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|  | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2022-2024 | | | TSAG–TD004 |
| **TSAG** |
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| **TD** | | | | |
| **Source:** | | | Chairman, TSAG | |
| **Title:** | | | (Draft) Report of the first TSAG meeting (Geneva, 12-16 December 2022) | |
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| **Abstract:** | The report of the first meeting of the ITU-T Telecommunication Standardization Advisory Group (Geneva, 12-16 December 2022) in the 2022-2024 study period. |

NOTE 1 – This report contains the conclusions and actions decided at this TSAG meeting.

NOTE 2 – Unless otherwise noted, all Contributions and TDs referenced in this report are of the TSAG series of documents.

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# Opening of the meeting, TSAG Chairman

The TSAG Chairman, Mr Abdurahman M. Al Hassan, Saudi Arabia (Kingdom of), welcomed the TSAG participants to the first meeting of the Telecommunication Standardization Advisory Group (TSAG) for the 2022- 2024 study period, which was held in Geneva, 12-16 December 2022. Mr Al Hassan was assisted by Mr Bilel Jamoussi, Chief of the ITU-T study groups department, and Mr Martin Euchner, Advisor.

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| 1.1 | Live interpretation in six official ITU languages was provided during the 12 and 16 December 2022 plenary sessions; and real-time captioning[[1]](#footnote-2), remote participation using Zoom, and webcasting[[2]](#footnote-3) were provided for all TSAG plenaries and Rapporteur Group sessions. At the beginning of the meeting, the Chairman read out the note contained in [TD063](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0063), which provided guidance on using Zoom, and the public chat. Additional information on using Zoom was available in [TD054](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0054). |
| 1.2 | Mr Al Hassan welcomed the ITU Secretary General, Mr Houlin Zhao; the BDT Director and Secretary General-elect, Ms Doreen Bogdan-Martin, the TSB Director, Mr Chaesub Lee, and TSB Director-elect Mr Seizo Onoe. |
| 1.3 | The following TSAG Vice-Chairmen attended the meeting: Mr Khalid Al-Hmoud (Hashemite Kingdom of Jordan), Mr Isaac Boateng (Ghana), Mr Olivier Dubuisson (France), Mr Tobias Kaufmann (Federal Republic of Germany), Mr Guy-Michel Kouakou (Republic of Côte d'Ivoire), Ms Fang Li (P.R. China), Ms Gaëlle Martin-Cocher (InterDigital Canada Ltée), Ms Miho Naganuma (NEC Corporation, Japan), Mr Victor Manuel Martinez Vanegas (Mexico), and Mr Ulugbek Azimov (Republic of Uzbekistan). |
| 1.4 | [TD055-R1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T17-TSAG-220110-TD-GEN-1210) reflects the final list of participants. In total, 276 (163 physical, 113 only remote) participants attended this first TSAG meeting: 47 Member States, 11 Sector Members (ROAs), 21 Sector Members (SIOs), seven Sector Members (Regional and other International Organizations), one Sector Member (Other entities), eight Permanent Missions, two Academia, one entity as per PP Resolution 99, one invited expert, and 61 ITU staff, and five elected officials of the ITU. |
| 1.5 | The ITU Secretary General, Mr Houlin Zhao, provided his opening remarks. With WTSA-20, WTDC-22 and PP-22 in 2022, he saw growing recognition that the digital transformation is critical to a sustainable future. He reported from the third G20 international standard summit, which was organized together with the National Standardization Agency of Indonesia (BSN) and ITU’s partners in the World Standards Cooperation, IEC and ISO, with participation of the World Trade Organization. This summit focused on the global action required to achieve better health, effective and sustainable digital transformation, energy security, and clean energy and net-zero emissions. That commitment to inclusive standardization process can place everyone in a stronger position to achieve their ambitions in sustainable development.  ITU continues to attract new members and partners, many from vertical markets with rapidly increasing need for ICT standards. He offered to the World Education summit held in New York in September 2022 that ITU would like to work with our education colleagues to help them to develop e-Education and even cooperate with them to develop education standards. And work with IO and UNESCO to perhaps provide assistance to teachers.  The ITU standardization platform must continue to grow in value to a green number of stakeholders from a green number of industries. ITU shall continue engaging more SMEs and academia and continue bridging development divide as well as gender divides. TSAG is in a position to make a very meaningful contribution to the achievement of this cause. |
| 1.6 | The BDT Director/Secretary-General-elect, Ms Doreen Bogdan-Martin, in her opening remarks, confirmed that achieving the strategic goals adopted by the Plenipotentiary Conference of Universal Connectivity and Sustainable Digital Transformation is very possible, and supporting standards play a key role to achieving those goals. Still, a lot of work remains to be done as one-third of humanity, with its population of unconnected, lies in the developing world, has never, ever connected to the Internet. Standards can make a huge difference to help ensure a level playing field and also by helping countries to build their digital infrastructure and to stimulate economic development. She reported that several countries engaged in the Partner-to-Connect Digital Coalition made pledges specific to standards, and standards have a key role to play when tackling the barriers that remain in terms of connectivity. She emphasized the need for the three ITU Sectors to work together in order to help the countries to take better advantage of what digital has to offer. Several resolutions of the WTSA relate directly to BDT's work on topics from accessibility to the circular economy; while at the same time, the WTDC adopted a number of resolutions that directly have an impact on the work of the ITU-T, from IMT and future networks to connecting every school in the world to the Internet. Opportunities for collaboration between ITU-D and ITU-T exist on topics like climate change, digital inclusion, and accessibility, cybersecurity, early warning systems. Such collaboration is in the very interest of the Sectors to give a new meaning to "one ITU"; which constitutes a central vision for the future of this organization, as Ms Bogdan-Martin stated, where ITU can make what might seem like impossible, actually possible. |
| 1.7 | The TSB Director, Mr Chaesub Lee, welcomed all delegates to this first TSAG meeting in this 20222-2024 study period. His speech is contained in [TD056](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0056). |
| 1.8 | The TSAG Chairman set the objectives for this TSAG meeting and for the time until WTSA-24. PP-22 has adopted the strategic plan of the ITU, which has two major pillars: universal connectivity and sustainable digital transformation. International standards developed by the ITU play a very important role in supporting both pillars. The timely and harmonized adoption of those technical standards play as well a vital role in this context. This can only be achieved by an integrated response that would capitalize on the most precious thing that ITU can offer, which is unity and diversity.  The first priority for this study period is to ensure that industry is engaged at all the levels of ITU-T’s work, whether here at the TSAG or also at the level of the study groups, the focus groups, and others. The private sector and the industry have been making major contributions towards transforming the sector beyond recognition in terms of scale and scope, the knowledge that they have, as well as their own needs will be essential in shaping our own standards.  The second priority is inclusiveness, where it is very important to leverage the bridging standardization gap programme as a platform for knowledge-sharing and a promotion of a common global understanding on important topics that are relevant today to enable conversions of ideas that will lead to consensus.  The third priority is cooperation and collaboration with all stakeholders within the ITU, outside as One ITU.  Those priorities are also the guiding principles for TSAG in the preparation for WTSA-24; such as for the possible restructuring of study groups. |
| 1.9 | [Annex A](#_Annex_A_Summary_1) of this report summarizes the key outcomes (reports, liaison statements, next meetings) of this TSAG meeting. |

# Approval of the agenda, document allocation and time management plan

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| 2.1 | The meeting adopted the draft agenda, document allocation and work plan ([TD002-R2](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0002)), wherein RCC contribution [WTSA-20 C40A19](https://www.itu.int/dms_pub/itu-t/md/17/wtsa.20/c/T17-WTSA.20-C-0040!A19!MSW-E.docx) on proposed modifications to Recommendation ITU-T A.1 was added and allocated to RG-WM. TSAG accepted the time management plan in [TD001-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0001), which was further revised into TD001-R7, and took note of the overview of the agendas and reports in [TD005-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0005). |
| 2.2 | TSAG adopted the draft agenda in [TD003-R2](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0002) for the TSAG closing plenary meeting that took place on 16 December 2022. |
| 2.3 | [TD060](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0060) lists all the contributions submitted and considered during this 1st TSAG meeting. [TD061](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0061) provides the list of all the TDs of the TSAG meeting and of the Rapporteur Groups. [TD059-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0059) summarizes the incoming liaison statements received by TSAG since 18 January 2022, and the outgoing liaison statements approved by the meeting and sent until 12 January 2023. [TD005-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0005) provides an overview of all draft agendas and reports. |

# TSAG structure, TSAG organization, TSAG leadership

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| 3.1 | TSAG elected (per CV Art.20 No 244) Mr Khalid AL-HMOUD, Jordan, as TSAG Vice Chairman to replace Mr Omar AL-ODAT, Jordan, TSAG Vice Chairman, who could not continue (see letter from Jordan Administration in [TD118](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0118)). |
| 3.2 | TSAG considered [TD064-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0064), which proposes a structure, organization, and leadership for TSAG in the 2022-2024 study period. |
| 3.3 | Contribution [C8](https://www.itu.int/md/T22-TSAG-C-0008) (Germany) supports TD064; many other members also supported TD064-R1. |
| 3.4 | [C18](https://www.itu.int/md/T22-TSAG-C-0018) (Russian Federation) proposes to keep the flat structure of TSAG. At the same time, it is proposed to study the issue of the necessity of introduction of additional working elements to the structure such as the Working Parties and report the results to WTSA-24. In addition, attention is drawn to the need for a balanced representation of the regional telecommunication organizations in the leadership of the working bodies of TSAG. |
| 3.5 | TSAG agreed the structure with terms of references of TSAG Working Parties and Rapporteur Groups in Annex C (ref. [TD064-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0064)), with two working parties (WPs) (see Table 1), each having two Rapporteur Groups (RGs) and Associate Rapporteurs (see Table 2, Table 3).  TSAG further agreed that the new structure be implemented on a trial basis until WTSA-24, and based on experiences, allowing any necessary adaptations to be made to the TSAG structure for the next study period. |

**Table 1 – TSAG Working Parties and WP leadership**

| **TSAG Working Party** | **WP Title** | **WP Chairman** | **WP Vice Chairman** |
| --- | --- | --- | --- |
| Working Party 1 (WP1) | Working Methods and related WTSA preparations (WP-WMW) | Mr Tobias KAUFMANN Germany | Ms Minah LEE Korea (Rep. of) |
| Working Party 2 (WP2) | Industry Engagement, Work Programme, Restructuring (WP-IEWPR) | Ms Gaëlle MARTIN-COCHER InterDigital Canada Ltee | Mr Guy-Michel KOUAKOU Côte d'Ivoire |

**Table 2 – TSAG WP1 Rapporteur Groups and RG leadership**

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| **TSAG Rapporteur Group** | **Rapporteur** | **Associate Rapporteur** |
| Working Methods (RG-WM) | Mr Olivier DUBUISSON France | on remote participation  Mr Phil RUSHTON United Kingdom |
| WTSA Preparations (RG-WTSA) | Ms Fang LI China (P.R.) | on WTSA Guidelines Mr Isaac BOATENG Ghana |
| on Streamlining Resolutions  Mr Evgeny TONKIKH Russian Federation |

**Table 3 – TSAG WP2 Rapporteur Groups and RG leadership**

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| **TSAG Rapporteur Group** | | **Rapporteur** | **Associate Rapporteur** |
| Work Programme and Restructuring, SG work, SG Coordination (RG-WPR) | | Ms Miho NAGANUMA NEC Corporation | on restructuring  Mr Greg RATTA United States |
| Industry Engagement, Metrics (RG-IEM) | | Mr Glenn PARSONS Ericsson Canada, Inc. | on emerging technologies  Mr Arnaud TADDEI Broadcom |
| on metrics  Mr Noah LUO Huawei Technologies Co., Ltd |
| 3.6 | | TSAG took note of the Action plan for the 2022-2024 study period ([TD065-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0065)), which collects the action items for TSAG from WTSA Resolutions and from the outcome of WTSA-20, and former Assemblies for the 2022-2024 study period. This TD also includes the actions from PP-22 as per TSAG-TD068. | | | |
| 3.7 | | TSAG took note of [TD160](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0160) which contains a migration plan for the TSAG mailing lists in the new study period that will be implemented after the end of this TSAG meeting. | | | |
| 3.8 | | A session for TSAG newcomers was organized on 13 December 2022; the newcomer welcome pack material is contained in [TD055-R2](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0055). | | | |
| 3.9 | | A session for TSAG Leadership training was organized on 14 December 2022; the training material is contained in [TD120](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0120). | | | |

# Appointments

TSAG agreed the appointments as shown in Table 4.

**Table 4 - Appointments**

| **Function** | **Appointment** |
| --- | --- |
| Rapporteur on Strategic & Operational Plan (R-SOP)  Note (1) | Mr Víctor MARTÍNEZ VANEGAS Mexico |
| Chairman of ITU-T Focus Group on metaverse (FG-MV)  Note (1) | Mr Shin-Gak KANG ETRI, Republic of Korea |
| Vice-Chairman of ITU-T Focus Group on metaverse (FG-MV)  Note (1) | Ms Shane HE NOKIA Corporation |
| Mr Hideo IMANAKA National Institute of Information and Communication Technology (NICT) |
| Mr Per FRÖJDH Telefon AB – LM Ericsson |
| Mr Andrey Ribeiro PEREZ NUNES, Agência Nacional de Telecomunicações – ANATEL, Brazil |
| Mr Vincent AFFLECK Department for Digital, Culture, Media and Sport (DCMS), United Kingdom |
| Mr Yuntao WANG Ministry of Industry and Information Technology (MIIT), China (P.R.) |
| Chairman of ITU-T Joint Coordination Activity on Accessibility and Human factors (JCA-AHF)  Note (1) | Ms Andrea SAKS G3ict |
| Co-chairmen of ITU-T Joint Coordination Activity on Digital COVID Certificate  Note (1) | Mr Heung-Youl YOUM Korea (Rep. of) |
| Mr Carl LEITNER WHO |
| Chairman of Joint Coordination Activity on Quantum Key Distribution Network (JCA-QKDN)  Note (1) | Mr Junsen LAI CAICT, MIIT, China (P.R.). |
| Vice-Chairman of Joint Coordination Activity on Quantum Key Distribution Network (JCA-QKDN)  Note (1) | Mr Mark McFADDEN United Kingdom |
| TSAG Representatives to the IEC-ISO-ITU-T Standardization Programme Coordination Group (SPCG)  Note (1) | Ms Miho NAGANUMA NEC Corporation |
| Mr Per FRÖJDH Telefon AB – LM Ericsson |
| Mr Ajit JILLAVENKATESA United States |
| Mr Olivier DUBUISSON Orange |
| Mr Zhicheng QU ZTE Corporation |
| TSAG Representatives to ITU Inter-Sector Coordination Group (ISCG) and on Inter-Sector Coordination  Note (1), (3) | Mr Abdurahman AL HASSAN TSAG Chairman |
| Mr Dominique WÜRGES SG5 Chairman |
| Mr Noah LUO SG16 Chairman |
| TSAG Representative to ITU Inter-Sector Coordination Group (ISCG) on remote participation  Note (1) | Mr Phil RUSHTON United Kingdom |
| Coordination with the Collaboration Intelligent Transportation Systems (CITS)  Note (1) | Mr Paul NAJARIAN United States |
| ITU-T Liaison Officer to ISO/IEC JTC1  Note (2), (3) | Mr Shigeru MIYAKE Hitachi Ltd |
| ITU-T Liaison Officer to IEC/SMB/SG12 "Digital Transformation and Systems Approach"  Note (2), (3) | Mr Olivier DUBUISSON Orange |
| Liaison Officer to IETF  Note (1) | Mr Scott MANSFIELD Ericsson Canada |

Notes:

1. Activity under TSAG Plenary
2. Activity under WP2
3. Appointed by TSAG management team (22 August 2022)

# Reports by the TSB Director

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| 5.1 | The TSB Director presented the ITU-T activity report ([TD020-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0020), slide set in [Addendum 1](https://www.itu.int/dms_pub/itu-t/md/22/tsag/td/221212/GEN/T22-TSAG-221212-TD-GEN-0020!A1!PPT-E.pptx)), highlighting the key results achieved in ITU-T standardization from January to November 2022. |
| 5.1.1 | The meeting requested amendments to TD020-R1 to address the role of ITU-T with respect to the WSIS Action Lines, and how ITU-T plans to implement the WSIS Action Lines. Further amendments were requested to provide information how WTSA Resolution 75 is reflected in the ITU-T strategic and operational plan. [TD020-R2](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0020) provides the amendments. |
| 5.2 | TSAG took note of the report (in [TD022](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0022)) of the Global Standards Symposium (GSS-20) and the World Telecommunication Standardization Assembly (WTSA-20). |
| 5.3 | TSAG took note of the report (in [TD062](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0062)) on the outcomes of WTDC‑22 of relevance to ITU-T. |
| 5.4 | TSAG took note of the report (in [TD023](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0023)) on the highlights of ITU Plenipotentiary Conference 2022 of interest to ITU-T. |
| 5.4.1 | TSAG took note of the new actions for TSAG from PP-22 (in [TD068](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0068)). |
| 5.4.2 | TSAG asked WP1 and RG-WM to consider the issue of remote interventions in physical meetings, whereas the instruments of the Union currently do not allow remote participation during decision-making. |
| 5.5 | TSAG took note of the report on contribution of the ITU Regional Offices to the ITU-T Operational Plan and Coordination activities with TSB (September 2021 – November 2022) (in [TD021](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0021)), which summarizes the contribution of the ITU Regional Offices to the implementation of the ITU-T four-year rolling operational plan, as requested by Resolution 25 (Rev. Bucharest, 2022) of the ITU Plenipotentiary Conference. |

# Focus Groups

## 6.1 New ITU-T Focus Group on metaverse (FG-MV)

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| 6.1.1 | TSAG received several proposals and comments thereof (in [TD106](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0106) from ITU-T SG16; in [C3](https://www.itu.int/md/T22-TSAG-C-0003) from ETRI, Korea (Rep. of)), KT Corporation, SK Telecom, Soonchunhyang University; in [C9](https://www.itu.int/md/T22-TSAG-C-0009) from Japan Industrial Imaging Association, KDDI Corporation, Keio University, Mitsubishi Electric Corporation, National Institute of Information and Communications Technology (NICT), NEC Corporation, Oki Electric Industry Company Ltd. (OKI), Rakuten Mobile, Inc., SoftBank Corporation, Waseda University; in [C10](https://www.itu.int/md/T22-TSAG-C-0010) from Canada; in [C13](https://www.itu.int/md/T22-TSAG-C-0013) from Germany, Netherlands, Romania, Sweden, United Kingdom; in [C19](https://www.itu.int/md/T22-TSAG-C-0019) from the Russian Federation; in [TD109](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0109) from ITU-TSG5; in [TD129](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0129) from ITU-T SG13; in [TD094](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0094) from ITU-T SG17; and in [TD132](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0132) from the IEC SMB/ISO TMB/ITU-T TSAG Standardization Programme Coordination Group (SPCG)), to establish a new Focus Group on the "metaverse/immersive virtual universe" with proposed draft terms of reference (ToR). |
| 6.1.2 | The meeting agreed to the creation of a new focus group to be operated under TSAG. |
| 6.1.3 | TSB provided clarification from consultations with the ITU Legal Affairs Units, that no IPR issues are seen for a Focus Group to use the name metaverse. |
| 6.1.4 | TSAG agreed to establish a TSAG Ad-hoc Group on metaverse (AHG-MV), under the leadership of Ms Gaëlle Martin-Cocher (InterDigital Canada Ltee), with the objective to refine the terms of reference and consider coordination issues. |
| 6.1.5 | TSAG agreed the report of AHG-MV in [TD163](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0163). |
| 6.1.6 | The following two issues were brought to the attention of TSAG and for its further study:   1. The first is a concern on the trademark implication of the use of the term “metaverse” in future ITU-T Recommendations resulting from the work of the Study Groups. It was requested that the use of the term metaverse in ITU-T Recommendations be deferred until a review of the terminology and principles used in ISO and IEC is performed. 2. The second was a request that upon the creation of the FG-MV, and in accordance with Recommendation ITU-T A.7, no overlap of work should happen with other groups, and in particular with the SG16 correspondence group on metaverse (CG-MV). SG16 is invited to consider the issue. |
| 6.1.7 | With a lot of support from members, TSAG agreed the proposed terms of reference in Annex D and established new ITU-T Focus Group on metaverse (FG-MV), with TSAG as parent, and to be chaired by Mr Shin-Gak KANG (ETRI), with Vice-Chairmen Ms Shane HE (NOKIA Corporation), Mr Hideo IMANAKA (National Institute of Information and Communication Technology – NICT), Mr Per FRÖJDH (Telefon AB – LM Ericsson), Mr Andrey Ribeiro PEREZ NUNES (Brazil), Mr Vincent AFFLECK (United Kingdom), and Mr Yuntao WANG (China P.R.). |
| 6.1.8 | TSAG agreed to keep the vice chairmen of FG-MV as in clause 6.1.6, but invited FG-MV to consider further. |
| 6.1.9 | TSAG agreed to send the liaison statement in ([TD161](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0161)) to announce the creation of FG-MV to all relevant groups and SDOs. |
| 6.1.10 | Saudi Arabia (Kingdom of) offered to host the first FG-MV meeting in Riyadh in Q1/2023. |
| 6.1.11 | For face-to-face meetings of FG-MV, voluntary financial contributions were kindly solicited by members, so as to be able to reduce the financial burden on ITU-T budget. |

# Inter-Sector Coordination with ITU-D, ITU-R

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| 7.1 | The Chairman of the Inter-Sector Coordination Group (ISCG), Mr Fabio Bigi, presented the report (in [TD048](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0048)) of the ISCG on issues of mutual interest, and its last meeting (9 February 2022). |
| 7.2 | TSAG took note of the report. |
| 7.3 | TSAG took note of the liaison statement from ISCG (in [TD076](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0076)) “LS/i on Access to documents on intersectoral activities” and supported the working arrangement between the Secretariats of the ISCG and the study groups, to ease access the of documents by members of the ISCG. |
| 7.4 | TSAG asked the Secretariats of the ITU-T study groups to review the mapping tables and to submit any updates to the ISCG. TSAG encourage all ITU-T study groups to continue actively utilize those mapping tables for their coordination with the relevant groups in the other two Sectors. |
| 7.5 | TSAG took note of the report (in [TD049](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0049)) of the Inter-Sectoral Coordination Task Force (ISC-TF), and its last meeting (20 September 2022). |
| 7.6 | Members saw a need for ITU to improve ease-of-use and user friendliness of its search engine, as well as of its web-pages to present the information in a better, harmonized manner and easier to find and access across the Union. TSAG advised the TSB Director to take the issues on search engine, web-pages and access to documents to Council (where CWG-LANG could be a place to address them). TSAG further advised TSAG management to involve the other two ITU advisory groups too so as to be able to find a common solution to those well-known problems. |

# Collaboration on ITS Communication Standards (CITS)

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| 8.1 | TSAG took note of the report of CITS (in [TD047](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0047)), which summarizes ITU-T activities in the field of ITS communications since the last meeting of TSAG in January 2022. |
| 8.2 | TSAG took note of the liaison response from ITU-T SG5 (in [TD085](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0085)) on Intelligent Transportation Systems (ITS). |

# Coordination with IEC, ISO, IEC-ISO-ITU-T SPCG

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| 9.1 | TSAG took note of the report (in [TD161](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0161)) of the 21th meeting of the IEC/ISO/ITU World Standards Cooperation (WSC) that took place on 25 February 2022. |
| 9.2 | TSAG took note of the report (in [TD043](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0043)) on the progress made by the IEC SMB/ISO TMB/ITU-T TSAG Standardization Programme Coordination Group (SPCG). |
| 9.3 | TSAG took note of the liaison statement from SG20 (in [TD089](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0089)) wherein ITU-T SG20 acknowledges the approval from TSAG management team of the extension of the lifetime of the IEC-ISO-ITU Joint Smart Cities Task Force (J-SCTF). |

# Languages on equal footing

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| 10.1 | The Chairman of the Standardization Committee for Vocabulary (SCV), Ms Rim Behaj, presented (in [TD050](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0050)) the report of activities of the SCV in the period January to November 2022. |
| 10.2 | TSAG took note of this report. |
| 10.3 | TSAG invites the ITU-T membership to nominate candidates for the vacant SCV Vice-Chairmen positions for Arabic and Russian languages, which were not filled during WTSA-20. |
| 10.4 | TSAG took note of the liaison response received from ITU-T SG15 (in [TD102](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0102)) on the appointment of a vocabulary rapporteur. TSAG invited the SCV to consider TD102. |
| 10.5 | TSB presented [TD116](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0116), which provides a status update on the findings regarding the use of inclusive language in the United Nations and ITU. It also gives some background and presents the positions of some of the ITU-T SGs in this matter. |
| 10.6 | TSAG recognized the need for guidance on the matter of inclusive language as a cross-cutting topic among all three ITU Sectors, and is awaiting any guidance from Council on that matter. |
| 10.7 | TSAG took note of the liaison statement (in [TD077](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0077)) from ISCG on machine translation, which informs the Advisory Groups about the developments on machine translation taking place in ITU. |

# Activities on gender in ITU-T and TSB

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| 11.1 | TSB presented [TD113](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0113), which provides information on the activities on gender in ITU-T and TSB. |
| 11.2 | TSAG requested to remove the “Other” gender option in the survey; and use the currently in-force terminology designations for chairman and vice-chairmen. The corrections are reflected in [TD113-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0113). |
| 11.3 | TSAG supported to rename the Women in Standardization Expert Group (WISE) to "Network of Women in ITU-T (NoW)" in ITU-T, and to launch the Network of Women (NoW) in ITU-T; and TSB to join forces with BDT and BR on corresponding NoW activities. |
| 11.4 | TSAG invited members to participate in an online survey to share insights on ways to accelerate gender equality in all areas of ITU-T; and invited members to undertake an online training on how to develop gender responsive standards. |

# IPR matters

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| 12.1 | TSAG was informed (in [TD139](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0139)) on the changes incorporated in the Guidelines for the Implementation of the Common Patent policy for ITU-T/ITU-R/ISO/IEC. |
| 12.2 | The meeting acknowledged that the changes do not have any impact on ITU. |

# Preparations for WTSA-24

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| 13.1 | TSB presented [TD135](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0135), which presents the initial thoughts for the WTSA-24 preparatory meetings.  As it was the case for WTSA-20, Regional Telecommunications Organizations, which are following the alphabetical order by the ITU Regions: ATU, CITEL, League of Arab States, APT, RCC and CEPT) will be soon start to convene preparatory meetings for WTSA-24. Initial tentative plannings of RTOs preparatory meetings for WTSA-24 are being shared with TSB.  As it was done for the past WTSAs, and in order to facilitate exchange of information among the Regions, TSB will put in place a Regional WTSA-24 Preparatory Meetings webpage, which will list all preparatory meetings. The page will be regularly and continuously updated to follow all the preparatory process. |
| 13.2 | TSB presented [TD136](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0136), which highlights some advanced planning on WTSA-24 Inter-regional coordination, proposing a way forward for the planning of interregional meetings (IRMs) in view of WTSA-24, with two IRMs that may be organized back-to-back with the two last TSAG meetings.  TSB will publish the WTSA-24 Inter-regional coordination webpage which will list all IRM related information. The page will be regularly and continuously updated to facilitate as much as possible the interregional preparatory process. |
| 13.3 | Members agreed with the proposal of TSB and supported the idea of having two IRMs organized back-to-back with the two last TSAG meetings prior to WTSA-24. |
| 13.4 | TSAG invited the Government of India to nominate the WTSA-24 Chairman to chair the first IRM. |
| 13.5 | Members commended TSB for facilitating the preparatory process and confirmed the important role the preparatory work prior and during IRMs allowing and facilitating possible reconciliation of positions of the regional telecommunication organisations prior to WTSA-24. |
| 13.6 | TSAG invited the Chairmen of ITU-T study groups to submit their proposed Question texts and material for Resolution 2 prior to the last TSAG meeting in 2024. |

# ITU-T Joint Coordination Activity (JCAs)

## 14.1 ITU-T Joint Coordination Activity on Accessibility and Human factors (JCA-AHF)

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| 14.1.1 | TSAG took note of the progress report in [TD040](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0040) containing the reports of the recent JCA-AHF meetings (26 January 2022 and 26 October 2022). |
| 14.1.2 | In reply to liaison statement [TSAG-LS50](http://handle.itu.int/11.1002/ls/sp16-tsag-oLS-00050.docx) from the January 2022 TSAG meeting, TSAG received four liaison statements from ITU-T SG5 (in [TD084](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0084)), SG11 (in [TD092](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0092)), SG15 (in [TD100](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0100)), and SG20 (in [TD087](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0087)); TSAG took note of those four liaison statements.  TSAG supported the nominations of the representatives to JCA-AHF and delegated those liaison statements and the nominations for consideration by the JCA-AHF. |
| 14.1.3 | TSAG endorsed the continuation of JCA-AHF. |

## 14.2 ITU-T Joint Coordination Activity on digital COVID-19 certificate (ITU-T JCA-DCC)

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| 14.2.1 | The JCA-DCC Chairman, Mr Heung-Youl Youm, presented in [TD041](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0041) the progress report of JCA-DCC, which held three meetings on 1 June, 26 August and 2 December 2022. |
| 14.2.2 | TSAG took note of the report. |
| 14.2.3 | TSAG approved the continuation of JCA-DCC in this study period with the revised JCA-DCC terms of reference as found in Annex G. |
| 14.2.4 | In reply to liaison statement [TSAG-LS47](https://www.itu.int/ifa/t/2017/ls/tsag/sp16-tsag-oLS-00047.docx) from the January 2022 TSAG meeting, TSAG received four liaison statements from ITU-T SG11 (in [TD071](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0071)), SG13 (in [TD072](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0072)), and SG20 (in [TD088](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0088)), and from FG-AI4H (in [TD073](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0073)); TSAG took note of those four liaison statements.  TSAG supported the nominations of the representatives to JCA-DCC and delegated those liaison statements and the nominations for consideration by the JCA-DCC. |

## 14.3 ITU-T Joint Coordination Activity on IMT-2020 and Beyond (JCA-IMT2020)

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| 14.3.1 | TSAG endorsed the continuation of ITU-T Joint Coordination Activity *on IMT-2020 and Beyond* (JCA-IMT2020) with revised terms of reference, as received in the liaison statement received from ITU-T SG13 in [TD127](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0127). |
| 14.3.2 | TSAG agreed to send liaison reply in [TD147](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0147) ([LS09](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00009.docx)) to all ITU-T study groups on continuation of JCA-IMT2020 with revised ToR. |

## 14.4 ITU-T Joint Coordination Activity on Identity Management (JCA-IdM)

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| 14.4.1 | TSAG endorsed the continuation of ITU-T Joint Coordination Activity *on Identity Management (JCA-IdM)* with revised terms of reference, as received in the liaison statement received from ITU-T SG17 in [TD093](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0093). TSAG took note of the (dormant) situation of JCA-COP in SG17, and left it to SG17 to determine if that JCA is still required and to reactivate, or consider closing it. |
| 14.4.2 | TSAG agreed to send liaison reply in [TD0148](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0148) ([LS10](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00010.docx)) to ITU-TSG17 on the JCAs under the responsibility of SG17. |

## 14.5 New ITU-T Joint Coordination Activity on Quantum Key Distribution Network (ITU-T JCA-QKDN)

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| 14.5.1 | Beijing University of Posts and Telecommunications, CAS Quantum Network Co. Ltd., China (P.R.), QuantumCTek Co., Ltd. propose in [C6](https://www.itu.int/md/T22-TSAG-C-0006) to establish a new Joint Coordination Activity on Quantum Key Distribution Network (JCA-QKDN). |
| 14.5.2 | After some consultations, TSAG established new ITU-T Joint Coordination Activity on Quantum Key Distribution Network (ITU-T JCA-QKDN), with TSAG as parent and with terms of reference found in Annex F. |
| 14.5.3 | TSAG appointed the leadership of JCA-QKDN:  Chairman ITU-T JCA-QKDN: Mr Junsen LAI, CAICT, China (P.R.).  Vice Chairman ITU-T JCA-QKDN: Mr Mark McFADDEN, United Kingdom. |
| 14.5.4 | TSAG agreed to send the liaison statement in [TD167](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0167) ([LS11](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00011.docx)) to relevant groups to announce the establishment of JCA-QKDN. |

## 14.6 New ITU-T Joint Coordination Activity on Machine-Learning (ITU-T JCA-ML)

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| 14.6.1 | ITU-T SG13 requested in [TD080](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0080) TSAG’s endorsement of a new Joint Coordination Activity on Machine Learning (JCA-ML) under parentship of SG13. SG13 had addressed in [TD126](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0126) the IEC/ISO/ITU SPCG recommendation in [TD067](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0067). |
| 14.6.2 | TSAG endorsed the new JCA-ML with SG13 as parent in TD126, and agreed to send liaison statement in [TD146](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0146) ([LS08](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00008.docx)) to all ITU-T study groups on updates on new Joint Coordination Activity on Machine Learning. |

## 14.7 Other ITU-T Joint Coordination Activities

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| 14.7.1 | TSAG endorsed the continuation of other ITU-T JCAs such as on Internet of Things and Smart Cities & Communities (JCA-IoT and SC&C), and of the currently dormant JCAs on Child Online Protection (JCA-COP) and on multimedia aspects of e-services (JCA-MMeS). |
| 14.7.2 | The mapping table of incoming and outgoing liaison statements sent from/received since 18 January 2022 until 12 January 2023 is contained in [TD059-R2](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0059). |

# 15 ITU Kaleidoscope academic conference 2022

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| 15.1 | TSAG took note of [TD057](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0057) “Evaluation of Kaleidoscope 2022 papers with respect to relevance in ITU activities, which provides an overview of the ITU Kaleidoscope academic conference 2022 (K-2022) “Extended reality − How to boost quality of experience and interoperability” that was held in Accra, Ghana from 7 – 9 December 2022. An attachment presents three keynote summaries, a keynote paper, an invited paper and accepted papers selected for presentation and publication, and identifies links to related activities in ITU-T and other ITU sectors. |
| 15.2 | TSAG took note of TD057, and TSAG invited ITU-T study groups and focus groups to review the papers relevant to their scope of work, and to take into consideration this input from the research community. |

# 16 ITU Journal on Future and Evolving Technologies

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| 16.1 | TSAG took note of [TD058](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0058) on the *ITU Journal on Future and Evolving Technologies*, which has published in 2022 seven issues – one regular issue, six special issues. Furthermore, seven special issues are still calling for papers for publication in 2023. |

# 17 Results of TSAG Working Parties

The two TSAG Working Parties progressed their work and brought their results to the TSAG closing plenary. The reports were agreed. The Plenary decisions are summarized below. [Annex A](#_Annex_A_Summary_1) to this report provides a table listing the TDs with the reports of the various Working Parties and Rapporteur Groups, the liaison statements they produced and the interim activities that are planned.

## 17.1 TSAG Working Party 1 “Working Methods and related WTSA preparations” (WP-WMW)

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| 17.1.1 | Working Party 1 met under the leadership of the WP1 Chairman, Mr Tobias KAUFMANN (Germany), with the assistance of the WP1 Vice Chairman, Ms Minah LEE, Korea (Rep. of). |
| 17.1.2 | The WP1 Vice Chairman presented the WP1 report in [TD008-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0008). |
| 17.1.3 | TSAG approved the WP1 meeting report in [TD008-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0008) (action WP1-1). |
| 17.1.4 | TSAG approved the interim period results from the AHG-GME and thanked the Chairman Mr Rushton for his work (action WP1-2). |
| 17.1.5 | TSAG took note of the plans for a WP1/TSAG meeting in October 2023 (action WP1-3). |
| 17.1.6 | TSAG agreedrevised Supplement 2 to the ITU-T A-series Recommendations "Guidelines on interoperability experiments" ([TD149](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0149/en)-R1) (action RG-WM-1). These guidelines relate to interoperability experiments and proof-of-concept events to be performed outside of ITU-T. The guidelines have been prepared to encourage such experiments and events to be performed, and to facilitate information exchange between parties participating in such experiments and events, and ITU-T study groups developing relevant Recommendation(s). |
| 17.1.7 | TSAG agreed revised Supplement 4 to the ITU-T A-series Recommendations "Guidelines for remote participation" ([TD155](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0155/en)-R1) (action RG-WM-2), which specifies guidelines on the organization and handling of meetings of ITU-T groups with remote participation. |
| 17.1.8 | TSAG agreed to send liaison statement (in [TD157](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0157/en)-R1) to all ITU-T groups, RAG and TDAG on the new edition of Supplement 4 to ITU-T A-series Recommendations "Guidelines for remote participation" in [TD157](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0157/en)-R1 ([LS04](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00004.docx)) (action RG-WM-3). |
| 17.1.9 | TSAG agreed to send liaison statement to the Inter-Sector Coordination Group (ISCG) on updated guidelines for remote participation and appointment of representative in [TD156](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0156/en)-R1 ([LS03](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00003.docx)) (action RG-WM-4). |
| 17.1.10 | TSAG agreed tochange the title of the WP1 Associate Rapporteur on e-meetings to "Associate rapporteur on remote participation" (action RG-WM-5). |
| 17.1.11 | TSAG appointed Mr Philip Rushton (United Kingdom) as TSAG representative (on remote participation) to the Inter-Sector Coordination Group (ISCG) (action RG-WM-6). |
| 17.1.12 | TSAG confirmed the appointment of Ms Ena Dekanic (United States) as Editor of Recommendation ITU-T A.7 in addition to Mr Olivier Dubuisson (as co-Editor) (action RG-WM-7). |
| 17.1.13 | TSAG requested TSB to discuss further with ITU IS Department to make the Recommendation-series title also available in their set of Recommendation download pages (action RG-WM-8). |
| 17.1.14 | TSAG authorized RG-WM to hold seven interim rapporteur virtual meetings (with a deadline for contributions 10 days earlier), as listed in clause 19.4 (action RG-WM-9). |
| 17.1.15 | TSAG agreed that RG-WTSA develop   1. ITU-T A.SupWTSAGL, a new supplement to the ITU-T A-series Recommendations “WTSA preparation guideline on Resolutions” (see Annex B1 for ITU-T A.13 justification) (action RG-WTSA-1a), and 2. ITU-T A.BN: Draft new briefing note “How to chair WTSA Committee/Ad Hoc meetings” (see Annex B2 for ITU-T A.13 justification) (action RG-WTSA-1b). |
| 17.1.16 | TSAG authorized RG-WTSA to hold up to three interim virtual meetings pending sufficient input by the contribution deadline at least one week in advance, as listed in clause 19.4 (action RG-WTSA-2). |

## 17.2 TSAG Working Party 2 “Industry Engagement, Work Programme, Restructuring” (WP-IEWPR)

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| 17.2.1 | Working Party 2 met under the leadership of the WP2 Chairman, Ms Gaëlle MARTIN-COCHER (InterDigital Canada Ltee), with the assistance of the WP2 Vice Chairman, Mr Guy-Michel KOUAKOU (Côte d'Ivoire). |
| 17.2.2 | The WP2 Chairman presented the WP2 report in [TD011-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0011). |
| 17.2.3 | TSAG approved the WP2 meeting report in [TD011-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0011) (action WP2-7). |
| 17.2.4 | TSAG agreed the addition to the Terms of Reference of WP2/TSAG – [TD011-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0011/en), Annex 1 (action WP2-1). |
| 17.2.5 | TSAG agreed the addition to the Terms of Reference of the RG-IEM – [TD011-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0001/en), Annex 2 (action WP2-2). |
| 17.2.6 | TSAG took note of the closure of WTSA Action plan *Action 3* related to Smart Cables – [TD114](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0114/en) (action WP2-3). |
| 17.2.7 | TSAG took note on ongoing *Action 4* for Smart Cables from the WTSA Action plan- [TD114](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0114/en) (action WP2-4). |
| 17.2.8 | TSAG agreed to send liaison statement in [TD165](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0165) ([LS05](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00005.docx)) to all ITU-T study groups on a progress report on the analysis of ITU-T study group restructuring” (actionRG-WPR-4). |
| 17.2.9 | TSAG approved the interim activities plan – clause 19.4 (action WP2-5). |
| 17.2.10 | TSAG agreed to send liaison statement in [TD168](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0168) ([LS06](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00006.docx)) to ITU-T SG11, SG13, SG16, SG17, and SG20 on work related to unmanned aircraft systems (UAS), and agreed to send liaison reply in [TD169](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0169) ([LS07](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00007.zip)) to ITU-T SG13 on new Question 10/13 (action WP2-6). |

# 18 Certificates of appreciation

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| 18.1 | In a ceremony, the TSB Director expressed his appreciation by handing out certificates to Mr Vladimir Minkin (Russian Federation) and to Mr Isaac Boateng (Ghana). |

# 19 ITU-T meeting schedule including date of next TSAG meeting

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| 19.1 | TSAG took note of [TD027-R3](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0027), with the schedule of ITU-T meetings in 2023 and 2024. |
| 19.2 | TSAG agreed the second TSAG meeting in the study period 2022-2024 to be scheduled   * Monday 5 – Friday 9 June 2023 (Geneva, Switzerland). |
| 19.3 | An overlap of that TSAG meeting with the Global Symposium for Regulators event (GSR-23, 5 to 8 June 2023, Sharm el-Sheikh/Egypt) should be avoided (if feasible). |
| 19.4 | Members preferred to have the final TSAG meeting late September/early October 2024 after all study groups will have had their last SG meetings. |
| 19.5 | TSAG took note of [TD162-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0162), which consolidates all planned interim TSAG meetings as follows: |

| # | Date | Time[[3]](#footnote-4) | Format[[4]](#footnote-5) | TSAG Group | Information (ToR/scope/main scope, contribution deadline) | Submission  deadline |
| --- | --- | --- | --- | --- | --- | --- |
|  | 31 January 2023 | 1300 – 1500 hours | V | RG-IEM | Main topic: Action Plan | 22 January 2023 |
|  | 01 February 2023 | 1300 – 1500 hours | V | RG-WM | Editing session for Rec. ITU‑T A.1 | 22 January 2023 |
|  | 14 February 2023 | 1300 – 1500 hours | V | RG-WM | Editing session for Rec. ITU‑T A.7 | 04 February 2023 |
|  | 15 February 2023 | 1230 – 1430 hours | V | RG-WPR | Contributions invited on: Available data, proposals for KPIs (how to use data) | 08 February 2023 |
|  | 28 February 2023 | 1300 – 1500 hours | V | RG-WM | - Editing session on Rec. ITU-T A.8  - Draft new A.Sup-RA;  - Discussion on the SG17 incubation mechanism | 18 February 2023 |
|  | 07 March 2023 | 1300 – 1500 hours | V | RG-IEM | Main topic: WTSA Resolution 68 | 28 February 2023 |
|  | 09 March 2023 | 1300 – 1500 hours | V | RG-WTSA | Contributions invited on:  1) Resolutions mapping analysis on WTSA-20 Resolutions with PP-22 Resolutions, WTDC-21 Resolutions and ITU-R Resolution  2) Resolution streamlining and review principles, and guidelines on how to draft a good Resolution;  3) Guidelines/handbook on how to chair WTSA meeting in a more effective and rules-based way | 01 March 2023 |
|  | 15 March 2023 | 1230 – 1430 hours | V | RG-WPR | Contributions invited on: Available data, proposals for KPIs, relative priorities of KPIs, how conducive current structure is to the standardization process | 08 March 2023 |
|  | 30 March 2023 | 1200 – 1500 hours | V | RG-WM | Governance and management of meetings with remote participation | 20 March 2023 |
|  | 04 April 2023 | 1300 – 1500 hours | V | RG-IEM | Main topic: metrics | 28 March 2023 |
|  | 13 April 2023 | 1300 – 1500 hours | V | RG-WTSA | Contributions invited on:  1) Resolutions mapping analysis on WTSA-20 Resolutions with PP-22 Resolutions, WTDC-21 Resolutions and ITU-R Resolution  2) Resolution streamlining and review principles, and guidelines on how to draft a good Resolution;  3) Guidelines/briefing note on how to chair WTSA meeting in a more effective and rules-based way | 05 April 2023 |
|  | 18 April 2023 | 1300 – 1500 hours | V | RG-WM | Editing session for Rec. ITU‑T A.7 | 08 April 2023 |
|  | 19 April 2023 | 1230 – 1430 hours | V | RG-WPR | Contributions invited on: Refining data and KPIs, priorities of KPIs, Int’l nature of current structure, new structure | 12 April 2023 |
|  | 27 April 2023 | 1200 – 1500 hours | V | RG-WM | Governance and management of meetings with remote participation | 17 April 2023 |
|  | 04 May 2023 | 1300 – 1500 hours | V | RG-WM | Editing session for Rec. ITU‑T A.1 | 24 April 2023 |
|  | 05 May 2023 | 1300 – 1500 hours | V | RG-IEM | Main topic: new technologies mechanism | 28 April 2023 |
|  | 11 May 2023 | 1300 – 1500 hours | V | RG-WTSA | Contributions invited on:  1) Resolutions mapping analysis on WTSA-20 Resolutions with PP-22 Resolutions, WTDC-21 Resolutions and ITU-R Resolution  2) Resolution streamlining and review principles, and guidelines on how to draft a good Resolution;  3) Guidelines/briefing note on how to chair WTSA meeting in a more effective and rules-based way | 03 May 2023 |
|  | 23 May 2023 | 1230 – 1430 hours | V | RG-WPR | Contributions invited on: Finalizing data and KPIs for reporting to TSAG, new structure | 16 May 2023 |
|  | July/‌August 2023 | TBD | V | WP2 RGs | WP2 interim RG meetings will be planned during the June TSAG meeting | 12 calendar days before WP meeting |
|  | 1st week of Oct. 2023 | TBD | TBD | WP2 & RGs | - WP2 + RGs meeting NOTE – WP2 interim and WP2 RG meetings will be planned during the June TSAG meeting | 12 calendar days before WP meeting |
|  | 1st or 2nd week of Oct. 2023 | TBD | TBD | WP1 & RGs | WP1 meeting with RG meetings | 12 calendar days before WP meeting |

# 20 Any other business

|  |  |
| --- | --- |
| 20.1 | The TSB Director was asked to prepare a document for the next Council that analyses the need of additional or further support, financial or any other resources for support in the context of bridging the standardization gap for developing, least developed countries and for those countries to attend and contribute to the meetings. |

# 21 Consideration of draft meeting Report

|  |  |
| --- | --- |
| 21.1 | The Chairman announced that, as per the practice in past TSAG meetings, the draft meeting report in [TD004](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0004) would be prepared in due course and open for review and comments for a period of two weeks. |

# 22 Closure of meeting

|  |  |
| --- | --- |
| 22.1 | The TSB Director and the Membership congratulated the new TSAG management team for its effectiveness, efficiency and the good results that were accomplished during this TSAG meeting. They particularly highlighted the important changes and great efforts leading to a productive, smooth and successful running of this TSAG meeting. Facing that this TSAG meeting was his last ITU-T meeting as TSB Director, he thanked all delegates, colleagues and TSB staff for their support and collaboration during his ITU-T career since 1987. |
| 22.2 | The TSAG Chairman reflected upon participation statistics from this TSAG meeting and expressed his wish to see more than 33% of delegates present in future TSAG meetings to represent Sector Members. Likewise, there is a need to see more women engaged in standardization.  He thanked participants for the successful conclusion of this TSAG meeting, in particular the ten TSAG Vice Chairmen, the Working Party Chairmen and WP Vice-Chairmen, the Rapporteurs and Associate Rapporteurs, the Chairmen of the study groups, chairmen of ad hoc groups/drafting/editing sessions, and the delegates for their active participation and their spirit of compromise. He also thanked Messrs Chaesub Lee, Bilel Jamoussi, Martin Euchner for their excellent guidance, advice, and support, and Ms Lara Al-Mnini for her excellent assistance and dedication, the TSB Counsellors who supported the work, the projection assistants, TSB staff, the TSB and IS staff for IT, as well as the interpreters and the captioners, for their support and work. He wished safe travels, an enjoyable time off after this meeting and happy holidays. |
| 22.3 | The TSAG meeting was closed on 16 December 2022 at 1620 hours, Geneva time. |

# Annex A Summary of results of the TSAG Plenary, TSAG Working Parties, and of the TSAG Rapporteur Groups

| Group | Reports | Outgoing liaison statements, and other agreed outputs | Future meetings |
| --- | --- | --- | --- |
| TSAG | ([TD004](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0004))  [TSAG-R1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-TSAG-R-00014) | * LS/r on updates on new Joint Coordination Activity on Machine Learning (JCA-ML) [to ITU-T SG13] ([LS08](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00008.docx)) * LS/r on continuation of JCA-IMT2020 with revised ToR [to all ITU-T study groupsSG13] ([LS09](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00009.docx)) * LS/r on the JCAs under the responsibility of SG17 [to ITU-T SGs] ([LS10](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00010.docx)) * LS on new ITU-T Joint Coordination Activity on Quantum Key Distribution Network (JCA-QKDN) [to ITU-T SGs, IEC TC 86, ISO/IEC JTC 1, ETSI, IEEE, IETF, IRTF, CCSA, CEN-CENELEC FG QT] ([LS11](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00011.docx)) * LS on new ITU-T Focus Group on metaverse (FG-MV) [to many groups and organizations] ([LS12](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00012.docx)) | * Monday 5 – Friday 9 June 2023 (Geneva, Switzerland). |
| WP1 | [TD008-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0008) |  | * Monday 5 – Friday 9 June 2023 (Geneva, Switzerland). |
| WP2 | [TD011-R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0011) |  | * Monday 5 – Friday 9 June 2023 (Geneva, Switzerland). |
| RG-IEM | [TD013-R1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-TSAG-221212-TD-GEN-0013) |  | * 31 January 2023: 1300 – 1500 hours, virtual. Main topic: Action Plan. Deadline: 22 January 2023 * 07 March 2023: 1300 – 1500 hours, virtual. Main topic: WTSA Resolution 68. Deadline: 28 February 2023 * 04 April 2023: 1300 – 1500 hours, virtual. Main topic: metrics. Deadline: 28 March 2023 * 05 May 2023: 1300 – 1500 hours, virtual. Main topic: new technologies mechanism. Deadline: 28 April 2023 |
| RG-WM | [TD015-R1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-TSAG-221212-TD-GEN-0015) | * LS on the new edition of Supplement 4 to ITU-T A-series Recommendations "Guidelines for remote participation" [to RAG, TDAG, and all ITU-T study groups] ([LS04](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00004.docx)) * LS on updated guidelines for remote participation and appointment of representative [to the Inter-Sector Coordination Group (ISCG)] ([LS03](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00003.docx)). | * 01 February 2023: 1300 – 1500 hours, virtual. Editing session for Rec. ITU T A.1. Deadline: 22 January 2023 * 14 February 2023: 1300 – 1500 hours, virtual. Editing session for Rec. ITU T A.7. Deadline: 04 February 2023 * 28 February 2023: 1300 – 1500 hours, virtual. Editing session on Rec. ITU-T A.8   - Draft new A.Sup-RA;  - Discussion on the SG17 incubation mechanism. Deadline: 18 February 2023   * 30 March 2023: 1200 – 1500 hours, virtual. Governance and management of meetings with remote participation. Deadline: 20 March 2023 * 18 April 2023: 1300 – 1500 hours, virtual. Editing session for Rec. ITU T A.7. Deadline: 08 April 2023 * 27 April 2023: 1200 – 1500 hours, virtual. Governance and management of meetings with remote participation. Deadline: 17 April 2023 * 04 May 2023: 1300 – 1500 hours, virtual. Editing session for Rec. ITU T A.1. Deadline: 24 April 2023 |
| RG-WPR | [TD017](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-TSAG-221212-TD-GEN-0017) | * LS on a progress report on the analysis of ITU-T study group restructuring [to all ITU-T study groups] ([LS05](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00005.docx)) * LS on work related to unmanned aircraft systems (UAS) [to ITU-T SG11, SG13, SG16, SG17, and SG20] ([LS06](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00006.docx)) * LS/r on New Question 10/13 [to ITU-T SG13] ([LS07](https://www.itu.int/ifa/t/2022/ls/tsag/sp17-tsag-oLS-00007.zip)) | * 15 February 2023: 1230 – 1430 hours, virtual. Contributions invited on: Available data, proposals for KPIs (how to use data). Deadline: 08 February 2023 * 15 March 2023: 1230 – 1430 hours, virtual. Contributions invited on: Available data, proposals for KPIs, relative priorities of KPIs, how conducive current structure is to the standardization process. Deadline: 08 March 2023 * 19 April 2023: 1230 – 1430 hours, virtual. Contributions invited on: Refining data and KPIs, priorities of KPIs, Int’l nature of current structure, new structure. Deadline: 12 April 2023 * 23 May 2023: 1230 – 1430 hours, virtual. Contributions invited on: Finalizing data and KPIs for reporting to TSAG, new structure. Deadline: 16 May 2023 |
| RG-WTSA | [TD019-R2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-TSAG-221212-TD-GEN-0019) |  | * 09 March 2023: 1300 – 1500 hours, virtual. Contributions invited on:   1) Resolutions mapping analysis on WTSA-20 Resolutions with PP-22 Resolutions, WTDC-21 Resolutions and ITU-R Resolution  2) Resolution streamlining and review principles, and guidelines on how to draft a good Resolution;  3) Guidelines/handbook on how to chair WTSA meeting in a more effective and rules-based way Deadline: 01 March 2023   * 13 April 2023: 1300 – 1500 hours, virtual. Contributions invited on:   1) Resolutions mapping analysis on WTSA-20 Resolutions with PP-22 Resolutions, WTDC-21 Resolutions and ITU-R Resolution  2) Resolution streamlining and review principles, and guidelines on how to draft a good Resolution;  3) Guidelines/briefing note on how to chair WTSA meeting in a more effective and rules-based way. Deadline: 05 April 2023   * 11 May 2023: 1300 – 1500 hours, virtual. Contributions invited on:   1) Resolutions mapping analysis on WTSA-20 Resolutions with PP-22 Resolutions, WTDC-21 Resolutions and ITU-R Resolution  2) Resolution streamlining and review principles, and guidelines on how to draft a good Resolution;  3) Guidelines/briefing note on how to chair WTSA meeting in a more effective and rules-based way. Deadline: 03 May 2023 |

**Annex B  
New TSAG Work Items**

## Annex B1 ITU-T A.13 justification for new supplement to the ITU-T A-series Recommendations ‘WTSA preparation guideline on Resolutions’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question:** | RG-WTSA | **Proposed new ITU-T:**  **■ Supplement**  **o Implementer's guide**  **o Technical paper**  **o Technical report**  **o Handbook**  **o Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | Geneva, 12-16 December 2022 | |
| **Reference and title:** | ITU-T A.SupWTSAGL: Draft new Supplement to the ITU-T A-series Recommendations: WTSA preparation guideline on Resolutions | | | |
| **Base text:** | [TSAG-C017](https://www.itu.int/md/T22-TSAG-C-0017/en) | | **Target date:** | 2023-11 |
| **Editor(s):** | Mr Evgeny Tonkikh, Russian Federation, [et@niir.ru](mailto:et@niir.ru) | | **Approval process:** | Agreement |
| **Purpose and scope** (defines what issue this non-normative document will address, thus permitting readers to judge its usefulness for their work; also defines the intent or objective of the non-normative document and the aspects covered, thereby indicating the limits of its applicability): | | | | |
| Develop guideline for the review of WTSA Resolutions (for editorial updates to Resolutions, identify overlap, identify candidates for suppression, how to simplify/shortening Resolutions, prepare consolidated draft texts, active involvement of the regional telecommunication organizations in pre-WTSA deliberations). | | | | |
| **Summary** (provides a brief overview of the proposal): | | | | |
| This supplement provides a guideline for ITU-T members on how to propose draft new and revised existing WTSA Resolutions in the preparation for WTSA.  The review of WTSA Resolutions include editorial updates, identify overlap, identify candidates for suppression, how to simplify/shortening Resolutions, prepare consolidated draft texts, active involvement of the regional telecommunication organizations in pre-WTSA deliberations. | | | | |
| **Relations to ITU-T Recommendations or other documents** (approved or under development): | | | | |
| WTSA Resolution 1, Resolution 22. | | | | |
| **Liaisons with other study groups or with other standards bodies:** | | | | |
| ITU-T SGs, ITU-T regional telecommunication organizations. | | | | |
| **Supporting members that are committing to contributing actively to the work item:** | | | | |
| China (P.R.), China Telecommunications Corporation, China Unicom, China Mobile Communications Co. Ltd., Huawei Technologies Co. Ltd., Russian Federation, ZTE Corporation. | | | | |

## Annex B2 ITU-T A.13 justification for new briefing note ‘How to chair WTSA Committee/Ad Hoc meetings’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question:** | RG-WTSA | **Proposed new ITU-T:**  **o Supplement**  **o Implementer's guide**  **o Technical paper**  **o Technical report**  **o Handbook**  **■ Other: Briefing note** | Geneva, 12-16 December 2022 | |
| **Reference and title:** | ITU-T A.BN: Draft new briefing note:  How to chair WTSA Committee/Ad Hoc meetings | | | |
| **Base text:** | [C016](https://www.itu.int/md/T22-TSAG-C-0016/en) | | **Target date:** | 2023-11 |
| **Editor(s):** | Mr Isaac Boateng, Ghana, [isaac.boateng@nca.org.gh](mailto:isaac.boateng@nca.org.gh) | | **Approval process:** | Agreement |
| **Purpose and scope** (defines what issue this non-normative document will address, thus permitting readers to judge its usefulness for their work; also defines the intent or objective of the non-normative document and the aspects covered, thereby indicating the limits of its applicability): | | | | |
| Develop a briefing note to guide WTSA leaders (WTSA AHGs, Chairmen) as well as delegates on how to conduct WTSA meetings (no consensus/no change, timeline/week-end AHGs). | | | | |
| **Summary** (provides a brief overview of the proposal): | | | | |
| This briefing note is expected to provide guideline for WTSA leaders on how to organize the discussion and review of WTSA Resolutions during the weekend AHGs and to meet the timeline at WTSA. | | | | |
| **Relations to ITU-T Recommendations or other documents** (approved or under development): | | | | |
| WTSA Resolution 1, Resolution 22. | | | | |
| **Liaisons with other study groups or with other standards bodies:** | | | | |
| ITU-T study groups, ITU-T regional telecommunication organizations. | | | | |
| **Supporting members that are committing to contributing actively to the work item:** | | | | |
| Canada, China (P.R.), China Telecommunications Corporation, China Unicom, China Mobile Communications Co. Ltd., Ericsson Canada, Huawei Technologies Co. Ltd., InterDigital Canada Ltee, ZTE Corporation. | | | | |

# Annex C Work items of TSAG

| Work item | New/ Revised | Title | Editor | Latest draft in | Timing |
| --- | --- | --- | --- | --- | --- |
| ITU-T A.Suppl.2 | Revised | Supplement 2 to the ITU-T A-series Recommendations  Guidelines on interoperability experiments | Mr Olivier Dubuisson, Orange, [olivier.dubuisson@orange.com](mailto:olivier.dubuisson@orange.com) | [TD149](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0149/en)-R1 | 2022-12 |
| ITU-T A.Suppl.4 | Revised | Supplement 4 to the ITU-T A-series Recommendations  Guidelines for remote participation | Mr Olivier Dubuisson, Orange, [olivier.dubuisson@orange.com](mailto:olivier.dubuisson@orange.com) | [TD155](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0155/en)-R1 | 2022-12 |
| ITU-T A.SupWTSAGL | New | Draft new Supplement to the ITU-T A-series Recommendations: WTSA preparation guideline on Resolutions | Mr Evgeny Tonkikh, Russian Federation, [et@niir.ru](mailto:et@niir.ru) | [C017](https://www.itu.int/md/T22-TSAG-C-0017/en) | November 2023 |
| ITU-T A.BN | New | Draft new briefing note:  How to chair WTSA Committee/Ad Hoc meetings | Mr Isaac Boateng, Ghana, [isaac.boateng@nca.org.gh](mailto:isaac.boateng@nca.org.gh) | [C016](https://www.itu.int/md/T22-TSAG-C-0016/en) | November 2023 |
| ITU-T A.SupplRA | New | Draft new Supplement to the ITU-T A-series Recommendations: Guidelines on the appointment and operations of registration authorities | Mr Olivier Dubuisson, Orange, [olivier.dubuisson@orange.com](mailto:olivier.dubuisson@orange.com) | [TD154](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0154/en) | June 2023 |

\* Note – Text for TAP approval in accordance with WTSA-20 Resolution 1, Section 9.

# Annex D Terms of references of TSAG Working Parties and Rapporteur Groups

D.1 Working Party 1 on Working Methods and related WTSA preparations (WP-WMW)

* Examines the existing and future working methods, including electronic working methods and practices, processes and procedures for the ITU-T Sector.
* ITU-T A-series texts.
* Guidance to study groups for their organization of work.
* Manual for Rapporteurs & Editors.
* Author’s Guide.
* Governance and management of e-meetings.
* Accessibility and human factors.
* Implementation guidelines for ITU T Recommendations.
* An approach on how to clearly acknowledge contributors.
* Review existing World Telecommunication Standardization Assembly (WTSA) Resolutions with a view to streamlining them, taking into account the Resolutions in Plenipotentiary Conference and other Sectors as appropriate.
* Examine the WTSA Resolutions with a view to avoid repetitions and duplication with the Resolutions in Plenipotentiary Conference.
* Develop guideline for the review of Resolutions (editorial updates to Resolutions, simplifying Resolutions, consolidated draft texts).
* Develop guideline for leaders (WTSA AHGs, Chairs, delegates) how to handle Resolutions at WTSA.

D.2 Working Party 2 on Industry Engagement, Work Programme, Restructuring (WP-IEWPR)

* Consider issues related to work programme and study group structure for 2022-2024 study period.
* Develop the detailed study group structure for the next study period.
* Develop a report and proposal(s) to be submitted by TSAG to WTSA-24 on study group responsibilities, mandates and allocation of work to be defined in WTSA Resolution 2.
* Review of the Lead Study Group reports.
* Review of proposed new or modified ITU-T study group Questions.
* Coordination of matters crossing ITU-T study groups.
* Establish an appropriate mechanism to examine and coordinate work on new and emerging technologies (Res.22 resolves 5, 6, 7).
* To coordinate on “SMART Submarine Cable Systems” with relevant ITU-T study groups.
* To consider the issue of industry engagement discussed at WTSA-20, including Resolution 68 (Rev. Hammamet, 2016), draft revised Resolution 68. (WTSA-20 Action 10).
* To consider the CxO/CTO recommendations.
* To implement the action plan for the analysis of ITU-T study group restructuring, and to undertake, monitor and guide the work through a rapporteur group or other appropriate group, and make a progress report on the analysis at each TSAG meeting (WTSA Res.99 instructs TSAG 1).
* TSAG to submit a report with recommendations for consideration by the next WTSA (WTSA Res.99 instructs TSAG 3).
* Cooperation with WSC, ISO/IEC JTC 1, ISO/IEC/ITU-T SPCG, UPU, and other SDOs and Fora, Consortia etc.
* Inter-Sector coordination with other ITU Sectors (ITU-D/TDAG, ITU-R/RAG, ISCG, ISC-TF) on matters of mutual interest.

D.3 Rapporteur on Strategic and Operational Plan (R-SOP)

* As Rapporteur be the TSAG focal point to collect and provide appropriate input from TSAG for consideration of the Council Working Group for the elaboration of the draft strategic plan.
* Review of the annual ITU-T operational plans for approval by Council.

D.4 Rapporteur Group on Working Methods (RG-WM)

* ITU-T A-series texts.
* Develop new ITU-T A-series or other series texts for the organization of the work within study groups.
* Manual for Rapporteurs & Editors.
* Author’s Guide.
* To consider developing guidelines on working methods to assist developing countries in their involvement in ITU-T activities. (Resolution 44 item I.2 of the Annex).
* Identifies an initial set of issues that will form the basis for future studies with respect to detailing the governance and management of e-meetings.
* Review of WTSA Resolution 1.

D.5 Rapporteur Group on WTSA Preparations (RG-WTSA)

* Review existing World Telecommunication Standardization Assembly (WTSA) Resolutions (Except Res1, Res2 and Res68) with a view to streamlining them, taking into account the Resolutions in Plenipotentiary Conference and other Sectors as appropriate.
* Examine the WTSA Resolutions with a view to avoid repetitions and duplication with the Resolutions in Plenipotentiary Conference.
* To review WTSA Res.11 “UPU-POC”.
* Develop guideline for the review of Resolutions (for editorial updates to Resolutions, identify overlap, identify candidates for suppression, how to simplify/shortening Resolutions, prepare consolidated draft texts, active involvement of the regional telecommunication organizations in pre-WTSA deliberations).
* Develop guideline for leaders (WTSA AHGs, Chairs, delegates) how to handle Resolutions at WTSA (no consensus/No Change, timeline/week-end AHGs).

D.6 Rapporteur Group on Work Programme and Restructuring, SG work, SG Coordination (RG-WPR)

* Consider issues related to work programme and study group structure for 2022-2024 study period.
* Develop the detailed study group structure for the next study period.
* Develop a report and proposal(s) to be submitted by TSAG to WTSA-24 on study group responsibilities, mandates and allocation of work to be defined in WTSA Resolution 2.
* To implement the action plan for the analysis of ITU-T study group restructuring, and to undertake, monitor and guide the work through a rapporteur group or other appropriate group, and make a progress report on the analysis at each TSAG meeting (WTSA Res.99 instructs TSAG 1).
* TSAG to submit a report with recommendations for consideration by the next WTSA (WTSA Res.99 instructs TSAG 3).
* In collaboration with study groups, develop guidelines for study groups on efficiency measures, processes, possible work organization, suitable structures.
* Review of the Lead Study Group reports.
* Review of proposed new or modified ITU-T study group Questions.
* Coordination of matters crossing ITU-T study groups.
* To coordinate on “SMART Submarine Cable Systems” with relevant ITU-T study groups.

D.7 Rapporteur Group on Industry Engagement, Metrics (RG-IEM)

* To consider the issue of industry engagement discussed at WTSA-20, including Resolution 68 (Rev. Hammamet, 2016) or draft revised Resolution 68. (WTSA-20 Action 10).
* To perform a review of the CxO/CTO coordination process.
* Establish an appropriate mechanism at TSAG level to be used at the study group level and at the Focus group level to examine and coordinate work on new and emerging technologies (Res.22 resolves 5, 6, 7).
* Review outcomes of former RG-StdsStrat (e.g. metrics, statistics).
* Review metrics and analyse statistics.
* Develop a plan to attract intensive industry participation in order to take account of latest technical trends and market needs.

# Annex E Terms of Reference for an ITU-T Focus Group on metaverse (FG-MV)

E.1 Rationale and scope

Recently, metaverse has become one disruptive area of innovation with great potential to change our economy, way of living and communicating and society. In this nascent phase of the metaverse, the industry has not converged towards common terms and definitions. The metaverse concept has attracted considerable public attention. Bloomberg analysts[[5]](#footnote-6) have suggested the total market value of the metaverse as the world's "next big technology platform" could reach USD 800 billion by 2024, doubling its value seen in 2020.

This Focus Group provides a collaboration platform for dialogue, for identifying stakeholders with whom ITU-T could collaborate, and for enabling the inclusion of non-members to contribute to the technical pre-standardization work. The Focus Group work will be enriched with the identification of relevant use cases.

The Focus Group will consider the following aspects for pre-standardization work of the metaverse:

– working definitions and terminology, concepts, vision, use cases and ecosystem;

– technical requirements;

– technical framework and characteristics, including identification of fundamental underlying technologies;

– security and personally identifiable information (PII) protection related aspects;

– networking infrastructure and connectivity;

– interoperability;

– application interfaces;

– accessibility including persons with disabilities;

– gap analysis of standardization activities in other standardization bodies, including terminology and principles used in ISO and IEC;

– economic aspects and regulatory implications;

– environmental sustainability.

E.2 Objectives

The objective of the focus group is to support pre-standardisation activities, including the following:

a) To study terminology, concepts, vision and ecosystem.

b) To identify and study the enabling technologies, their evolution and key tasks for standardization purposes, including multimedia, network optimization, connectivity, interoperability of services and applications, security, protection of personally identifiable information, quality (including bandwidth), digital assets (e.g., digital currencies), IoT, accessibility, digital twin and environmental sustainability.

c) To study and gather information to develop a pre-standardization roadmap.

d) To build a community of experts and practitioners to unify the concepts, develop common understandings, so that it be benefiting not only the ITU standardization scene but also the global community.

e) To identify stakeholders with whom ITU-T could collaborate and establish liaisons and relationships with other organisations that could contribute to the pre-standardisation activities and identify potential collective action and specific next steps.

f) To stimulate international collaboration, to share knowledge and best practices, and to explore the opportunities and challenges related to interoperability.

g) To provide a platform to share findings and for dialogue on economic, policy and regulatory implications of metaverse related to telecommunication/ICT.

E.3 Specific tasks and deliverables

The FG is expected to provide its deliverables to TSAG in time for its January 2024 meeting for its consideration and action, as appropriate (e.g., distribution to SGs for their consideration on starting new work).

a) To develop deliverables related to working definitions and terminology, use cases, and requirements.

b) To develop deliverables with guidelines and collection of best practices, including a gap analysis and a pre-standardization roadmap.

c) To develop deliverables related to technical frameworks, and architecture, taking into consideration security requirements and approaches, PII protection and design principles to meet accessibility requirements.

d) To organize and participate in workshops to share and collect knowledge and experience from a wide range of expert community and stakeholders.

e) Upon completion of its lifetime, to provide the final report and a complete set of deliverables to TSAG.

E.4 Relationships

The Focus Group will work through co-located meetings with relevant ITU-T SGs when possible. It will establish and maintain task-appropriate collaboration arrangements with other partners as well.

The Focus Group will collaborate with:

* ITU-T SG2 – Operational aspects
* ITU-T SG3 – Economic & policy issues
* ITU-T SG5 – Environment, EMF & circular economy
* ITU-T SG9 – Broadband cable & TV
* ITU-T SG11 – Protocols, testing & combating counterfeiting
* ITU-T SG12 – Performance, QoS & QoE
* ITU-T SG13 – Future networks
* ITU-T SG16 – Multimedia & digital technologies
* ITU-T SG17 – Security
* ITU-T SG20 – IoT, smart cities & communities

Furthermore, the Focus Group will collaborate (as required) with other relevant groups and entities, in accordance with Recommendation ITU-T A.7. These include governments, non-governmental organizations (NGOs), policy makers, SDOs, industry forums and consortia, companies, academic institutions, research institutions and other relevant organizations, inter alia:

* ITU-R SG5 – Systems and networks for fixed, mobile, radiodetermination, amateur and amateur-satellite services
* IEC TC57 – Power systems management and associated information exchange
* IEC TC65 – Industrial process measurement, control and automation
* IEC TC79 – Alarm and electronic security systems
* IEC TC85 – Measuring equipment for electrical and electromagnetic quantities
* IEC TC93 – Design automation
* IEC TC100 – Audio, video and multimedia systems and equipment
* IEC TC110 – Electronics displays
* ISO/TC68/SC8 – Reference data for financial services
* ISO/TC69 – Applications of statistical methods
* ISO/TC133 – Clothing sizing systems – Size designation, size measurement methods and digital fittings
* ISO/TC184/SC4 – Industrial data
* ISO/TC307 – Blockchain and distributed ledger technologies
* ISO/IEC JTC 1 – Information technology
* ISO/IEC JTC 1/SC24/WG6 – Computer graphics, image processing and environmental data representation
* ISO/IEC JTC 1/SC27 – Information security, cybersecurity and privacy protection
* ISO/IEC JTC 1/SC29 – Coding of audio, picture, multimedia and hypermedia information
* ISO/IEC JTC 1/SC38 – Cloud computing and distributed platforms
* ISO/IEC JTC 1/SC41 – Internet of things and digital twin
* ISO/IEC JTC 1/SC42 – Artificial intelligence
* ISO/IEC JTC 1/SC43 – Brain computer interfaces
* ISO and IEC Joint Standardization Evaluation Group (JSEG) on metaverse
* IEEE-SA Metaverse Standards Committee
* IEEE Computer Society SAB SC Metaverse SG (MSG)
* W3C (Open) Metaverse Interoperability (OMI) Community Group
* IETF
* ETSI ISG Augmented Reality Framework
* 3GPP SA
* Metaverse Standardization Forum (MSF).

E.5 Structure

The Focus Group may establish sub-groups if needed.

E.6 Parent group

The parent group of the Focus Group is TSAG.

E.7 Leadership

See clause 2.3 of Recommendation ITU-T A.7.

E.8 Participation

See clause 3 of Recommendation ITU-T A.7. A list of participants will be maintained for reference purposes and reported to the parent group.

E.9 Administrative support

See clause 5 of Recommendation ITU-T A.7.

E.10 General financing

See clauses 4 and 10.2 of Recommendation ITU-T A.7.

E.11 Meetings

The Focus Group will conduct regular meetings. The frequency and locations of meetings will be determined by the Focus Group management. The overall meetings plan will be announced after the approval of the terms of reference. The Focus Group will use remote collaboration tools to the maximum extent.

The meeting dates will be announced by electronic means (e.g., e-mail and website, etc.) at least four weeks in advance.

E.12 Technical contributions

See clause 8 of Recommendation ITU-T A.7.

E.13 Working language

The working language is English.

E.14 Approval of deliverables

Approval of deliverables shall be taken by consensus.

E.15 Working guidelines

Working procedures shall follow the procedures of Rapporteur meetings. No additional working guidelines are defined.

E.16 Progress reports

See clause 11 of Recommendation ITU-T A.7.

E.17 Announcement of Focus Group formation

The formation of the Focus Group will be announced via TSB Circular to all ITU membership, via the ITU-T News log, press releases and other means, including communication with the other involved organizations.

E.18 Milestones and duration of the Focus Group

The Focus Group lifetime is set for one year from the first meeting with possibility of extension.

Any extension beyond the above-mentioned date is subject to the decision by TSAG, in line with ITU-T A.7.

E.19 Patent policy

See clause 9 of Recommendation ITU-T A.7.

# Annex F Terms of Reference for an ITU-T Joint Coordination Activity on Quantum Key Distribution Network (JCA-QKDN)

F.1 Scope

The scope of JCA-QKDN is coordination of the ITU-T quantum key distribution network (QKDN) standardization work within ITU-T and coordination of the communication with standards development organizations, consortia and forums also working on QKD related standards.

The JCA operates under the terms of Recommendation ITU-T A.1, clause 5. The JCA operates according to the instruction in WTSA-16 Resolution 92.

F.2 Objectives

* The JCA-QKDN ensures that the ITU-T QKDN standardization work is progressed in a well-coordinated manner among relevant study groups, in particular, Study Group 11 on protocols and interoperability, Study Group 13 on network architecture and functions, and Study Group 17 on security.
* Whenever duplication of effort or planning issues are discovered, the JCA-QKDN will coordinate all activities related to QKDN with relevant study groups and report the results to TSAG.
* The JCA-QKDN considers and encourages possibilities of co-operation on QKD related standardization with relevant SDOs such as ISO/IEC JTC 1, ETSI, IEEE, IETF/IRTF, CCSA, CEN-CENELEC FG QT, IEC TC 86, etc.
* The JCA-QKDN analyses the work of standards development organizations, consortia and forums for use in its coordination function and as part of its report provides information on this work for use by the relevant study groups in planning their work.
* In order to avoid duplication of work and assist in coordinating the work of the study groups, the JCA-QKDN acts as a point of contact within ITU-T and with other standards development organizations, consortia and forums working on QKD related standards.
* The JCA-QKDN maintains the SG13 roadmap for QKDN standardization which addresses on-going and published specifications from ITU, other relevant standard development organization, consortia and forums.
* In carrying out the internal coordinating role, participants in the JCA-QKDN will include representatives of relevant ITU-T study groups and other ITU groups.
* In carrying out the external collaboration role, representatives from other relevant standards development organizations, regional/national organizations, consortia and forums shall be invited to join the JCA-QKDN.

F.3 Participation

Participation is open to official representatives of all ITU-T SGs and TSAG and all ITU-T SG secretariat. Other ITU groups and relevant external bodies, standardization organizations in particular, may be invited to appoint a representative to join the group.

F.4 Administrative support

ITU-T Telecommunications Standardization Bureau (TSB) will provide secretariat and facilities support for JCA-QKDN within available resource limits.

F.5 Meetings

The JCA-QKDN works electronically using teleconferences and with face-to-face meetings as needed. Meetings will be held as determined by the JCA-QKDN and will be announced to its participants by the JCA e-mail reflector and posted on the ITU-T website. JCA-QKDN will meet during TSAG meeting if it needs to.

F.6 Parent group and progress reports

The JCA-QKDN will report to TSAG at its meetings. An executive summary will be sent to TSAG after each JCA-QKDN meeting. Progress reports and proposals will be sent to relevant study groups as necessary, in accordance with Recommendation ITU-T A.1, clause5.

F.7 Leadership

Chairman ITU-T JCA-QKDN: Mr Junsen LAI, CAICT, MIIT, China (P.R.).

Vice Chairman ITU-T JCA-QKDN: Mr Mark McFADDEN, United Kingdom.

F.8 Other contacts

JCA-QKDN secretariat ([quantum@itu.int](mailto:quantum@itu.int)).

F.9 Lifetime

See clause 5.10 of Recommendation ITU-T A.1.

# Annex G (revised) Terms of Reference for an ITU-T Joint Coordination Activity on Digital COVID 19 certificates (JCA-DCC)

**Scope**

Current COVID-19 has illustrated the need for digital certificates including vaccination etc that could be used in an interoperable fashion across organizations. Digital COVID-19 Certificates are intended to provide proof that a person has been vaccinated against COVID-19, tested for the virus, or recovered from COVID-19. It is recognized that digital certificates should be suitable to be used by both existing and emerging systems such as those based on decentralized identity (DID).

There is a need for coordinating activities across ITU-T SGs and related SDOs working on this important subject. The Terms of Reference of this JCA are consistent with clause 5 of Recommendation ITU-T A.1. The scope of the JCA is coordination of the ITU-T digital COVID-19 certificates (DCC) standardization work among relevant ITU-T study groups and external organizations and forums, fostering the use of compatible data architectures for sharing data, and promoting interoperability, agility and safety for users, and all relevant stakeholders involved​.

The JCA-DCC should consider new PP-22 Resolution on “Role of telecommunications/ICTs in mitigating global pandemics” and the UN Sustainability Goal 3: GOOD HEALTH AND WELL-BEING.

The JCA-DCC will be a platform for relevant stakeholders – such as public health authorities, telecom regulators, healthcare delivery organizations, services providers, platform providers, network operators, travellers' organizations, healthcare users' organizations, international organizations, and industry forums and consortia.

**Objectives**

* The JCA-DCC will ensure that the ITU-T DCC standardization work is progressed in a well-coordinated way among relevant study groups. Planning issues can be brought to the attention of the JCA-DCC. The JCA-DCC will facilitate work assignment through the involved study groups when it is not clear under which Question work should be done and recommend an allocation of tasks.
* The JCA-DCC will analyse DCC standardization work items and coordinate an associated standardization roadmap.
* The JCA-DCC will act as a point of contact within ITU-T on DCC and with other intergovernmental organizations (in particular WHO), the European Commission as well as with SDOs/Forums (in particular ISO/IEC JTC 1/SCs 6, 17, 27, 35, and 37, W3C, ISO/PC 317, ISO/TC 215, ISO/TC 307, GSMA, EC, IEEE, ECMA, etc.) in order to avoid duplication of standardization work and assist in coordinating the DCC work of the relevant study groups.
* As per Rec. ITU-T A.1, clause 5.3, JCA-DCC is open, but (to restrict its size) should primarily be limited to official representatives from the relevant ITU study groups that are responsible for work on DCC. A portion of each JCA-DCC meeting may be allocated to raising awareness of DCC issues addressed by other ITU-T Study Groups Questions, and external organizations.
* JCA-DCC may also include invited experts and should invite representatives from other intergovernmental organizations (e.g. WHO) and relevant recognized SDOs/Forums (in particular the ISO and IEC committees as referenced above), as appropriate.
* The JCA should strive towards encouraging joint activity with the relevant SDOs (in particular ISO and IEC) and organizations.

**Administrative support**

TSB will provide support for JCA-DCC within available resource limits.

**Meetings**

JCA-DCC will work electronically using teleconferences and with face-to-face meetings as needed. Meetings will be held as determined by the JCA-DCC and will be announced to its participants and on the ITU-T website. JCA-DCC will meet during TSAG meeting if it needs to.

**Progress reports**

The JCA-DCC will report to TSAG at its meetings. Progress reports and proposals will be sent to relevant study groups as necessary, in accordance with [Recommendation ITU-T A.1](https://www.itu.int/rec/T-REC-A.1/en), clause 5.7.

**Leadership**

Co-chairmen: Mr Heung Youl Youm (Rep. of Korea), Mr. Carl Leitner (WHO)

**Other contacts**

JCA-DCC secretariat ([tsbjcadcc@itu.int](mailto:tsbjcadcc@itu.int)).

**Lifetime**

See clause 5.10 of [Recommendation ITU-T A.1](https://www.itu.int/rec/T-REC-A.1/en).

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1. <https://extranet.itu.int/sites/itu-t/studygroups/2022-2024/tsag/Captioning/Forms/AllItems.aspx> [↑](#footnote-ref-2)
2. Webcast recording is available at <https://www.itu.int/webcast/live2/t2022-24tsag>. The direct link to the archived webcast is <https://www.itu.int/webcast/archive2/t2022-24tsag?order=field_start_date&sort=desc>. [↑](#footnote-ref-3)
3. Geneva time, unless indicated otherwise. [↑](#footnote-ref-4)
4. Format: Physical (P), Virtual (V), Physical with Remote participation (PR) [↑](#footnote-ref-5)
5. <https://www.bloomberg.com/professional/blog/metaverse-may-be-800-billion-market-next-tech-platform/>. [↑](#footnote-ref-6)