Traveller Information Services Association

Home of the TMC and TPEG standards

Teun Hendriks
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Traffic Information - Context

- Traffic information is a key element of an overall ITS policy
- Knowledge of traffic situation supports safe, efficient journeys
- Traffic information is useful before and during a journey
  - To plan if / when / how to make the journey
  - To avoid congestion during the journey
  - To receive warnings of incidents on the planned route
- Traffic information should be coherent - between web pages, TV & radio news, roadside signs and navigation systems
Traffic information standards - *a long road*

**RDS-TMC: Radio-Data System - Traffic Message Channel**
- **1984:** Start of development
- **1992-1994:** Field trials in several EC member states
- **1997:** First operational services
- ...
- **2008:** New services in development in e.g. Baltic States, Israel, Mexico, Portugal, South Africa, New Zealand,

**TPEG: Traffic Protocol Experts Group**
- **1997:** Start of development
- **2000-2003:** EC project TPEG with field trials
- **2004-2007:** Mobile.info follow-on project with field trials
- **2008:** First test services in UK over DAB
TMC services in Europe: Status October 2008

- TMC
- TMC planned
- No TMC

TISA - Traveller Information Services Association - February 2009
The standards challenge: local versus global

Address local variations and cultural diversities
- Harmonize local differences ("stau" vs. "bouchon" vs. "backup")
- Provide internationalization and translation support

Safeguarding a global traffic information service standard
- Maintain single source of responsibility
- Provide meeting forum to discuss issues, standards extensions, service concepts, with all parties involved
Introduction to TISA

- Background
- Vision & objectives
- Structure & activities
- Committees
- Development topics
- Standardisation
Traveller Information Services Association

- Launched Nov. 2007 - Not for profit, hosted by ERTICO
- Takes over activities of TMC Forum, TPEG Forum and German Mobile.Info project - custodian of mobile.info deliverables
- Worldwide scope, market driven priorities
- Members from across the globe and across the traffic & travel information service chain
  - Including public authorities
- Development, deployment, support of standardisation
  - TPEG traffic and travel information
  - TMC traffic information
  - Other areas of travel information technology
TISA mission

- **Culture**: TISA offers an environment where the values and needs of service and content providers, broadcasters, public authorities and industry meet.

- **Mission**: TISA creates and maintains global, open traffic and traveler information standards and policies that increase the safety and efficiency of traveling.

- **Vision**: TISA coordinates the concerns and contributions of its global membership with the aim to foster business, customer, and society value of TISA standards based services and products.
TISA structure
Key TISA Activities

- Use Case procedure
- TPEG application development
- TMC new features (backwards compatible)
- Deployment support - best practices / administration
- Processes leading to Standardisation
- Promotion of travel information standards
Technical & Standardisation Committee

Brings together the technical development of new features and applications and readies them for either international standardisation or de facto specifications for use amongst TISA members.

- Chairman role shared by Heinz-Werner Pfeiffer of Bosch and Teun Hendriks representing Clear Channel
- Provides a mechanism for the formalisation, specification and standardisation of new applications
- Peer review and sharing of best-practice in new application development
- Liaison with Standardisation Organisations and regional / technology-based associations
Content & Service Provision Committee

Brings together an end-to-end concern for information content and provision to the end-user.

- Chairman Jonathan Burr of ITIS Holdings
- Collects experience and implementation best practices from large-scale deployment undertaken by members
- Supports informed configuration and specification of TPEG content collection and service provision parameters
- Addresses business models and market impact of developments for validation of technical development choices
Products Committee

Initiates and coordinates the creation and maintenance of TISA products and safeguards quality

- Chairman Theo Kamalski of TomTom
- TISA products: e.g. specifications and implementation guidelines, message lists in various languages, encryption keys and development & certification tools
- Facilitates distribution - where development work results in new TISA products, the Committee provides a mechanism for publishing to the wider world and coordinating usage.
- Files and administers TISA products and versioning and creates and maintains certification repository
Standardisation

- RDS-TMC and TPEG services rely upon international Standards...
- TISA Members are committed to ongoing international Standardisation to support TISA services and implementations...
- The international Standards Organisations concerned are:
  - ISO - International Standards Organisation
  - CEN - Comité Européen Normalisation
  - ETSI - European Telecommunications Standardisation Institute
- RDS-TMC is standardised in the EN ISO 14819-series
- TPEG is standardised in the CEN ISO/TS 18234-series (Binary) and the CEN ISO/TS 24530-series (XML)
TISA Working Groups

Example: TPEG Applications Working group

- Tasked with developing TPEG applications in response to Use Cases submitted by TISA members
- Takes up the role of the former TPEG Forum Standards Task Force. Its membership is made up of a small group of dedicated technical developers
- The most technical group working on TPEG in TISA - in addition to applications, it addresses other topics such as adaptation layers for different bearers.
Current Use Cases for TPEG

- Weather Information (WEA)
  - Weather and related content for travellers, including air pressure, cloud type/cover, flood warning, pollution index, precipitation etc.
  - Current information, predicted information and local (area) measured information including ‘emergency notifications’ related to severe weather situations.

- Fuel Price Information (FPI)
  - Static and dynamic data linked with availability and price of vehicle fuels

- Traffic Flow & Prediction (TFP)
  - Transmission of status oriented traffic flow information for road networks.
  - Data for navigations systems for route guidance and for display to the driver directly. Covers not only current traffic flows but also predicted traffic states.
Further TISA Working Groups

- Development of new features for TMC, e.g. addressing
  - New Toll Bridge and Safety events (including ‘Amber-alert’)
  - Coding IVR response number for TMC
- Development and maintenance of lists and tables - e.g. TMC event list, TPEG application tables
- Certification of TMC location tables (170 in 2008!)
- Administration of Service and Application IDs and Conditional Access
- Harmonisation of services across markets and between services and receivers
Summary - *Standards need a home and TLC*

TISA provides:

- Technical development of applications matched with administrative and deployment support activities
- Use Case procedure provides framework for developing new applications
- Peer review & best practices - a two-way process
- Open standards
- Synergy - a win-win situation!
Thank you for your attention!

For further information:

TISA Executive Office
James Burgess (j.burgess@tisa.org)

www.tisa.org