TPEG Mobility
Information Delivery

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About bmt

Bayerische Medien Technik

...we pave the way for digital broadcasting!
bmt and Traffic Telematics

- 10 years of experience with TPEG and TMC
- Consulting for Service providers, automotive suppliers and device manufacturers
- Maintenance of traffic information systems
- Data conversion
- TPEG Playout and Receiver Products
What is the use case?

- Information is available
- The traveller needs such information

Quelle: bayerninfo.de

Which way?
Generations of Mobility Information

- Transmission of rendered content (1\textsuperscript{st} Generation)
  - Audio Traffic Announcement, FM-ARI etc.
  - Many different services

- 2\textsuperscript{nd} Generation: Broadcast of the Information to the Navigation
  - RDS-TMC – The Traffic Message Channel

- 3\textsuperscript{rd} Generation: Bearer independent, language independent and more than just Road Traffic Information
  - TPEG
The future belongs to TPEG

- TMC is a success story
- TPEG – Transport Protocol Experts Group is the next generation standard
- Bearer independent
- Extensible
- Multimodal
- Standardised
- Language independent
- Machine readable -> Navigation
TPEG Applications

- RTM – Road Traffic Messages
- TEC – Traffic Event Compact
- PTI – Public Transport Information
- PKI – Parking Information
- TFP – Traffic Flow Prediction
- FPI – Fuel Price Information
- SPI – Speed Limit Information

- BSI – Bus Service Information
- WEA – Weather
- POI – Points of Interest
TPEG Multiplexing

Applications

- TPEG-SNI
- TPEG-RTM
- TPEG-RTI
- TPEG...

Services

- Service A
- Service B
- Service...

Adaptation

- DAB
- DARC
- DVB
- Internet
- Other

Delivery
Roles

- Information is available
- The traveller needs such information

Content Provider → Service Provider → TPEG Playout → Network Playout → Traveller

Mobile Distribution Networks

Monitoring TPEG Analysers
Content Provider Systems
Service Provider Content System
TPEG Playout and Distribution
Bearer/Carrier Playout Systems
Broadcast Transmitters

1 to All

Receivers
TPEG Decoder (Filter)
User Interface
TPEG Broadcast with CA

Content Provider Systems
Service Provider Content System
TPEG Playout and Distribution including HECA
Bearer/Carrier Playout Systems
Broadcast Transmitters

1 to All

Receivers
TPEG Decoder (Filter) including HECA
User Interface
TPEG over HTTP

Content Provider Systems
Service Provider Content System
TPEG over HTTP Server (Filter/Session)

Mobile IP Network (3G/UMTS)

TPEG Client
TPEG Decoder
User Interface
TPEG Hybrid Distribution
TPEG ON AIR System

- Support of new Web-based delivery method “TPEG over HTTP”
- Support of HECA encryption
- Web based configuration and status monitoring

- Support of all TPEG applications (RTM, TEC, …)
- tpegML input; conversion of other data source formats available on request
- Interfaces to all relevant DAB/DMB playout systems
TPEG Analyser

- monitoring services
- quality assurance and debugging
- comparing TPEG services

- reference information for development of devices and terminals
- testing TPEG encoders
- visualisation and control of TPEG services
Let’s go TPEG

- Know how transfer -> Workshop
- Prototype service
  - Data Conversion (Native to tpegML)
  - TPEG ON AIR System -> TPEG Analyser
- Enabling Client Devices
- Evaluation, Business Model, Service Design
- Rollout Production Level System
- Operation of the System and Maintenance
- Market Introduction
Use Case fulfilled with TPEG!

- Information is available
- The traveller has this information

TPEG!

This way!