THE FUTURE OF DATEX II

DATEX II AND THE ITS DEPLOYMENT GUIDELINES

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The roots: the EasyWay project

- was a cooperation project of road authorities and road operators from 27 European countries
- intended to unlock the benefits of cooperation and harmonisation in the deployment of Intelligent Transport Systems (ITS) on Europe’s major road network
- was no standardisation body
- did not have any power to legally constrain the Member States in their national deployment activities

Overview of EasyWay Activities
ITS Deployment Guidelines ...

- were developed as one of the major achievements of the EasyWay project (to versions: 2010 and 2012)
- are neither technical standards nor specifications (as currently developed by the European Commission as their part of the implementation of the ITS Directive 2010/40/EU)
- intend to be user supporting guidelines to foster harmonisation and interoperability of ITS-services in Europe, written in a way that clearly defines criteria that deployments have to fulfil in order to claim overall compliance with the guideline
ITS Deployment Guidelines

What is the goal?

Harmonisation leads to a European added value

DG2012

local ITS-Service instances

Use

Harmonising European ITS Services and Actions
ITS Deployment Guidelines
The development process

- **Initial creation based on 2010 Version**: 1st Oct 2011
- **External peer review**: 1st Nov 2011
- **Finalisation of 1st Draft**: 1st Nov 2011
- **Final enquiry based on 2nd draft**: 7th Oct 2011
- **Mediation / amendment in cooperation with MS**: 15th Sep 2011
- **Formal MS consultation & stakeholder participation**: 1st May 2012
- **Adoption**: 19th Nov 2012
- **Finalisation**: 1st Nov 2012
- **19th Nov SPB**:
ITS Deployment Guidelines

Document set structure

EasyWay 2 Deployment Guidelines 2012 – INTRODUCTION DOCUMENT

- TIS - Traveller Information Services
  - FORECAST AND REAL TIME EVENT INFORMATION
  - TRAFFIC CONDITION AND TRAVEL TIME INFORMATION
  - SPEED LIMIT INFORMATION
  - WEATHER INFORMATION
  - CO-MODAL TRAVELLER INFORMATION
  - REFERENCE DOCUMENT - TIS Deployment Guideline Annex

- TMS - Traffic Management Services
  - DYNAMIC LANE MANAGEMENT
  - VARIABLE SPEED LIMITS
  - RAMP METERING
  - HARD SHOULDER RUNNING
  - INCIDENT WARNING AND MANAGEMENT
  - HGV OVERTAKING BAN
  - TRAFFIC MANAGEMENT PLAN FOR CORRIDORS AND NETWORKS

- F&LS - Freight & Logistic Services
  - INTELLIGENT AND SECURE TRUCK PARKING
  - ACCESS TO ABNORMAL GOODS TRANSPORT REGULATIONS

- Supporting Guidelines
  - Variable Message Sign Messages
  - VMS MESSAGE DESIGN PRINCIPLES
  - Data Exchange
  - Information and Communication Technologies
  - OPERATING ENVIRONMENTS

profiles
ITS Deployment Guidelines
What are the pillars?

European Added Value

Interoperability
• functional
• organisational
• technical

Common Look & Feel

EU Assessment Criteria

Pan-European understanding of the nature and the benefit of each ITS-service
ITS Deployment Guidelines

Requirement categories

- Functional requirements
  - Architectural aspects: decomposition into functions and interfaces
    (with Reference to DATEX II-Profiles)

- Organisational requirements
  - Organisational aspects for the cooperation of partners of service deployment
    and operation
    (have to agree on basic interoperability features, incl. DATEX II-Profiles)

- Technical requirements
  - ICT-Infrastructure requirements
  - Standards and Agreements: existing and required
    - DATEX II (plus Profiles and potentially exchange specifications)
    - Need for Additional Specifications (potentially including DATEX II extensions)

- Common Look & feel

- Level of Service Definitions
ITS Deployment Guidelines
DATEX II elements for traveler information services

- **static information:**
  - measurement site information
  - predefined locations (e.g. segments)

- **dynamic information:**
  - measured traffic data:
    - traffic flow
    - traffic speed
    - occupancy rate
  - elaborated data
    - level of service
    - travel times
  - operator actions
    - road works & closures
    - recommended routes

Example: Diagram of the trajectories profile
ITS Deployment Guidelines
DATEX II elements for weather information services
ITS Deployment Guidelines
DATEX II elements for traffic management services

- location and length
  - network management type
    - dynamic lane management
    - ramp metering
      - ramp metering in operation
    - dynamic speed limits
      - vehicle type
      - speed limit
  - incident management
    - type of incident
    - actions to react
- HGV overtaking ban
- traffic management plans
  - no agreed profile yet
  - important interface to navigation services!

Example: Variable speed limits
ITS Deployment Guidelines

Conclusion

- ITS Deployment Guidelines are the basis of future deployments of ITS-services in Europe
- The usage of DATEX II is a “must” requirement
- Common DATEX II profiles must be developed and agreed and will come into operation within the next years

Questions:
- What is the link of harmonised DATEX II profiles in the guidelines to standardisation?
- How should harmonised profiles be expressed in the guidelines and how detailed do they need to be?
- How can the cooperation of DG Coordinators and DATEX experts best be organised to support the creation of harmonised DATEX II profiles?
THANK YOU FOR YOUR ATTENTION