ETSI TC ITS

ISO / ITU workshop and ad-hoc meeting

Kyoto, Japan,
24th August 20111

History

~ 2000:

ISO TC204 WG16 "Communications Access for Land Mobiles (CALM)"

→ To produce a set of communication standards for "Cooperative Intelligent Transport Systems (C-ITS)"

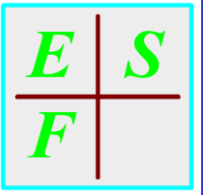<u>Leading advocate for ITSC (communications in ITS)</u>

December 2007:

ETSI TC ITS (founded by members of ISO TC204 WG16) with the charter to:

→ Develop test suites for CALM standards

→ Convert ISO CALM standards into European Norms

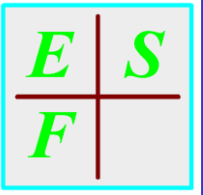→ Complement the set of ISO CALM standards

EC mandate M/453

CEN TC278 WG16 (formed 2009) and ETSI TC ITS replied jointly to mandate M/453 on Cooperative ITS (2010).

CEN TC278 WG16 and ISO TC204 WG18 work jointly together.

M/453 objective: ETSI TC ITS and CEN TC278 WG16 / ISO TC204 WG18 should have a minimum set of TSs and draft versions of ENs by mid 2012!

If the goal is met, a majority of the critical C-ITS standards will have been completed by mid 2012!

ETSI TC ITS

http://portal.etsi.org/portal/server.pt/community/ITS/317

Chairman:
Soeren Hess, consultant (Denmark)

Vice-chairman:
Marco Annoni, Telecom Italia (Italy)

Working groups of ETSI TC ITS

WG 1: G. Segarra, Renault; L. Lan, Hitachi
ITS facilities layer protocols and selected cooperative ITS applications

WG 2: K. Evensen, Q-Free; H.-J. Fischer, ESF
ITS architecture, cross-layer protocols and International harmonization

WG 3: A. Festag, NEC; T. Ernst, INRIA
ITS networking & transport layer protocols

WG 4: C. Wöste, BMWi; A. Brakemeier, Daimler Research
ITS access layer protocols

WG5: S. Cadzow, Cadzow Communications; B. Lonc, Renault
ITS privacy and security

Some liaisons of ETSI TC ITS

CEN TC278

Joint reply to mandate M/453 of the EC. Working on C-ITS applications

ISO TC204

agreement to produce only complementary standards

IEEE WG 1609

mainly related to ITS security for 5,9 GHz

IETF

Mobile IPv6

SAE

CAM / BSM / DENM

Activities at ETSI TC ITS WG1

- TR and TS on ***Basic Set of Applications (BSA)***
- TR and EN on ***Local Dynamic Map (LDM)***
- TS on ***Cooperative Awareness Message (CAM)***
- TS on ***Decentralized Environmental Notification Message (DENM)***
- TS on ***ITS facility layer architecture*** and ***ITS facility on position and time***
- TS on ***Applications and facilities layer common data dictionary***
- TS on ***Electric Vehicle Charging Spot***, ***Intersection Collision Risk Warning, Longitudinal Collision Risk Warning, Co-operative Awareness Application***, ***Communication congestion control***
- Related ***test standards***

Activities at ETSI TC ITS WG2

- EN on ***ITS communication architecture***, almost identical to ISO 21217
- Multi-part TS on ***Cross-layer protocols***, to be replaced by references to ISO 24102 – ITS station management
- TS on ***Classification and management of ITS application objects***, International harmonization project
- TS on ***ITS-AID registration list***
- TS on ***ITS facilities layer communication management specification***
- TS on ***services announcement specification***, reference to ISO 24102 - FSAP
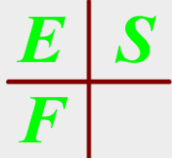- TR on ***Mobile network support of C-ITS***
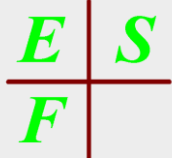
Activities at ETSI TC ITS WG2

➢ EG on *ITS testing framework*

➢ Test suites for **ISO CALM base standards**

➢ Base and test standards related to **RTTT (European EFC)**

➢ Management / coordination of the **International Harmonization** efforts towards *globally harmonized open standards* according to clause 10 of the joint EU-U.S. Joint Declaration of Intent on Research Cooperation in Cooperative Systems (which lead to the **EU / U.S. / Japan task force on C-ITS**).

Activities at ETSI TC ITS WG3

- ➤ Multi-part TS on ***Geo-Networking / Basic transport protocol***
- ➤ EN on ***Geographical Area Definition***
- ➤ TR on ***IPv6 analysis for networking***

- ➤ Related ***test standards***

Activities at ETSI TC ITS WG4

- ➢ ES on *European Profile 5 GHz*
- ➢ TS on *Channel specifications 5 GHz*
- ➢ TS on *Congestion control for 5 GHz*
- ➢ TR and TS on *Mitigation CEN DSRC – ITS 5 GHz*
- ➢ TR on *STDMA*

- ➢ Related *test standards*

Activities at ETSI TC ITS WG5

So far mainly working on "communication privacy / security" for 5,9 GHz / GeoNetworking and CAM / DENM:

➢ TS on *Security Services and Architecture*
➢ TR on *Threat Vulnerability and Risk Analysis*
➢ ES on *Identity Management and Identity Protection in ITS*
➢ TS on *IEEE 1609.2 profile*
➢ TS on *Security architecture and Management*
➢ TS on *Identity, Trust and Privacy Management*
➢ TS on *Access Control*
➢ TS on *Confidentiality services*

➢ New activities in preparation on *system security*

ISO TC204 WG16 is going to adopt security standards from ETSI!

Status of TC ITS

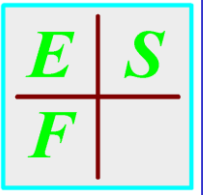Major activities in **WG1** to be continued until mid 2012.

- International harmonization BSM / CAM and DENM
- Introduction of cellular network technologies for DENM (and CAM) – joint work with **WG2**

Major activities in **WG2** on testing CALM in 2012 (not affected by the mandate M/453 schedule).

Finalization of GeoNetworking in **WG3** (almost done).

WG4 more or less is dormant.

Major activities in **WG5** on various security aspects for global C-ITS.

Next steps in TC ITS

Starting second half of 2012:

➢ Formal conversion of TSs to ENs.

➢ Ballots (ENs) and final adjustments dependent on comments.

➢ Development of conformance test suites for all protocol standards.

➢ Interoperability tests

  ▪ Test bed for road safety based on ETSI communication profiles.

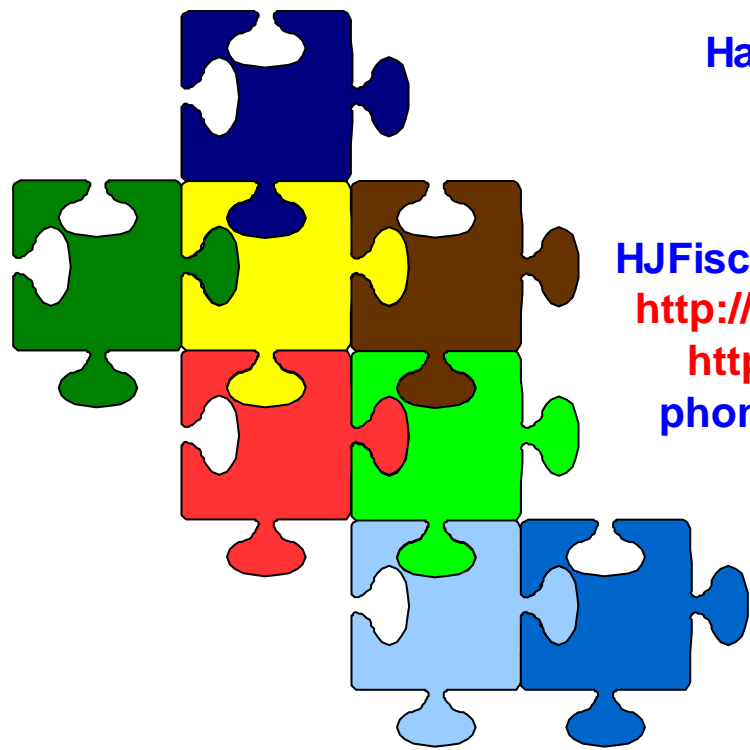 ▪ General C-ITS test bed for equipment compliant with CALM standards.

Conclusion

Development of most of the critical communication standards for C-ITS will be completed by mid 2012 at ISO TC204 WG16 in collaboration with ETSI TC ITS, CEN TC278 WG16 / ISO TC204 WG18 and IEEE 1609 WG.

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