

EFC STANDARDISATION PROGRESS UPDATE

29 May 2012

Progress since the latest progress update (of the 15th of March 2012)

The following CEN deliverable has recently been published:

-- Addendum of EN 15876-1

The following CEN ISO deliverables are subject to formal vote:

-- CEN/TS 16439 EFC - Security framework: formal vote ends on 2012-07-26

-- CEN ISO/TS 17444-1 EFC - Charging performance - Part 1: Metrics: provisional formal vote period 2012-06-25--2012-09-25

Current focus of the work

The current focus relevant for the EETS is on:

- EFC - Secure monitoring – Compliance checking
- EFC - Charging performance – Part 2: Examination framework. New work item approved in 2012-05

We have also started the work on "Guidelines for EFC-Applications based on in-vehicle ITS stations. This work will form input for the further standardisation of "Cooperative ITS" and "EFC", and is relevant for EETS in a longer term perspective.

We are also starting up the preparation of a future work item on an interoperable application profile (IAP) standard for information exchange between Service Provision and Toll Charging. A questionnaire was circulated in March to stakeholders (ASECAP, Stockholm Group, AEITIS, EC-DG Move and EFC standards experts) for the propose of collecting best practice and needs with regards to data exchanges between Toll chargers and Toll service providers. 12 responses have been received, are being processed and will form a basis for the further work.

EN 15509 on "IAP for DSRC" is currently being revised.

Progress and status of EC EFC Grant Agreements

- **EFC 2006 Grant Agreement**
 - 2 ENs and 4 TS
 - Completed
- **EFC 2007 Grant Agreement**
 - 1 ENs, 15 TS and 4 TRs
 - Completed
- **EFC 2010 Grant Agreement**
 - Agreement signed in Dec 2010
 - Security framework & Charging performance metrics (TC278 N2362)
 - Target : 3 TS - approval expected by H1/2013
- **EFC 2011 Grant Agreement**
 - Agreement signed in December 2011
 - Secure monitoring for autonomous toll systems — Compliance checking
 - Guidelines for EFC-applications based on in-vehicle ITS stations
 - Target : 1 TS and 1 TR – approval expected by mid 2014
 - PT experts selected and contracted
- **EFC 2012 Grant Agreement Application**
 - Application submitted
 - EFC - Secure monitoring for autonomous toll systems — Trusted recorder
 - EFC - Interoperable application profiles for information exchange between Service Provision and Toll Charging

Potential ideas for future EFC standardization

Below a provisional list of potential ideas for future EFC standardization:

- IAP for information exchange between Service Provision and Toll Charging
- Miscellaneous test standards (for "IAP for information exchange between Service provision and toll charging", "Secure monitoring – Compliance checking & Trusted recorder ...)
- Positioning performance – metrics and examination framework. (This should ideally be generic and not EFC specific, and e.g. be progressed by the newly formed CEN-CENELEC/TC5 on "Space")

The relevance and importance of some of the potential ideas for future standardization are recognized but not progressed at this stage due to lack of resources, whereas some lack broader support in order to be taken forward at this point in time.

Enclosure: Overview of published CEN and ISO Electronic Fee Collection standards

Basel, 2012-05-29
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Overview of published CEN and ISO Electronic Fee Collection standards

Architecture and technology independent

EN ISO 12855:2012	Electronic fee collection - Information exchange between service provision and toll charging
ISO 17573:2010	Electronic fee collection - System architecture for vehicle-related tolling
CEN ISO/TS 17574:2009	Electronic fee collection – Guidelines for security protection profiles
CEN/TR 16092:2010	Electronic fee collection - Requirements for pre-payment systems
CEN/TR 16152:2011	Electronic fee collection – Personalisation and mounting of first mount OBE
CEN/TR 16219:2011	Electronic fee collection – Value added services based on EFC on-board equipment

DSRC-based EFC

EN ISO 14906:2011	Electronic fee collection - Application interface definition for DSRC
CEN ISO/TS 14907-1:2010	Electronic fee collection - Test procedures user and fixed equipment - Part 1: Description of test procedures
CEN ISO/TS 14907-2:2011	Electronic fee collection - Test procedures user and fixed equipment - Part 2: Conformance test for the onboard unit application interface
EN 15509:2007	Electronic fee collection - Interoperable application Profile for DSRC
EN 15876-1:2010+A1:2012	Electronic fee collection – Conformity evaluation of on-board and roadside equipment to EN 15509 - Part 1: Test suite structure and test purposes
EN 15876-2: 2011	Electronic fee collection – Conformity evaluation of on-board and roadside equipment to EN 15509 - Part 2: Abstract test suite
CEN ISO/TS 25110:2009	Electronic fee collection - Interface definition for on-board account using ICC
CEN/TR 16040:2010	Electronic fee collection - Requirements for urban DSRC systems

Autonomous and support for autonomous EFC systems

CEN ISO/TS 17575-1:2010	Electronic fee collection - Application interface definition for autonomous systems - Part 1: Charging
CEN ISO/TS 17575-2:2010	Electronic fee collection - Application interface definition for autonomous systems - Part 2: Communication and connection to the lower layers
CEN ISO/TS 17575-3:2011	Electronic fee collection - Application interface definition for autonomous systems - Part 3: Context data
CEN ISO/TS 17575-4:2011	Electronic fee collection - Application interface definition for autonomous systems - Part 4: Roaming
CEN/TS 16331:2012	Electronic fee collection – Interoperable application profiles for autonomous systems
CEN ISO/TS 16407-1:2011	Electronic fee collection – Evaluation of equipment for conformity to CEN ISO / TS 17575-1 - Part 1: Test suite structure & test purposes
CEN ISO/TS 16407-2:2012	Electronic fee collection – Evaluation of equipment for conformity to CEN ISO / TS 17575-1 - Part 2: Abstract test suite

- CEN ISO/TS 16401-1:2012 Electronic fee collection – Evaluation of equipment for conformity to CEN ISO / TS 17575-2 - Part 1: Test suite structure & test purposes
- CEN ISO/TS 16401-2:2012 Electronic fee collection – Evaluation of equipment for conformity to CEN ISO / TS 17575-2 - Part 2: Abstract test suite
- CEN ISO/TS 16410-1:2011 Electronic fee collection – Evaluation of equipment for conformity to CEN ISO / TS 17575-3 - Part 1: Test suite structure & test purposes
- CEN ISO/TS 16410-2:2012 Electronic fee collection – Evaluation of equipment for conformity to CEN ISO / TS 17575-3 - Part 2: Abstract test suite
- CEN ISO/TS 16403-1:2012 Electronic fee collection – Evaluation of equipment for conformity to CEN ISO / TS 17575-4 - Part 1: Test suite structure & test purposes
- CEN ISO/TS 16403-2:2012 Electronic fee collection – Evaluation of equipment for conformity to CEN ISO / TS 17575-4 - Part 2: Abstract test suite
- CEN ISO/TS 12813:2009 Electronic fee collection - Compliance check communication
- CEN ISO/TS 13143-1:2011 Electronic fee collection - Evaluation of on-board and roadside equipment for conformity to CEN ISO/TS 12813 - Part 1: Test suite structure and test purposes
- CEN ISO/TS 13143-1:2011 Electronic fee collection - Evaluation of on-board and roadside equipment for conformity to CEN ISO/TS 12813 - Part 2 : Abstract test suite
- CEN ISO/TS 13141:2010 Electronic fee collection – Localisation augmentation communication
- CEN ISO/TS 13140-1:2011 Electronic fee collection - Evaluation of on-board and roadside equipment for conformity to CEN ISO/TS 13141 - Part 1: Test suite structure and test purposes
- CEN ISO/TS 13140-2:2012 Electronic fee collection - Evaluation of on-board and roadside equipment for conformity to CEN ISO/TS 13141 - Part 2: Abstract test suite

Figure: Relationship between the EETS interfaces and the relevant EFC standards

