

PPP-Future Internet

Input to Use Case workshop

TNO | Knowledge for business



Erik Fledderus
Senior Strategist, program manager | TNO ICT
Professor | TU Eindhoven

Smart Energy / Grids

eHealth / Healthy Living

Smart Agriculture

Smart Content

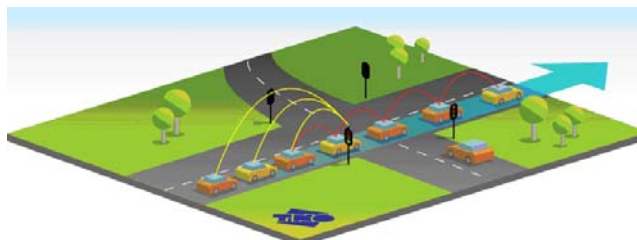
eGovernment

Smart Mobility

Smart City / Living



Use Case: smart mobility



21

© TNO

PPP-FI – TNO's input to Use Case workshop

June 21/22, 2010



Use Case: smart mobility Developments

- Mobility in the Netherlands and the EU is suffering from delays, unreliability, accidents and pollution.
- Intelligent transport systems and services (ITS) offer a wide range of solutions which may support a better match between demand and supply, either by increasing capacity, speed and reliability of traffic networks, assisting or guiding travelers in making smarter (and more system-optimal) travel choices, or both.
- **Technological developments:**
 - Open service architectures
 - Standardised vehicle to infrastructure (V2I) and vehicle to vehicle communications (V2V) based on IPv6
 - Sensor infrastructures and open access to statistical data
- **Examples:**
 - real-time, high-density traffic information
 - multi-modal travel support and personal travel advice
 - Cooperative safety systems, e.g. road condition warnings
 - Logistics chain management
 - Cooperative traffic flow optimization

22

© TNO

PPP-FI – TNO's input to Use Case workshop

June 21/22, 2010



Use Case: smart mobility Trackrecord

- Introduction dynamic speed advice *Dynamax* in the NL
- A270 demo on shockwave damping using in-car speed advice
- Large scale pilots with open service platforms SPITS
- Sensor City Assen
- Pre-crash detection of vulnerable road users
- Effect-evaluations of ICT applications on congestion, environment and safety
- Participation in more than 20 FP7 projects on mobility



DAIMLER



Universität Karlsruhe (TH)
Forschungsuniversität • gegründet 1825



TOMTOM®

HITACHI
Inspire the Next



Use Case: smart mobility Trackrecord

- SPITS will develop an open platform for intelligent in-vehicle applications
 - traffic management, safety, and infotainment applications
 - based on dedicated, open communication standards for mobility: 802.11p, CALM
 - based on open service platforms in the vehicle, along the road, and in the backoffice



