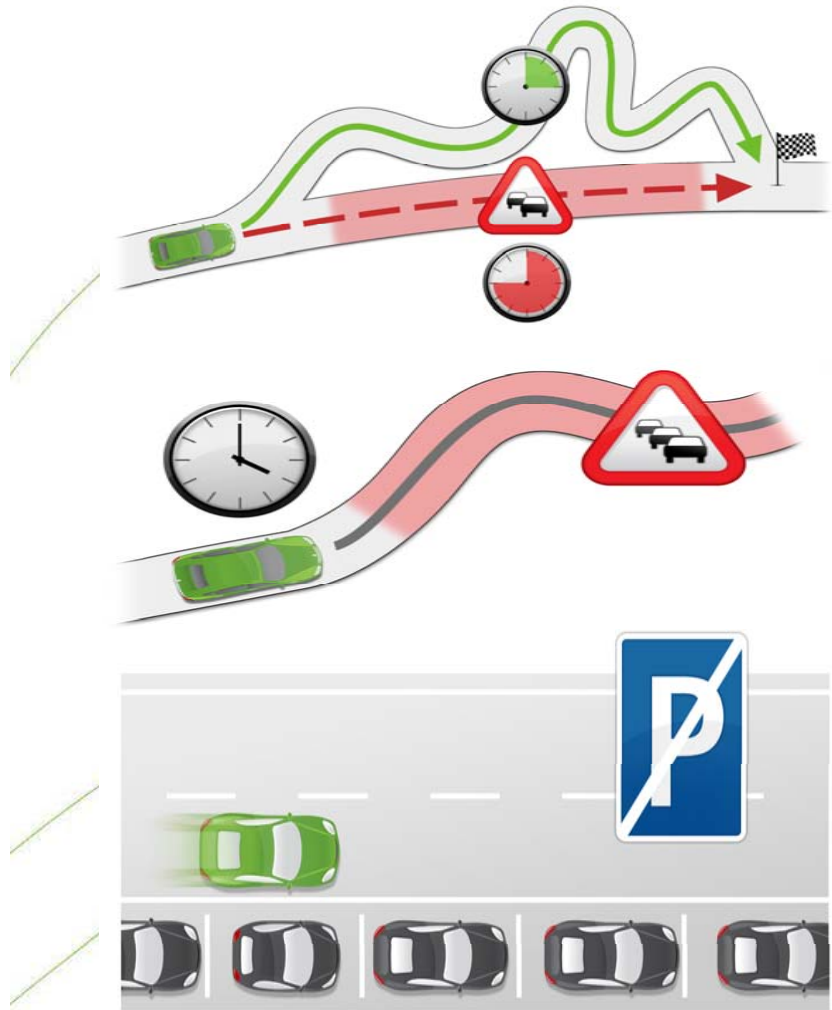


- Traffic Signal Phase Data Message (TSPDM)
- Speed and Lane Advice Message (SLAM)
- Intersection Topology Message (ITM)



- Vehicle velocity profile
- Control object capacity

Route guidance



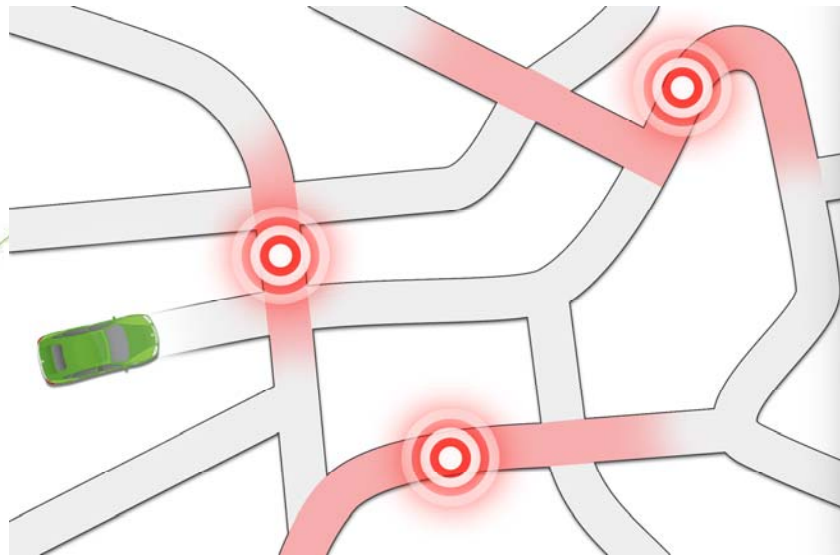
TPEG (RMR, TFP, TEC, PKI)

- Road and Multimodal Routes
- Traffic Flow Prediction
- Traffic Event Compact
- Parking Information

- Policy-based route guidance
- Traffic state information
- Route diversions
- Parking accessibility

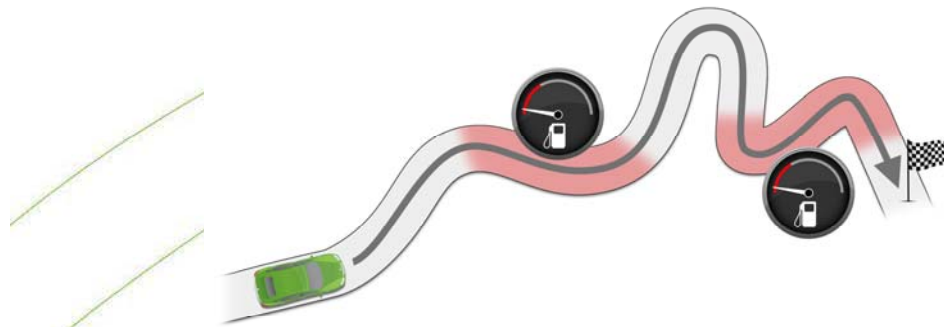


Network usage



Cooperative Awareness Message (CAM)

- State estimation
- Time and emission
- Now, later, desired



- Driving strategies
- Control strategies

I2V Message Overview

- Cooperative Awareness Message (CAM)
- Traffic Signal Phase Data Message (TSPDM, *SPaT*)
- Speed and Lane Advice Message (SLAM, *SPaT*)
- Intersection Topology Message (ITM, *MAP*)
- TPEG-RMR (Road and Multimodal Routes)
- TPEG-TFP (Traffic Flow Prediction)
- TPEG-TEC (Traffic Event Compact)
- TPEG-PKI (Parking Information)

Thank you for your attention

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