DIGITAL SOLUTIONS START WITH INTEROPERABILITY

How standardization propels public transport into the next level

11 October 2023 by
AGENDA

Let’s meet

How standardization propels public transport into the next level

We need you!
Let’s meet

How standardization propels public transport into the next level

We need you!
**WE ARE ITxPT**

**WHO WE ARE**

The *non-profit association* that enables an *open architecture, data accessibility and interoperability* between IT systems. The members of ITxPT develop the IT architecture for *public transport* and other mobility services together, *based on standards and best practices*.

**MEMBERSHIP-BASED**

- 160+ members in 28 countries
- PTA, PTO, Industry and Associations

**WHAT WE DO**

- An architecture for interoperability
- A community for innovation
- A label for compliance
ITxPT TEAM IN THE ROOM

Anders Selling
Secretary General

Pascale Guyot
Members Relations

Emmanuel de Verdalle
Technical Committee Chair

Tu-Tho Thai
Manager, Projects & Partnerships
Let’s meet

How standardisation propels public transport into the next level

We need you!
WHY STANDARDIZE?

FOR YOU & THE INDUSTRY

- Facilitate data exchange & sharing
  - Between different organizations
  - Between different sectors
  - Between different systems
- Reduce costs of development & Scale-up

TO PROPEL INNOVATION

- Stimulate tailored solutions to meet multiple and different needs
  - Same questions = same answers
  - Localize / Personalize with the same base
- A community to rely on
**ITxPT Specifications Fosters Innovation**

**S 01**
**Installation Requirements**
- Power Supply Interface
- FMS Interface
- Other Interfaces (audio, antenna, wireless, etc)
- IP network
- Space
- On-board IP Harness

**S 02**
**On-board**
- 0 Protocols DNS and MQTT
- 1 Module Inventory
- 2 Time service
- 3 GNSS Location
- 4 FMStoIP
- 5 VEHICLEtoIP
- 6 AVMS
- 7 APC
- 8 MADT
- 9 MQTT Broker

**S 03**
**Back-Office**
- TRANSMODEL ecosystem
- NeTEx (Network Timetable exchange)
- SIRI (Service Interface for Real-time Information)
- OJP (Open Journey Planning)
- S03P01 – TiGR (Telediagnosis for intelligent Garage in Real-time)

**Useful protocols**
Governed by CEN, Facilitated by ITxPT

**IP network and hardware layer**

**Inventory**
- to be provided by
- to be subscribed to
CONCRETE EXAMPLE WITH S03P01

PRINCIPLES

- A standard interface to access vehicle data remotely
- Works in heterogeneous fleets with different brands and models
- **Standardized header** for all event messages that can be:
  - Ordinary operational event
  - Abnormal operational event
  - Vehicle or ITS Failure
  - Maintenance warning

BENEFITS

- Prevents
  - Vendor lock-in
  - Costly patching of several proprietary “open” interfaces
- Supports
  - Global harmonisation that reflects the community’s needs
  - “Plug and play” principle
EU STANDARDS AS THE BACKBONE OF MaaS
Let’s meet

How standardization propels public transport into the next level

We need you!
GET INVOLVED!

Governance Process

Members

Pre-studies

ExB

Requirements Committee

RC Chair

what

Technical Committee

TC Chair

how

Final Approval

ITxPT Specification and Test suite

Executive Board

solution

Specifications Change Process

for whom

Non-Members

Consumers

Requirements Working Group

Technical Working Group
Questions? Comments?