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| **Telecommunication Development Advisory Group (TDAG)****23rd Meeting, Geneva, 9-11 April 2018** | P:\SUP\Logos\Post-150th Anniv\ITU-logo-UNblue.jpg |
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|  | **Document** **TDAG-18/37-E** |
|  | **10 April 2018** |
|  | **Original: English** |
| Chairman, Inter-Sector Coordination Team on issues of mutual interest |
| REPORT OF THE MEETING OF ISCT HELD ON 9 APRIL 2018 |

**Meeting of the Inter-Sector Coordination Team on Issues of Mutual Interest**

On 9 April 2018, the Team met under the chairmanship of Mr Fabio Bigi, who continued chairing this Team, to review progress made since its May 2017 meeting and make further progress in its mandate.

In addition to the chairman, the composition of the group has changed, further to WTDC-17 having modified the composition of the TDAG Bureau. Ms Nurzat Boljobekova (Kyrgyzstan) and Mr Arseny Plossky (Russian Federation) were welcomed as TDAG representatives to the ISCT. The team discussed and revised document [TDAG-18/DT/3](https://www.itu.int/md/D18-TDAG23-180409-TD-0003/) (Chairman, ISCT) on the [Terms of Reference](https://www.itu.int/en/ITU-D/Conferences/TDAG/Pages/Terms-of-reference-for-IST.aspx), which are attached in **Annex 1**, for consideration by TDAG/RAG/TSAG. The team endorsed a proposal to open input and output documents of this team according to ITU practice.

The Team noted that WTDC Resolution 59 was modified by WTDC-17. A compared version of the said Resolution was submitted to the Team in document [ISCT/11](https://www.itu.int/en/ITU-D/Conferences/TDAG/Documents/ISCT_2018_011E_v1_changes-Res.59.docx) and is attached as **Annex 2**.

The Team approved its agenda ([ISCT/10](https://www.itu.int/en/ITU-D/Conferences/TDAG/Documents/ISCT_2018_010E_v8-clean_draft-agenda.docx)) and reviewed document [TDAG-18/5(Rev.2)](https://www.itu.int/md/D18-TDAG23-C-0005/) (Director, BDT) on Inter-Sector Coordination Team on Issues of Mutual Interest. They updated the list of areas of mutual interest to include candidate topics on working methods for ITU inter-Sector coordination (see **Annex 3**).

ISCT examined document [TDAG-18/DT/2](https://www.itu.int/md/D18-TDAG23-180409-TD-0002/), which contains a proposal to appoint two ITU-D experts to the newly created ITU Coordination Committee on Terminology (ITU CCT), as per Council Resolution 1386 and WTDC Resolution 86 (Buenos Aires, 2017). The Team recommends to TDAG the appointment of Mr Peter Mbengie (Cameroon), from ITU-D SG1 and Ms Ke Wang (China), from SG2.

In the area of event coordination, bilateral meetings between BDT/TSB staff have taken place to facilitate collaboration and co-location of events at all levels. Similar meetings between BDT/BR D-Level staff will be planned. The electronic calendar of events developed by BDT for 2018, 2019, 2020 and 2021 is facilitating collaboration and coordination of various meetings and events of the ITU Sectors. These yearly event calendars are available to members on the [TDAG homepage](http://www.itu.int/en/ITU-D/Conferences/TDAG/Pages/default.aspx) and are updated regularly. These calendars are in a printer-friendly format (see **Annex 4** (a separate pdf file) for current versions).

**Attachments 1** and **2**, which refer to “Matching of ITU-D Study Group 1 and 2 Questions of interest to ITU-T study groups” and “Matching of ITU-R WPs of interest to ITU-T study groups”, respectively, which were received from TSAG were also noted. They already reflect the changes in ITU-D study group Questions approved by WTDC-17.

The Team noted the liaison statements in documents [TDAG-18/25](https://www.itu.int/md/D18-TDAG23-C-0025/) (ITU-T SG5) and [TDAG-18/27](https://www.itu.int/md/D18-TDAG23-C-0027/) (TSAG). The Team noted the liaison statement in document [TDAG-18/23](https://www.itu.int/md/D18-TDAG23-C-0023/) (ITU-R SG1) on WTDC Resolution 9 (Rev. Dubai, 2014) which was received right after the 2017 TDAG meeting and that this issue was already discussed and concluded at WTDC-17.

The Team further noted document [TDAG-18/29](https://www.itu.int/md/D18-TDAG23-C-0029/) (Russian Federation) on streamlining PP and WTDC Resolutions.

The Team noted document [TDAG-18/36](https://www.itu.int/md/D18-TDAG23-C-0036/) (Director, BR) on the collaboration between ITU-D and ITU-R within the framework of Resolution 9.

The Team also noted document [ISCT/12](https://www.itu.int/en/ITU-D/Conferences/TDAG/Documents/ISCT_2018_012E_v1_Res191_C18_TF-ISC.docx) (Secretary General) on the implementation of PP Resolution 191 (Busan, 2014), reporting on the coordination activities within the secretariat and the outcomes of the work of the Inter-Sector Coordination Task Force (ISC-TF).

**Annex 1**

**Revised Terms of Reference for ISCT**

The inter-Sector coordination team on Issues of Mutual Interest (ISCT) is jointly established by the Advisory Groups of all three Sectors, in order to avoid duplication of effort and optimize the use of resources. While executing its functions it will:

* identify subjects, deliverables and activities common to the three Sectors, as well as the General Secretariat, or, bilaterally, and consider an updated list (prepared by the Secretariat) containing the areas of mutual interest to the three Sectors and the General Secretariat, pursuant to the mandates assigned by each ITU assembly or conference, and in accordance with the objectives of the ITU Strategic Plan;
* identify the necessary mechanisms to strengthen cooperation and joint activity among the three Sectors and the General Secretariat, or with each Sector, on issues of mutual interest, paying particular attention to the interests of the developing countries, and taking into account the mandates and activities of the regional offices, including their role in the organization of workshops, seminars, symposia, etc.;
* report annually to the respective advisory groups on the progress of the work undertaken, highlighting key issues to be raised with the respective Bureau Directors, as well as the Inter-Sector Coordination Task Force.

**Background documents**

1. Resolution 191 (Busan, 2014) of the Plenipotentiary Conference, on strategy for the coordination of efforts among the three Sectors the Union;
2. Resolution ITU-R 6-2 (Rev. Geneva, 2015) of RA, on liaison and collaboration with the ITU Telecommunication Standardization Sector (ITU-T), and Resolution ITU-R 7-3 (Rev. Geneva, 2015) of RA, on telecommunication development including liaison and collaboration with the ITU Telecommunication Development Sector (ITU-D);
3. Resolutions 44 and 45 (Rev. Hammamet, 2016) of WTSA, on mutual cooperation and integration of the activities of ITU-T and ITU-D;
4. Resolution 5 (Rev. Buenos Aires, 2017) of WTDC, on enhanced participation by developing countries in the activities of the Union;
5. Resolution 18 (Rev. Hammamet, 2016) of WTSA, on principles and procedures for the allocation of work to, and coordination between, the ITU Radiocommunication and ITU Telecommunication Standardization Sectors;
6. Resolution 59 (Rev. Buenos Aires, 2017) of WTDC, on strengthening coordination and cooperation among ITU-R, ITU-T and ITU-D on matters of mutual interest.

**Composition of the inter-Sector coordination team on issues of mutual interest:**

1. The ISCT will consist of representatives from the three Advisory Groups, keeping in mind the need for regional balance.
2. The ISCT is chaired by Mr Fabio Bigi, and vice-chaired by the appointed RAG, TSAG and TDAG representatives:
3. RAG representatives: Mr Peter Major and Mr Albert Nalbandian (Vice-Chairmen of RAG);
4. TSAG representatives: Mr Vladimir Minkin and Mr Matano Ndaro (Vice-Chairmen of TSAG);
5. TDAG representatives: Ms Nurzat Boljobekova and Mr Arseny Plossky (Vice-Chairmen of TDAG).
6. The ISCT is open to observers who are not the above representatives.

**Secretariat support**

The support of the group activity will be provided in accordance with Resolution 191 (Busan, 2014).

**Working methods**

* The ISCT will use the e-mail list int-sect-team@lists.itu.int.
* The ISCT interactions may include e-mail exchange via the e-mail list or through electronic meetings.
* Possible physical meetings may be held if deemed necessary, preferably in conjunction with advisory group meetings, and within available resources, to finalize the work.

**Annex 2**

**Changes made to WTDC Resolution 59 by WTDC-17**

RESOLUTION 59 (REV. BUENOS AIRES, 2017)

Strengthening coordination and cooperation among the three
ITU Sectors on matters of mutual interest

The World Telecommunication Development Conference (Buenos Aires, 2017),

recalling

*a)* Resolution 123 (Rev. Busan, 2014) of the Plenipotentiary Conference, on bridging the standardization gap between the developing[[1]](#footnote-1)1 and developed countries;

*b)* Resolution 191 (Rev. Busan, 2014) of the Plenipotentiary Conference, on Strategy for the coordination of efforts among the three Sectors of the Union;

*c)* Resolution 5 (Rev. Buenos Aires, 2017) of this conference, on enhanced participation by developing countries in the work of ITU;

*d)* Resolution ITU‑R 7-3 of the Radiocommunication Assembly 2015, on telecommunication development including liaison and collaboration with the ITU Telecommunication Development Sector (ITU‑D);

*e)* Resolution 44 (Rev. Hammamet, 2016) of the World Telecommunication Standardization Assembly (WTSA), on Bridging the standardization gap between developing and developed countries ;

*f)* Resolution 18 (Rev. Hammamet, 2016) of WTSA, on Principles and procedures for the allocation of work to, and coordination among the ITU Radiocommunication and ITU Telecommunication Standardization Sectors,

considering

*a)* that a basic principle for collaboration and cooperation and among the three ITU Sectors is the need to avoid duplication of activities of the Sectors, and ensure that the work is undertaken efficiently and effectively;

*b)* that the mechanism for cooperation at secretariat level among the three Sectors and the General Secretariat of the Union was established to ensure close cooperation between the secretariats and with the secretariats of external entities and organizations that deal with key priority issues, such as emergency telecommunications and climate change;

*c)* that interaction and coordination in the joint holding of seminars, workshops, forums, symposia and so forth have yielded positive results in terms of financial and human resource savings,

taking into account

*a)* the expanding sphere of joint studies between the three Sectors and the need for coordination and cooperation among them in this regard;

*b)* the growing number of issues of mutual interest and concern to the three Sectors including, but not limited to: electromagnetic compatibility, international mobile telecommunications, middleware, audiovisual broadcasting, access to telecommunications/information and communication technologies (ICTs) for persons with disabilities, emergency telecommunications including preparedness, ICT and climate change, cybersecurity, compliance of systems with the Recommendations emanating from the ITU‑R and ITU‑T study groups and their joint activities, etc.;

*c)* the need to avoid duplication and overlapping of work among the Sectors and to support efficient and effective integration among them,;

resolves

1 that the Telecommunication Development Advisory Group (TDAG) and the Director of the Telecommunication Development Bureau shall continue to cooperate actively with the Radiocommunication Advisory Group (RAG) and the Director of the Radiocommunication Bureau and with the Telecommunication Standardization Advisory Group (TSAG) and the Director of the Telecommunication Standardization Bureau as called for by Resolution 191 (Rev. Busan, 2014);

2 to invite the Telecommunication Development Advisory Group (TDAG), in collaboration with the Radiocommunication Advisory Group, the Telecommunication Standardization Advisory Group, to assist in identifying subjects common to the three Sectors, or, bilaterally, subjects common to ITU‑D and either ITU‑R or ITU‑T, and in identifying the necessary mechanisms to strengthen cooperation and joint activity among the three Sectors or with each Sector, on issues of joint interest, paying particular attention to the interests of the developing countries, including through the establishment of the inter-sectoral coordination team on issues of mutual interest;

3 to invite the Director of the Telecommunication Development Bureau (BDT), in collaboration with the Secretary-General, the Director of the Telecommunication Standardization Bureau (TSB) and the Director of the Radiocommunication Bureau (BR), to continue to create cooperation mechanisms at secretariat level on matters of mutual interest to the three Sectors, and also to invite the Director of BDT to create a mechanism for bilateral cooperation with ITU‑R and ITU‑T, as required;

4 to request the Secretary-General to report annually to the ITU Council on the implementation of this resolution, in particular the joint operational activities undertaken by the three Bureaux, including funding arrangements, including voluntary contributions if any,

invites

1 RAG, TSAG and TDAG to continue to assist intersector coordination in the identification of subjects common to the three Sectors and mechanisms to enhance cooperation and collaboration in all Sectors on matters of mutual interest;

2 the Directors of the Radiocommunication, Telecommunication Standardization and Telecommunication Development Bureaux to report to the respective Sector advisory groups on options for improving cooperation at the secretariat level to ensure that close coordination is maximized,

instructs

1 the ITU-D study groups to continue cooperation with the study groups of the other two Sectors so as to avoid duplication of effort and make use of the results of work done by the study groups of those two Sectors;

2 the Director of BDT in cooperation with the Director of TSB and the Director of BR to provide an annual report to ITU-D study groups on the latest development in the activities of ITU-T and ITU‑R study groups;

3 the Director of BDT to inform TDAG annually on the implementation of this resolution.

**Annex 3**

**List of areas of mutual interest**

1. Participation

1.1 Remote participation.

1.2 E-meetings, e-correspondence groups.

1.3 Increasing involvement of developing countries.

1.4 Participation issues, including vice-chairmen tasks.

1.5 Non-member participation.

2. Document handling

 2.1 Electronic document handling.

 2.2 Deadline for submission of secretariat contributions for action.

 2.3 Electronic access to documents, including the application of the access policy of the documents decided by the Council.

3. Registration

 3.1 Harmonization of registration.

 3.2 Registration for participation in meetings, including for remote participants.

4. Improvement of the ITU webpages in official ITU languages taking into account best practices.

 4.1 Language issues

5. Meeting planning.

5.1 Preparation to conferences and meetings.

5.2 Further enhancement and optimization of seminars/symposia/workshops/capacity building.

5.3 Collaboration and cooperation on events.

6. Streamlined establishment procedures of inter-Sector Rapporteur group (IRG).

6.1 Liaison statement handling of Inter-Sector Rapporteur Groups

7. Identification of technical issues with common interests.

8. Exchange of information on related study activities

8.1 Improvement of interaction between working parties and study groups of different Sectors.

9. Working methods (Resolution 1) of the three Sectors and application of best practices.

10. Sector membership.

**Annex 4**

**ITU-D event calendar**

(Provided as a separate pdf file)

**Attachment 1**

**Matching of ITU-D SG 1 and SG 2 Questions of interest to ITU-T study groups**

Amendments herein reflect:

* Outcome of WTDC-17.
	+ Added ITU-T Q1/13, Q7/13 for ITU-D Q3/1.
	+ Added ITU-T Q9/3 for ITU-D Q3/1.
* Hyperlinks to ITU-D SG1 and SG2 Questions pending.
* TSAG ILS TD 187 from ITU-T SG15.
* TSAG ILS TD 178 from ITU-T SG5.
* TSAG ILS TD 213 from ITU-T SG16.
* Note that proposed additions to former ITU-D Q2/1 could not be incorporated as WTDC-17 merged that Question into ITU-D Q1/1 and into ITU-D Q3/1, and then former ITU-D Q2/1 was deleted and former ITU-D Q8/1 became new ITU-D Q2/1.

It is thus suggested to double-check the mapping of ITU-T SGs and Questions for ITU-D Q1/1 and Q3/1 and submit updates if necessary.

**Table 1 – ITU-D Questions vis-à-vis ITU-T Questions**

| **ITU-D Question** | **ITU-D SG** | **ITU-T SG** | **ITU-T SG Questions** |
| --- | --- | --- | --- |
| Question 1/1: Strategies and policies for the deployment of broadband in developing countries | [SG1](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=1) | [SG2](https://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/default.aspx) | [Q1/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q1.aspx): Application of numbering, naming, addressing and identification plans for fixed and mobile telecommunications services |
| [SG3](https://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/default.aspx) | [Q1/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q1.aspx): Development of charging and accounting/settlement mechanisms for international telecommunications services using the next-generation networks (NGNs), future networks, and any possible future development, including adaptation of existing D-series Recommendations to the evolving user needs[Q2/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q2.aspx): Development of charging and accounting/settlement mechanisms for international telecommunications services, other than those studied in Question 1/3, including adaptation of existing D-series Recommendations to the evolving user needs[Q3/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q3.aspx): Study of economic and policy factors relevant to the efficient provision of international telecommunication services[Q4/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q4.aspx): Regional studies for the development of cost models together with related economic and policy issues[Q11/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q11.aspx): Economic and policy aspects of big data and digital identity in international telecommunications services and networks |
| [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q2/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q2.aspx): Equipment resistibility and protective components[Q4/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q4.aspx): Electromagnetic compatibility (EMC) issues arising in the telecommunication environment[Q6/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx): Achieving energy efficiency and smart energy[Q7/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q7.aspx): Circular economy including e-waste[Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q5/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q5.aspx): Software components application programming interfaces (APIs), frameworks and overall software architecture for advanced content distribution services within the scope of Study Group 9[Q8/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q8.aspx): The Internet protocol (IP) enabled multimedia applications and services for cable television networks enabled by converged platforms[Q9/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q9.aspx): Requirements, methods, and interfaces of the advanced service platforms to enhance the delivery of sound, television, and other multimedia interactive services over cable television network |
| [SG11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/default.aspx) | [Q1/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q1.aspx): Signalling and protocol architectures in emerging telecommunication environments and guidelines for implementations[Q2/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q2.aspx): Signalling requirements and protocols for services and applications in emerging telecommunication environments[Q4/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q4.aspx): Protocols for control, management and orchestration of network resources[Q5/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q5.aspx): Protocols and procedures supporting services provided by broadband network gateways[Q15/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q15.aspx): Combating counterfeit and stolen ICT equipment |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx)[QSDG](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/QSDG.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T[Q11/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q11.aspx): Performance considerations for interconnected networks[Q12/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q12.aspx): Operational aspects of telecommunication network service quality[Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspxhttp%3A/www.itu.int/en/ITU-T/studygroups/2013-2016/12/Pages/q17.aspx): Performance of packet-based networks and other networking technologies[Q18/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q18.aspx): Measurement and control of the end-to-end quality of service (QoS) for advanced television technologies, from image acquisition to rendering, in contribution, primary distribution and secondary distribution networks[Q19/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q19.aspx): Objective and subjective methods for evaluating perceptual audiovisual quality in multimedia services |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q1/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q1.aspx): Innovative services scenarios, deployment models and migration issues based on Future Networks[Q2/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q2.aspx): Next-generation network (NGN) evolution with innovative technologies including software-defined networking (SDN) and network function virtualization (NFV)[Q5/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx): Applying networks of future and innovation in developing countries[Q22/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q22.aspx): Upcoming network technologies for IMT-2020 and Future Networks |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards[Q16/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q16.aspx): Optical physical infrastructures |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q11/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q11.aspx): Multimedia systems, terminals, gateways and data conferencing[Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx): Multimedia application platforms and end systems for IPTV[Q21/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q21.aspx): Multimedia framework, applications and services |
| [SG17](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) | [Q2/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q2.aspx): Security architecture and framework |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx): Requirements, capabilities, and use cases across verticals[Q3/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q3.aspx): Architectures, management, protocols and Quality of Service[Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms[Q5/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx): Research and emerging technologies, terminology and definitions[Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx): Security, privacy, trust and identification[Q7/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx): Evaluation and assessment of Smart Sustainable Cities and Communities |
| Question 2/1: Strategies, policies, regulations and methods of migration to and adoption of digital broadcasting and implementation of new services | [SG1](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=1) | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q2/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q2.aspx): Methods and practices for conditional access, protection against unauthorized copying and against unauthorized redistribution ("redistribution control" for digital cable television distribution to the home)[Q4/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q4.aspx): Guidelines for implementations and deployment of transmission of multichannel digital television signals over optical access networks[Q6/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q6.aspx): Functional requirements for residential gateway and set-top box for the reception of advanced content distribution services[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q8/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q8.aspx): The Internet protocol (IP) enabled multimedia applications and services for cable television networks enabled by converged platforms |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx): Multimedia application platforms and end systems for IPTV |
|  |  | ~~[SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx)~~ | ~~[Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission of television and sound programme signal for contribution, primary distribution and secondary distribution~~~~[Q4/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q4.aspx): Guidelines for implementations and deployment of transmission of multichannel digital television signals over optical access networks~~~~[Q7/9:](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx) Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks~~ |
| [~~SG11~~](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/default.aspx) | [~~Q6/11~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q6.aspx)~~: Protocols supporting control and management technologies for IMT-2020~~[~~Q10/11~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q10.aspx)~~: Testing of emerging IMT-2020 technologies~~ |
| [~~SG12~~](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [~~Q17/12~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspxhttp%3A/www.itu.int/en/ITU-T/studygroups/2013-2016/12/Pages/q17.aspx)~~: Performance of packet-based networks and other networking technologies~~ |
| [~~SG13~~](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [~~Q5/13~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx)~~: Applying networks of future and innovation in developing countries~~ |
| [~~SG15~~](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [~~Q1/15~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx)~~: Coordination of access and home network transport standards~~[~~Q2/15~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q2.aspx)~~: Optical systems for fibre access networks~~[~~Q4/15~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q4.aspx)~~: Broadband access over metallic conductors~~[~~Q15/15~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q15.aspx)~~: Communications for smart grid~~~~[Q16/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q16.aspx): Optical physical infrastructures~~[~~Q18/15~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q18.aspx)~~: Broadband in-premises networking~~ |
| [~~SG16~~](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | ~~[Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination~~[~~Q21/16~~](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q21.aspx)~~: Multimedia framework, applications and services~~ |
| [~~SG20~~](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [~~Q1/20~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx)~~: End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C~~[~~Q2/20~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx)~~: Requirements, capabilities, and use cases across verticals~~[~~Q3/20~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q3.aspx)~~: Architectures, management, protocols and Quality of Service~~[~~Q4/20~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx)~~: e/Smart services, applications and supporting platforms~~[~~Q5/20~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx)~~: Research and emerging technologies, terminology and definitions~~[~~Q6/20~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx)~~: Security, privacy, trust and identification~~[~~Q7/20~~](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx)~~: Evaluation and assessment of Smart Sustainable Cities and Communities~~ |
| Question 3/1: Emerging technologies, including cloud computing, m-services and OTTs: Challenges and opportunities, economic and policy impact for developing countries | [SG1](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=1) | [SG3](https://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/default.aspx) | [Q9/3](https://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q9.aspx)**:** Economic and regulatory impact of the Internet, convergence (services or infrastructure) and new services, such as over the top (OTT), on international telecommunication services and networks |
| [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q6/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx): Achieving energy efficiency and smart energy[Q7/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q7.aspx): Circular economy including e-waste[Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/default.aspx) | [Q14/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q14.aspx): Cloud interoperability testing |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q17/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q17.aspx): Requirements, ecosystem, and general capabilities for cloud computing and big data[Q18/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q18.aspx): Functional architecture for cloud computing and big data[Q19/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q19.aspx): End-to-end Cloud computing management, cloud security and big data governance |
| [SG2](https://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/default.aspx)[SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | JRG-CCM – Joint Rapporteurs Group on Cloud Computing Management |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards |
| [SG17](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) | [Q8/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q8.aspx): Cloud computing security |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q7/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx): Evaluation and assessment of Smart Sustainable Cities and Communities |
| Question 4/1: Economic policies and methods of determining the costs of services related to national telecommunication/information and communication technology networks, including next-generation networks | [SG1](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=1) | [SG3](https://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/default.aspx) | [Q1/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q1.aspx): Development of charging and accounting/settlement mechanisms for international telecommunications services using the next-generation networks (NGNs), future networks, and any possible future development, including adaptation of existing D-series Recommendations to the evolving user needs[Q2/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q2.aspx): Development of charging and accounting/settlement mechanisms for international telecommunications services, other than those studied in Question 1/3, including adaptation of existing D-series Recommendations to the evolving user needs[Q3/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q3.aspx): Study of economic and policy factors relevant to the efficient provision of international telecommunication services[Q4/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q4.aspx): Regional studies for the development of cost models together with related economic and policy issues[Q11/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q11.aspx): Economic and policy aspects of big data and digital identity in international telecommunications services and networks |
| Question 5/1: Telecommunications/information and communication technologies for rural and remote areas | [SG1](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=1) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q2/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q2.aspx): Equipment resistibility and protective components[Q4/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q4.aspx): Electromagnetic compatibility (EMC) issues arising in the telecommunication environment[Q6/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx): Achieving energy efficiency and smart energy[Q7/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q7.aspx): Circular economy including e-waste[Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx) Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards[Q16/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q16.aspx): Optical physical infrastructures |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx): Multimedia application platforms and end systems for IPTV[Q21/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q21.aspx): Multimedia framework, applications and services[Q26/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q26.aspx): Accessibility to multimedia systems and services[Q28/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q28.aspx): Multimedia framework for e-health applications |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx): Requirements, capabilities, and use cases across verticals[Q3/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q3.aspx): Architectures, management, protocols and Quality of Service[Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms[Q5/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx): Research and emerging technologies, terminology and definitions[Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx): Security, privacy, trust and identification[Q7/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx): Evaluation and assessment of Smart Sustainable Cities and Communities |
| Question 6/1: Consumer information, protection and rights: Laws, regulation, economic bases, consumer networks | [SG1](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=1) | [SG2](https://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/default.aspx) | [Q1/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q1.aspx): Application of numbering, naming, addressing and identification plans for fixed and mobile telecommunications services |
| [SG11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/default.aspx) | [Q15/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q15.aspx): Combating counterfeit and stolen ICT equipment |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q24/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q24.aspx): Human factors related issues for improvement of the quality of life through international telecommunications[Q26/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q26.aspx): Accessibility to multimedia systems and services |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms[Q5/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx): Research and emerging technologies, terminology and definitions[Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx): Security, privacy, trust and identification |
| Question 7/1: Access to telecommunication/information and communication technology services by persons with disabilities and other persons with specific needs | [SG1](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=1) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q2/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q2.aspx): Equipment resistibility and protective components[Q4/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q4.aspx): Electromagnetic compatibility (EMC) issues arising in the telecommunication environment[Q6/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx): Achieving energy efficiency and smart energy[Q7/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q7.aspx): Circular economy including e-waste[Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx) Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q6/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q6.aspx): Functional requirements for residential gateway and set-top box for the reception of advanced content distribution services |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q24/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q24.aspx): Human factors related issues for improvement of the quality of life through international telecommunications[Q26/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q26.aspx): Accessibility to multimedia systems and services |
| [JCA-AHF](http://www.itu.int/en/ITU-T/jca/ahf/Pages/default.aspx) | Joint Coordination Activity on Accessibility and Human Factors (JCA-AHF) |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms |
| ~~Question 8/1: Strategies, policies, regulations and methods of migration and adoption of digital broadcasting and the implementation of new services~~ This Question is now Question 2/1 and the related ITU-T SG Questions should be moved there. | [SG1](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=1) | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q2/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q2.aspx): Methods and practices for conditional access, protection against unauthorized copying and against unauthorized redistribution ("redistribution control" for digital cable television distribution to the home)[Q4/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q4.aspx): Guidelines for implementations and deployment of transmission of multichannel digital television signals over optical access networks[Q6/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q6.aspx): Functional requirements for residential gateway and set-top box for the reception of advanced content distribution services[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q8/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q8.aspx): The Internet protocol (IP) enabled multimedia applications and services for cable television networks enabled by converged platforms |
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| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx): Multimedia application platforms and end systems for IPTV |
| Question 1/2: Creating smart cities and society: Employing information and communication technologies for sustainable social and economic development | [SG2](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=2) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q6/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx): Achieving energy efficiency and smart energy[Q7/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q7.aspx): Circular economy including e-waste[Q9/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q16/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q16.aspx): Knowledge-centric trustworthy networking and services |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx): Multimedia application platforms and end systems for IPTV[Q21/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q21.aspx): Multimedia framework, applications and services[Q26/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q26.aspx): Accessibility to multimedia systems and services[Q27/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q27.aspx): Vehicle gateway platform for telecommunication/ITS services and applications[Q28/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q28.aspx): Multimedia framework for e-health applications |
| [SG17](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) | [Q13/17](http://itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q13.aspx): Security aspects for Intelligent Transport System |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms[Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx): Security, privacy, trust and identification[Q7/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx): Evaluation and assessment of Smart Sustainable Cities and Communities |
| [JCA-IoT and SC&C](http://www.itu.int/en/ITU-T/jca/iot/Pages/default.aspx) | Joint Coordination Activity on Internet of Things and Smart Cities and Communities (JCA-IoT and SC&C) |
| Question 2/2: Telecommunications/information and communication technologies for e-health | [SG2](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=2) | [SG11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/default.aspx) | [Q1/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q1.aspx): Signalling and protocol architectures in emerging telecommunication environments and guidelines for implementations |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q2/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q2.aspx): Next-generation network (NGN) evolution with innovative technologies including software-defined networking (SDN) and network function virtualization (NFV) |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q28/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q28.aspx): Multimedia framework for e-health applications |
| [SG17](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) | [Q9/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q9.aspx): Telebiometrics |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms[Q5/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx): Research and emerging technologies, terminology and definitions[Q7/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx): Evaluation and assessment of Smart Sustainable Cities and Communities |
| Question 3/2: Securing information and communication networks: Best practices for developing a culture of cybersecurity | [SG2](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=2) | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q2/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q2.aspx): Methods and practices for conditional access, protection against unauthorized copying and against unauthorized redistribution ("redistribution control" for digital cable television distribution to the home) |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards |
| [SG17](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) | [Q4/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q4.aspx): Cybersecurity |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx): Security, privacy, trust and identification |
| Question 4/2: Assistance to developing countries for implementing conformance and interoperability programmes and combating counterfeit information and communication technology equipment and theft of mobile devices | [SG2](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=2) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q2/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q2.aspx): Equipment resistibility and protective components[Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs)[Q4/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q4.aspx): Electromagnetic compatibility (EMC) issues arising in the telecommunication environment[Q6/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx): Achieving energy efficiency and smart energy[Q9/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/default.aspx) | [Q9/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q9.aspx): Service and networks benchmark testing, remote testing including Internet related performance measurements[Q11/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q11.aspx): Protocols and networks test specifications; frameworks and methodologies[Q12/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q12.aspx): Testing of Internet of things, its applications and identification systems[Q13/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q13.aspx): Monitoring parameters for protocols used in emerging networks, including cloud computing and software-defined networking/network function virtualization (SDN/NFV)[Q14/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q14.aspx): Cloud interoperability testing[Q15/11:](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q15.aspx) Combating counterfeit and stolen ICT equipment |
| Question 5/2: Utilizing telecommunications/ information and communication technologies for disaster risk reduction and management | [SG2](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=2) | [SG2](https://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/default.aspx) | [Q3/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q3.aspx): Service and operational aspects of telecommunications, including service definition |
| [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q8/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q8.aspx): The Internet protocol (IP) enabled multimedia applications and services for cable television networks enabled by converged platforms |
| [SG11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/default.aspx) | [Q3/11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q3.aspx): Signalling requirements and protocols for emergency telecommunications |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q2/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q2.aspx): Next-generation network (NGN) evolution with innovative technologies including software-defined networking (SDN) and network function virtualization (NFV) |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards[Q16/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q16.aspx): Optical physical infrastructures[Q17/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q17.aspx): Maintenance and operation of optical fibre cable networks |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q8/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q8.aspx): Immersive live experience systems and services[Q11/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q11.aspx): Multimedia systems, terminals, gateways and data conferencing[Q14/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q14.aspx): Digital signage systems and services |
| [SG17](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) | [Q4/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q4.aspx): Cybersecurity |
| Question 6/2: Information and communication technologies and the environment | [SG2](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=2) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q6/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx): Achieving energy efficiency and smart energy[Q7/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q7.aspx): Circular economy including e-waste[Q9/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx): Requirements, capabilities, and use cases across verticals[Q5/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx): Research and emerging technologies, terminology and definitions |
| Question 7/2: Strategies and policies concerning human exposure to electromagnetic fields | [SG2](https://www.itu.int/net4/ITU-D/CDS/sg/index.asp?lg=1&sp=2018&stg=2) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs) |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx): Requirements, capabilities, and use cases across verticals |
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**Table 2 – Matrix of ITU-D Questions and ITU-T Questions**

|  | **ITU-D SG1** | **ITU-D SG2** |
| --- | --- | --- |
| **Q1/1** |  | **Q2/1** | **Q3/1** | **Q4/1** | **Q5/1** | **Q6/1** | **Q7/1** |  | **Q1/2** | **Q2/2** | **Q3/2** | **Q4/2** | **Q5/2** | **Q6/2** | **Q7/2** |  |  |
| **ITU-T SG2** | [Q1/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q1.aspx) | X |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |
| [Q3/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q3.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| **ITU-T SG3** | [Q1/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q1.aspx) | X |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q2/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q2.aspx) | X |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q3/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q3.aspx) | X |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q4/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q4.aspx) | X |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q9/3](https://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q9.aspx) |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q11/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q11.aspx) | X |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **ITU-T SG5** | [Q2/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q2.aspx) | X | ~~X~~ |  |  |  | X |  | X |  |  |  |  | X |  |  |  |  |  |
| [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx) |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |
| [Q4/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q4.aspx) | X | ~~X~~ |  |  |  | X |  | X |  |  |  |  | X |  |  |  |  |  |
| [Q6/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx) | X | ~~X~~ |  | X |  | X |  | X |  | X |  |  | X |  | X |  |  |  |
| [Q7/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q7.aspx) | X | ~~X~~ |  | X |  |  |  | X |  | X |  |  |  |  | X |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q9/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx) | X | ~~X~~ |  | X |  | X |  | X |  | X |  |  | X | X | X |  |  |  |
| **ITU-T SG9** | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx) |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q2/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q2.aspx) |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |
| [Q3/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q3.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q4/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q4.aspx) |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q5/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q5.aspx) | X |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |
| [Q6/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q6.aspx) |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx) |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q8/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q8.aspx) | X |  | X |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q9/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q9.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **ITU-T SG11** | [Q1/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q1.aspx) | X |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q2/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q2.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q3/11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q3.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q4/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q4.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q5/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q5.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q6/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q6.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q9/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q9.aspx) |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q10/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q10.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q11/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q11.aspx) |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q12/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q12.aspx) |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q13/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q13.aspx) |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q14/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q14.aspx) |  |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q15/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q15.aspx) | X |  |  |  |  |  | X |  |  |  |  |  | X |  |  |  |  |  |
| **ITU-T SG12** | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx) | X |  |  | X |  | X |  | X |  | X | X |  |  | X |  |  |  |  |
| [Q11/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q11.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q12/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q12.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q18/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q18.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q19/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q19.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **ITU-T SG13** | [Q1/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q1.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q2/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q2.aspx) | X |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |
| [Q5/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q16/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q16.aspx) |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |
| [Q17/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q17.aspx) |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q18/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q18.aspx) |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q19/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q19.aspx) |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q22/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q22.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **ITU-T SG15** | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx) | X |  |  | X |  | X |  |  |  | X | X | X |  | X |  |  |  |  |
| [Q2/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q2.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q4/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q4.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q12/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q12.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q14/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q14.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q15/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q15.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q16/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q16.aspx) | X | ~~X~~ |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q17/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q17.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q18/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q18.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q19/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q19.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **ITU-T SG16** | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx) | X | ~~X~~ | X |  |  | X | X | X | ~~X~~ | X | X |  |  | X |  |  |  |  |
| [Q8/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q8.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q11/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q11.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx) | X |  | X |  |  | X |  |  |  | X |  |  |  |  |  |  |  |  |
| [Q14/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q14.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q21/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q21.aspx) | X |  |  |  |  | X |  |  |  | X |  |  |  |  |  |  |  |  |
| [Q24/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q24.aspx) |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |  |  |  |
| [Q26/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q26.aspx) |  |  |  |  |  | X | X | X |  | X |  |  |  |  |  |  |  |  |
| [Q27/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q27.aspx) |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |
| [Q28/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q28.aspx) |  |  |  |  |  | X |  |  |  | X | X |  |  |  |  |  |  |  |
| **ITU-T SG17** | [Q1/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q1.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q2/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q2.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q4/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q4.aspx) |  |  |  |  |  |  |  |  |  |  |  | X |  | X |  |  |  |  |
| [Q8/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q8.aspx) |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q9/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q9.aspx) |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q13/17](http://itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q13.aspx) |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |
| **ITU-T SG20** | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx) | X |  |  | X |  | X | X | X |  | X |  |  |  |  |  |  |  |  |
| [Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx) | X |  |  |  |  | X |  |  |  |  |  |  |  |  | X | X |  |  |
| [Q3/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q3.aspx) | X |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx) | X |  |  |  |  | X | X | X |  | X | X |  |  |  |  |  |  |  |
| [Q5/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx) | X |  |  |  |  | X | X |  |  |  | X |  |  |  | X |  |  |  |
| [Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx) | X |  |  |  |  | X | X |  |  | X |  | X |  |  |  |  |  |  |
| [Q7/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx) | X |  |  | X |  | X |  |  |  | X | X |  |  |  |  |  |  |  |

**Attachment 2**

**Matching of ITU-R WPs of interest to ITU-T study groups**

Amendments herein reflect:

* TSAG ILS TD 187 from ITU-T SG15
* TSAG ILS TD 178 from ITU-T SG5
* TSAG ILS TD 210 from ITU-R SG6
* TSAG ILS TD 213 from ITU-T SG16.

**Table 1 – ITU-R WPs vis-à-vis ITU-T Questions**

| ITU-R WP | ITU-R SG | ITU-T SG | ITU-T SG Questions |
| --- | --- | --- | --- |
| [WP 1A](https://www.itu.int/go/ITU-R/wp1a): Spectrum engineering techniques | [SG1](https://www.itu.int/en/ITU-R/study-groups/rsg1/Pages/default.aspx) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards[Q4/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q4.aspx): Broadband access over metallic conductors[Q15/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q15.aspx): Communications for smart grid[Q18/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q18.aspx): Broadband in-premises networking |
| [WP 1B](https://www.itu.int/go/ITU-R/wp1b): Spectrum management methodologies and economic strategies | [SG1](https://www.itu.int/en/ITU-R/study-groups/rsg1/Pages/default.aspx) | [SG3](https://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/default.aspx) | [Q2/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q2.aspx): Development of charging and accounting/settlement mechanisms for international telecommunications services, other than those studied in Question 1/3, including adaptation of existing D-series Recommendations to the evolving user needs[Q3/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q3.aspx): Study of economic and policy factors relevant to the efficient provision of international telecommunication services |
| [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs) |
| [WP 1C](https://www.itu.int/go/ITU-R/wp1c): Spectrum monitoring | [SG1](https://www.itu.int/en/ITU-R/study-groups/rsg1/Pages/default.aspx) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs)[Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [WP 3J](https://www.itu.int/go/ITU-R/wp3j): Propagation fundamentals | [SG3](https://www.itu.int/en/ITU-R/study-groups/rsg3/Pages/default.aspx) | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [WP 3K](https://www.itu.int/go/ITU-R/wp3k): Point-to-area propagation |
| [WP 3L](https://www.itu.int/go/ITU-R/wp3l): Ionospheric propagation and radio noise |
| [WP 3M](https://www.itu.int/go/ITU-R/wp3m): Point-to-point and Earth-space propagation | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [WP 4A](https://www.itu.int/go/ITU-R/wp4a): Efficient orbit/spectrum utilization for FSS and BSS | [SG4](https://www.itu.int/en/ITU-R/study-groups/rsg4/Pages/default.aspx) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks |
| [WP 4B](https://www.itu.int/go/ITU-R/wp4b): Systems, air interfaces, performance and availability objectives for FSS, BSS and MSS, including IP-based applications and satellite news gathering | [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T[Q12/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q12.aspx): Operational aspects of telecommunication network service quality[Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspx): Performance of packet-based networks and other networking technologies |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q5/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx): Applying networks of future and innovation in developing countries[Q23/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q23.aspx): Fixed-Mobile Convergence including IMT-2020 |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx): Multimedia application platforms and end systems for IPTV |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx): Requirements, capabilities, and use cases across verticals[Q3/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q3.aspx): Architectures, management, protocols and Quality of Service[Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms[Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx): Security, privacy, trust and identification |
| [WP 4C](https://www.itu.int/go/ITU-R/wp4c): Efficient orbit/spectrum utilization for MSS and RDSS \*\* WP 4C will also deal with the performance issues related to RDSS | [SG2](https://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/default.aspx) | [Q3/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q3.aspx): Service and operational aspects of telecommunications, including service definition |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q24/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q24.aspx): Human factors related issues for improvement of the quality of life through international telecommunications |
| [WP 5A](https://www.itu.int/go/ITU-R/wp5a): Land mobile service above 30 MHz\* (excluding IMT); wireless access in the fixed service; amateur and amateur-satellite services | [SG5](https://www.itu.int/en/ITU-R/study-groups/rsg5/Pages/default.aspx) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs) |
| [SG2](https://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/default.aspx) | [Q1/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q1.aspx): Application of numbering, naming, addressing and identification plans for fixed and mobile telecommunications services |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T[Q12/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q12.aspx): Operational aspects of telecommunication network service quality[Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspx): Performance of packet-based networks and other networking technologies |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q5/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx): Applying networks of future and innovation in developing countries[Q16/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q16.aspx): Knowledge-centric trustworthy networking and services[Q23/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q23.aspx): Fixed-Mobile Convergence including IMT-2020 |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q15/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q15.aspx): Communications for smart grid |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q24/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q24.aspx): Human factors related issues for improvement of the quality of life through international telecommunications[Q27/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q27.aspx): Vehicle gateway platform for telecommunication/ITS services and applications |
| [SG17](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) | [Q6/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q6.aspx): Security aspects of telecommunication services, networks, and Internet of Things[Q13/17](http://itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q13.aspx): Security aspects for Intelligent Transport System |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx): Requirements, capabilities, and use cases across verticals[Q3/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q3.aspx): Architectures, management, protocols and Quality of Service[Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms[Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx): Security, privacy, trust and identification |
| [CITS](http://www.itu.int/en/ITU-T/extcoop/cits) |  |
| [WP 5B](https://www.itu.int/go/ITU-R/wp5b): Maritime mobile service including Global Maritime Distress and Safety System (GMDSS); aeronautical mobile service and radiodetermination service | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs)[Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T[Q12/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q12.aspx): Operational aspects of telecommunication network service quality[Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspx): Performance of packet-based networks and other networking technologies |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q5/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx): Applying networks of future and innovation in developing countries[Q16/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q16.aspx): Knowledge-centric trustworthy networking and services[Q22/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q22.aspx): Upcoming network technologies for IMT-2020 and Future Networks[Q23/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q23.aspx): Fixed-Mobile Convergence including IMT-2020 |
| [WP 5C](https://www.itu.int/go/ITU-R/wp5c): Fixed wireless systems; HF and other systems below 30 MHz in the fixed and land mobile services | [SG2](https://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/default.aspx) | [Q3/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q3.aspx): Service and operational aspects of telecommunications, including service definition |
| [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx): SG12 work programme and quality of service/quality of experience (QoS/QoE) coordination in ITU-T[Q12/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q12.aspx): Operational aspects of telecommunication network service quality[Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspx): Performance of packet-based networks and other networking technologies |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q5/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx): Applying networks of future and innovation in developing countries[Q16/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q16.aspx): Knowledge-centric trustworthy networking and services[Q20/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q20.aspx): IMT-2020: Network requirements and functional architecture[Q23/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q23.aspx): Fixed-Mobile Convergence including IMT-2020 |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards[Q3/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q3.aspx): Optical physical infrastructures[Q4/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q4.aspx): Broadband access over metallic conductors |
| [WP 5D](https://www.itu.int/go/ITU-R/wp5d): IMT Systems | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q2/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q2.aspx): Equipment resistibility and protective components[Q3/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs)[Q4/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q4.aspx): Electromagnetic compatibility (EMC) issues arising in the telecommunication environment[Q6/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx): Achieving energy efficiency and smart energy |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [SG11](https://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/default.aspx) | [Q6/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q6.aspx): Protocols supporting control and management technologies for IMT-2020[Q10/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q10.aspx): Testing of emerging IMT-2020 technologies |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q7/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q7.aspx): Methods, tools and test plans for the subjective assessment of speech, audio and audiovisual quality interactions[Q9/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q9.aspx): Perceptual-based objective methods for voice, audio and visual quality measurements in telecommunication services[Q10/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q10.aspx): Conferencing and telemeeting assessment[Q13/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q13.aspx): Quality of experience (QoE), quality of service (QoS) and performance requirements and assessment methods for multimedia[Q14/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q14.aspx): Development of models and tools for multimedia quality assessment of packet-based video services[Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspx): Performance of packet-based networks and other networking technologies |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q5/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx): Applying networks of future and innovation in developing countries[Q16/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q16.aspx): Knowledge-centric trustworthy networking and services[Q20/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q20.aspx): IMT-2020: Network requirements and functional architecture[Q23/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q23.aspx): Fixed-Mobile Convergence including IMT-2020 |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards[Q3/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q3.aspx): Optical physical infrastructures[Q4/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q4.aspx): Broadband access over metallic conductors |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx): Multimedia application platforms and end systems for IPTV |
| [Q21/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q21.aspx): Multimedia framework, applications and services |
| [SG17](https://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/default.aspx) | [Q6/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q6.aspx): Security aspects of telecommunication services, networks, and Internet of Things |
| [SG20](https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx) | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx): End to end connectivity, networks, interoperability, infrastructures and Big Data aspects related to IoT and SC&C[Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx): Requirements, capabilities, and use cases across verticals[Q3/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q3.aspx): Architectures, management, protocols and Quality of Service[Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx): e/Smart services, applications and supporting platforms[Q5/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx): Research and emerging technologies, terminology and definitions[Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx): Security, privacy, trust and identification[Q7/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx): Evaluation and assessment of Smart Sustainable Cities and Communities |
| [WP 6A](https://www.itu.int/go/ITU-R/wp6a): Terrestrial broadcasting delivery | [SG6](https://www.itu.int/en/ITU-R/study-groups/rsg6/Pages/default.aspx) | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx): Human exposure to electromagnetic fields (EMFs) from information and communication technologies (ICTs) |
| [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
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| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of access and home network transport standards[Q4/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q4.aspx): Broadband access over metallic conductors[Q15/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q15.aspx): Communications for Smart Grid[Q18/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q18.aspx): Broadband in-premises networking |
|  | ~~[Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination~~ |
| [WP 6B](https://www.itu.int/go/ITU-R/wp6b): Broadcast service assembly and access | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q2/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q2.aspx): Methods and practices for conditional access, protection against unauthorized copying and against unauthorized redistribution ("redistribution control" for digital cable television distribution to the home)[Q5/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q5.aspx): Software components application programming interfaces (APIs), frameworks and overall software architecture for advanced content distribution services within the scope of Study Group 9[Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx): Cable television delivery of digital services and applications that use Internet protocol (IP) and/or packet-based data over cable networks[Q8/9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q8.aspx): The Internet protocol (IP) enabled multimedia applications and services for cable television networks enabled by converged platforms |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q13/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q13.aspx): Quality of experience (QoE), quality of service (QoS) and performance requirements and assessment methods for multimedia[Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspx): Performance of packet-based networks and other networking technologies |
| [SG13](https://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/default.aspx) | [Q2/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q2.aspx): Next-generation network (NGN) evolution with innovative technologies including software-defined networking (SDN) and network function virtualization (NFV) |
| [SG15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/default.aspx) | [Q1/15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx): Coordination of Access and Home Network Transport Standards[Q4/15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q4.aspx): Broadband access over metallic conductors[Q12/15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q12.aspx): Transport network architectures[Q18/15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q18.aspx): Broadband in-premises networking |
| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q6/16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q6.aspx): Visual coding[Q8/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q8.aspx): Immersive live experience systems and services[Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx): Multimedia application platforms and end systems for IPTV |
| [WP 6C](https://www.itu.int/go/ITU-R/wp6c): Programme production and quality assessment |  |  |
| [SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [Q7/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q7.aspx): Methods, tools and test plans for the subjective assessment of speech, audio and audiovisual quality interactions[Q9/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q9.aspx): Perceptual-based objective methods for voice, audio and visual quality measurements in telecommunication services[Q14/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q14.aspx): Development of models and tools for multimedia quality assessment of packet-based video services[Q18/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q18.aspx): Measurement and control of the end-to-end quality of service (QoS) for advanced television technologies, from image acquisition to rendering, in contribution, primary distribution and secondary distribution networks[Q19/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q19.aspx): Objective and subjective methods for evaluating perceptual audiovisual quality in multimedia services |
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| [SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination[Q8/16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q8.aspx): Immersive live experience systems and services[Q26/16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q26.aspx): Accessibility to multimedia systems and services |
|  |  |
| [IRG-AVA](https://www.itu.int/en/irg/ava/Pages/default.aspx): Intersector Rapporteur Group Audiovisual Media Accessibility | [SG6](https://www.itu.int/en/ITU-R/study-groups/rsg6/Pages/default.aspx) | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx)[SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [IRG-AVA](https://www.itu.int/en/irg/ava/Pages/default.aspx): Intersector Rapporteur Group Audiovisual Media Accessibility[Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination |
| [IRG-AVQA](http://www.itu.int/en/irg/avqa/Pages/default.aspx): Intersector Rapporteur Group Audiovisual Quality Assessment | [SG6](https://www.itu.int/en/ITU-R/study-groups/rsg6/Pages/default.aspx) | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx)[SG12](https://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/default.aspx) | [IRG-AVQA](http://www.itu.int/en/irg/avqa/Pages/default.aspx): Intersector Rapporteur Group Audiovisual Quality Assessment |
| [IRG-IBB](https://www.itu.int/en/irg/ibb/Pages/default.aspx): Integrated Broadcast-Broadband (IBB) | [SG6](https://www.itu.int/en/ITU-R/study-groups/rsg6/Pages/default.aspx) | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx)[SG16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/default.aspx) | [IRG-IBB](https://www.itu.int/en/irg/ibb/Pages/default.aspx): Integrated Broadcast-Broadband (IBB)[Q1/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx): Multimedia coordination |
| [WP 7A](https://www.itu.int/go/ITU-R/wp7a): Time signals and frequency standard emissions: Systems and applications (terrestrial and satellite) for dissemination of standard time and frequency signals | [SG7](https://www.itu.int/en/ITU-R/study-groups/rsg7/Pages/default.aspx) |  |  |
| [WP 7B](https://www.itu.int/go/ITU-R/wp7b): Space radiocommunication applications: Systems for transmission/reception of telecommand, tracking and telemetry data for space operation, space research, Earth exploration-satellite, and meteorological satellite services | [SG9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/default.aspx) | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx): Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution[Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx): Work programme, coordination and planning |
| [WP 7C](https://www.itu.int/go/ITU-R/wp7c): Remote sensing systems: active and passive remote sensing applications in the Earth exploration-satellite service and systems of the MetAids service, as well as space research sensors, including planetary sensors | [SG5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/default.aspx) | [Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx): Climate change and assessment of information and communication technology (ICT) in the framework of the Sustainable Development Goals (SDGs) |
| [WP 7D](https://www.itu.int/go/ITU-R/wp7d): Radio astronomy: radio astronomy and radar astronomy sensors, both Earth-based and space-based, including space very long baseline interferometry (VLBI) |  |  |

**Table 2 – Matrix of ITU-R WPs and ITU-T Questions**

|  | **ITU-R SG1** | **ITU-R SG2** | **ITU-R SG4** | **ITU-R SG5** | **ITU-R SG6** | **ITU-R SG7** |
| --- | --- | --- | --- | --- | --- | --- |
| [WP 1A](https://www.itu.int/go/ITU-R/wp1a) | [WP 1B](https://www.itu.int/go/ITU-R/wp1b) | [WP 1C](https://www.itu.int/go/ITU-R/wp1c) | [WP 3J](https://www.itu.int/go/ITU-R/wp3j) | [WP 3K](https://www.itu.int/go/ITU-R/wp3k) | [WP 3L](https://www.itu.int/go/ITU-R/wp3l) | [WP 3M](https://www.itu.int/go/ITU-R/wp3m) | [WP 4A](https://www.itu.int/go/ITU-R/wp4a) | [WP 4B](https://www.itu.int/go/ITU-R/wp4b) | [WP 4C](https://www.itu.int/go/ITU-R/wp4c) | [WP 5A](https://www.itu.int/go/ITU-R/wp5a) | [WP 5B](https://www.itu.int/go/ITU-R/wp5b) | [WP 5C](https://www.itu.int/go/ITU-R/wp5c) | [WP 5D](https://www.itu.int/go/ITU-R/wp5d) | [WP 6A](https://www.itu.int/go/ITU-R/wp6a) | [WP 6B](https://www.itu.int/go/ITU-R/wp6b) | [WP 6C](https://www.itu.int/go/ITU-R/wp6c) | [WP 7A](https://www.itu.int/go/ITU-R/wp7a) | [WP 7B](https://www.itu.int/go/ITU-R/wp7b) | [WP 7C](https://www.itu.int/go/ITU-R/wp7c) | [WP 7D](https://www.itu.int/go/ITU-R/wp7d) |
| **ITU-T SG2** | [Q1/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q1.aspx) |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |
| [Q3/2](http://www.itu.int/en/ITU-T/studygroups/2017-2020/02/Pages/q3.aspx) |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |  |  |  |  |
| **ITU-T SG3** | [Q2/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q2.aspx) |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q3/3](http://www.itu.int/en/ITU-T/studygroups/2017-2020/03/Pages/q3.aspx) |  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **ITU-T SG5** | [Q2/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q2.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q3/5](http://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q3.aspx) | X | X | X |  |  |  |  | X |  |  | X | X | X | X | X |  |  |  |  |  |  |
| [Q4/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q4.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q6/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q6.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q9/5](https://www.itu.int/en/ITU-T/studygroups/2017-2020/05/Pages/q9.aspx) |  |  | X |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X |  |
| **ITU-T SG9** | [Q1/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q1.aspx) | X |  | X |  |  | X |  | X |  |  | X | X | X | X | X | X |  |  | X |  |  |
| [Q2/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q2.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q5/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q5.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q7/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q7.aspx) | X |  | X |  |  | X |  | X |  |  | X | X | X | X | X | X |  |  |  |  |  |
| [Q8/9](https://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q8.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q10/9](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Pages/q10.aspx) | X |  | X |  |  | X | X |  |  | X | X | X | X | X | X |  |  |  | X |  |  |
| **ITU-T SG11** | [Q6/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q6.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q10/11](http://www.itu.int/en/ITU-T/studygroups/2017-2020/11/Pages/q10.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| **ITU-T SG12** | [Q1/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q1.aspx) |  |  |  |  |  |  |  |  | X |  | X | X | X |  |  |  |  |  |  |  |  |
| [Q7/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q7.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |
| [Q9/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q9.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |
| [Q10/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q10.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q12/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q12.aspx) |  |  |  |  |  |  |  |  | X |  | X | X | X |  |  |  |  |  |  |  |  |
| [Q13/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q13.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  | X |  |  |  |  |  |
| [Q14/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q14.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |
| [Q17/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q17.aspx) |  |  |  |  |  |  |  |  | X |  | X | X | X | X |  | X |  |  |  |  |  |
| [Q18/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q18.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q19/12](http://www.itu.int/en/ITU-T/studygroups/2017-2020/12/Pages/q19.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| **ITU-T SG13** | [Q5/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q5.aspx) |  |  |  |  |  |  |  |  | X |  | X | X | X | X |  |  |  |  |  |  |  |
| [Q2/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q2.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q16/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q16.aspx) |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  |  |  |  |  |  |
| [Q20/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q20.aspx) |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |
| [Q22/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q22.aspx) |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |
| [Q23/13](http://www.itu.int/en/ITU-T/studygroups/2017-2020/13/Pages/q23.aspx) |  |  |  |  |  |  |  |  | X |  | X | X | X | X |  |  |  |  |  |  |  |
| **ITU-T SG15** | [Q1/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q1.aspx) | X |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  |  |  |  |
| [Q3/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q3.aspx) |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |
| [Q4/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q4.aspx) | X |  |  |  |  |  |  |  |  |  |  |  | X | X | X | X |  |  |  |  |  |
| [Q12/15](https://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q12.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q15/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q15.aspx) | X |  |  |  |  |  |  |  |  |  | X |  |  |  | X |  |  |  |  |  |  |
| [Q18/15](http://www.itu.int/en/ITU-T/studygroups/2017-2020/15/Pages/q18.aspx) | X |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |
| **ITU-T SG16** | [Q1/16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q1.aspx) |  |  |  |  |  |  |  |  | X | X | X |  |  | X | ~~X~~ | X | X |  |  |  |  |
| [Q6/16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q6.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| [Q8/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q8.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |
| [Q13/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q13.aspx) |  |  |  |  |  |  |  |  | X |  |  |  |  | X |  | X |  |  |  |  |  |
| [Q21/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q21.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q24/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q24.aspx) |  |  |  |  |  |  |  |  |  | X | X |  |  |  |  |  |  |  |  |  |  |
| [Q26/16](https://www.itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q26.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |
| [Q27/16](http://itu.int/en/ITU-T/studygroups/2017-2020/16/Pages/q27.aspx) |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |
| **ITU-T SG17** | [Q6/17](http://www.itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q6.aspx) |  |  |  |  |  |  |  |  |  |  | X |  |  | X |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Q13/17](http://itu.int/en/ITU-T/studygroups/2017-2020/17/Pages/q13.aspx) |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |  |  |
| **ITU-T SG20** | [Q1/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q1.aspx) |  |  |  |  |  |  |  |  | X |  | X |  |  | X |  |  |  |  |  |  |  |
| [Q2/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q2.aspx) |  |  |  |  |  |  |  |  | X |  | X |  |  | X |  |  |  |  |  |  |  |
| [Q3/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q3.aspx) |  |  |  |  |  |  |  |  | X |  | X |  |  | X |  |  |  |  |  |  |  |
| [Q4/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q4.aspx) |  |  |  |  |  |  |  |  | X |  | X |  |  | X |  |  |  |  |  |  |  |
| [Q5/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q5.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |
| [Q6/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q6.aspx) |  |  |  |  |  |  |  |  | X |  | X |  |  | X |  |  |  |  |  |  |  |
| [Q7/20](http://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/q7.aspx) |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |

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1. 1 These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition. [↑](#footnote-ref-1)