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|  | **Telecommunication Development Advisory Group (TDAG)**  **29th Meeting, Virtual, 8-12 November 2021** | | A close up of a sign  Description automatically generated |
|  | | **Revision 1 to** | |
|  | | **Document TDAG-2****1/2/6-E** | |
|  | | **4 November 2021** | |
|  | | **Original: English** | |
| Chairman, ITU-D Study Group 2 | | | |
| ITU-D Study Group 2 activities for the seventh study period | | | |
|  | | | |
| **Summary:**  This report is an update to the last meeting report to TDAG (Revision 1 to Document [TDAG-21/9](https://www.itu.int/md/D18-TDAG28-C-0009)) on the activities carried out by Study Group 2 for the seventh study period.  As a follow-up to the decisions made by TDAG at its 28th meeting (24-28 May 2021), an additional set of Study Group 2 meetings were held from 18 to 22 October 2021, principally with the aim of reaching consensus on the revised Terms of Reference (ToRs) for study Questions.  Updates to the last meeting report to TDAG are summarized as follows:   * Consensus was reached on revised ToRs for the seven Study Group 2 Questions. The list of revised ToRs can be found in **Annex 6** to this report and in Document [TDAG-21/2/DT/5](https://www.itu.int/md/D18-TDAG29-211108-TD-0005/). * Other relevant outcomes from the last meetings include the publication of the 7 output reports and approval of one new annual deliverable in e-health, among others. More information is available in **Section 2.2.6**. Key results achieved by each individual Question were also updated in **Section 3**. * Overall participation and contribution statistics for the seventh study period were updated to take into account the last meeting participants and contributions. The results remained steady. More information is available in **Section 1.3**. * Collaborations with other groups on similar topics of interest have been fruitful and are expected to continue. More information is available in **Section 4**.   **Actions required:**   * TDAG is invited to examine the revised ToRs contained in Document [TDAG-21/2/DT/5](https://www.itu.int/md/D18-TDAG29-211108-TD-0005/) and take any further action as deemed appropriate. * TDAG is invited to note the rest of the report.   **References:**  [TDAG-18/13](https://www.itu.int/md/D18-TDAG23-C-0013), [TDAG-19/13](https://www.itu.int/md/D18-TDAG24-C-0013), [TDAG-20/13](https://www.itu.int/md/D18-TDAG25.2-C-0013), [TDAG-21/9](https://www.itu.int/md/D18-TDAG28-C-0009), [2/REP/8](https://www.itu.int/md/D18-SG02-R-0008/en) (2018), [2/REP/16](https://www.itu.int/md/D18-SG02-R-0016/en) (2019), [2/REP/24](https://www.itu.int/md/D18-SG02-R-0024/en) & [SG2RGQ/REP/22](https://www.itu.int/md/D18-SG02.RGQ-R-0022) (2020), [2/REP/32](https://www.itu.int/md/D18-SG02-R-0032) & [2/REP/33](https://www.itu.int/md/D18-SG02-R-0033) & [SG2RGQ/REP/23](https://www.itu.int/md/D18-SG02.RGQ-R-0023) (2021) | | | |

# Introduction

The report covers the seventh study period for ITU-D Study Group 2. SG2 concluded its work at its fourth and final meeting held in Geneva from 15 to 19 March 2021, approving output reports for all seven Questions. Following decision by TDAG during its meeting held from 24 to 28 May 2021, an additional meeting was held from 18 to 22 October 2021, focused on review and updates to the terms of reference of the Study Group 2 Questions to define its future work until the next WTDC.

The study period 2018-2021 for SG2 concluded to-date with:

* 7 output reports and video clips to promote them[[1]](#footnote-2)
* 5 annual deliverables[[2]](#footnote-3)
* 4 annual Study Group meetings from 2018 to 2021
* 4 annual Rapporteur Group Question (RGQ) level meetings from 2018 to 2021, as well as 1 block of RGQ informal meetings in February 2021
* Video interviews by 7 (co-)authors of annual deliverables[[3]](#footnote-4)
* 3 webinars in the 2020 “Reflections on COVID-19” series[[4]](#footnote-5)
* 3 WSIS 2020 sessions (one thematic workshop and two high-level policy sessions)[[5]](#footnote-6) and 4 WSIS 2021 sessions (one high-level policy session, two thematic workshops and one country workshop)[[6]](#footnote-7)
* 21 workshops and other events[[7]](#footnote-8)
* 6 ITU News blogs[[8]](#footnote-9) and 1 ITU communique[[9]](#footnote-10)
* 166 incoming liaison statements (SG2 and Rapporteur Group Question level)
* 86 outgoing liaison statements (SG2 and RGQ level)
* 587 contributions (membership, SG2 management and ITU)
* The highest number of participants for a SG2 plenary level meeting was 130 (second meeting in 2019)
* The highest percentage of female participation for a SG2 plenary level meeting was 37% (fourth meeting in 2021)
* The highest number of participants for Rapporteur Group Question level meeting was 156 (first meeting in 2018)
* The highest percentage of female participation for Rapporteur Group Question level meeting was 42% (last meeting in October 2021)
* SG2 Management team contributed in ITU work including representations in regional workshops, RDFs, RPMs and IRMs
* Draft revised terms of reference of the SG2 Questions were developed and reached agreement during the last SG2 meetings of this study period (18-22 October 2021).

## Mandate and outcomes

Study Group 2 (SG2) was established in accordance with Resolution 2 (Rev. Buenos Aires, 2017) to study Questions and issues relating to ICT services and applications for the promotion of sustainable development. The Group is responsible for seven substantive topics to study the use and impact of ICTs in the areas of: 1) smart cities and society, 2) e-health, 3) cybersecurity, 4) conformance and interoperability testing, counterfeit ICT equipment and theft of mobile devices, 5) disaster risk reduction and management, 6) e-waste and climate change, and 7) human exposure to electromagnetic fields. SG2 takes also into account the work of other ITU Sectors and relevant organizations, and the priorities of developing countries in fulfilling its mandate.

The formal titles of the Study Group 2 Questions are as follows:

* **Question 1/2**: Creating smart cities and society: Employing information and communication technologies for sustainable social and economic development
* **Question 2/2**: Telecommunications/ICTs for eHealth
* **Question 3/2**: Securing information and communication networks: Best practices for developing a culture of cybersecurity
* **Question 4/2**: Assistance to developing countries for implementing conformance and interoperability (C&I) programmes and combating counterfeit ICT equipment and theft of mobile devices
* **Question 5/2**: Utilizing telecommunications/ICTs for disaster risk reduction and management
* **Question 6/2**: ICTs and the environment
* **Question 7/2**: Strategies and policies concerning human exposure to electromagnetic fields

The definitions of the Questions, which include, *inter alia*, the statement of the problem, the description of the expected output, the initial work plan with the required timing for the output, etc., is available on the Study Group 2 website in Document [2/2](https://www.itu.int/md/D18-sg02-c-0002).

SG2 concluded its work at its fourth and final meeting held virtually from 15 to 19 March 2021, approving output reports for all seven study Questions. Following postponement of WTDC to June 2022 and decision by TDAG, extra SG2 plenary and rapporteur group meetings were held from 18 to 22 October 2021 and were principally focused on developing draft revisions of the terms of reference of the SG2 Questions in preparation for future studies.

## Study Group 2 management

WTDC-17 designated the SG2 leadership for the seventh study period (2018-2021): Dr Ahmad Reza Sharafat (Islamic Republic of Iran) served as Chairman; he was ably assisted by the following Vice-Chairmen:

* Mr Abdelaziz Alzarooni (United Arab Emirates) (ARB)
* Ms Nora Abdalla Hassan Basher (Sudan) (ARB)
* Ms Maria Bolshakova (Russian Federation) (CIS)
* Ms Celina Delgado (Nicaragua) (AMS)
* Mr Ananda Raj Khanal (Nepal (Republic of)) (ASP)
* Mr Roland Yaw Kudozia (Ghana) (AFR)
* Mr Tolibjon Oltinovich Mirzakulov (Uzbekistan) (CIS)
* Ms Alina Modan (Romania) (EUR)
* Mr Henry Chukwudumeme Nkemadu (Nigeria) (AFR)
* Ms Ke Wang (China) (ASP)
* Mr Dominique Würges (France) (EUR)

Resigned during this study period:

* Mr Nasser Al Marzouqi (United Arab Emirates) (ARB)
* Mr Filipe Miguel Antunes Batista (Portugal) (EUR)
* Mr Yakov Gass (Russian Federation) (CIS)

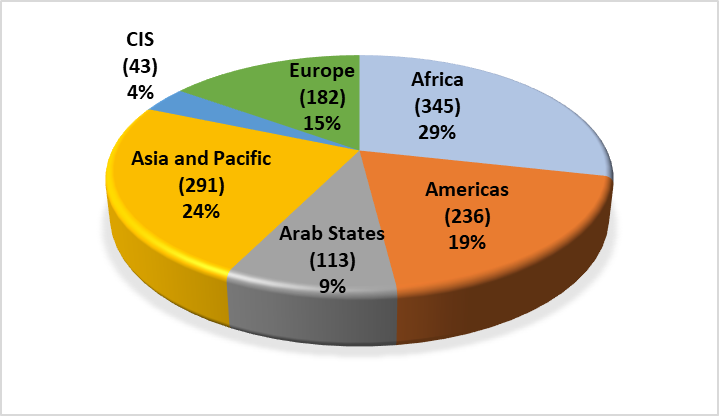
The list of appointed Chairman, Vice-Chairmen, Rapporteurs and Vice-Rapporteurs of ITU-D Study Group 2 Questions can be found in **Annex 1**.

## Participation and written contributions (2018-2021)

An aggregate number of 1210 participants attended SG2 and Rapporteur Group meetings (including the joint SG1 and SG2 plenary held in March 2021) during this study period. **Table 1** details the number of participants and represented countries during each SG2 event of the study period. Each SG2 event gathered about 121 participants from 56 countries on average per meeting.

**Table 1: Participation to SG2 and Rapporteur Group meetings during the study period**

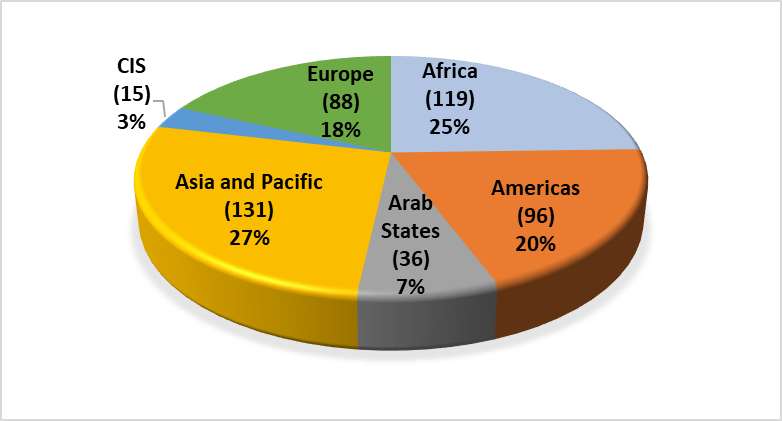




**Figure 1: Aggregate number of participants (per region) for Study Group 2**

**Figure 1** provides the regional distribution of all participants. The majority of participants were from the African and Asia and Pacific regions, followed by the Americas, Europe, Arab States and CIS.

Many delegates regularly attended Study Group and associated Rapporteur Group activities, either in person or remotely, from year to year. A total of 483 individual delegates[[10]](#footnote-11) participated in at least one Study Group 2 meeting. **Figure 2** shows the regional distribution of these individual delegates. While the Asia and Pacific region is ahead with the most individual delegates followed by Africa, the distribution is similar to the regional distribution of the aggregate number of participants in Figure 1.

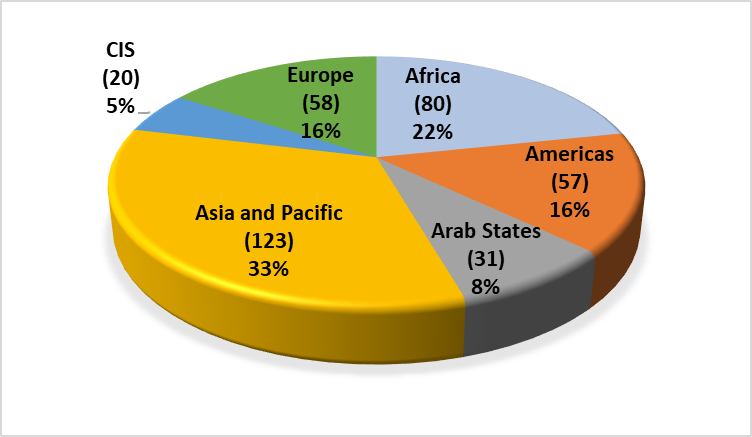
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**Figure 2: Number of individual participants (per region) for Study Group 2**

Study Group 2 considered a total of 926 documents during this study period, 587 of which were contributions. A deeper analysis shows that 369 of these contributions were submitted by the membership[[11]](#footnote-12), while the remaining 218 contributions come from the SG2 management team members (Chairman, Vice-Chairmen, Rapporteurs, Vice-Rapporteurs and Coordinators) while performing their duties, and from ITU (BDT including BDT Focal Points, other BDT staff and the Study Group Secretariat, as well as the other ITU Sectors and the General Secretariat). **Table 2** lists the different documents during this study period.

**Table 2: Documents considered by SG2 during the study period (2018–2021)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Documents for SG2 meetings and Rapporteur Group meetings | 2018 | 2019 | 2020 | 2021 | Study period |
| Contributions   * From members * From SG management + ITU | 138 | 162 | 177 | 110 | **587** 369218 |
| Incoming liaison statements | 63 | 41 | 29 | 34 | 167 |
| Outgoing liaison statements | 38 | 21 | 13 | 14 | 86 |
| Meeting and progress reports | 14 | 21 | 21 | 30 | 86 |
| Total documents | 253 | 245 | 240 | 188 | **926** |



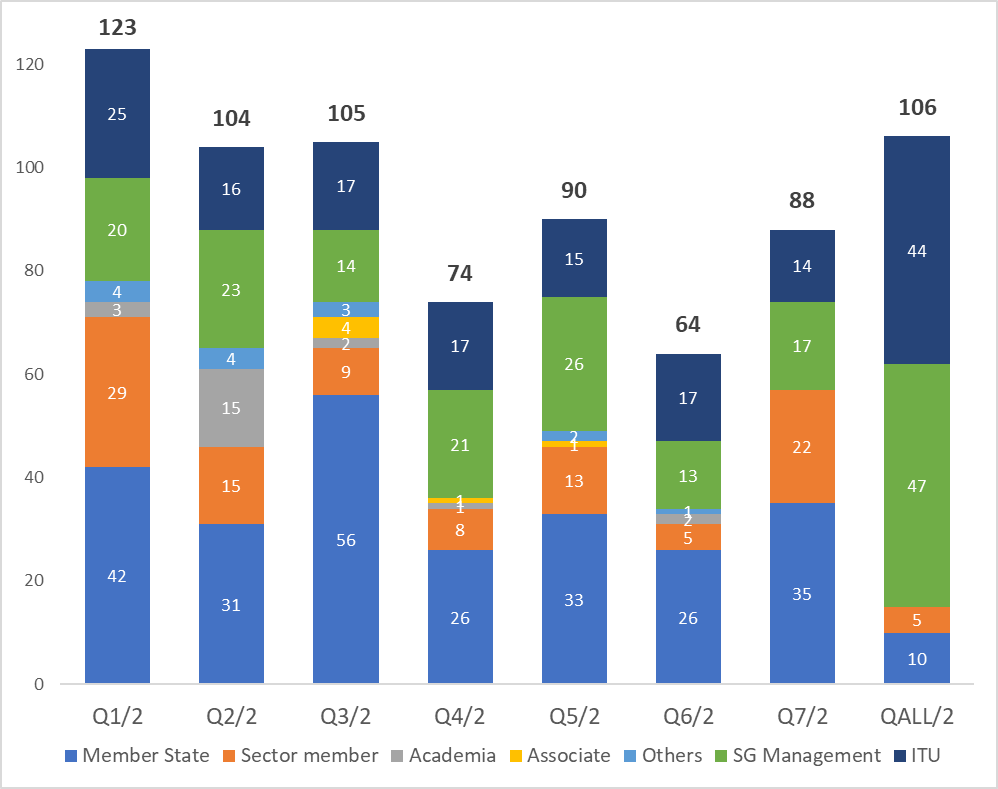
**Figure 3: Regional distribution of contributions submitted by the membership to Study Group 2**

**Figure 3** provides a regional analysis of the contributions from members. The majority of the contributions came from the Asia and Pacific and Africa regions, followed by Europe, the Americas, Arab States and CIS.

As illustrated in **Table 3**, each Question has received a satisfactory number of written contributions to complete its deliverables for the study period. The three Questions (excluding contributions to All Questions – “QAll/2”) receiving the highest number are Question 1/2 (area: smart cities and communities) with 123, followed by Question 3/2 (area: cybersecurity) with 106, then Question 2/2 (area: e-health) with 104. Despite the pandemic period, Study Group 2 could ensure business continuity with 2020 being the year with the highest number of contributions received. This situation is comparable to the previous study period (the busiest year was also on the third year in 2016), as members were actively involved in the final phase of development of output reports. It should also be noted that all Rapporteur Groups also organized workshops and webinars (see **Section 3**) during this study period, the results of which were also used as inputs to support and complement the development of their output reports.

**Table 3: Number of contributions received per Study Group 2 Question**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Contributions received for annual SG2 and rapporteur group meetings[[12]](#footnote-13) | 2018 | 2019 | 2020 | 2021 | Total |
| Q1/2 | 35 | 39 | 38 | 11 | **123** |
| Q2/2 | 23 | 22 | 41 | 18 | **104** |
| Q3/2 | 26 | 30 | 39 | 11 | **106** |
| Q4/2 | 21 | 16 | 31 | 6 | **74** |
| Q5/2 | 19 | 21 | 35 | 16 | **91** |
| Q6/2 | 18 | 14 | 25 | 8 | **65** |
| Q7/2 | 20 | 23 | 36 | 9 | **88** |
| QAll/2 | 15 | 16 | 31 | 55 | **117** |
| Total | **177** | **181** | **276** | **134** | **768** |



**Figure 4: Number of contributions received for Study Group 2 per Question and source**

**Figure 4** illustrates the distribution of contributions per source type. Similar to the previous study period, Member States remain the highest contributor across all Questions, with more contributions submitted to Question 3/2 (area: cybersecurity). Sector members (which include regional/international organizations) followed suit with more contributions in Questions 1/2 (area: smart cities and communities) and 7/2 (area: human exposure to RF-EMF). While more active participation from academia and associates remains desirable, their activity slightly increased compared to the previous study period, especially in Question 2/2 (area: e-health) for academia and Question 3/2 (area: cybersecurity) for associates. Some SMEs which participated in the SME pilot project[[13]](#footnote-14) also contributed during this study period during the years 2018-2019.

# Meetings

## Management team meetings

During this study period, four annual Study Group 2 management team meetings with the Chairman, Vice-Chairmen, (Co-)Rapporteurs, Vice-Rapporteurs and BDT Focal Points were held on the day before each annual Study Group 2 meeting, in order to prepare for the meeting, approve the time-management plan, review the progress of each Question under study, discuss planned and on-going activities and come up with proposals on further improvements to the functioning of the Study Groups.

In addition, nine additional management team meetings (four of which jointly with SG1) were held from the third annual meeting of SG2 in 2020 to best prepare the progress of annual and final deliverables and to coordinate on other areas of interest, including topics in preparation for the next WTDC (e.g., working methods in WTDC Res. 1, future study groups and Questions in WTDC Res. 2). Coordinators were appointed to facilitate the coordination on key topics. A list of these topics and names of the coordinators can be found in **Annex 2** to this report.

Finally, the seven Rapporteur Groups held management team meetings at their own level to ensure coordination and fulfill their Question mandates.

## Study Group 2 meetings

During the course of the study period, Study Group 2 met six times. Four annual meetings were held in May 2018, March 2019, February 2020 and March 2021. In addition and to ensure good preparations during the global COVID-19 pandemic situation, two extra SG2 plenaries were held in October 2020 and October 2021 to review relevant inputs, including proposals on topics and revisions of draft terms of references of study group Questions in preparation for the next WTDC, as well as on synergies with BDT projects and approval of new annual deliverables. Finally, a joint plenary meeting of ITU-D Study Groups 1 and 2 was held on 31 March – 1 April in order to develop joint proposals on two topics (working methods – Res. 1, future study Questions – Res. 2) in preparation for the next WTDC.

The Rapporteur Groups met in total nine times during this study period, both during each annual Study Group meeting and separately in October 2018, 2019, 2020 and 2021. They also held one additional block of informal meetings in February 2021 to compensate for the shortened meeting times due to COVID-19, in order to progress their work and identify ahead any pending issues before finalization of their output reports.

**Annex 3** presents the dates of the Study Group and Rapporteur Group meetings held during this study period. A substantial amount of the work was also carried out electronically and by correspondence in between the physical meetings.

### First annual SG2 meeting

The meeting was held in Geneva from 7 to 11 May 2018. The meeting took the following main actions and decisions:

* Reviewed the main outcomes from the previous 2014-2017 study period, SG2 work plan and expectations for the 2018-2021 study period;
* Appointed new (Co-)Rapporteurs and Vice-Rapporteurs to lead the Questions under study ;
* Approved draft work plans and tables of contents for each Question to start the work;
* Developed a draft mapping table between ITU-D Study Group Questions and ITU-T Questions, in the context of inter-sectoral coordination between the ITU Sectors;

The report of this meeting is available in Document [2/REP/8](https://www.itu.int/md/D18-SG02-R-0008).

### Second annual SG2 meeting

The meeting was held in Geneva from 25 to 29 March 2019, and took the following main actions:

* Appointed additional Co-Rapporteurs and Vice-Rapporteurs to strengthen activities of the management teams;
* Approved an annual deliverable from Question 1/2 (“*A Holistic Approach to Creating Smart Societies*”) to be released as an on-going work under the auspices of the SG2 Chairman.[[14]](#footnote-15) A panel discussion was also held to present the annual deliverable and discuss its main themes;
* Developed and stabilized mappings between ITU-D Questions and with other ITU Sectors;
* Initiated studies on possible linkages between ITU-D Questions with ITU projects, ITU capacity building activities and WSIS Prizes in 2018 and 2019;
* Progressed on the implementation of ITU Plenipotentiary Conference Resolution 131 (Rev. Dubai, 2018) by defining future actions to be taken by SG2 on topics related to statistics, with an ITU-D SG2 Vice-Chairman to coordinate the work;
* Progressed on the implementation of WTDC Resolution 9 (Rev. Buenos Aires, 2017) by identifying the relevant Questions and appointing corresponding contact points and an ITU-D SG2 Vice-Chairman to coordinate the work;

The report of this meeting is available in Document [2/REP/16](https://www.itu.int/md/D18-SG02-R-0016).

### Third annual SG2 meeting

The meeting was held in Geneva from 24 to 28 February 2020. The meeting took the following main actions and decisions:

* Appointed 2 Vice-Chairmen (CIS and Europe regions), 1 Co-Rapporteur and 2 Vice-Rapporteurs to reinforce the management teams following resignations;
* Agreed to initiate a coordination process between relevant experts to receive further inputs and edits on a new annual deliverable from Question 1/2 (“*Security and trust for the creation of smart cities*”), and at the end of the process, to release it as an on-going work under the auspices of the SG2 Chairman;
* Held a session on “IoT for development: opportunities and risks for developing countries” to get a better understanding of IoT, explore its potential for development and to inform the participants of the underlying opportunities and challenges, especially in developing countries;
* Further advanced on mapping of activities between ITU-D SG Questions and with the other ITU sectors. Some conflicts with respect to a proposal received from TSAG was resolved through coordination in the Inter Sector Coordination Group following this meeting.
* In relation with ITU Plenipotentiary Conference Resolution 131, initiated studies of linkages between ITU-D Questions with activities of the Expert Group on ICT Household Indicators (EGH) and the Expert Group on Telecommunication/ICT Indicators (EGTI). A liaison statement was also sent for further collaboration with these Expert Groups;
* In relation with WTDC Resolution 9, identified topics for collaboration from the relevant Questions (Q1/2, Q4/2 and Q7/2);
* Initiated discussions on new topics for future study Questions;
* Shared preparations for a dedicated session to present the ITU-D study groups during the WSIS Forum 2020;

The report of this meeting is available in Document [2/REP/24](https://www.itu.int/md/D18-SG02-R-0024).

### Extra-SG2 plenary meeting (October 2020)

The meeting was held virtually on 5 October 2020. The meeting took the following main actions:

* Consolidated preliminary views on topics in preparation for the next WTDC (working methods – Res. 1, future study Questions – Res. 2, streamlining of Resolutions, draft WTDC declaration), which were then shared with the TDAG Working Group on WTDC Resolutions, Declaration and Thematic Priorities (TDAG-WG-RDTP);
* Explored status of two BDT projects (FIGI, PRIDA) for potential synergies with SG Questions;
* Approved two annual deliverables from Question 1/2 (“*Vertical applications in smart cities*”) and Question 5/2 (“*Draft guidelines for conducting national level emergency communications drills and exercises*”) to be released as an on-going work under the auspices of the SG2 Chairman;
* Appointed 1 Co-Rapporteur for Question 5/2 to ensure continued co-leadership and resource in its management team following a Co-Rapporteur’s resignation;
* Reviewed a draft joint survey on the work of the ITU-D study groups for the 2018-2021 study period, prior to its launch soon after the meeting;
* Reviewed other inputs of relevance to ITU-D study groups (WSIS, Digital Digital Regulation Handbook and online Platform, GSR-20 Best Practice and Guidelines).

The report of this meeting is available in Document [SG2RGQ/REP/22](http://www.itu.int/md/D18-SG02.RGQ-R-0022/).

### Fourth annual SG2 meeting

The meeting was held virtually from 15 to 19 March 2021. The meeting took the following main actions:

* Approved the output reports on the seven SG2 study Questions for the study period;
* Consolidated the views on future study topics for each Question;
* Re-approved two annual deliverables from Questions 1/2 and 5/2, which were revised by professional editors, for release;
* Reviewed potential mechanisms for collaboration with an external organization (Eastern Partnership Electronic Communications Regulators Network - EaPeReg);[[15]](#footnote-16)
* Reviewed other areas of relevance to ITU-D activities, including: implementation of WTDC Resolution 9; results of last meetings of EGTI, EGH and the World Telecommunication/ICT Indicators Symposium (WTIS); results of the meetings of the ITU Coordination Committee for Terminology (ITU CCT); update of the BDT PRIDA project; and BDT report on AI and big data.

The report of this meeting is available in Document [2/REP/32](https://www.itu.int/md/D18-SG02-R-0032).

## Joint plenary meeting of Study Groups 1 and 2

The meeting[[16]](#footnote-17)was held virtually on 31 March and 1 April 2021. The meeting took the following main actions:

* Noted the status of current progress in TDAG-WG-RDTP;
* Noted the results of the joint end of cycle survey and introduction to the Results Based Management (RBM) initiative recently started for study groups;
* Agreed a joint proposal with SG1 that updates parts of WTDC Resolution 1 (“*Rules of procedure of the ITU Telecommunication Development Sector*”) related to study groups. The proposal was conveyed to TDAG WG-RTDP through a liaison statement (Annex 1 of Document [2/438](https://www.itu.int/md/D18-SG02-C-0438));
* Agreed a joint proposal with SG1 that updates Annex 1 to WTDC Resolution 2 (“*Scope of ITU-D study groups*”), based on discussions on future study topics held during the fourth meetings of ITU-D study groups in March 2021 and this joint plenary meeting. The proposal was conveyed to TDAG WG-RTDP through a liaison statement (Annex 2 of Document [2/438](https://www.itu.int/md/D18-SG02-C-0438));
* Noted the current status on streamlining of WTDC Resolutions;
* Noted the draft Addis Ababa Declaration under discussion in the TDAG WG-RDTP.

### Extra-SG2 plenary and rapporteur group meetings (October 2021)

The meeting was held virtually from 18 to 22 October 2021. The meeting took the following main actions:

* Reached consensus on revised Terms of Reference for the seven SG2 Questions, as a follow-up to related decisions made during the 28th meeting of TDAG (24-28 May 2021). The list of revised ToRs can be found in **Annex 6** to this report and in Document [TDAG-21/2/DT/5](https://www.itu.int/md/D18-TDAG29-211108-TD-0005/).
* Noted with appreciation the publication of all output reports of ITU-D Study Group 2, along with related video-clips (link).
* Approved one annual deliverable from Question 2/2 (“*Telecommunication/ICTs for pandemics and suicide prevention*”) to be released as an ongoing work under the auspices of the SG2 Chairman;
* Reviewed new proposals submitted by members in relation with the next iteration of the Global Cybersecurity Index (GCIv5). It was agreed to create a new correspondence group to harmonize the proposals and submit their outcomes to GCIv5 after approval.
* Reviewed other areas of relevance to ITU-D activities, including: exploring synergies with the Generation Connect Initiative, update of ITU’s work in the Question topics and ICT measurement, continued collaboration with the WSIS platform.

The report of this meeting is available in Document [SG2RGQ/REP/23](http://www.itu.int/md/D18-SG02.RGQ-R-0023).

# Summary of the key results achieved

## Question 1/2 – Creating smart cities and society: Employing information and communication technologies for sustainable social and economic development

The Output Report on Question 1/2 in Document [2/375](https://www.itu.int/md/D18-SG02-C-0375) (Rev.2) was approved and published ([link](https://www.itu.int/en/myitu/Publications/2021/10/01/07/40/Employing-ICTs-for-sustainable-social-and-economic-development)).

The following annual deliverables on Question 1/2 were approved for release in the ongoing work page[[17]](#footnote-18) under the auspices of SG2 Chairman:

* *A holistic approach to creating smart societies* (annual deliverable 2019, [link](https://www.itu.int/oth/D0717000002)). A dedicated panel session presented the key findings of this deliverable ([presentations](https://www.itu.int/md/D18-SG02-190325-TD-0020)).
* *Promoting trust and safety for the creation of smart cities and communities* (annual deliverable 2020, [link](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/OngoingWork.aspx)). A dedicated panel session presented the key findings of this deliverable ([presentations](https://www.itu.int/md/D18-SG02-200224-TD-0035)).
* *Vertical applications in smart cities* (annual deliverable 2020, [link](https://www.itu.int/oth/D0723000004)). A dedicated interview ([link](https://youtu.be/051ieMmdMeA)) presented the key findings of this deliverable. A related article is also available ([link](https://www.itu.int/en/myitu/News/2021/04/30/11/32/Digital-agriculture-hydroponic-melon-farming-Japan))

The Rapporteur Group on Question 1/2 also organized and/or participated in the following workshops:

* GMIS-UNIDO-ITU special session on“*Technology and Innovation Powering Connectivity for Inclusive and Sustainable Industrial Development*”, held on 1 October 2018 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/GMIS-UNIDO-ITU-special-session.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0001) (see Annex 5));
* Workshop/tutorial on “*AI and emerging technologies*”, held on 11 October 2019 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/tutorial_AI_oct19.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0008) (see Annex 4)).

An updated draft terms of reference for Question 1/2 was agreed and is available in Document [SG2RGQ/319](https://www.itu.int/md/D18-SG02.RGQ-C-0319) (Rev.1).

## Question 2/2 – Telecommunications/ICTs for eHealth

The Output Report on Question 2/2 in Document [2/376](https://www.itu.int/md/D18-SG02-C-0376) (Rev.2) was approved and published ([link](https://www.itu.int/en/myitu/Publications/2021/10/01/08/03/Telecommunications-and-ICTs-for-eHealth)).

The following annual deliverable on Question 2/2 was approved for release in the ongoing work page[[18]](#footnote-19) under the auspices of SG2 Chairman:

* *Telecommunication/ICTs for pandemics and suicide prevention* (annual deliverable 2021, Document [SG2RGQ/351](http://www.itu.int/md/D18-SG02.RGQ-C-0351))*.*

The Rapporteur Group on Question 2/2 also organized the following workshops and webinar:

* Workshop on“*Adoption of new digital health technologies*”, held on 5 October 2018 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q2-2-oct18.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0002) (Annex 5));
* Workshop on“*New communication technologies for e-health and socio-economic issues*”, held on14 October 2019 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q2-2-oct19.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0009) (Annex 3));
* Webinar on “New e-health solutions to combat pandemics with ICT”, held on 6 July 2020 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/Webinars/2020/Q2-2-july06.aspx), [report](https://www.itu.int/en/myitu/News/2020/07/17/13/08/New--COVID19-ehealth-tools) (ITU News article)).

An updated draft terms of reference for Question 2/2 was agreed and is available in Document [SG2RGQ/320](https://www.itu.int/md/D18-SG02.RGQ-C-0320) (Rev.2).

## Question 3/2 – Telecommunications/ICTs for eHealth

The Output Report on Question 3/2 in Document [2/377](https://www.itu.int/md/D18-SG02-C-0377) (Rev.2) was approved and published ([link](https://www.itu.int/en/myitu/Publications/2021/09/28/13/54/SG2-Q3-2-Final-Report)).

The Rapporteur Group on Question 3/2 also organized a workshop on“*Cybersecurity emerging issues*” held on 9 October 2018 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q3-2-oct18.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0003) (Annex 5));

An updated draft terms of reference for Question 3/2 was agreed and is available in Document [SG2RGQ/321](https://www.itu.int/md/D18-SG02.RGQ-C-0321) (Rev.2).

## Question 4/2 – Assistance to developing countries for implementing conformance and interoperability (C&I) programmes and combating counterfeit ICT equipment and theft of mobile devices

The Output Report on Question 4/2 in Document [2/378](https://www.itu.int/md/D18-SG02-C-0378) (Rev.3) was approved and published ([link](https://www.itu.int/en/myitu/Publications/2021/09/28/17/06/Assistance-to-developing-countries-to-implement-conformance-interoperability-anti-counterfeit)).

The Rapporteur Group on Question 4/2 also organized the following workshops:

* Workshop on“*Combating counterfeit ICT devices*”, held on 4 October 2018 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q4-2-oct18.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0004) (Annex 6));
* Workshop on“*ICT Conformance and Interoperability: challenges for developing countries*”, held on16 October 2019 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q4-2-oct19.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0011) (Annex 4)).

An updated draft terms of reference for Question 4/2 was agreed and is available in Document [SG2RGQ/322](https://www.itu.int/md/D18-SG02.RGQ-C-0322) (Rev.2).

## Question 5/2 – Utilizing telecommunications/ICTs for disaster risk reduction and management

The Output Report on Question 5/2 in Document [2/379](https://www.itu.int/md/D18-SG02-C-0379) (Rev.3) was approved and published ([link](https://www.itu.int/en/myitu/Publications/2021/09/09/13/55/Utilizing-telecommunications-and-ICTs-for-disaster-risk-reduction-and-management)).

An annual deliverable on Question 5/2 was approved for release in the ongoing work page[[19]](#footnote-20) under the auspices of the SG2 Chairman: *Guidelines for conducting national-level emergency telecommunication drills and exercises* (annual deliverable 2020, [link](https://www.itu.int/oth/D0723000005)). A dedicated interview ([link](https://youtu.be/ZEsV0RIHpSA)) presented the key findings of this deliverable. A related article is also available ([link](https://www.itu.int/en/myitu/News/2021/08/02/06/54/Telcos-strengthen-India-disaster-preparedness))

The Rapporteur Group on Question 5/2 also organized the following workshops and webinar:

* Workshop on“*Early Warning Systems (EWS)*”, held on 8 May 2018 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/panel-EWS.aspx), [report](https://www.itu.int/md/D18-SG02-R-0005) (Annex 4));
* Workshop on“*Disaster drills and emerging technologies on disaster management*”, held on 3 October 2018 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q5-2-oct18.aspx), [report](https://www.itu.int/md/D18-SG02.RGQ-R-0005) (Annex 4));
* Workshop on“*Conducting national level emergency communications drills and exercises: guidelines for Small Island Developing States (SIDs) and Least Developed Countries (LDCs)*”, held on 7 October 2019 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q5-2-oct19.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0012) (Annex 4)).
* Webinar on“*The enabling policy environment for effective disaster management including for COVID-19 response*”, held on 14 July 2020 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/Webinars/2020/Q5-2-july14.aspx), [report](https://news.itu.int/disaster-management-ict-policy-covid-19/) (ITU News article)).

An updated draft terms of reference for Question 5/2 was agreed and is available in Document [SG2RGQ/323](https://www.itu.int/md/D18-SG02.RGQ-C-0323) (Rev.2).

## Question 6/2 – ICTs and the environment

The Output Report on Question 6/2 in Document [2/380](https://www.itu.int/md/D18-SG02-C-0380) (Rev.2) was approved and published ([link](https://www.itu.int/en/myitu/Publications/2021/10/01/08/28/Information-and-communication-technologies-and-the-environment)).

The Rapporteur Group on Question 6/2 also organized the following workshops and webinar:

* Workshop on“*E-waste policies, strategies and frameworks*”, held on 9 October 2018 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q6-2-oct18.aspx), [report](https://www.itu.int/md/D18-SG02.RGQ-R-0006) (Annex 5));
* Workshop on“*Frontier ICTs for climate action*”, held on 15 October 2019 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q6-2-oct19.aspx), [report](http://www.itu.int/md/D18-SG02.RGQ-R-0013) (Annex 4)).
* Webinar on“*ICTs for climate action and rebuilding greener economies after COVID-19*”, held on 15 July 2020 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/Webinars/2020/Q6-2-july15.aspx), [report](https://news.itu.int/leveraging-icts-to-build-back-greener-after-covid-19/) (ITU News article)).

An updated draft terms of reference for Question 6/2 was agreed and is available in Document [SG2RGQ/324](https://www.itu.int/md/D18-SG02.RGQ-C-0324) (Rev.2).

## Question 7/2 – Strategies and policies concerning human exposure to electromagnetic fields

The Output Report on Question 7/2 in Document [2/381](https://www.itu.int/md/D18-SG02-C-0381) (Rev.4) was approved and published ([link](https://www.itu.int/en/myitu/Publications/2021/10/01/08/44/Policies-guidelines-of-human-exposure-to-radio-frequency-electromagnetic-fields)).

The Rapporteur Group on Question 7/2 also organized a workshop on “Modern policies, guidelines, regulations and assessments of human exposure to RF-EMF”, held on 10 October 2018 ([programme](https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/session-Q7-2-oct18.aspx), [report](https://www.itu.int/md/D18-SG02.RGQ-R-0007) (Annex 7)).

An updated draft terms of reference for Question 7/2 was agreed and is available in Document [SG2RGQ/325](https://www.itu.int/md/D18-SG02.RGQ-C-0325) (Rev.2).

# Collaboration with other groups

## Mapping of activities between ITU-D study Questions and with other ITU sectors

During this study period, mapping of activities between ITU-D study Questions themselves (intra-sector mapping) and with activities of other ITU sectors (inter-sector mapping) were developed in order to identify potential areas of common interest, facilitate coordination and further strengthen collaboration. The study groups appointed two coordinators to facilitate development and exchange of these mapping tables: Mr Arseny Plossky (Russian Federation) for SG1, Co-Rapporteur for Question 4/1, and Mr Haim Mazar (ATDI, France) for SG2.

Both the intra-sector and inter-sector mapping tables were developed and regularly updated during this study period. It was agreed that all documents related to inter-sector mappings would be stored as living documents in a common repository, currently maintained by the Inter-Sector Coordination Group (ISCG) on issues of mutual interest. Consequently, further updates will be maintained through coordination between the ISCG and representatives of the three ITU Bureaus.

Documents for more information:

* Intra-sector mapping table: **Annex 4** to this report
* Inter-sector mapping tables with other ITU sectors: [mapping tables](https://www.itu.int/en/general-secretariat/Pages/ISCG/ISCT_Documents-Mapping_Tables.aspx) maintained by the ISCG

## WTDC Resolution 9 (Rev. Buenos Aires, 2017)

In an effort to implement WTDC Resolution 9 (Rev. Buenos Aires, 2017), and in particular to fulfil the needs of the developing countries stated therein, ITU-D study groups shared with TDAG in 2019 a proposal for how ITU-D study groups could contribute to the implementation of Resolution 9 (Rev. Buenos Aires, 2017) within their scope of work. The study groups appointed two coordinators to ensure continuous update on this topic: Mr Roberto Hirayama (Brazil), Vice-Chairman of ITU-D Study Group 1, and Mr Fadel Digham (Egypt), Co-Rapporteur for Question 1/2.

ITU-D Study Group 2 identified Questions 1/2, 4/2 and 7/2 as the most relevant with Resolution 9. During this study period, these Questions analyzed their needs in Resolution 9 and potential topics for collaboration with ITU-R, as described in **Annex 5** to this report.

In line with WTDC Resolution 9 objectives, expressed in the Annex of the Resolution, the last SG2 meeting expressed a desire to explore new and innovative approaches to fulfil the Resolution’s objectives, in full collaboration with the BR and BDT Directors, taking into consideration relevant ITU-R SGs activities and events, such as, ITU-R Workshops and Seminars, but also, other relevant events, such as, the PRIDA, WSIS Action Line C2 sessions during the WSIS Forum, etc.

Documents for more information:

* Liaison statement from the Chairmen of SG1 and SG2 to TDAG (2019): [TDAG-19/40](https://www.itu.int/md/D18-TDAG24-C-0040);
* Report from the Chairmen of SG2 to TDAG (2020): Section 4.2 of [TDAG-20/13](https://www.itu.int/md/D18-TDAG25.2-C-0013) (Rev.1);
* Report from the SG Coordinators on Resolution 9: [2/402](https://www.itu.int/md/D18-SG02-C-0402).

## ITU Coordination Committee for Terminology (ITU CCT)

ITU CCT was created through Council Resolution 1386 (“ITU Coordination Committee for Terminology (ITU CCT)”) in 2017 as a joint working body within ITU responsible for the adoption and agreement of terms and definitions in the field of telecommunications/ICTs in all six official languages of the Union. In accordance with WTDC Resolution 86 (Buenos Aires, 2017) on the “Use in the ITU Telecommunication Development Sector of the languages of the Union on an equal footing” TDAG in 2018 appointed SG1 Vice-Chairman Mr Peter Mbengie (Cameroon) and SG2 Vice-Chairman Ms Ke Wang (People’s Republic of China) to be the ITU-D’s representatives on the ITU Coordination Committee for Terminology (ITU CCT).

During the 2018-2021 study period, ITU CCT met 9 times. The meeting considered liaison statements and contributions with matters concerning terminology and agreed on the updates to the ITU terminology database, especially what is called Part 3 with the Terms, acronyms and definitions. Matters of interest to ITU-D work included the following:

* General definition of broadband: Given the rapid technical evolution, diverging views of ITU sectors and study groups, it was decided that a general definition of broadband access that would be suitable to the context of work of all parties involved could not be given.
* Several terms and definitions proposed by ITU-R and ITU-T study groups were linked with activities that are related to ITU-D study Questions, such as in the area of smart cities and communities, broadcasting, cloud computing, among others.
* Some ITU-D Questions discussed potential new terms and definitions, e.g., in the area of e-health. Following discussions, the meetings decided to not define any new terms, but were encouraged to take into account the existing terms and definitions in ITU, in particular those appearing in the online ITU Terms and Definitions database.
* The use of inclusive language in ITU standards and other publications gained importance. Considering that this is a cultural issue to be addressed at a higher level, ITU-CCT will seek advice from the Council Working Group on the use of the six official languages of the Union (CWG-LANG). ITU-D study groups will continue to monitor the situation and follow-up accordingly.

Overall, ITU-D study group members acknowledged the need to be more and more involved in the work of ITU-CCT, and continue to carry out fruitful cooperation in the future.

Documents for more information:

* Summary records of ITU-CCT meetings (period 2018-2021): [R15-CCV/47](https://www.itu.int/md/R15-CCV-C-0047) (1 June 2018), [R15-CCV/49](https://www.itu.int/md/R15-CCV-C-0049) (22 Nov. 2018), [R15-CCV/49](https://www.itu.int/md/R15-CCV-C-0049) (22 Nov. 2018), [R15-CCV/59](https://www.itu.int/md/R15-CCV-C-0059) (17 June 2019), [R19-CCV/3](https://www.itu.int/md/R19-CCV-C-0003) (3 June 2020), [R19-CCV/11](https://www.itu.int/md/R19-CCV-C-0011) (7 Dec. 2020), [R19-CCV/14](https://www.itu.int/md/R19-CCV-C-0014) (7 April 2021), [R19-CCV/20](https://www.itu.int/md/R19-CCV-C-0020) (23 June 2021), [R19-CCV/21](https://www.itu.int/md/R19-CCV-C-0021) (8 September 2021).[[20]](#footnote-21)
* Report from the SG coordinators: [2/406](https://www.itu.int/md/D18-SG02-C-0406) (March 2021).[[21]](#footnote-22)

## Expert Group on ICT Household Indicators (EGH) and Expert Group on Telecommunication/ICT Indicators (EGTI)

In order to implement Plenipotentiary Conference (PP) Resolution 131 (Rev. Dubai, 2018) on “Measuring information and communication technologies to build an integrating and inclusive information society” and WTDC Resolution 8 (Rev. Buenos Aires, 2017) on “Collection and dissemination of information and statistics”, two liaison statements from the Expert Group on ICT Household Indicators (EGH) and the Expert Group on Telecommunication/ICT Indicators (EGTI) respectively were received with the aim to create a working mechanism to ensure collaboration between these expert groups and the ITU-D study groups, and to share information of mutual interest. Following this proposal, the study groups appointed SG1 Vice-Chairman Ms Anastasia Konukhova (Russian Federation) and SG2 Vice-Chairman Mr Roland Kudozia (Ghana) as coordinators to explore deeper synergies with EGH and EGTI, to identify linkages between ITU-D study Questions and activities of EGH and EGTI (e.g. through a mapping table), and to identify topics and indicators of interest for their current studies and possible future work.

* During the 2020 meetings of EGTI (15-16 September 2020) and EGH (17-18 September 2020), topics for future work were agreed, several of which were of direct relevance to SGs Questions, such as “*the measurement of over-the-top services (OTT) effects on mobile traffic*”[[22]](#footnote-23), “*impact of the COVID-19 pandemic on telecoms and the way ICT was used to mitigate it*”, “*e-waste indicators in household surveys*”[[23]](#footnote-24) and “*child online protection*” (COP)[[24]](#footnote-25). A new discussion topic was also agreed to share experience and evidence on the proposals from ITU-D Study Groups 1 and 2. Both expert groups highlighted the importance of further collaboration with ITU‑D SGs and encouraged ITU-D members to participate actively in meetings and online forum discussions on the topics outlined for future work.
* Outcomes of the last meeting of EGTI (13-15 September 2021) and EGH (15-16 September 2021) were presented during the last ITU-D Study Group 2 Plenary and Rapporteur Group meetings (18-22 October 2021). Members noted with appreciation the ongoing work and updates from their subgroups, such as on 5G/IMT-2020, child online protection and e-waste, which are relevant to the ITU-D SG2 Questions.

Documents for more information:

* Liaison statements from EGTI and EGH: [2/247](https://www.itu.int/md/D18-SG02-C-0247/) (LS from EGTI), [2/248](https://www.itu.int/md/D18-SG02-C-0248/) (LS from EGH)
* Reply liaison statements from SGs: [2/353](https://www.itu.int/md/D18-SG02-C-0353/) (Reply LS from SG2)
* Reports/presentations from SG coordinators and BDT: [2/404](https://www.itu.int/md/D18-SG02-C-0404) (EGTI, EGH and WTIS activities in 2020), [SG2RGQ/339 + annex](https://www.itu.int/md/D18-SG02.RGQ-C-0339/en) (EGTI and EGH activities in 2021)

## Synergies with BDT projects (FIGI and PRIDA)

With the aim to strengthen synergies between the study groups and BDT initiatives, the two following projects were explored:

* FIGI (Financial Inclusion Global Initiative)[[25]](#footnote-26), which aims at leveraging ICTs for financial services to achieve digital financial inclusion. Coordinators: Mr Ahmad Gad (Egypt), Vice-Chairman of ITU‑D Study Group 1, and Mr Fadel Digham (Egypt), Co-Rapporteur for Question 1/2.
* PRIDA (Policy and Regulation Initiative for Digital Africa)[[26]](#footnote-27), which is a large programme in collaboration between the African Union, the European Union and the ITU to foster universally accessible and affordable broadband across the African continent to unlock future benefits of Internet-based services. Coordinator: Mr Haim Mazar (ATDI, France), Co-Rapporteur for Question 7/2.

A background and status of implementation of both projects were presented. Also, events/activities such as capacity-building workshops and development of technical guidelines that are relevant to the study group Questions were identified. Management teams and members were encouraged to explore possible synergies with these activities/events.

Documents for more information:

* Report from SG Coordinators on FIGI: [SG2RGQ/252 + annex](https://www.itu.int/md/D18-SG02.RGQ-C-0252)
* Reports from SG Coordinator on PRIDA: [SG2RGQ/245 + annex](https://www.itu.int/md/D18-SG02.RGQ-C-0245), [2/396](https://www.itu.int/md/D18-SG02-C-0396)

## Collaboration with WSIS

In order to seek a close alignment between WSIS Process and 2030 Agenda for Sustainable Development as called by the United Nations General Assembly Overall Review on WSIS[[27]](#footnote-28), and as encouraged by the Council Working Group on WSIS&SDG (CWG-WSIS&SDG) to closely work between ITU study groups and WSIS Secretariat for contribution to the WSIS and SDG Process, several areas of collaboration were explored with follow-up actions during this study period:

* Developed jointly with the WSIS Secretariat linkages between winning and champion projects from WSIS Prizes and ITU-D Study Group Questions (Documents [2/190](https://www.itu.int/md/D18-SG02-C-0190/));
* Reviewed contributions from SG members on commitments to WSIS (Documents [2/251](https://www.itu.int/md/D18-SG02-C-0251/), [2/TD/34](https://www.itu.int/md/D18-SG02-200224-TD-0034/));
* Organized a thematic workshop presenting activities of the two study groups during the WSIS Forum 2020: “*Facing Realities in Digital Transformation: Emerging Trends and Challenges*” ([programme](https://www.itu.int/net4/wsis/forum/2020/Agenda/Session/274), [report](https://www.itu.int/net4/wsis/forum/2020/Files/outcomes/draft/WSISForum2020_OutcomeDocument_DRAFT-20210201.pdf) (Page 173))[[28]](#footnote-29)
* Several members of the ITU-D Study Group 2 Management Team participated in several High-Level Policy sessions, as well as thematic and country workshops during the WSIS Forums 2020 and 2021:
  + “*Knowledge societies, Capacity building and e-Learning*” ([programme](https://www.itu.int/net4/wsis/forum/2020/Agenda/Session/204), [report](https://www.itu.int/net4/wsis/forum/2020/Files/outcomes/draft/WSISForum2020_HighLevelTrackOutcomesAndExecutiveBrief_DRAFT.pdf) (Page 172))
  + “*ICT Applications and Services /e-Environment/ Climate Change*” ([programme](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/160))[[29]](#footnote-30)
  + “*Towards a Digital Government*” ([programme](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/448))
  + “*Combating counterfeit telecommunication/ICT devices and software*” ([programme](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/406))
  + “*ICTs for Inclusive, Resilient and Sustainable Societies and Economies in the Arab States*” ([programme](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/338))
* Reviewed regular contributions to inform about upcoming WSIS activities and explore possibilities for more collaboration with the SGs (Documents [2/76](https://www.itu.int/md/D18-SG02-C-0076/en), [SG2RGQ/81](https://www.itu.int/md/D18-SG02.RGQ-C-0081/en), [SG2RGQ/167](https://www.itu.int/md/D18-SG02.RGQ-C-0167/en), [2/312](https://www.itu.int/md/D18-SG02-C-0312/en), [2/317](https://www.itu.int/md/D18-SG02-C-0312/en), [SG2RGQ/240](https://www.itu.int/md/D18-SG02.RGQ-C-0240/en), [SG2RGQ/258](https://www.itu.int/md/D18-SG02.RGQ-C-0258), [2/434](https://www.itu.int/md/D18-SG02-C-0434/en), [2/435](https://www.itu.int/md/D18-SG02-C-0435), [2/436](https://www.itu.int/md/D18-SG02-C-0436), [2/437](https://www.itu.int/md/D18-SG02-C-0437), [SG2RGQ/340](https://www.itu.int/md/D18-SG02.RGQ-C-0340), [SG2RGQ/341](https://www.itu.int/md/D18-SG02.RGQ-C-0341), [SG2RGQ/342](https://www.itu.int/md/D18-SG02.RGQ-C-0342), [SG2RGQ/343](https://www.itu.int/md/D18-SG02.RGQ-C-0343), [SG2RGQ/344](https://www.itu.int/md/D18-SG02.RGQ-C-0344), [SG2RGQ/345](https://www.itu.int/md/D18-SG02.RGQ-C-0345)).

# Results of the survey on the work of ITU-D Study Groups (7th study period, 2018-2021)

In keeping with Section 12.4.3 of Resolution 1 (Rev. Buenos Aires, 2017), the ITU-D Study Groups issued a joint survey to help ascertain the extent to which the ITU-D membership, and in particular developing countries, benefit from the outputs of studies.

A draft questionnaire was submitted for comments at the September-October 2020 rapporteur group meetings of ITU-D Study Groups 1 and 2. The final version of the questionnaire was issued as an online survey to the ITU-D membership (see Document [BDT/DKH/CSTG-11](https://www.itu.int/md/D18-CA-CIR-0011)) on 18th December 2020 with closing date of 15th January 2021. The deadline was extended to 29th January 2021. The results of the joint survey were analysed and were submitted to the meetings of the study groups. Through this report, ITU-D SG2 wishes to apprise TDAG of document [2/429](https://www.itu.int/md/D18-SG02-C-0429) (BDT) which has as annex the survey report and a shorter presentation of the key findings, so that it may be reported at the next WTDC.

Some findings to consider

* 68 responses were received (37 responses in previous survey);
* Developing countries had the highest % of respondents, while respondents represented a fairly consistent geographical spread;
* Attendance to virtual meetings were high as they are less resource intensive and less costly. Connectivity is a challenge for virtual meetings. Lack of budget was the main reason for not attending physical meetings in the past;
* Governments are perceived as encouraging SMEs, academia and industry participation in study groups’ work (specific examples were shared by respondents);
* Collaboration with ITU-T and ITU-R were appreciated and stand to be further enhanced;
* While most respondents understand the structure of Questions, almost half of them consider that certain important topics are not being addressed;
* Questions perceived of having the highest importance are Q1/1, Q5/1, Q3/1 and Q3/2 (**Figure 5)**;
* 85% of respondents use study group work output in drafting policies and regulations with specific examples provided in the report (with URLs);
* More workshops, more annual deliverables throughout the study period rank high in the opinion of respondents when asked how to enhance usage of outputs.

The findings of the surveys can be useful for the membership as part of preparations for WTDC-21, particularly the sections relevant to discussions on future of Questions and on working methods of study groups.

Chart, bar chart

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**Figure 5: Perceived average importance of Questions from the survey**

# Conclusion

Study Group 2 has successfully carried out its mandate because of the hard work, dedication, perseverance, flexibility, and expertise of all the parties concerned: the SG2 Management Team, Vice Chairs, (Co-)Rapporteurs, Vice-Rapporteurs, Focal Points, Secretariat, active contributors, meeting participants, interpreters and translators and all other persons working behind the scene. With strong support from the BDT Director and her staff, the Group has fulfilled its mission.

**Annexes**

**Annex 1: Appointed Chairman, Vice-Chairmen, Rapporteurs and Vice-Rapporteurs of ITU-D Study Group 2 Questions for the 2018-2021 period**

**Table 1A: List of chairman and vice-chairmen** (also available at: <https://www.itu.int/net4/ITU-D/CDS/sg/chairmen.asp?lg=1&sp=2018>)

|  |  |
| --- | --- |
|  | ITU-D STUDY GROUP 2 |
| Chairman | Mr Ahmad Reza SHARAFAT (Islamic Republic of Iran) |
| Vice-Chairmen | Mr Nasser AL MARZOUQI (United Arab Emirates)  *(Stepped down in 2019)* |
| Mr Abdelaziz ALZAROONI (United Arab Emirates) |
| Mr Filipe Miguel ANTUNES BATISTA (Portugal) *(Stepped down in 2019)* |
| Ms Nora Abdalla Hassan BASHER (Sudan) |
| Ms Maria BOLSHAKOVA (Russian Federation) |
| Ms Celina Delgado CASTELLÓN (Nicaragua) |
| Mr Yakov GASS (Russian Federation)  *(Stepped down in 2020)* |
| Mr Ananda Raj KHANAL (Republic of Nepal) |
| Mr Roland Yaw KUDOZIA (Ghana) |
| Mr Tolibjon Oltinovich MIRZAKULOV (Uzbekistan) |
| Ms Alina MODAN (Romania) |
| Mr Henry Chukwudumeme NKEMADU (Nigeria) |
| Ms Ke WANG (China) |
| Mr Dominique WÜRGES (France) |

**Table 2A: List of (Co-)Rapporteurs and Vice-Rapporteurs**   
(also available at: <https://www.itu.int/net4/ITU-D/CDS/sg/rapporteurs.asp?lg=1&sp=2018>)

| **ITU-D Question** | **Role** |  | **First name** | **Last name** | **Entity / Country** | **Region** | **Organization** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Question 1/2** | **Co-Rapporteur** | Mr | James | Njeru | Kenya | Africa | Administration |
| **Question 1/2** | **Co-Rapporteur** | Mr | Fadel F | Digham | Egypt | Arab States | Administration |
|  | Vice-Rapporteur | Mr | Seydou | Diarra | Mali | Africa | Administration |
|  | Vice-Rapporteur | Ms | Carrelle | Toho Acclassato | Benin | Africa | Administration |
|  | Vice-Rapporteur | Ms | Aminata Niang | Diagne | Senegal | Africa | Administration |
|  | Vice-Rapporteur | Mr | Turhan | Muluk | United States | Americas | Intel Corporation |
|  | Vice-Rapporteur | Mr | Abdelmadjid | Loumi | Algeria | Arab States | Administration |
|  | Vice-Rapporteur | Mr | Fadi | Morjanh | State of Palestine | Arab States | Administration |
|  | Vice-Rapporteur | Mr | Sanjeev | Banzal | India | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Cai | Chen | China | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Jong-Sung | Hwang | Korea (Rep. of) | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Ataru | Kobayashi | Japan | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Yoshihiro | Nakayama | Japan | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Evgeny | Bondarenko | Russian Federation | CIS countries | Administration |
|  | Vice-Rapporteur | Ms | Neslihan | Cenk | Turkey | Europe | Türk Telekom |
| **Question 2/2** | **Co-Rapporteur** | Mr | Isao | Nakajima | Japan | Asia & Pacific | Administration |
| **Question 2/2** | **Co-Rapporteur** | Mr | Done-Sik | Yoo | Korea (Rep. of) | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Paul | Kiage | Kenya | Africa | Administration |
|  | Vice-Rapporteur | Ms | Lydia | Ouedraogo/Seneme | Burkina Faso | Africa | Administration |
|  | Vice-Rapporteur | Ms | Fatoumata | Samake | Mali | Africa | Administration |
|  | Vice-Rapporteur | Mr | Babou | Sarr | Senegal | Africa | Administration |
|  | Vice-Rapporteur | Ms | Carrelle | Toho Acclassato | Benin | Africa | Administration |
|  | Vice-Rapporteur | Mr | Gregory | Domond | Haiti | Americas | Administration |
|  | Vice-Rapporteur | Mr | Mayank | Mrinal | India | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Ms | Malina | Jordanova | Bulgaria | Europe | Administration |
|  | Vice-Rapporteur | Mr | John | Owuor | Sweden | Europe | Administration |
|  | Vice-Rapporteur | Mr | Leonid | Androuchko |  | World or Multi-Regional | Dominic Foundation |
| **Question 3/2** | **Co-Rapporteur** | Ms | Aimee | Meacham | United States | Americas | Administration |
| **Question 3/2** | **Co-Rapporteur** | Mr | Dominique | Wurges | France | Europe | Administration |
|  | Vice-Rapporteur | Mr | Amine Adoum | Bakhit | Chad | Africa | Administration |
|  | Vice-Rapporteur | Mr | Mahamadou | Zarou | Mali | Africa | Administration |
|  | Vice-Rapporteur | Mr | Damnam Kanlanfei | Bagolibe | Togo | Africa | Administration |
|  | Vice-Rapporteur | Mr | Cissé | Kane |  | Africa | African Civil Society on the Information Society |
|  | Vice-Rapporteur | Mr | Jean David | Rodney | Haiti | Americas | Administration |
|  | Vice-Rapporteur | Ms | Jabin | Vahora | United States | Americas | Administration |
|  | Vice-Rapporteur | Mr | Karim | Hasnaou | Algeria | Arab States | Administration |
|  | Vice-Rapporteur | Ms | Sonam | Choki | Bhutan | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Ms | Miho | Naganuma | Japan | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Ms | Xinxin | Wan | China | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Jaesuk | Yun | Korea (Rep. of) | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Ms | Maria | Bolshakova | Russian Federation | CIS countries | Administration |
| **Question 4/2** | **Rapporteur** | Mr | Cheikh Tidjani | Oudaa | Mauritania | Arab States | Administration |
|  | Vice-Rapporteur | Mr | Ahmadou Dit | Adi Cisse | Mali | Africa | Administration |
|  | Vice-Rapporteur | Mr | Joseph | Onaya | Kenya | Africa | Administration |
|  | Vice-Rapporteur | Mr | Serigne Abdou | Lahatt Sylla | Senegal | Africa | Administration |
|  | Vice-Rapporteur | Mr | Brillant Harivony | Rakotoratsimanjefy | Madagascar | Africa | Administration |
|  | Vice-Rapporteur | Ms | Amel | Khiar | Algeria | Arab States | Administration |
| **Question 5/2** | **Co-Rapporteur** | Ms | Kelly | O’Keefe | United States | Americas | Administration |
| **Question 5/2** | **Co-Rapporteur** | Mr | Sanjeev | Banzal | India | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Abdulkarim Ayopo | Oloyede | Nigeria | Africa | Administration |
|  | Vice-Rapporteur | Mr | Parag | Agrawal | India | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Hideo | Imanaka | Japan | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Joses | Jean Baptiste | Haiti | Americas | Administration |
| **Question 6/2** | **Co-Rapporteur** | Mr | Cissé | Kane |  | Africa | African Civil Society on the Information Society |
| **Question 6/2** | **Co-Rapporteur** | Ms | Aprajita | Sharrma | India | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Richard | Anago | Burkina Faso | Africa | Administration |
|  | Vice-Rapporteur | Ms | Amandine Kalima | Katanti | Dem. Rep. of the Congo | Africa | Administration |
|  | Vice-Rapporteur | Mr | Joses | Jean Baptiste | Haiti | Americas | Administration |
|  | Vice-Rapporteur | Mr | Issa | Camara | Mali | Africa | Administration |
| **Question 7/2** | **Co-Rapporteur** | Mr | Tongning | Wu | China | Asia & Pacific | Administration |
| **Question 7/2** | **Co-Rapporteur** | Mr | Haim | Mazar | France | Europe | ATDI |
|  | Vice-Rapporteur | Mr | Enock | Gothias | Central African Rep. | Africa | Administration |
|  | Vice-Rapporteur | Ms | Aminata Niang | Diagne | Senegal | Africa | Administration |
|  | Vice-Rapporteur | Mr | R.M. | Chaturvedi | India | Asia & Pacific | Administration |
|  | Vice-Rapporteur | Mr | Gregory | Domond | Haiti | Americas | Administration |

**Annex 2: List of ITU-D Study Group coordinators on key topics of interest**

**Table 3A: List of appointed coordinators**

|  | Study Group 1 | Study Group 2 |
| --- | --- | --- |
| Preparation of topics for WTDC-21 | | |
| Working methods (WTDC-21 Res. 1) | Mr Arseny Plossky, Rapporteur for Q4/1, Russian Federation | Ms Alina Modan, Vice-Chairman, ITU-D SG2, Romania |
| Future study Questions (WTDC-21 Res. 2) | Mr Roberto Hirayama, Vice-Chairman, ITU-D SG1 & Rapporteur for Q2/1, Brazil | Mr Abdelaziz Alzarooni, Vice-Chairman, ITU-D SG2, United Arab Emirates |
| Synergies of future study Questions with regional preparatory processes | Mr Roberto Hirayama, Vice-Chairman, ITU-D SG1 & Rapporteur for Q2/1, Brazil | Ms Maria Bolshakova, Vice-Chairman, ITU-D SG2, Russian Federation |
| Streamlining of WTDC-21 Resolutions | Mr Arseny Plossky, Rapporteur for Q4/1, Russian Federation | |
| WTDC-21 draft declaration | Ms Sameera Belal Momen Mohammad, Vice-Chairman, ITU-D SG1, Kuwait | Ms Amel Khiar, Vice-Rapporteur for Q4/2, Algérie Télécom (Algeria) |
| Other key activities and topics for ITU-D study groups | | |
| Dashboard for monitoring Question progress | Mr Vadym Kaptur Vice-Chairman, Vice-Chairman , ITU-D SG1 & Rapporteur for Q1/1, Ukraine | Mr Abdulkarim Oloyede, Vice-Rapporteur for Q5/2, Nigeria (Federal Republic of) |
| Inter-sectoral mappings | Mr Arseny Plossky, Rapporteur for Q4/1, Russian Federation | Mr Haim Mazar, Co-Rapporteur for Q7/2, ATDI (France) |
| ITU-CCT (Vocabulary) | Mr Peter Mbengie, Vice-Chairman, ITU-D SG1, Cameroon | Ms Ke Wang, Vice-Chairman, ITU-D SG2, China (People’s Republic of) |
| Statistics (EGTI, EGH) | Ms Anastasia Konukhova, Vice-Chairman , ITU-D SG1 & Vice-Rapporteur for Q7/1, Russian Federation | Mr Roland Kudozia, Vice-Chairman, ITU-D SG2, Ghana |
| Synergies of study Questions with BDT projects | FIGI: Mr Ahmed Abdel Aziz Gad, Vice-Chairman, ITU-D SG1, Egypt (Arab Republic of) | FIGI: Mr Fadel Digham, Co-Rapporteur for Q1/2, Egypt (Arab Republic of) |
| PRIDA: Mr Haim Mazar, Co-Rapporteur for Q7/2, ATDI (France) | |
| WTDC Resolution 9 | Mr Roberto Hirayama, Vice-Chairman, ITU-D SG1 & Rapporteur for Q2/1, Brazil | Mr Fadel Digham, Co-Rapporteur for Q1/2, Egypt (Arab Republic of) |

**Annex 3: ITU-D Study Group 2, Rapporteur Group meetings and associated workshops and webinars (2018-2021)**

**Table 4A: List of ITU-D Study Group 2 and Rapporteur Group meetings**

| **Study Group / Rapporteur Group meeting** | **Date and location** |
| --- | --- |
| **Study Group 2 meetings** |  |
| [Fourth meeting of ITU-D Study Group 2](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=26284) | 15 - 19 March 2021, fully virtual e-meeting |
| [Third meeting of ITU-D Study Group 2](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=24908) | 24 - 28 February 2020, Switzerland [Geneva] |
| [Second meeting of ITU-D Study Group 2](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=21833) | 25 - 29 March 2019, Switzerland [Geneva] |
| [First meeting of ITU-D Study Group 2](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=20349) | 7 - 11 May 2018, Switzerland [Geneva] |
| **Rapporteur Group meetings** |  |
| [Plenary and Rapporteur Group meetings](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&stg=2&sp=2018&blk=27666) | 18 - 22 October 2021, fully virtual e-meeting |
| [Plenary and Rapporteur Group meetings](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=24969) | 5 - 16 October 2020, fully virtual e-meeting |
| [Rapporteur Group meetings](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=21835) | 7 - 18 October 2019, Switzerland [Geneva] |
| [Rapporteur Group meetings](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=20351) | 1 - 12 October 2018, Switzerland [Geneva] |
| **Informal meetings** |  |
| [Informal ITU-D Study Group 2 Rapporteur Group meetings](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=26282) | 22 - 26 February 2021, fully virtual e-meeting |
| **Joint meetings** |  |
| [Joint plenary meeting of ITU-D Study Groups 1 and 2](https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=26278) | 31 March - 1 April 2021, fully virtual e-meeting |

All associated workshops and webinars are detailed in the ITU-D study groups website on the page dedicated to workshops and other events (see <https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/events_workshops.aspx>).

**Annex 4: Intra-sector mapping between ITU-D SG1 and SG2 Questions**

This aim of this matrix of relationships and interactions between study Questions in ITU-D SG1 and ITU-D SG2 was to identify areas of possible areas of overlap and opportunities where collaboration could be further strengthened.

**Table 5A: Matrix of relationships between study Questions in ITU-D SG1 and SG2s**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | [**Q1/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ01.1&stg=1) | [**Q2/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ02.1&stg=1) | [**Q3/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ03.1&stg=1) | [**Q4/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ04.1&stg=1) | [**Q5/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ05.1&stg=1) | [**Q6/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ06.1&stg=1) | [**Q7/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ07.1&stg=1) | [**Q1/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ01.2&stg=2) | [**Q2/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ02.2&stg=2) | [**Q3/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ03.2&stg=2) | [**Q4/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ04.2&stg=2) | [**Q5/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ05.2&stg=2) | [**Q6/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ06.2&stg=2) | [**Q7/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ07.2&stg=2) |
| [**Q1/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ01.1&stg=1) |  | **X** | **X** | **X** | **X** |  | **X** | **X** | **X** |  | **X** | **X** | **X** |  |
| [**Q2/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ02.1&stg=1) | **X** |  |  |  | **X** |  | **X** |  |  |  | **X** | **X** | **X** |  |
| [**Q3/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ03.1&stg=1) | **X** |  |  | **X** |  | **X** | **X** |  |  | **X** |  | **X** | **X** |  |
| [**Q4/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ04.1&stg=1) | **X** |  | **X** |  | **X** | **X** | **X** |  |  |  |  | **X** |  |  |
| [**Q5/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ05.1&stg=1) | **X** | **X** |  | **X** |  | **X** |  | **X** | **X** |  |  | **X** | **X** |  |
| [**Q6/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ06.1&stg=1) |  |  | **X** | **X** | **X** |  | **X** |  |  | **X** | **X** |  |  | **X** |
| [**Q7/1**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG01-RGQ07.1&stg=1) | **X** | **X** | **X** | **X** |  | **X** |  |  | **X** | **X** |  | **X** |  |  |
| [**Q1/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ01.2&stg=2) | **X** |  |  |  | **X** |  |  |  | **X** | **X** | **X** | **X** | **X** | **X** |
| [**Q2/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ02.2&stg=2) | **X** |  |  |  | **X** |  | **X** | **X** |  | **X** |  | **X** |  |  |
| [**Q3/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ03.2&stg=2) |  |  | **X** |  |  | **X** | **X** | **X** | **X** |  |  | **X** |  |  |
| [**Q4/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ04.2&stg=2) | **X** | **X** |  |  |  | **X** |  | **X** |  |  |  |  |  | **X** |
| [**Q5/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ05.2&stg=2) | **X** | **X** | **X** |  | **X** |  | **X** | **X** | **X** | **X** |  |  | **X** |  |
| [**Q6/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ06.2&stg=2) | **X** | **X** | **X** |  | **X** |  |  | **X** |  |  |  | **X** |  | **X** |
| [**Q7/2**](https://www.itu.int/net4/ITU-D/CDS/sg/rgqlist.asp?lg=1&sp=2018&rgq=D18-SG02-RGQ07.2&stg=2) |  |  |  |  |  | **X** |  | **X** |  |  | **X** |  | **X** |  |

**Annex 5: Needs and collaboration topics on WTDC Resolution 9 linked with ITU-D SG2 Questions**

**Table 6A: Identified needs and potential collaboration topics on WTDC Resolution 9   
(Rev. Buenos Aires, 2017)**

|  |  |  |
| --- | --- | --- |
| **Question** | **Corresponding Needs in Res 9** | **Potential topics for collaboration with ITU-R** |
| Q1/2: Creating the smart cities and society: Employing ICTs for sustainable social and economic development | **Need 9**: Assistance in identifying the most efficient ways to utilize the digital dividend  **Need 10**: Emerging technologies and approaches in using spectrum | * Passive and active mobile sites sharing: sharing is a key principal for efficiency in smart cities. In particular, there is a need to examine different models and case studies for active sharing; * Existing and future frequency allocations for Wi-Fi: public Wi-Fi and hotspots are being highly adopted in many cities. It is essential to be aware of the current and future potential spectrum allocations for Wi-Fi and their relevant use cases; * Identification of potential technologies and relevant spectrum allocation for utilities management (e.g., meters connectivity); * IoT and short range devices: what are the current and potential plans for IoT and SRDs? * Any specific studies in relation to emerging systems (along with relevant spectrum issues) that could be adopted in smart cities such as connected cars, intelligent transportation, flying stations or drones, etc. |
| Q4/2: Assistance to developing countries for implementing conformance and interoperability (C&I) programs and combating counterfeit ICT equipment and theft of mobile devices | **Need 12**: Assistance with interference caused by devices in derogation of national spectrum allocations | * Legal framework for spectrum management; * How spectrum is used; * What spectrum is available for particular purposes (National Table of Frequency Allocation) ; * Equipment specifications and standards (for each band/purpose); * Spectrum quality control, interference management & enforcement; * Proposed changes to regulations and spectrum use; * Spectrum & apparatus assignment/licensing processes/mechanisms. |
| Q7/2: Strategies and policies concerning human exposure to electromagnetic fields | **Need 1**: Assistance in raising the awareness of national policy-makers as to the importance of effective spectrum management for a country's economic and social development | * Challenges of spectrum monitoring, taking into account ITU-R Recommendations, reports, handbooks and other outputs from ITU-R; * What are the impacts of active site-sharing on EMF exposures around transmitting stations? * Given no change in other parameters (technology, power, altitude; coverage, capacity and QoS), does provision of additional RF spectrum to cellular operators reduce EMF exposure around base stations, and also reduce the number of base stations? * How to quantify EMF exposure around low and high-power non-beam wireless power transfer devices? |

**Annex 6: Revised Terms of Reference for ITU-D Study Group 2 Questions**

The following table provides a list of revised Terms of Reference (ToRs) for ITU-D Study Group 2 Questions. All ToRs reached consensus during the ITU-D Study Group 2 Plenary meeting held on 22 October 2021.

**Table 7A: Revised draft Terms of Reference for ITU-D Study Group 2 Questions**

|  |  |
| --- | --- |
| **Question** | **Revised ToR** |
| Q1/2 | [SG2RGQ/319](https://www.itu.int/md/D18-SG02.RGQ-C-0319) (Rev.1) |
| Q2/2 | [SG2RGQ/320](https://www.itu.int/md/D18-SG02.RGQ-C-0320) (Rev.2) |
| Q3/2 | [SG2RGQ/321](https://www.itu.int/md/D18-SG02.RGQ-C-0321) (Rev.2) |
| Q4/2 | [SG2RGQ/322](https://www.itu.int/md/D18-SG02.RGQ-C-0322) (Rev.2) |
| Q5/2 | [SG2RGQ/323](https://www.itu.int/md/D18-SG02.RGQ-C-0323) (Rev.2) |
| Q6/2 | [SG2RGQ/324](https://www.itu.int/md/D18-SG02.RGQ-C-0324) (Rev.2) |
| Q7/2 | [SG2RGQ/325](https://www.itu.int/md/D18-SG02.RGQ-C-0325) (Rev.2) |

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

1. All output reports and video clips are accessible through the following web page: <http://www.itu.int/itudsgpub> [↑](#footnote-ref-2)
2. See <https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/OngoingWork.aspx> [↑](#footnote-ref-3)
3. *Ibid.* [↑](#footnote-ref-4)
4. For Questions 2/2, 5/2 and 6/2. See <https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/covid19/webinars/1stSeries.aspx>. [↑](#footnote-ref-5)
5. See the programmes of the thematic workshop ([link](https://www.itu.int/net4/wsis/forum/2020/Agenda/Session/274)) and high-level policy sessions ([link1](https://www.itu.int/net4/wsis/forum/2020/Agenda/Session/204), [link2](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/160)) for more information. [↑](#footnote-ref-6)
6. See the programmes of the high-level session ([link](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/160)), thematic workshops ([link1](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/338), [link2](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/406)) and country workshop ([link](https://www.itu.int/net4/wsis/forum/2021/Agenda/Session/448)) for more information. [↑](#footnote-ref-7)
7. See the full list in <https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/meetings/events_workshops.aspx>. [↑](#footnote-ref-8)
8. See [link1](https://www.itu.int/en/myitu/News/2021/04/30/11/32/Digital-agriculture-hydroponic-melon-farming-Japan) (Q1/2, 2021), [link2](https://www.itu.int/en/myitu/News/2021/08/02/06/54/Telcos-strengthen-India-disaster-preparedness) (Q5/2, 2021), [link3](https://www.itu.int/en/myitu/News/2020/07/17/13/08/New--COVID19-ehealth-tools) (Q2/2, 2020), [link4](https://www.itu.int/en/myitu/News/2020/07/23/14/34/Effective-disaster-management-policy-environment-COVID-19) (Q5/2, 2020), [link5](https://www.itu.int/en/myitu/News/2020/07/27/09/39/Leveraging-ICTs-build-back-greener-COVID-19) (Q6/2, 2020), [link6](https://www.itu.int/en/myitu/News/2020/03/27/14/06/IMT-2020-5G-and-the-electromagnetic-field--ITU-shares-the-latest-global-information) (Q7/2, 2018). [↑](#footnote-ref-9)
9. See <https://www.itu.int/en/mediacentre/Pages/MC_OCT_2021_.aspx> [↑](#footnote-ref-10)
10. This total does not include participants who attended only the workshops held in conjunction with the SG2 and rapporteur group meetings. [↑](#footnote-ref-11)
11. Some contributions are from SMEs who had participated in the SME pilot until end of 2019, see [here](https://www.itu.int/en/join/smes/Documents/SMEs%20background%20info_final_8july%20(1).pdf) for more information. [↑](#footnote-ref-12)
12. Some contributions may be counted more than once if allocated to more than one Question [↑](#footnote-ref-13)
13. See <https://www.itu.int/en/join/smes/Documents/SMEs%20background%20info_final_8july%20(1).pdf> [↑](#footnote-ref-14)
14. The “ongoing work” web page is available in <https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/OngoingWork.aspx> [↑](#footnote-ref-15)
15. Following this meeting, a joint reply liaison statement with SG1 was approved to continue exploring such possibilities in the next WTDC, when the next set of Questions will be approved; [↑](#footnote-ref-16)
16. See meeting webpage <https://www.itu.int/net4/ITU-D/CDS/sg/blkmeetings.asp?lg=1&sp=2018&blk=26278> [↑](#footnote-ref-17)
17. See <https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/OngoingWork.aspx> [↑](#footnote-ref-18)
18. See <https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/OngoingWork.aspx> [↑](#footnote-ref-19)
19. See <https://www.itu.int/en/ITU-D/Study-Groups/2018-2021/Pages/OngoingWork.aspx> [↑](#footnote-ref-20)
20. The summary records of the ITU-CCT meeting held on 7 April 2021 was not available at the time of writing. [↑](#footnote-ref-21)
21. Oral reports were provided in previous years. [↑](#footnote-ref-22)
22. See <https://www.itu.int/net4/ITU-D/ExpertGroup/topic.asp?TOPIC_ID=7405>. [↑](#footnote-ref-23)
23. See <https://www.itu.int/net4/ITU-D/forum/expertgrouponhouseholds/forum/yaf_topics1173_E-waste.aspx>. [↑](#footnote-ref-24)
24. See <https://www.itu.int/net4/ITU-D/forum/expertgrouponhouseholds/forum/yaf_topics1174_Child-online-protection.aspx>. [↑](#footnote-ref-25)
25. More information about FIGI is available in <https://www.itu.int/net4/ITU-D/CDS/projects/display.asp?ProjectNo=9GLO17088>. [↑](#footnote-ref-26)
26. More information about PRIDA is available in <https://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/PRIDA/Pages/default.aspx>. [↑](#footnote-ref-27)
27. See “*Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society*”, [Res. A/70/125](https://unctad.org/en/PublicationsLibrary/ares70d125_en.pdf). [↑](#footnote-ref-28)
28. Another thematic workshop was also organized specific to Question 3/1: “A Roadmap for a trusted Cloud for Good” ([programme](https://www.itu.int/net4/wsis/forum/2020/Agenda/Session/279), [report](https://www.itu.int/net4/wsis/forum/2020/Files/outcomes/draft/WSISForum2020_OutcomeDocument_DRAFT-20210201.pdf) (Page 178)). [↑](#footnote-ref-29)
29. The report was not yet available at the time of writing this report. [↑](#footnote-ref-30)