|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A black and white logo  Description automatically generated with low confidence | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2022-2024 | | | TSAG-TD215 | |
| **TSAG** | |
| **Original: English** | |
| **Question(s):** | | | N/A | Geneva, 30 May - 2 June 2023 | |
| **TD** | | | | | |
| **Source:** | | | Chairman, Collaboration on ITS Communication Standards | | |
| **Title:** | | | Report on Collaboration on ITS Communication Standards and ITS-related activities | | |
| **Contact:** | | T. Russell Shields USA | | | E-mail: [russell.shields@outlook.com](mailto:russell.shields@outlook.com) |

|  |  |
| --- | --- |
| **Abstract:** | The document summarizes ITU-T activities in the field of ITS communications since the last meeting of TSAG in December 2022. |

# Action required

TSAG is invited to note the report.

ITU-T study groups with activities related to ITS communications (especially SG2, SG12, SG13, SG16, SG17 and SG20 along with ITU-R SG5) are invited to provide regular updates on their ITS work items to the Collaboration on ITS Communication Standards (CITS).

Contents

[Action required 1](#_Toc135758877)

[1 Collaboration on ITS Communication Standards (CITS) 1](#_Toc135758878)

[1.1 CITS-related events 3](#_Toc135758879)

[1.1.1 Concluded meetings and events: 3](#_Toc135758880)

[1.1.2 Planned meetings and events: 3](#_Toc135758881)

[2 ITU-T related Focus Groups 3](#_Toc135758882)

[ANNEX - All the previous CITS meetings 4](#_Toc135758883)

# 1 Collaboration on ITS Communication Standards (CITS)

The Collaboration on ITS Communication Standards ([CITS](https://www.itu.int/en/ITU-T/extcoop/cits/Pages/default.aspx)) has become the globally recognized forum for the coordination of Intelligent Transportation Systems (ITS) communication standards. CITS supports the rapid deployment of fully interoperable ITS communication-related products and services in the global marketplace.

One CITS meeting has been held since the last TSAG meeting (December 2022) – on 17 March 2022. The meetings of the Collaboration on ITS Communication Standards discuss the various ITS-related standardization activities in the different SDOs, through progress and status reports submitted. The documents of the meeting in March 2023 are available [here](https://www.itu.int/en/ITU-T/extcoop/cits/Pages/meeting-documents.aspx?RootFolder=/en/ITU-T/extcoop/cits/Documents/Meeting-20230317-e-meeting&FolderCTID=0x0120008D91490DA7927C4D8A0BB5A73929B07D&View=%7b73BE16B3-22C9-43D5-A9FD-D8BC067A87FF%7d).

Following the discussions during the previous CITS meeting, several SDOs have provided information on their relevant standards for inclusion in the [online ITS Communication Standards database](https://www.itu.int/net4/ITU-T/landscape#?topic=0.131&workgroup=1&searchValue=&page=1&sort=Revelance). The CITS meeting in March 2023 was attended by 61 participants representing SDOs and other organizations including IETF, IEC, SAE International, CSAE, CATARC, IEEE, 5GAA, ISO, W3C, ETSI, Car2Car Communication Consortium, TIAA, ARIB, TSDSI, TTC, WWRF, SAE International, UNECE, among others. These entities and their related groups provided progress reports to CITS. The relevant inputs from the progress reports were included in the ITS communication database in due time.

The e-meeting of CITS in March 2023 was preceded by the **18th** **Symposium on the Future Networked Car 2023 (**[**FNC-2023**](https://fnc.itu.int/)**)**, co-organized by **ITU** and **UNECE** on **13 – 16 March 2023**. The Symposium was attended by over **250** participants. As there was no formal event of the Geneva Motor Show, the Symposium was organized as a fully virtual meeting over four days. The programme was developed, with the panelists connecting to the sessions remotely from **13-16 March 2023**:

* **13 March 2023**: [OPENING + SESSION 1](https://fnc.itu.int/2023-session-1/): *Will AI Controlled Automated Vehicles Be Safe for Road Users?*
* **14 March 2023**: [SESSION 2](https://fnc.itu.int/2023-session-2/): *Using Automotive Artificial Intelligence to Improve Vehicle Safety, Services and Transport Management*
* **15 March 2023**: [SESSION 3](https://fnc.itu.int/2023-session-3/): *Automated Driving Systems (ADS) for Consumer and Other Vehicles*
* **16 March 2023**: [SESSION 4](https://fnc.itu.int/2023-session-4/): *Wireless Communications Applied to Vehicle Safety, Services, and Transport Management – Current Status and Future Directions*

See the final Programme at: <https://fnc.itu.int/> .

The Symposium can be accessed offline by watching the recorded sessions.

During the CITS meeting, it was again highlighted that FG-AI4AD and FG-VM had completed their work and submitted their finalized deliverables to their parent ITU-T Study Group 16 in September 2022.

CITS continues to provide the link between ITU and the [UNECE World Forum for Harmonization of Vehicle Regulations (WP.29)](http://www.unece.org/trans/main/welcwp29.html) for topics including ITS and automated driving, for which SG16 (through the deliverables of FG‑AI4AD) and other study groups have various ongoing studies.

Collaboration among the UNECE Task Force and ITU-T SG17 is useful to discuss related topics in both organizations with the participation of delegates of both UNECE WP29 and Q13/17, as well as CITS in general.

Additionally, the informal group “UN Task Force on Vehicular Communication” was established by UNECE WP29 under the informal group on ITS: <https://wiki.unece.org/display/trans/ITS+Task+Force+on+Vehicular+Communications>

ITU delegates interested in participating in UNECE WP.29 activities are invited to consult the meeting schedule at <http://www.unece.org/trans/main/wp29/meetings_events.html> and to contact Mr Russ Shields (CITS Chairman) and Mr Stefano Polidori (ITU/TSB) at [tsbcits@itu.int](mailto:tsbcits@itu.int) for additional information and coordination. CITS will continue reviewing and discussing the progress in WP.29 and coordinate ITS communications related input.

# 1.1 CITS-related events

# 1.1.1 Concluded meetings and events:

CITS has convened one (e-)meeting since the last TSAG:

* **E-meeting, 17 March 2023:** Collaboration on ITS Communication Standards (CITS) e-meeting (collocated with the Symposium on the Future Networked Car 2022, 13– 16 March 2023)

All the previous CITS meetings are listed in [**ANNEX**](#_ANNEX) **for information**.

The following related (virtual) events have taken place since the last TSAG meeting:

* **AI for Good Webinar, 21 February 2023**: [AI for Autonomous and Assisted Driving: Findings of ITU-T Focus Group FG-AI4AD](https://aiforgood.itu.int/event/ai-for-autonomous-and-assisted-driving-findings-of-itu-t-focus-group-fg-ai4ad/)
* **Virtual Symposium, 13-16 March 2023,** [The Symposium on the Future Networked Car (FNC-2023)](https://fnc.itu.int/)

# 1.1.2 Planned meetings and events:

* Webinar on “[***Digital Transformation of Mobility: Paving the way for road safety***](https://www.itu.int/cities/standards4dt/ep26/)” on **14 June 2023**, *14:00 – 15:00 CEST*
* **E-meeting, 22 September 2023:** [**Collaboration on ITS Communication Standards (CITS)**](https://www.itu.int/en/ITU-T/extcoop/cits/Pages/default.aspx) e-meeting
* **Spin off of the Future Networked Car (FNC) Symposium, Qatar in October 2023 (TBC)**

Delegates are invited to consult the CITS website for further updates and information: <http://itu.int/go/ITScomms>.

# 2 ITU-T related Focus Groups

Under the remit of ITU-Study Group 16, the following Focus Groups were established in 2018 and have since completed their work in September 2022:

* [ITU-T Focus Group on Vehicular Multimedia (FG-VM)](https://www.itu.int/en/ITU-T/focusgroups/vm/Pages/default.aspx)
* [ITU-T Focus Group on AI for Autonomous and Assisted Driving (FG-AI4AD](https://www.itu.int/en/ITU-T/focusgroups/ai4ad/Pages/default.aspx))

Both these Focus Groups have concluded their work and submitted their deliverables to ITU-T Study Group 16.

ANNEX: 1

# ANNEX - All the previous CITS meetings

* 1st CITS Meeting, 14 December 2011, Geneva, Switzerland (collocated with the 3rd meeting of the [Focus Group on Driver Distraction](https://www.itu.int/en/ITU-T/focusgroups/distraction/Pages/default.aspx) on 12-13 December 2011)
* 2nd CITS Meeting, 3 April 2012, Troy, USA (collocated with the 4th meeting of the [Focus Group on Driver Distraction](https://www.itu.int/en/ITU-T/focusgroups/distraction/Pages/default.aspx) on 4-5 April 2012)
* 3rd CITS Meeting, 26 June 2012, Munich, Germany (collocated with the 5th meeting of the [Focus Group on Driver Distraction](https://www.itu.int/en/ITU-T/focusgroups/distraction/Pages/default.aspx) on 27-28 June 2012)
* 4th CITS Meeting, 21 August 2012, Tokyo, Japan (collocated with the 6th meeting of the [Focus Group on Driver Distraction](https://www.itu.int/en/ITU-T/focusgroups/distraction/Pages/default.aspx) on 22-23 August 2012)
* 5thCITS Meeting, 28 October 2012, Vienna Austria (collocated with the 7th meeting of the [Focus Group on Driver Distraction](https://www.itu.int/en/ITU-T/focusgroups/distraction/Pages/default.aspx) on 29-30 October 2012)
* 6thCITS Meeting, 17 December 2012, Washington, D.C., USA (collocated with the 8th meeting of the [Focus Group on Driver Distraction](https://www.itu.int/en/ITU-T/focusgroups/distraction/Pages/default.aspx) on 18-19 December 2012)
* 7th CITS Meeting, 21-22 March 2013, Beijing, China
* 8th CITS Meeting, 26 and 28 June 2013, Geneva, Switzerland (collocated with [Workshop](https://www.itu.int/en/ITU-T/Workshops-and-Seminars/its-em/201306/Pages/default.aspx) on 27 June 2013)
* 9th CITS Meeting, 13 October 2013, Tokyo, Japan
* 10th CITS Meeting, 7 March 2014, Geneva, Switzerland (collocated with [Symposium FNC-2014](https://www.itu.int/en/fnc/2014/Pages/default.aspx) on 5-6 March 2014)
* 11th CITS Meeting, 4 July 2014, Sapporo, Japan
* 12th CITS Meeting, 23 October 2014, Troy, USA
* 13th CITS Meeting, 6 March 2015, Geneva, Switzerland (collocated with [Symposium FNC-2015](https://www.itu.int/en/fnc/2015/Pages/default.aspx) on 5 March 2015)
* 14th CITS Meeting, 29 July 2015, Beijing, China (collocated with [Workshop](https://www.itu.int/en/ITU-T/extcoop/cits/Pages/072015.aspx) on 28-29 July 2015)
* 15th CITS Meeting, 7 December 2015, Arlington, USA (collocated with [Workshop](https://www.itu.int/en/ITU-T/extcoop/cits/Pages/201512.aspx) on 8 December 2015)
* 16th CITS Meeting, 4 March 2016, Geneva, Switzerland (collocated with [Symposium FNC-2016](https://www.itu.int/en/fnc/2016/Pages/default.aspx) on 3 March 2016)
* 17th CITS Meeting, 5 July 2016, Tokyo, Japan (collocated with [Workshop](https://www.itu.int/en/ITU-T/extcoop/cits/Pages/201607.aspx) on 4 July 2016)
* 18th CITS Meeting, 30 November 2016, Detroit, USA (collocated with Workshop on 29 November 2016)
* 19th CITS Meeting, 10 March 2017, Geneva, Switzerland (collocated with [Symposium FNC-2017](https://www.itu.int/en/fnc/2017/Pages/default.aspx) on 9 March 2017)
* 20th CITS Meeting, 7 July 2017, Singapore (collocated with [Workshop](https://www.itu.int/en/ITU-T/extcoop/cits/Pages/201707.aspx) on 6 July 2017)
* 21st CITS Meeting, 6 December 2017, Arlington, USA (collocated with Workshop on 5 December 2017)
* 22nd CITS Meeting, 9 March 2018, Geneva, Switzerland (collocated with [Symposium FNC-2018](https://www.itu.int/en/fnc/2018/Pages/default.aspx) on 8 March 2018)
* 23rd CITS Meeting, 6-7 September 2018, Nanjing, China (collocated with [International Forum on ITS](https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20180906/Pages/default.aspx) on 6-7 September 2018)
* 24th CITS Meeting, 8 March 2019, Geneva, Switzerland (collocated with [Symposium FNC-2019](https://www.itu.int/en/fnc/2019/Pages/default.aspx) on 7 March 2019)
* 25th CITS Meeting, 28 October 2019, e-Meeting
* 26th CITS Meeting, 6 March 2020, Geneva, Switzerland (collocated with [Symposium FNC-2020](https://www.itu.int/en/fnc/2020/Pages/default.aspx) on 5 March 2020)
* 27th CITS Meeting, 9 September 2020, e-Meeting
* 28th CITS Meeting, 26 March 2021, e-Meeting (collocated with [Symposium FNC-2021](https://fnc.itu.int/search-result-programme/?keyword=&category=&location=&organizer=&status=&enddate=December+31+2021&startdate=January+01+2021&sort=Sort+by&price=0%3B299) on 22-25 March 2021)
* 29th CITS Meeting, 10 September 2021, e-Meeting
* 30th CITS Meeting, 18 March 2022, e-Meeting (collocated with [Symposium FNC-2022](https://fnc.itu.int/search-result-programme/?keyword=&category=&location=&organizer=&status=&enddate=December+31+2022&startdate=January+01+2022&sort=&price=0%3B299) on 22-25 March 2022)
* 31st CITS Meeting, 23 September 2022, e-Meeting
* 32nd CITS Meeting, 17 March 2023, e-Meeting (collocated with [Symposium FNC-2023](https://fnc.itu.int) on 13-16 March 2022)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_