



CEN/TC278/WG1 & ISO/TC204/WG5 Status report to CEN/TC278 September 2012

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FprCEN ISO/TS 17444-1 Charging performance – Part 1: Metrics

- **Objectives**

- Charging performance metrics for discrete and continuous charging schemes to support procurement and service level agreements

- **Scope**

- Charging performance metrics information:
 - Charge reports
 - Toll declarations
 - Billing details
 - Invoicing accuracy on the level of user accounts

- **Status**

- WI adopted in Feb 2011 (TC278 N2430)
- For TC information (TC278 N2522) and internal WG review, closing on 2011-08-31. ISO NP adopted in 2011-08 (TC204 N2830).
- CEN TC review / ISO working draft comments: TC278 N2607
- CRR (TC278 N2651)
- Draft (WG N1572) submitted in 2012-02 for CEN FV / ISO DTS ballot
- **FV / DTS period closes on 2012-09-21**

- Drafting is supported by PT134

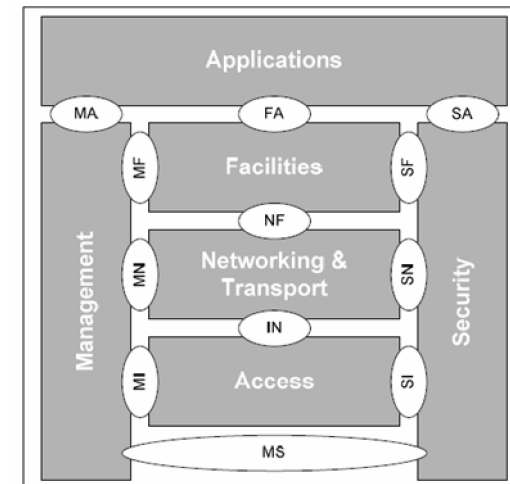
prCEN ISO/TS 17444-2 Charging performance – Part 2: Examination framework

- **Objectives**
 - Charging performance evaluation and monitoring for discrete and continuous charging schemes to support procurement and service level agreements
- **Scope**
 - Definition of the methods (data collection, processing...) to support the evaluation and monitoring of the Charging performance metrics defined in part 1
- **Outside the scope**
 - Specific numeric performance bounds, or average or worst-case error bounds in percentage or monetary units
 - Evaluation of the expected performance of a system based on modelling and measured data from trial at another place
- **Status and target**
 - CEN WI adopted in March 2012 (TC278 N2666)
 - ISO NP letter ballot, replies by 2012-05-28 (TC204 N2909)
 - **Parallel "TC review" (TC278 N2714) closes on 2012-09-21**
 - CEN FV / ISO DTS ballot: 2013-02
- Drafting is supported by PT134

prCEN TR WI 278315 Guidelines for EFC-applications based on in-vehicle ITS stations

- **Objective :**
 - Assessment of the technical and operational feasibility of using a generic ITS Station @ ETSI EN 302 665 "ITS – Com arch" for EFC applications
- **Scope**
 - Comparison of the ITS and EFC architectures
 - Core requirements for operation of an EFC app on an ITS Station
 - Potential synergies between EFC and ITS applications
 - Requirements for the ITS Station to support EFC apps
 - Recs on standards needed to support deployment of or actions to reduce barriers for deployment of EFC applications on an ITS Station

- **Status and target**
 - WI adopted in 2011-08 (TC278 N2538)
 - TC review: 2012-10
 - FV: 2013-04
- Drafting is supported by PT136



EN 15509 Interoperability application profile (IAP, rev)

- **Objectives**

- Interoperability, equipment compatibility, best industry practice
- Support the European EFC Directive (2004/52/EC)

- **Scope**

- DSRC requirements
- EFC functions and data, security and ICS proforma

- **Status and target**

- Result of review enquiry (TC278 N2556, 2009-09)
- Decision to revise 15509 (TC278 Res 025-2011)
- **CEN Enquiry: draft (WG N1627; CRR TC N2709) submitted in 2012-07. Enquiry planned to start on 2012-10-11**
- Draft ready for FV: 2013-04

prCEN/TS WI 278282 “Secure monitoring for autonomous toll systems – Compliance checking”

- **Objective**

- Support for the Toll Charger to check the trustworthiness of the toll declarations from the Toll Service Provider whilst respecting the privacy of the user

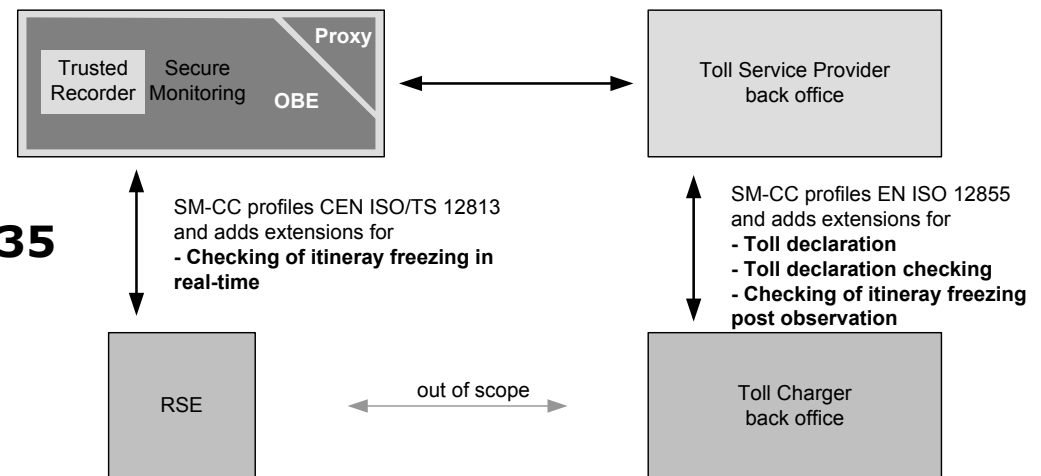
- **Scope**

- Secure monitoring concept and stake holder reqs
- Transactions and data
- Using whenever possible existing standards (CEN/ISO TS 12813, EN CEN/ISO 12855, CEN/ISO TS 17575-1...)

- **Status and target**

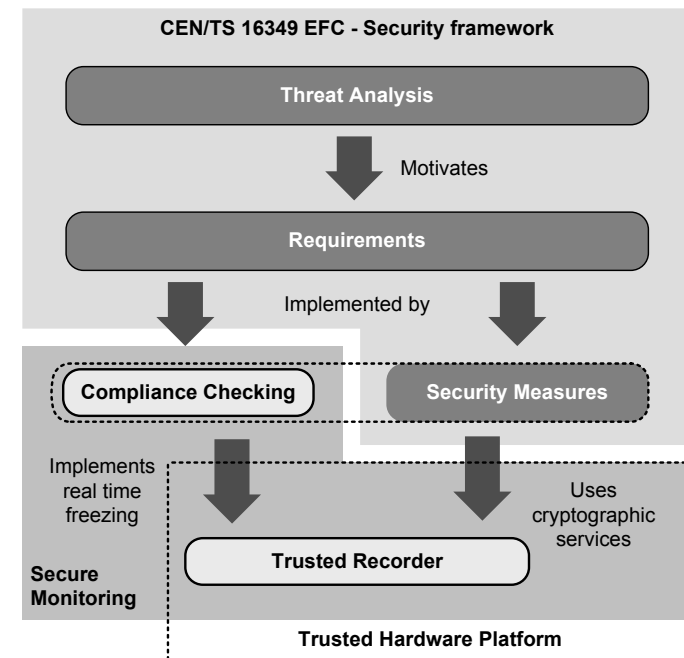
- CEN WI adopted in 2011-08 (TC278 N2539)
- TC review: 2012-10
- FV: 2013-04

- **Drafting is supported by PT135**



prCEN/TS WI 278338 "Secure monitoring for autonomous toll systems – Trusted recorder"

- **Objective**
 - Support for the Toll Charger to check the trustworthiness of the toll declarations from the Toll Service Provider whilst respecting the privacy of the user
- **Scope**
 - Secure monitoring concept and stake holder reqs
 - Transactions and data
 - Using whenever possible existing standards (CEN/ISO TS 12813, EN CEN/ISO 12855, CEN/ISO TS 17575-1...)
- **Status and target**
 - CEN WI adopted in 2012-05
 - TC review: 2013-02
 - FV: 2013-07
- **Call for PT137 experts (N2741), deadline to apply is 2012-11-02**



Miscellaneous (1)

- **CEN/TS 16439 EFC – Security framework**
 - Approved in 2012-08 (TC278 N2715), 22 NSBs approved, AFNOR disapproved
- **CEN ISO/TS 25110 EFC - Interface definition for on-board account using ICC on-board account using ICC**
 - SR closed on 2012-03-15; 11 confirmed the TS, 1 with minor corrections (TC204 N2914)
 - **Draft for ISO DTS / CEN FV submitted in 2012-07**
- **Ideas for future work**
 - **Profile standard for EN ISO 12855** “Information exchange between Service provision and Toll charging”; a questionnaire (TC278 N2655) circulated to collect stakeholders’ requirements and experiences. 12 responses received. NWI proposal is being drafted
 - Potentially “Framework to support **suitability for use assessment**”

Miscellaneous (2) QA - Initial thoughts

- **Current situation**

- Room for improvement
- Importance of QA grows with the number of EFC standard compliant systems and published standards

- **Needs (WG N1583)**

- Ensure harmonised definitions of terms across the ITS/EFC suite of standards
- Ensure correct ASN.1 data definitions and use of existing definitions whenever applicable
- Early identification and resolution of conflicting definitions
- Effective procedures for maintenance of our standards (corrections, extensions ...)
- Appropriate dissemination of corrections and anticipated future extensions

- **Solutions - terms and definitions**

- ISO database for standardized terms and definitions, ought to be complemented with the CEN only terms (see rec 1 on slide 19)
- Central repository of standardised EFC terms (WG N1605) - a blueprint for CEN/TC278 & ISO/TC204?

Miscellaneous (3) QA - Initial thoughts

- **Solutions - data definitions**
 - Central repository of the proposed changes and their provisional handling (WG N1606), incl maintenance of the ASN.1 modules
 - Rec to include **ASN.1 module as electronic inserts** in future ITS/EFC stds
 - Best practice and recs on how to present (EFC) data definitions – action on-going in the WG. ISO/TR 25100:2012 “Harmonization of ITS data concepts” and ISO 14813-6:2009 “ITS ref model – Data presentation in ASN.1” will be taken into account in this review action
- **Solutions – maintenance on top-up of the formal systematic review**
 - Provisional handling of post adoption comments on published stds – WG internal repository (WG N1628)
 - Preparation of corrigenda, when appropriate
- **Do other WGs face similar challenges? WG1 is interested to exchange lessons learnt and best practice**

Miscellaneous (4)

- **Corrigenda are being prepared for**
 - CEN ISO/TS 12813
 - CEN ISO/TS 13141
 - CEN ISO/TS 17575-1 & 3
 - EN ISO 12855
 - EN ISO 14906
 - EN ISO 14816 (sent to the convenor of WG12)**predominantly correcting ASN.1 syntax errors**
- EFC stds vs 15638-6 “TARV – Regulated applications”. Recommended to align the scope of 15638 suite with the existing stds (i.e. to remove “charging”) and reuse existing ITS/EFC standardized terms and definitions, where appropriate
- **Intellectual property and patent rights** – Monitoring and initial assessment of potentially relevant new patent or patent applications (**WG N1584** and **N1616**)

Miscellaneous (4)

- EFC 2006 Grant Agreement
 - 2 ENs and 4 TS
- EFC 2007 Grant Agreement
 - 1 EN, 15 TS and 4 TRs
- **EFC 2010 Grant Agreement**
 - Security framework & Charging performance metrics (TC278 N2362)
 - Target : 3 TS - approval expected by H1/2013
- **EFC 2011 Grant Agreement (2011-38)**
 - 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
- **EFC 2012 Grant Agreement Application (2012-21)**
 - Secure monitoring for autonomous toll systems – Trusted recorder
 - Interoperable application profiles for information exchange between Service Provision and Toll Charging
 - Coordination of PTs and support to the EC
 - **Agreement was signed in 2012-09. Call for experts (N2741), deadline to apply is 2012-11-02**

CEN/TC278/WG1 and ISO/TC204/WG5

Recent meetings: 27-28 June 2012, Zürich (Switzerland)

Next meetings: 16-17 October 2012, Moscow (Russia)
17 Oct joint meetings (tbc) with WGs on PT & C-ITS
23-24 January 2013, London (UK)
April 2013, Paris (tbc)
26-27 June 2013, Helsinki (Finland)
8-9 October 2013, Kobe (Japan)

Members: Australia, Austria, Canada, China, Czech Republic, Finland, France, Germany, Italy, Japan, Korea, Netherlands, Norway, Poland, Portugal, Slovenia, South Africa, Spain, Sweden, Switzerland, United Kingdom

In total **47 expert members** from 21 countries (15 CEN)

Subgroups: SG1 - Trond Foss: Info exchange, architecture, security
SG2 - Jean François Jouen: DSRC based EFC, testing
SG5 - Ian Catling: GNSS/CN based EFC

Liaisons: EC DG TREN, EC Electronic Toll Committee, ETSI ITS, CEN/WG3 & ISO/WG8, CEN WG16 & ISO /WG18, ISO/WG16, IEEE 1609, CEN/TC224/WG11

Convenor's recommendations to TC278

1. CEN/TC278 decides to encourage CEN CMC to implement a database for CEN standardized terms and definitions, analogous to ISO's (<http://cdb.iso.org>), in order to foster broad adoption of common definitions and to avoid duplications and contradictions
2. Considering the need to speed up the production process and noting ISO's recent reduction of the ISO DIS ballot from 5 months to 3 months for ISO only work items (cf. TMB Res 14/2012), CEN/TC278 requests CEN CMC to consider to reduce the CEN Enquiry from 5 months to 3 months.
3. Considering the role of satellite-based location services in intelligent transport systems applications, which are in the scope of CEN/TC278 work programme, and that the related services are standardized in CEN/TC5 on "Space" and ETSI/TC on "Satellite communication and navigation", CEN/TC278 decides to seek to establish an informative co-operation mode with these TCs.