# Collaboration on ITS Communication Standards

## 4 March 2016, Geneva, Switzerland

### Meeting report

1. **Introduction**

The meeting of the Collaboration on ITS Communication Standards (“Collaboration”) took place on 4 March 2016 at ITU headquarters in Geneva, Switzerland.

The meeting was held in conjunction with the [ITU/UNECE Symposium on The Future Networked Car](http://www.itu.int/en/fnc/2016/Pages/default.aspx) on 3 March 2016.

**T. Russell Shields** of Ygomi LLC chaired the meeting.

The intent of the Collaboration is to provide a globally recognized forum for the creation of an internationally accepted, globally harmonized set of ITS communication standards of the highest quality in the most expeditious manner possible to enable the rapid deployment of fully interoperable ITS communication-related products and services in the global marketplace.[[1]](#footnote-1)

1. **Opening of meeting, introductions and adoption of the agenda**

**Russ Shields** welcomed the 21 participants including 2 remote attendees (the final list of participants is reproduced in [Doc 008](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201603-Geneva/008%20-%20List%20of%20Participants.pdf)) and introduced the objectives of the Collaboration (see [website](http://www.itu.int/en/ITU-T/extcoop/cits/)). He stressed that the Collaboration is not a standards-setting, but a standards-facilitating group, exchanging information and promoting the development and adoption of ITS communications standards.

The draft agenda was presented and adopted without changes in [Doc 001](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201603-Geneva/001%20-%20Draft%20agenda.docx).

1. **Wrap-up of Symposium on The Future Networked Car**

Participants provided feedback on the Symposium. According to participants, FNC 2016 was a productive and informative event, providing good insights and opportunity to interact, and for conversations. Things to be considered for future editions include programme structure; a clear way forward coming out of the event (“Where do we go from here?”); effort to strengthen car company and carrier representation; bigger room and better signing; provision of an additional information package post event, with background material and further reading.

1. **Updates on ITS communications standards activities**

**Michael Sena** introduced a draft paper on secure over-the-air software updates ([Doc 002](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201603-Geneva/002%20-%20Secure%20Over-the-Air%20Vehicle%20Software%20Updates%20-%20Operational%20and%20Functional%20Requirements.zip)). The paper addresses the business process issues of delivering firmware over-the-air (FOTA) and software over-the-air (SOTA) updates to vehicles. The principal objective of the paper is to provide supportive information to the groups working on the technical specifications for FOTA/SOTA telecommunications standards. The meeting agreed to submit the draft paper as a liaison to SG16 and SG17 to consider the adoption of the material as (joint) technical report.

* Action (1) Yushi Naito, Koji Nakao, Russ Shields, ITU/TSB: Submit LS with draft technical report to SG16 and SG17.

**Masashi Eto**, NICT, gave a brief status report on ITU-T Study Group 17’s work on “Secure software update capability for ITS communications devices” (work item X.itssec-1) ([Doc 004](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201603-Geneva/004%20-%20X_itssec-1%20status.zip)). The objective of this ITU-T Recommendation will be to provide common methods to update the software by a secure procedure, including security controls and protocol definition. The work item is approaching completion in the near future.

**Hans Gierlich**, Head acoustics, introduced the work of [Question 4](http://www.itu.int/en/ITU-T/studygroups/2013-2016/12/Pages/q4.aspx) (“hands-free communication and user interfaces in vehicles”) of ITU-T Study Group 12 (“Performance, QoS and QoE”). He highlighted one of the recent products of Q4/12: [Recommendation ITU-T P.1140](http://itu.int/ITU-T/P.1140) “Speech communication requirements for emergency calls originating from vehicles”. The standard is considered for inclusion in related UNECE documents. Speech recognition systems are another areas of interest to Q4/12. He also informed the meeting about an upcoming testing event on the interworking of mobile phones and hands-free telephone systems (HFT) installed in vehicles. The test event will take place at ITU headquarters in Geneva, from 23 to 27 May 2016. More information is available at <https://www.itu.int/en/ITU-T/C-I/Pages/HFT-mobile-tests/test_event_2.aspx>.

**Yushi Naito**, Chair of ITU-T Study Group 16, reported on the status of [Question 27](http://www.itu.int/ITU-T/workprog/wp_search.aspx?isn_sp=1749&isn_sg=1758&isn_qu=2036&isn_status=-1,1,3,7&details=0&field=acdefghijo) (“vehicle gateway platform for telecommunication/ITS services/applications”) of ITU-T Study Group 16 (Multimedia). Great interest was expressed by **Dick Schnacke**, Chairman of ISO TC204 (ITS) in the Q27/16 work on vehicle gateway and vehicle gateway interface. ISO recently approved new work items on “secure vehicle interface” (see: [ISO/AWI TS 21177](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=70056); [ISO/AWI TS 21184](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=70057); [ISO/AWI TS 21185](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=70058)). The meeting encouraged Q27/16 to exchange information on its vehicle gateway and vehicle gateway interface work with ISO TC204.

* Action (2) Yushi Naito: Exchange information on vehicle gateway / vehicle gateway platform with ISO TC204 / TC204 Chairman.

**Alexandre Petrescu**, CEA (France), highlighted ITS discussions underway in the IETF ([Doc 006](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201603-Geneva/006%20-%20Status%20of%20ITS%20communications%20work%20items%20at%20IETF.pptx)). A Birds of a Feather (BoF) session was scheduled for the upcoming IETF meeting in Argentina to review the possibility of creating an ITS Working Group about the use of IP networking protocols for moving network to nearby moving network applications like V2V.

**Tom Kurihara**, Chair, IEEE 1609 WG, presented the status of the P1609 project ([Doc 003](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201603-Geneva/003%20-%20IEEE%20Status%20Report_R1.ppt)). A question was raised on the future development of 1609 in view of LTE-V, and the need to ensure backward compatibility. It was also suggested that ITU-T Study Group 17 review and take into account the IEEE 1609 standards when advancing its own work item X.itssec-2.

**Dick Schnacke**, Chair of ISO TC204, gave a high level overview of TC204 (Doc 005). He pointed out that LTE D2D communications for ITS was under development (as ISO 17515-2). He also highlighted significant new joint activity between TC204 and TC22 in area of ITS interface development (a gateway between the ITS system and the in-vehicle network) – **see Action Item 2**. The ISO vehicle interface taskforce conducts its work through F2F meetings (next scheduled for 2-3 May 2016, Detroit) and conference calls.

Questions were asked about the relationship of ISO TC204 WG16 and ISO/IEC JTC1 SC27; as well as the link between TC204 and smart city efforts.

1. **Update on World Forum for Harmonization of Vehicle Regulations (WP.29) activities**

Russ Shields gave an update on the UNECE WP.29 activities related to ITS communications. He highlighted the work of the informal working groups on ITS/Automated Driving (ITS/AD), and Accident Emergency Call Systems (AECS).

* Action (3) ITU/TSB: Send an update to ITS/AD summarizing the draft technical report on secure over-the-air software updates and the X.itssec-1 status.

1. **Next meetings**

The second meeting in 2016 will take place on **5 July 2016** at TTC headquarters in **Tokyo, Japan**. The meeting will be held in conjunction with an [**ITU/TTC Workshop on “How Communications will Change Vehicles and Transport”**](http://www.itu.int/en/ITU-T/extcoop/cits/Pages/201607.aspx) taking place on **4 July**.

Meeting announcement, logistical information and registration form will be made available at <http://itu.int/go/ITScomms>.

1. **Close of meeting**

**Russ Shields** thanked the participants for all the fruitful discussions. The meeting closed at 1659.

| Meeting | No. | Who | What | Work Item | By when | Status |
| --- | --- | --- | --- | --- | --- | --- |
| Geneva, March 2016 | | | | | | |
| Geneva(2016) | 1 | Yushi Naito, Koji Nakao, Russ Shields, ITU/TSB | Submit LS with draft technical report to SG16 and SG17 |  | March 2016 | Done |
| Geneva(2016) | 2 | Yushi Naito | Exchange information on vehicle gateway / vehicle gateway platform with ISO TC204 / TC204 Chairman |  | March 2016 | Pending |
| Geneva(2016) | 3 | ITU/TSB | Send an update to ITS/AD summarizing the draft technical report on secure over-the-air software updates and the X.itssec-1 status |  | March 2016 | Done |
| Arlington, December 2015 ([meeting report](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201512-Arlington/011%20-%20Meeting%20report.docx)) | | | | | | |
| Arlington(2015) | 1 | ITU/TSB | Study the proposal of convening a meeting of the leaderships of vehicle manufacturers, UNECE, ITU, and others. |  |  | ongoing |
| Beijing, July 2015 ([meeting report](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/011%20-%20Meeting%20report.docx)) | | | | | | |
| Beijing(2015) | 2 | China Unicom | Submit a contribution based on Doc 008 to SG16 meeting. | 1 |  | Pending |
| Geneva, March 2015 ([meeting report](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201503-Geneva/009%20-%20Meeting%20report.docx)) | | | | | | |
| Geneva(2015) | 1 | Koji Nakao | Provide additional details about communication security aspects of Japan’s V2V verification project. | 4 |  | Pending |
| Geneva(2015) | 2 | Russ Shields, Yushi Naito, ITU/TSB | Follow work of informal group ITS/AD, synchronize activities with development of F.AUTO-TAX. | 2, 3, 6 |  | Ongoing |

1. Collaboration website, <http://www.itu.int/en/ITU-T/extcoop/cits/> [↑](#footnote-ref-1)