# Collaboration on ITS Communication Standards

## 29 July 2015, Beijing, China

### Meeting report

1. **Introduction**

The meeting of the Collaboration on ITS Communication Standards (“Collaboration”) took place on 29 July 2015 in Beijing, China, hosted by the China Communications Standards Association (CCSA).

The meeting was held in conjunction with a workshop on “[How Communications Will Change Vehicles and Transport](http://www.itu.int/en/ITU-T/extcoop/cits/Pages/072015.aspx)” on 28 July 2015, jointly organized by CCSA, the Research Institute of Highway (RIOH) of the Ministry of Transportation, and ITU. The workshop was attended by more than 150 participants. Workshop programme and presentation material are available [here](http://www.itu.int/en/ITU-T/extcoop/cits/Pages/072015-Programme.aspx).

A rapporteur meeting of ITU-T Study Group 16, [Question 27](http://www.itu.int/en/ITU-T/studygroups/2013-2016/16/Pages/q27.aspx) (Vehicle gateway platform for telecommunication / ITS services / applications) was held on 30 and 31 July 2015.

**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 38 participants (the final list of participants is reproduced in [Doc 012](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/012%20-%20List%20of%20Participants.pdf)) and gave introduction to the objectives of the Collaboration (see [website](http://www.itu.int/en/ITU-T/extcoop/cits/)). He commended the organizers of the preceding workshop for the high quality of the event.

The draft agenda was presented and adopted without changes in [Doc 001](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/001%20-%20Draft%20agenda.docx).

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

**Martin Adolph** of ITU’s Telecommunication Standardization Bureau gave a short overview of ITU activities related to ITS communications ([Doc 005](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/005%20-%20Update%20on%20ITS%20related%20activities%20in%20ITU.pdf)). Mr Adolph summarized some of the recent developments in the ITU-R, and highlighted the adoption of [Recommendation ITU-T P.1140](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=p.1140) “Speech communication requirements for emergency calls originating from vehicles”. The pre-published text is available for the ITU-T membership, the final public version is expected to be published later in August. ITU-T Study Group 12 informed the Collaboration about the development of P.1140 in two liaison statements, [Doc 002](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/002%20-%20Liaison%20ITU-T%20SG12.docx) and [Doc 003](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/003%20-%20Liaison%20ITU-T%20SG12.zip), which were briefly introduced.

Participants noted that the draft new Recommendation ITU-R M.[IMT.VISION] – “Framework and overall objectives of the future development of IMT for 2020 and beyond” included automated driving, V2V and V2I communications as usage scenarios enabled by ultra-reliable and low latency communications such as those anticipated for [IMT-2020](http://www.itu.int/en/ITU-R/study-groups/rsg5/rwp5d/imt-2020/Pages/default.aspx) (“5G”).

Mr Adolph elaborated the importance of an increasing participation of ICT and standardization community in the deliberations of the UNECE World Forum on the Harmonization of Vehicle Regulations ([WP.29](http://www.unece.org/trans/main/wp29/introduction.html)) and its informal groups. ITU delegates participate in the discussions on topics related to [ITS and automated driving](https://www2.unece.org/wiki/pages/viewpage.action?pageId=2523344), and [in-vehicle emergency call systems](https://www2.unece.org/wiki/pages/viewpage.action?pageId=14319865). ITU delegates interested in participating in these activities are invited to consult the [meeting schedule](http://www.unece.org/trans/main/wp29/meetings_events.html) and contact Martin Adolph at [martin.adolph@itu.int](mailto:martin.adolph@itu.int) for additional information and coordination. CITS will continue reviewing and discussing the progress in WP.29 and coordinate any ITS communications related input.

**Yushi Naito**, Co-Chair of the Collaboration and Chairman of ITU-T Study Group 16 (Multimedia), informed participants about some of the outcomes of the recent Telecommunication Standardization Advisory Group (TSAG) meeting; the establishment of [ITU-T Study Group 20](http://www.itu.int/en/ITU-T/studygroups/2013-2016/20/Pages/default.aspx) (on “IoT and its applications including smart cities and communities”); and the ongoing discussion about the lessons learned from the Collaboration on ITS Communication Standards as a model for multilateral collaboration in other areas of work ([TD GEN 307](http://www.itu.int/md/T13-TSAG-150602-TD-GEN-0307/en)).

**Koji Nakao**, Vice-Chairman of ITU-T Study Group 17 (Security) gave an overview of SG17 and its activities ([Doc 007](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/007%20-%20Introduction%20to%20ITU-T%20SG17.pdf)) including the ITS related work items, [itssec-1](http://www.itu.int/itu-t/workprog/wp_item.aspx?isn=10276) and [itssec-2](http://www.itu.int/itu-t/workprog/wp_item.aspx?isn=10277). Itssec-1, the work item on secure software update capability for ITS communications devices, was described in greater detail at the preceding workshop ([presentation material](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Workshop-201507-Beijing/Presentations/S4P3-Masashi-Eto.pdf)). Nakao-san was confident that a stable draft of the text would be available for comments after SG17’s meeting in September 2015. He also introduced a liaison statement from SG17 ([Doc 004](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/004%20-%20Liaison%20ITU-T%20SG17.zip)) informing the Collaboration about the allocation of an OID dedicated to intelligent transportation systems.

Participants recommended that ITU establish a repository of ITS related work items in ITU on the Collaboration website.

* Action (1) ITU/TSB: Establish a repository of ITU’s ITS related work items.

**Zhao Li** of the China Academy of Telecommunications Technology (CATT) presented a status update of LTE V2X related activities in CCSA ([Doc 009](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/009%20-%20Progress%20of%20LTE%20V2X%20in%20CCSA.pptx)). CCSA continues to support and promote the study of LTE-V technologies, as well as LTE-V standardization. CATT and Huawei both have developed LTE-V prototype systems, which have been demonstrated at the 14th ITS Asia-Pacific Forum in April 2015. CCSA members play an important role in promoting LTE-V in other SDOs, in particular 3GPP.

**Du Jiadong** of the China Academy of Information and Communications Technology gave some background on LTE-V and its standardization in 3GPP ([Doc 010](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/010%20-%20LTE-V%20in%203GPP.pdf)). 18 use cases related to V2V, V2I and V2P have been studied in TR 22.885, and a range of system parameters for V2X including range, speed, latency, reliability are under discussion. Participants commented that sensors will continue playing an important role in active safety applications. would still provide necessary and relevant information.

**Yang Qi** of RIOH introduced the activities of the National ITS Standardization Technical Committee (SAC/TC269) ([Doc 006](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/006%20-%20ITS%20standards%20in%20China%20(TC%20ITS).ppt)). China is a P-member of ISO TC204 and participates in items related to DSRC; multi-modal transport and transit management; and security.

**Naito-san** gave a short briefing on the activities of TTC Japan’s smart car committee. Key activities include discussions about a taxonomy for automated driving and general promotion of ITS communications. No progress has been made on V2P communications.

**Jim Misener**, Chair of SAE International’s DSRC Technical Committee, elaborated on the SAE presentation ([slides](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Workshop-201507-Beijing/Presentations/S4P1-Gary-Schkade.pdf)) made during the workshop. The committee is working on a recommended practice for V2P performance requirements, which is planned for publication in 2016. He highlighted the updated message set dictionary for DSRC ([SAE J2735](http://standards.sae.org/j2735_201504/)) and the work on performance requirements for V2V safety systems based on IEEE 802.11 ([SAE J2945/1](http://standards.sae.org/wip/j2945/1/)). He noted the rapid progress that has been made following the advance notice of proposed rulemaking to begin the implementation of V2V communications technology in the United States.

1. **Discussion of work items**

**Shuhui Ma** of China Unicom introduced seven ITS communications scenarios and their requirements ([Doc 008](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201507-Beijing/008%20-%20Vehicle%20communications%20use%20cases.zip)). Participants welcomed the input to work item “Perform a study of identified ITS application requirements so that needed communication capabilities and performance can be properly defined,” and recommended that a separate China Unicom contribution with this content should be reviewed by Q27/16. A possible way forward could include a liaison to SG12 on the hands-free aspects of some use cases, and to SG17 on security aspects. The use cases could be added to a revised version of the Technical Paper / Survey on Global ITS Communication Requirements ([HSTP-CITS-Reqs](http://www.itu.int/pub/T-TUT-ITS-2014-REQS)), or form the basis of new Q27/16 work items. China Unicom was invited to review the format of the text (e.g., avoid use of trademarks) and to submit a contribution to the next SG16 meeting (Geneva, 12‑23 October 2015).

* Action (2) China Unicom: Submit a contribution based on Doc 008 to SG16 meeting.

1. **Next meetings**

The Telecommunications Industry Association (TIA) has agreed to host the next meeting of the Collaboration on ITS Communication Standards on **8 December 2015 (morning) in Arlington, VA, United States**, with remote participation capabilities. Following the success of the Beijing workshop, TIA and ITU will convene a similar [**workshop on *How Communications will Change Vehicles and Transport***](http://www.itu.int/en/ITU-T/extcoop/cits/Pages/201512.aspx) **on 7 December 2015**.

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

The first meeting in 2016 will take place on **4 March 2016** at ITU headquarters in **Geneva, Switzerland**. The meeting will be held in conjunction with [**The Symposium on The Future Networked Car**](http://www.itu.int/en/fnc/Pages/default.aspx) at Geneva Motor Show (3 March 2016).

1. **Close of meeting**

**Russ Shields** the participants for all the discussions. The meeting closed at 1730.

| Meeting | No. | Who | What | Work Item | By when | Status |
| --- | --- | --- | --- | --- | --- | --- |
| Beijing, July 2015 | | | | | | |
| Beijing(2015) | 1 | ITU/TSB | Establish a repository of ITU’s ITS related work items. |  | December meeting |  |
| Beijing(2015) | 2 | China Unicom | Submit a contribution based on Doc 008 to SG16 meeting. | 1 | SG16 deadline: 29 Sept 2015 |  |
| 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 | July 2015 meeting | 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 | Update in July 2015 meeting | Ongoing |
| Geneva(2015) | 3 | ITU/TSB | Finalize and submit Liaison Statement to UNCEFACT. |  | 31 March 2015 | Done |
| Geneva(2015) | 4 | ITU/TSB | Provide list of active ITU work items related to ITS communications to GSC ITS Task Force. |  | 31 March 2015 | Done |

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