# Collaboration on ITS Communication Standards

## 26 and 28 June 2013, Geneva, Switzerland

### Meeting report

1. **Introduction**

The meeting of the Collaboration on ITS Communication Standards (“Collaboration”) took place on 26 and 28 June 2013 at ITU headquarters in Geneva, Switzerland.

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**

The Chairman welcomed the participants (12 on-site, 6 remote; the final list of participants is reproduced in [Doc 008](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201306-Geneva/008%20-%20List%20of%20Participants.pdf)).

The agenda approved by the meeting is reproduced in [Doc 001](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201306-Geneva/001%20-%20Draft%20agenda.docx).

1. **Presentation of incoming documents**

ITU-R WP 5A Liaison Rapporteur Paul Najarian gave an update on activities leading to the World Radiocommunication Conference 2015 ([WRC-15](http://www.itu.int/en/ITU-R/conferences/wrc/2015/Pages/default.aspx)), specifically Agenda Item 1.18 *“to consider a primary allocation to the radiolocation service for automotive applications in the 77.5-78.0 GHz frequency band in accordance with Resolution 654 (WRC-12)”*. He presented [Doc 002](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201306-Geneva/002%20-%20Radio%20interfaces%20V2V%20V2I.zip) (a skeleton of an ITU-R Recommendation on radio interfaces for vehicle-to-vehicle and vehicle-to-infrastructure communication) and [Doc 003](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201306-Geneva/003%20-%20Information%20Paper%20on%20ITS%20DSRC.zip) (an information paper on DSRC in the 5.9 GHz band).

Action (1) ALL: Input is invited to the next ITU-R WP 5A meeting ([18-28 November 2013, Geneva, Switzerland](http://www.itu.int/events/eventdetails.asp?eventid=10101&lang=en)) to fill the skeleton in Attachment 1 of Doc 002 with text describing radio interface standards, e.g., from ETSI, IEEE and ARIB. Attachment 1 of Doc 003 may represent an input to the draft ITU-R Recommendation.

Action (2) ALL: Further input is sought on the definitions of automobile, vehicle, and motor vehicle.

1. **ITS communications requirements – Work Item 1**

Scott Pennock (QNX) then presented a Liaison Statement ([Doc 005](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201306-Geneva/005%20-%20Input%20on%20ITS%20performance%20measurement%20methods,%20QoS,%20and%20QoE.zip)) from ITU-T Study Group 12 to Study Group 16, for information to the Collaboration. The document provides feedback on QoS and QoE aspects of the ITS communication requirements document developed by the Collaboration (see [version of August 2012](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20120821-Tokyo/002%20-%20Global%20ITS%20Communication%20Requirements%20(DRAFT).zip)). Doc 005 proposes to categorize parameters with a priority relative to each-other and to organize performance parameters according to a 3x3 matrix, first described in Recommendation [ITU‑T I.350](http://itu.int/ITU-T/I.350), when surveying application and network performance requirements.

Action (3) Russ and Scott: Apply performance matrix to high-priority ITS applications (or high-level categories thereof) in the ITS communications requirements document.

1. **Gap analysis – Work Item 2**

Yushi Naito presented a document ([Doc 007](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201306-Geneva/007%20-%20Gap%20Analysis.zip)) submitted by TTC Japan proposing an approach for work item 2: ITS communication standards’ gap analysis.

Action (4) Russ and Yushi: Discuss this gap analysis proposal further with TTC in Japan, early July, in view of contributing parts of work item 2 to the next Collaboration meeting.

1. **Community-based traffic information systems**

The afternoon session had presentations from TomTom (Andreas Erwig), Coyote System ([Doc 004](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201306-Geneva/004%20-%20The%20role%20of%20community-based%20driving%20assistants%20in%20road%20safety.zip); Yves-Paul Robert), BeatTheTraffic (André Guéziec) and Nokia (Joe Ciprian) on different approaches to traffic information systems, including

* Jam tail warnings based on GPS probe data;
* Road safety information based on user input combined with GPS data.

Participants then discussed potential standards gaps related to traffic information systems. Dynamic geo referencing of traffic and safety-related information was identified as an area to be further explored. [ISO 17572-3:2008](http://www.iso.org/iso/home/store/catalogue_tc/catalogue_detail.htm?csnumber=45962) (Intelligent transport systems (ITS) -- Location referencing for geographic databases -- Part 3: Dynamic location references (dynamic profile)), also known as [AGORA-C](http://www.vialicensing.com/licensing/agora-overview.aspx) was mentioned as one of the standards in the area.

Road safety information message formats and interfaces were other potential gaps mentioned.

Groups active in the domain include [ISO TC204](http://www.iso.org/iso/iso_technical_committee?commid=54706) Working Group 3 (ITS database technology), [ISO TC211](http://www.iso.org/iso/home/standards_development/list_of_iso_technical_committees/iso_technical_committee.htm?commid=54904) (Geographic information/Geomatics) and the [Open Geospatial Consortium](http://www.opengeospatial.org/) (OGC).

Action (5) TomTom, Coyote System, BeatTheTraffic, Nokia: Elaborate on standards’ needs for traffic and road safety information systems.

Action (6) Russ and ITU/TSB: Talk to standards bodies re human input with geo referencing.

The discussion about traffic information systems highlighted the growing attention given to driver distraction aspects and guidelines and how they can be implemented.

Scott Pennock, Chairman of the former [ITU-T Focus Group on Driver Distraction](http://www.itu.int/en/ITU-T/focusgroups/distraction/Pages/default.aspx) and Rapporteur of [Question 27 in ITU-T Study Group 16](http://www.itu.int/en/ITU-T/studygroups/2013-2016/16/Pages/q27.aspx) which is following up on the driver distraction work, pointed to the output of the Focus Group, which is available on the website:

* [Final report](http://www.itu.int/en/ITU-T/focusgroups/distraction/Documents/deliverables/FG%20Distraction%20-%20Final%20Report.pdf)
* [Report on use cases](http://www.itu.int/en/ITU-T/focusgroups/distraction/Documents/deliverables/FG%20Distraction%20-%20Report%20on%20Use%20Cases.pdf)
* [Report on user interface requirements for automotive applications](http://www.itu.int/en/ITU-T/focusgroups/distraction/Documents/deliverables/FG%20Distraction%20-%20Report%20on%20User%20Interface%20Requirements%20for%20Automotive%20Applications.pdf)
* [Report on situational awareness management](http://www.itu.int/en/ITU-T/focusgroups/distraction/Documents/deliverables/FG%20Distraction%20-%20Report%20on%20Situational%20Awareness%20Management.pdf)
* [Report on vehicle-to-applications communications interface​](http://www.itu.int/en/ITU-T/focusgroups/distraction/Documents/deliverables/FG%20Distraction%20-%20Report%20on%20Vehicle-to-Applications%20Communications%20Interface.pdf)

Any feedback on these reports is welcome.

Takaaki Sugiura gave an update on ISO TC204 WG16 activities.

First day of the meeting closed around 17:00 local time.

1. **ITS Workshop**

A [workshop on ITS in emerging markets](http://itu.int/go/ITSworkshop) took place on 27 June 2013. The workshop was jointly organized by ITU and UNECE. Some 50 participants attended and adopted an [action plan](http://www.itu.int/en/ITU-T/Workshops-and-Seminars/its-em/201306/Documents/ITS%20workshop%20-%20action%20plan.pdf) and encouraged both organizations to further strengthen cooperation in ITS matters and road safety. The workshop also had the participation and input from developing countries. It became obvious that requirements, priorities and needs vary from country to country and region to region.

Action (7) ITU/TSB: Follow up with speakers from developing countries to identify top 5 ITS applications in their current situation.

Driver distraction and eCall were identified as other topics of joint interest. A written note (see Annex 1) was submitted to UNECE WP29 to initiate the dialogue on driver distraction.

Action (8) ITU/TSB: Follow up with UNECE secretariat and identify the right forum (WP1 or WP29?) for driver distraction discussions within UNECE.

Action (9) ITU/TSB: Identify ITU-T Study Groups’ role (e.g., SG2 or SG3) in eCall.

1. **Working procedures – Work Item 3**

Martin Adolph (ITU/TSB) presented the [working procedures](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20120626-Munich/006%20-%20Draft%20working%20procedures.docx) drafted to converge, harmonize, and incorporate ITS communication standards identified by the Collaboration into ITU Recommendations.

The meeting agreed to include wording on the establishment of a new work item in the procedure.

Action (10) ITU/TSB: Reflect the change in the working procedures.

1. **ITS communications security – Work Item 4**

Scott Pennock presented a [Liaison Statement](http://ifa.itu.int/t/2013/sg16/exchange/wp2/q27/1306-GVA/MeetingDocuments/ILS1_T13-SG16-131028-TD-GEN-0112!!MSW-E.doc) from ITU-T Study Group 17 (Security) to SG16. The Liaison comments on the V2V security approach taken by the US DOT Safety Pilot Program.

The meeting agreed to discuss the matter further with SG17 vice-chair Mr Nakao, and to send a follow up statement for the next SG17 meeting.

Action (11) Russ and Yushi: Discuss ITS security with Nakao-san in Tokyo, draft and send statement to SG17.

1. **ICTs in vehicles – Work Item 5**

Scott Pennock presented a Liaison Statement ([Doc 006](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201306-Geneva/006%20-%20LSi%20on%20organization%20of%20a%20series%20of%20thematic%20ITS%20virtual%20workshops.zip)) from ITU-T Q27/16 inviting the Collaboration to consider organizing and conducting webinars / online meetings to identify and discuss standards for ICTs in vehicles with other interested organizations.

The meeting concluded that the proposal was worthwhile, that it requires extensive planning and preparation. It was agreed that an invitation will be sent out to organizations by **15 September 2013.** **Friday, 15 November 2013** (15:00 Geneva time) was identified as the target date for the online meeting.

Action (12) Scott: Identify and describe topic for the event. Draft invitation letter.

Action (13) Scott and ITU/TSB: Identify speakers, target audience and contacts.

Action (14) ITU/TSB: Dispatch invitations, provide platform for the online meeting.

1. **Next meetings**

The next Collaboration meeting will take place from **12-13 October 2013, hosted by TTC in Tokyo, Japan** (in conjunction with [ITS World Congress](http://www.itsworldcongress.jp/) and ISO TC 204). Meeting announcement and logistics will be posted shortly at <http://itu.int/go/ITScomms>.

1. **Close of meeting**

The Chairman thanked the participants for all the discussions.

### List of new actions

**Action (1) ALL:** Input is invited to the next ITU-R WP 5A meeting (18-28 November 2013, Geneva, Switzerland) to fill the skeleton in Attachment 1 of Doc 002 with text describing radio interface standards, e.g., from ETSI, IEEE and ARIB. Attachment 1 of Doc 003 may represent an input to the draft ITU-R Recommendation.

**Action (2) ALL:** Submit input on the definitions of automobile, vehicle, and motor vehicle [ITU-R WP 5A].

**Action (3) Russ and Scott:** Apply [ITU T I.350] performance matrix to high-priority ITS applications (or high-level categories thereof) in the ITS communications requirements document.

**Action (4) Russ and Yushi:** Discuss this gap analysis proposal further with TTC in Japan, early July, in view of contributing parts of work item 2 to the next Collaboration meeting.

**Action (5) TomTom, Coyote System, BeatTheTraffic, Nokia:** Elaborate on standards’ needs for traffic and road safety information systems.

**Action (6) Russ and ITU/TSB:** Talk to standards bodies re human input with geo referencing.

**Action (7) ITU/TSB:** Follow up with speakers from developing countries to identify top 5 ITS applications in their current situation.

**Action (8) ITU/TSB:** Follow up with UNECE secretariat and identify the right forum (WP1 or WP29?) for driver distraction discussions within UNECE.

**Action (9) ITU/TSB:** Identify ITU-T Study Groups’ role (e.g., SG2 or SG3) in eCall.

**Action (10) ITU/TSB:** Reflect the change in the working procedures.

**Action (11) Russ and Yushi:** Discuss ITS security with Nakao-san in Tokyo, draft and send statement to SG17.

**Action (12) Scott:** Identify and describe topic for the ICTs in vehicles webinar. Draft invitation letter.

**Action (13) Scott and ITU/TSB:** Identify speakers, target audience and contacts for ICTs in vehicles webinar.

**Action (14) ITU/TSB:** Dispatch invitations, provide platform for the ICTs in vehicles webinar.

### Pending and ongoing action items from previous Collaboration meetings

**Beijing meeting (**[**see report**](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-201303-Beijing/006%20-%20Meeting%20report.docx)**):**

**China Unicom:** Review the use-cases based on the discussions; discuss and evaluate the scenarios with ITS experts.

**TTC:** Describe such [multimodal] scenarios in detail for the next meeting.

**TTC:** Describe these disaster relief and other societal services enabled by ITS communications in more detail for the next meeting and propose a structured document as basis for future discussion.

[**ITS communication standards catalogue and questionnaire**](https://docs.google.com/forms/d/1xl4xbyNaKRJUR7kxCG5kkXNfiYiTWQGint1jbRsW9s0/viewform)

**ALL:** Complete the form for any ITS communication standards

**Yushi Naito:** Coordinate the collection of relevant ARIB, ITU-T, ITU-R and TTC standards.

**Mitch Tseng:** Coordinate the collection of relevant IEEE, ISO TC204 and TIA standards.

**Washington meeting (**[**see report**](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20121217-Washington/006%20-%20Meeting%20report.docx)**):**

**Yushi Naito:** Identify existing ITU-T work on Public Protection and Disaster Relief (PPDR), e.g., communication for police, fire brigade ambulance, etc.

**Requirements Drafting Team:** Include SAE J2735 in requirements document.

**Jim Frazer:** Clarify contribution [[Doc 004](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20121217-Washington/004%20-%20References%20to%20V2I%20standard%20SAE%20J2735%20and%20additions%20to%20section%202_1.zip)] with respect to the communications requirements of “management of electric vehicles and electric vehicle charging spots” and “Integration to the Smart Grid”.

**Vienna meeting (**[**see report**](http://www.itu.int/en/ITU-T/extcoop/cits/Documents/Meeting-20121028-Vienna/008%20-%20Meeting%20report.docx)**):**

**Requirements Drafting Team:** see Action 4.

ANNEX 1

ITU Statement for UNECE WP29 2013-06-26

The ITU appreciates the opportunity provided for ITU delegates to participate in ITS discussions at the UNECE meeting on 25 and 26 June 2013.

ITU understands that the use of mobile devices by drivers in moving vehicles creates risks of vehicle accidents. Mobile devices continue to increase in numbers and capabilities. This trend is increasing the risk of driver distraction issues from mobile devices in moving vehicles.

ITU expects that the issues of driver distraction by mobile devices will be addressed by legal promulgations in various jurisdictions prohibiting certain actions by drivers with their mobile devices, regulations by various vehicle and mobile regulators to prescribe requirement for new vehicles and new mobile devices, and technical implementations to enforce legal prescriptions and regulations covering the use of mobile devices by drivers in moving vehicles.

ITU believes that better solutions to driver distraction by the use of mobile devices in vehicles by drivers can be created by the vehicle community and the mobile community working together.

ITU invites UNECE WP29 formally establish a cooperation with ITU for the joint development of solutions to reduce the misuse of mobile devices by drivers in moving vehicles. ITU accepts that the lead in such a cooperation should come from UNECE WP29.

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