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|  | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2022-2024 | | | | SG15–R6 |
| STUDY GROUP 15 |
| Original: English |
| **Question(s):** | | | All/15 | | June 2023 |
| **REPORT** | | | | | |
| **Source:** | | | Study Group 15 | | |
| **Title:** | | | Report of the second meeting of Study Group 15, - Networks, technologies and infrastructures for transport, access and home (Geneva, 17-28 April 2023) | | |
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| **Abstract:** | This document provides the report of the second meeting of Study Group 15 of the 2022-2024 study period. |

Structure of the report of the second meeting of Study Group 15   
(Geneva, 17-28 April 2023)

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| --- | --- |
| **SG15-R** | **Report of** |
| 6 | SG15 |
| 7 | WP1/15 |
| 8 | WP2/15 |
| 9 | WP3/15 |
| 10 | G.9964 determined text |

# 1. General

**1.1** The second meeting of Study Group 15 (Networks, Technologies and Infrastructures for Transport, Access and Home) of the 2022-2024 Study Period, convened by [Collective letter 2/15](https://www.itu.int/md/T22-SG15-COL-0002/en) of 22 November 2022, took place in Geneva, 17-28 April 2023, under the chairmanship of Mr. Glenn Parsons (Ericsson, Canada), Chairman of Study Group 15. The Chairman was assisted by Mr Mohamed Amine BENZIANE (Algérie Télécom, Algeria), Mr Sudipta BHAUMIK (Sterlite, India), Mr Taesik CHEUNG (ETRI, Korea), Mr Thomas HUBER (Nokia, United States), Mr Emanuele NASTRI (Italy), Mr Cyrille Vivien VEZONGADA (Central African Republic) and Mr Fatai ZHANG (Huawei, China).

**1.2** In his closing remarks, the TSB director, Seizo Onoe noted the increased participation, management team’s effort for in-person meetings and its promotion and coordination activities. He mentioned that SG15 is a world-renowned centre of excellence and that it is a source of great pride to ITU. He also indicated that his priority is to ensure that ITU attracts leading experts and promotes the adoption of new technologies, and relevant standards, in every region of the world.

**1.3** The Chairman presented the draft agenda in [TD111/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0111/en) and indicated that items 1-11 would be dealt with in the opening plenary and items 12-20 would be dealt with in the closing plenary. The agenda was adopted without modification. The Chairman indicated that all announced meetings of the Study Group including the opening and closing plenary sessions would be available with remote participation through MyMeetings. In was also noted that captioning would be provided for both the opening and closing plenary.

**1.4** The meeting reports of the first SG15 meeting of the 2022-2024 Study Period held in Geneva 19-30 September 2022 are contained in [SG15-R1-4](https://www.itu.int/md/T22-SG15-R), These reports were approved by the meeting. SG15 interim activities and their reports since the September 2022 meeting are listed in [TD122/P](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-SG15-230417-TD-PLEN-0122). The reports of liaison Rapporteurs were listed in [TD124R3/P](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-SG15-230417-TD-PLEN-0124). These reports were noted and the Chairman indicated that they would be dealt with as appropriate in the meetings of the Working Parties and Questions.

**1.5** The Chairman introduced [TD121/P](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-SG15-230417-TD-PLEN-0121) containing TSAG matters of interest to SG15. The Chairman called attention to the recently agreed A Suppl. 4 and some key highlights of the ongoing work to resolve issues that SG15 raised to TSAG. The Chairman also called attention to the TSAG “Study Group activity monitoring” activity, and requested the Rapporteurs take action to address the work items identified in the report to TSAG as “stale”.

**1.6** The Chairman called attention to the status of texts consented and determined at the previous meeting of SG15 as listed in [TD125/P](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-SG15-230417-TD-PLEN-0125). This includes 46 AAP texts that were consented in September 2022 that have subsequently been approved.

**1.7** The Chairman called attention to the initial candidate list of texts for approval, determination, consent and agreement in [TD129/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0129/en). The Chairman introduced the workplan and document allocation for this meeting as contained in [TD94/G](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-SG15-230417-TD-GEN-0094) and [TD127/P](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-SG15-230417-TD-PLEN-0127), respectively. Practical information for the meeting was contained in [TD126/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0129/en).

**1.8** The Chairman called attention to the Promotion and Coordination session to be held in the 2nd Tuesday with an agenda in [TD124/G](https://www.itu.int/md/T22-SG15-230417-TD-GEN-0124/en), the newcomer’s session to be held in the 1st Monday lunchtime with the newcomer’s welcome pack in [TD122/G](https://www.itu.int/md/T22-SG15-230417-TD-GEN-0122/en).

**1.9** The Chairman highlighted the value of human interaction in reaching consensus. It is during the side conversations — during coffee break, or over a meal — where real progress towards consensus can be made. To continue these interactions, the Chairman invited all delegates to join a networking reception on the 2nd Monday hosted by Nokia. The Chairman thanked all delegates made the effort to attend this meeting in person. The consensus and agreements reached at this meeting are proof of the value of in-person meetings.

# 2. Meeting Organization

## 2.1 Objectives for the meeting

The Chairman introduced the objectives for the meeting as listed in **Annex 25**. The meeting endorsed these objectives. The Chairman indicated that the Working Parties and Questions would have objectives for the meeting more specific to their areas of work.

## 2.2 Appointment of WP Chairmen and Vice Chairmen

As a result of Mr Noriyuki ARAKI joining the TSB staff, the meeting agreed to the appointment of new WP2 Chairman and Vice Chairman as proposed by the management team in [TD119/P](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T22-SG15-230417-TD-PLEN-0119).

Appointed WP Chairmen and Vice-Chairmen

|  |  |
| --- | --- |
| **Working Party** | **Leadership** |
| WP1/15 | Chairman: Mr. Tom STARR (Huawei, Switzerland) Vice Chairman: Mr. Ian HORSLEY (BT, UK) |
| WP2/15 | Chairman: Mr. Paul DOOLAN (Infinera, USA) Vice Chairman: Mr. Sudipta BHAUMIK (Sterlite, India) |
| WP3/15 | Chairman: Mr. Malcolm BETTS (ZTE, China) Vice Chairman: Mr. Tom HUBER (Nokia, USA) |

## 2.3 Appointment of Rapporteurs and Associate Rapporteurs

As a result of the retirement of Mr. Kam LAM, the meeting agreed to the appointment of a new Q14/15 Rapporteur as proposed by the management team in [TD119/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0119/en).

Appointed Rapporteurs and Associate Rapporteurs

| **Question** | **Leadership** |
| --- | --- |
| Q1/15 | R: Jean-Marie FROMENTEAU (Corning, USA)  AR: Dekun LIU (Huawei, China) |
| Q2/15 | R: Frank EFFENBERGER (Futurewei, USA)  AR: Junichi KANI (NTT, Japan) |
| Q3/15 | R: Les BROWN (Huawei, China) AR: Marcos MARTINEZ (Maxlinear, US)  AR: Tony ZENG (Huawei, China) |
| Q4/15 | R: Frank VAN DER PUTTEN (Nokia, Finland) AR: Les BROWN (Huawei, China)  AR: Miguel PEETERS (Broadcom, USA) |
| Q5/15 | R: Kazuhide NAKAJIMA (NTT, Japan)  AR: Vincent FERRETTI (Corning, US) |
| Q6/15 | R: Fabio CAVALIERE (Ericsson, Sweden)  AR: Bernd TEICHMANN (Nokia, Finland) |
| Q7/15 | R: Chihiro KITO (NTT)  AR: Xiong ZHUANG (MIIT) |
| Q8/15 | R: Omar AIT SAB (Nokia, Finland) |
| Q10/15 | R: Jessy Rouyer (Nokia, USA) |
| Q11/15 | R: Steve GORSHE (Microsemi, USA)  AR: Bert KLAPS (Intel, USA) |
| Q12/15 | R: Stephen SHEW (Ciena, Canada)  AR: Haomian ZHENG (Huawei) |
| Q13/15 | R: Stefano RUFFINI (Calnex, UK)  AR: Silvana RODRIGUES (Huawei, China) |
| Q14/15 | R: Scott MANSFIELD (Ericsson, Canada)  AR: Liping CHEN (CICT, China) |

## 2.4 Appointment of Liaison Rapporteurs

The meeting agreed to the appointment of liaison Rapporteurs as indicated in [TD123R2/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0123/en). Note that these are shown with revision marks to indicate the changes from the last Study Group meeting.

## 2.5 Guidance for the work of SG15

The Chairman called the meeting attention to the guidelines for carrying out the work of SG15 that provide a strengthened and detailed augmentation of the procedures described primarily in Recommendations ITU-T A.1 and A.8 and in WTSA Resolution 1. The virtual meeting guideline was updated to align with the recently revised A Suppl. 4 and agreed as in [TD120/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0120/en). These guidelines are reproduced as **Annexes 1 through 24** of this report, and will be updated by the management team as required. The up-to-date guidelines will be made available in the informal FTP area at <https://www.itu.int/ifa/t/2022/sg15/guidelines/>

# 3 Meeting Documents

The meeting dealt with nearly 700 documents (287 contributions and 367 TDs). The allocation of input Contributions and TDs is indicated in [TD127/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0127/en). The Contributions are available on the ITU-T website at <https://www.itu.int/md/T22-SG15-230417-C/en> .

A total of 75 Liaison Statements were received for this meeting. The incoming Liaison Statements to this meeting are listed in [TD128/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0128/en) and can be found on the website at [ITU-T Liaison Statements](https://www.itu.int/net/itu-t/ls/ils.aspx?to=8273&meeting=T22-SG15-230417). A list of the outgoing Liaison Statements can be found on the website at <https://www.itu.int/net/itu-t/ls/ols.aspx?from=8273&after=2023-04-28> .

# 4 Meeting Results

## 4.1 Work Programme

[TD133/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0133/en), [TD138R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0138/en) and [TD143R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0143/en) provide updated tables showing the Work Programme of Recommendations and other texts under development in WP1/15, WP2/15, and WP3/15, respectively. The work items contained in these TDs will serve to update the SG15 Work Programme. New work items agreed for addition to the Work Programme in this meeting are documented in these TDs using the template from Recommendations [ITU-T A.1](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=11920)/[A.13](https://www.itu.int/itu-t/recommendations/rec.aspx?rec=13853) Annex A. Study Group 15 agreed to the appointment or continuation of the Editors through acceptance of these documents. Note that the Rapporteurs are ultimately responsible for the quality of the text, and where an Editor is appointed, the Editor assists the Rapporteur in the preparation of the text. In cases where a document does not have an explicitly assigned Editor, the Rapporteur is responsible for the text.

## 4.2 Recommendations approved since the SG15 meeting in September 2022

**Annex 26** lists the draft Recommendations of SG15 approved between the SG15 meeting in September 2022 and the beginning of this meeting according to Recommendation [ITU-T A.8](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=9641).

## 4.3 IPR Status

Patent Statement and Licensing Declarations that are relevant to the Recommendations for decision at this meeting, and that had been received prior to the Study Group 15 meeting, are listed in the ITU-T patent statement database. There were no responses to the Chairman’s inquiry with regard to undeclared patents or pending patent applications relevant to the draft Recommendations for decision at this meeting. It was further noted that no Patent Statement and Licensing Declaration had been received by the TSB that would prevent approval of any of the Recommendations proposed for decision.

## 4.4 Recommendations approved under TAP

SG15 approved Amendment 1 to Recommendation ITU-T G.9901 as shown in **Annex 27**.

## 4.5 Recommendations approved under AAP

SG15 approved revised Recommendation ITU-T G.9962, consented in September 2022 that was referred back to SG15 for approval as shown in **Annex 28**.

## 4.6 Recommendations determined

SG15 determined one draft revised Recommendation ITU-T G.9964 as shown in **Annex 29**.

## 4.7 Recommendations consented

SG15 consented 22 draft new/revised Recommendations, draft Amendments and draft Corrigenda as shown in **Annex 30**.

## 4.8 Appendices, Implementer’s guides and Supplements agreed

The meeting agreed the 2 non-normative documents listed in **Annex 31**.

## 4.9 Electronic working methods (EWM) Group

The SG15 EWM group, consisting of the one EWM representative from each working party, discussed a number of EWM issues with the aim to enhance the use of electronic working methods. The meeting confirmed that SG15 will continue to promote EWM to achieve more efficient working methods. The EWM report is contained in [TD182/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0182/en).

# 5 Projects and promotion

## 5.1 SG15 Promotion and Coordination

The report from the Promotion and Coordination Group is contained in [TD146R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0146/en). The meeting approved sending the liaison statements contained this report.

## 5.2 Lead Study Group activities on Access Network Transport

The meeting agreed the ANT Standardization Overview (Issue 38) in [TD147/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0147/en) and ANT Standards Work Plan (Issue 36) in <TD148R1/P> ). These are published on the SG15 website at: <https://www.itu.int/en/ITU-T/studygroups/com15/Pages/ant.aspx>.

As well as part of the ITU Standards Landscape database:

<https://www.itu.int/itu-t/landscape/?topic=tx356&group=g&search_text=>

## 5.3 Lead Study Group activities on Home Networking

The meeting agreed the Home Network Transport Standards Work Plan (Issue 15) in [TD149R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0149/en). This is published on the SG15 website at:

<https://www.itu.int/en/ITU-T/studygroups/Pages/sg15-hnt.aspx>.

As well as part of the ITU Standards Landscape database:

<https://www.itu.int/itu-t/landscape/?topic=tx153&group=g&search_text=>

## 5.4 Lead Study Group activities on Optical Technology

The meeting agreed the Optical and other Transport Networks and Technologies Standardization Work Plan (Issue 32), as contained in [TD150/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0150/en). This is published on the SG15 website at:

<https://www.itu.int/en/ITU-T/studygroups/com15/Pages/otn.aspx>.

As well as part of the ITU Standards Landscape database:

<https://www.itu.int/itu-t/landscape/?topic=tx401&group=g&search_text=>

## 5.5 Newcomer mentoring

A newcomer orientation was held over lunch break on 17 April 2023. A copy of the newcomer’s welcome pack can be found in [TD122/G](https://www.itu.int/md/T22-SG15-230417-TD-GEN-0122/en).

# 6 Relationships with other Study Groups and/or organizations

## 6.1 Liaison Statements

**Annex 32** lists the outgoing Liaison Statements agreed at this meeting.

The texts of the 26 outgoing Liaison Statements agreed at this meeting (oLS-44 – oLS-69) are available at: <https://www.itu.int/ifa/t/2022/ls/sg15/>

## 6.2 A.4/A.5 Qualification

There were no new SDOs considered for qualification.

# 7 Future Work

## 7.1 Interim Rapporteur Group and Working Party Meetings

**Annex 33** lists the in-person interim meetings planned to be held before the next meeting of Study Group 15. The Chairman reminded the meeting that each Rapporteur should confirm the final venue to the members at least two months prior to the meeting. According to the working methods defined in [Recommendation ITU-T A.1](http://www.itu.int/rec/T-REC-A.1), meetings will be confirmed at least two months prior to the meeting and a convening letter posted on the SG15 website. Note that the meetings listed in **Annex 33** as “Confirmed” have been confirmed as of the closing plenary of this meeting as they are occurring close to this two-month deadline.

## 7.2 Virtual Meetings

**Annex 34** lists the virtual meetings currently planned to be held before the next meeting of Study Group 15. Note that additional virtual meetings may be planned during the normal course of the work, for example as part of authorized correspondence activities. All virtual meetings will be posted on the SG15 website and, per the guideline in **Annex 19**, will be confirmed at least two weeks before each meeting.

## 7.3 SG15 Networking Events

The Chairman thanked Nokia for hosting the networking reception at this SG15 meeting. It was an appreciated opportunity to network with colleagues. Members are invited to contact the SG15 Chairman, or the SG15 Advisor Hiroshi Ota on hosting a networking event at a future SG15 meeting.

## 7.4 Plenary meeting hosts

The Chairman invited Members to consider hosting a future SG15 plenary meeting as the new ITU building project will result in SG15 not being able to hold meetings in any of the ITU buildings until 2027 or later. The Chairman presented [TD167/G](https://www.itu.int/md/T22-SG15-230417-TD-GEN-0167/en) with typical hosting requirements and the potential future plenary meeting schedule. Additional assistance with hosting guidance is available from TSB.

The management team views that in-person meetings are important to progress the work of SG15.

## 7.5 Future Meeting Dates

The dates of the next SG15 meetings and related events or hosting of related groups are currently proposed as:

* Third SG15 Plenary – 20 November – 1 December 2023 – Geneva CICG – confirmed
* Fourth SG15 Plenary – 1-12 July 2024 (Geneva) – to be confirmed  
   – 1-12 July 2024 (Montreal) – to be confirmed  
  NOTE: while both options are being explored, only one will be confirmed

# 8 Account of resources used and fellowships provided

* Real-time captioning for opening and closing SG plenary sessions: CHF 798.88.
* Three fellowships were provided: CHF 10,640.00.

Annex 1  
Appointment of working party chairmen and vice-chairmen

ITU PP Resolution 208 (Dubai, 2018) includes the following as qualifications for chairmen and vice-chairmen of the Study Group:

* knowledge and experience;
* continuity in participation in the relevant study group or, for chairmen and vice-chairmen of TSAG, in ITU-T;
* managerial skills;
* availability;
* knowledge for standardization related activities.

WTSA Resolution 1 highlights that “Each working party chairman provides technical and administrative leadership and should be recognized as having a role of equal importance to that of a study group vice-chairman.”

As a result, individuals to be appointed for working party chairmen or vice-chairmen should meet the five criteria given in ITU PP Resolution 208Annex 2, and should ideally have served as a Rapporteur or Associate Rapporteur in SG15 as indicated. It is desirable that they provide a letter of support from their organization indicating that they will be given the time, payment of travel expenses, etc., necessary to fulfil the responsibilities of the position for the full study period. Of course, these are not legally enforceable and business conditions may change, but at the time of appointment, there should be a belief that the candidate’s employer will support the individual for the full study period.

A working party chairman or vice-chairman is expected to:

* Be impartial in the performance of their duties (required per WTSA Resolution 1)
* Attend the entirety of every study group plenary meeting of the study period, helping to shepherd the work and assess progress of the work within the working party throughout the meeting, attending management team progress check meetings over the course of the meeting.
* Attend any stand-alone plenary of the given working party.
* Perform the necessary preparation for each plenary meeting, including preparing the workplan for the meeting to be included in the collective letter, negotiating with other working party chairmen as needed to arrange necessary joint meetings of questions across working parties, ensuring that all Rapporteur meeting reports and editor drafts of all candidate texts for consent, determination, agreement or approval are posted in advance of the meeting.
* Chairing the opening and closing working party meetings.
* Preparing the report of the working party to be presented to the study group closing plenary.
* Shortly after each SG or WP plenary meeting, preparing the portion of the executive summary concerning the results of the working party on the study group website.
* Between plenary meetings, the working party chairman is responsible for tracking the progress of the working party documents through the approval procedures, for example, assessing whether LC or AR comments are in-scope or typographical (for AT approvals), ensuring that comment resolution is carried out and texts posted for AR. The working party chairman is also responsible, together with the study group chairman and TSB, for checking, correcting if necessary, and authorizing transmission of liaison statements generated from interim meetings of questions within the working party.
* Between plenary meetings, the working party chairman is responsible for ensuring that: Planned face-to-face interim Rapporteur group meetings are authorized at least two months, in advance to allow time for participants to obtain visas and plan travel and planned virtual interim Rapporteur group meetings are authorized at least two weeks in advance.

A working party vice-chairman should meet the same qualifications as a working party chairman. The working party vice-chairman assists the working party chairman in carrying out the above tasks, and is able to substitute for the working party chairman should the chairman be unavailable.

Candidates for working party chairmen and working party vice-chairmen are chosen by the management team and confirmed by the study group in the first plenary meeting of the study period. The selected candidates can carry out these roles in an acting capacity until the first plenary meeting.

Annex 2  
Working party report structure

## Background

During SG15 plenary meetings, each working party will prepare 5 report files. The TSB allocates TD(PLEN) and TD(WPx) numbers for these report files at least two weeks prior to the meeting to assist WP chairmen with their preparation.

## Guideline

The following files comprise the working party report:

### Main Report

This is the main record of the discussions in the meeting. It should not be a transcript of everything that was said by any party, but rather should record which proposals were considered and what agreements were reached in the meeting. The detailed review (page by page, line by line) of the main report occurs only in the working party to ensure that it is an accurate representation of the agreements reached at the meeting. When the WP chairman presents the main report in the SG plenary, this is generally for information and should focus on the highlights of the results and not the details.

### List of documents for Consent, Determination, Agreement, Approval or Deletion

These are the documents that will be considered by the SG plenary for the appropriate decision. The table should indicate for each text, the TD number where the text can be found, the title, whether it is a new or revised text, and any supplementary documents such as A.5 justifications. It should be verified that A.5 justification documents are generated for every text that has a new reference to a document of an external SDO. The A.5 justification must be posted at least one day before the SG closing plenary meeting.

### Work Programme

This is a list of all of the active work items in the working party, updated to reflect the results and any decisions in the meeting. The work programme table is used to update the work programme database at the conclusion of the meeting. See the companion guideline on work programme details.

Where it is decided to add a new work item to the work programme, the template from Annex A of Recommendation ITU-T A.1 for normative texts or A.13 for non-normative texts should be filled out to document this decision and annexed to the Status of Recommendations table. Any work item that is complete and being put into an approval process should have AAP or TAP indicated. If further work is expected regarding a completed work item, a new row indicating the next expected output (e.g., a future amendment or revision) should be added, as the AAP or TAP row will disappear once the document is approved. Any dates should be adjusted based on progress made. Any result not accomplished by the originally foreseen date should have the date adjusted with the new expected date for completion. The table shouldn’t have any dates in the timing field that are in the past. The location of the base text should be updated as necessary, e.g., from a TD to a pre-published text to a published text. All continuing, new, or updated editor assignments are reflected in the table and are effective as of the acceptance of the document by the plenary.

Items in the work programme should be monitored to ensure they do not appear in the TSB generated “stale work item” report created for TSAG. A stale work item is considered to be any work item which has not had a base text or update in 18 months. At each meeting, the list should be examined not only to ensure that none of the current work items are stale, but to identify any work items that will become stale by the time of the following plenary meeting if no action is taken in the current meeting to update the work item.

### Liaison Statements

The document should contain all liaisons statements generated during the meeting. The correct template should be used for all liaison statements. All liaison statements should indicate whether they are for action, or for information. All liaison statements for action should include a deadline for a reply. The document should normally contain a liaison tracking table that associates incoming liaison statements with the replies generated, and makes clear which liaison statements are generated spontaneously.

### Interim Meetings

This should list all interim meetings of questions and any proposed standalone working party meetings envisioned between this meeting and up to two months following the next full study group plenary meeting. All meetings should indicate, as far as possible, the proposed dates, locations, hosts, and terms of reference. Due to the new provisions of Recommendation ITU-T A.1 clauses 2.3.3.10, 2.3.3.11, any meetings which are close to the 2-month deadline for confirmation and issuing a convening letter may request confirmation of the meeting directly from the plenary. The WP report should indicate the level of support for holding the meeting, for example, how many delegates from the current meeting indicated that they would attend the interim meeting and how many intend to bring contributions. When TSB provides a template for the convening letter, the convening letters for all meetings to be confirmed directly from the plenary meeting should be annexed to the Interim Meetings document.

Annex 3  
Standalone working party meetings

## Background

There are two ways that an interim WP can be organized. The preferred method is to hold a WP meeting in conjunction with its associated rapporteur groups. Another method is for the WP to meet stand-alone, i.e. with no rapporteur group meetings.

Stand-alone WP meetings are possible, in or outside Geneva. The decision to hold such meetings should be carefully considered, taking into account a number of factors outlined below.

Stand-alone WP meetings follow the same rules as SG meetings, i.e.

* they are called by TSB Collective letter 2 months prior to the meeting
* contributions must be submitted with the corresponding 12-day deadlines (although short, standalone WP meetings do not normally expect to deal with contributions)
* TDs will be numbered
* Results will be documented in the COM 15-R series of reports
* TSB staff must be present (minimum the SG counsellor or advisor) at the expense of the host

Taking the above into account, it is obvious that such WP meetings should only be called if warranted by the importance and urgency of related work.

Some SGs have held ½ day WP or even SG meetings for the sole purpose to ‘consent’ or ‘determine’ one or more draft Recommendations or other texts.

This practice has received some unfavorable comments in TSAG, although not officially recorded. The main complaint is that those not necessarily participating in the individual Rapporteur Group activities nevertheless want to have a say when it comes to ‘consent’, and are not willing or able to travel ‘around the world’ just for a ½ day WP meeting for the purpose of ‘consent’.

With this background in mind, the following is for guidance in deciding on the need and practicality of stand-alone WP meetings of SG 15.

## Guidelines

* Stand-alone WP meetings should only be scheduled when absolutely necessary to advance important work on an urgent basis
* Must be sure that draft texts for consent will be mature and complete
* Proposal/decision to hold stand-alone WP meeting should have active support by WP members
* Stand-alone WP meeting host should be prepared to absorb cost for participation of TSB staff (Airfare, hotel, expenses) in line with corresponding ITU-T rules
* Participation in stand-alone WP meeting should be reasonably representative of member organizations normally attending SG meetings in order to make the IPR inquiry on texts for ‘consent’ meaningful

Annex 4  
Appointment and role of Rapporteurs and Associate Rapporteurs

## Background

The responsibilities of Rapporteurs are described in A.1 clause 2.3.

A manual for Rapporteurs and Editors is available at: https://handle.itu.int/11.1002/plink/4329501768.

While the procedures permit the assignment of Rapporteurs for activities that may endure less than the full study period, the organization of Study Group 15 is such that the “horizontal” responsibilities of questions endure and are applicable even as the vertical work areas evolve. For example, the shift from SDH to OTN standardization did not result in any change in the question structure representing interfaces, equipment, element management, etc. So the normal expectations are that Study Group 15 questions are long-term groups, and appointments of leadership are generally expected to be similarly long-term (for the full study period).

## Guidelines

Rapporteurs and Associate Rapporteurs are expected to:

* be impartial in the performance of their duties (required per WTSA Resolution 1)
* be technical experts in the area of study of a question
* have the managerial skills required to lead the group through the development of any necessary Recommendation text

Across the study group, Rapporteurs and Associate Rapporteurs should be selected based on the expertise required and giving as much balance as possible geographically, across segments of the industry (e.g., network operators, equipment vendors, component vendors), and across companies within the industry .

Rapporteurs and Associate Rapporteurs are expected to attend every study group plenary meeting and standalone working party meeting for the working party of which their question is a part, and to attend and chair all interim meetings agreed for the question. They should plan to be present through the closing plenary session, particularly when any text from their question might be considered for agreement, consent, determination or approval in case any question should arise regarding that text, and not simply plan to be present for the part of the meeting they expect to chair.

Since being a Rapporteur can represent a considerable commitment of time, travel, etc., Rapporteurs are invited to provide a support letter from their employer.

From A.1 clause 2.3.3.3, “An associate rapporteur assists the rapporteur, either in general or to deal with a particular point or area of study in a Question”. In general, at most one associate Rapporteur is appropriate, unless the question is large and complex with distinct areas of work that need to be managed. Associate Rapporteurs are expected to have similar skills as described for Rapporteurs above. Being an associate rapporteur is a commitment to do work, and not just an honorary title.

In the case of a temporary absence or resignation of a rapporteur, an associate rapporteur is expected to be able and willing to take over for the rapporteur. The Rapporteur or the WP chair will indicate when the Associate Rapporteur will act in the role of Rapporteur. Therefore, associate rapporteurs are also invited to provide a support letter from their employer.

A.1 clause 2.3.3.3 indicates “Where the work so requires, a rapporteur may propose the appointment of … editors …”. While editors may be appointed to assist the rapporteur in the preparation of texts, rapporteurs have ultimate responsibility for the quality of texts that are produced by the question. A Recommendation without an explicitly assigned editor is not a vacancy, but a case where the Rapporteur has elected to retain sole responsibility for the text. A Rapporteur is never compelled to appoint an editor for a document. Editors should be appointed based on the rapporteur determining that there is a need for assistance in preparing the text. An appointed editor should have the required technical expertise in the subject matter and the required managerial skills and impartiality to complete the task. Submitting contributions on a topic does not create an entitlement to be named an editor for any associated work items.. As a general rule, the number of editors assigned to the Recommendation should be zero (the Rapporteur retains sole responsibility for the text) or one. There may be exceptional cases requiring two editors: for example, where the primary editor who is the technical expert lacks the English language skills to perform the task unassisted.

An editor assignment may be removed, or a new editor may be assigned, before the completion of a work item: typically, this might occur if the editor does not have sufficient time or continued support to attend meetings, or if the Rapporteur is dissatisfied with the quality or timeliness of the Editor’s work.

Referring to TD127(GEN)(2009-2012) (liaison guidance from TSAG):

In an ITU-T meeting on a Question and before a draft Recommendation is proposed for approval, consent or determination, the Rapporteur should ensure that all of the bullet points of the check list have been reviewed and that they have been fulfilled adequately. This should also be reflected in the report of the Question.

Draft <title of the draft>, which is proposed for approval, consent or determination:

* has been thoroughly reviewed for technical accuracy
* is technically soundwith as few options as feasible
* has content that does not conflict with the content of an already approved Recommendation
* does not contain case studies within the normative part
* only short illustrative examples, if necessary, have been included in the normative part
* follows the author’s guidelines (including the use of the ITU-T template)
* has been spell-checked and is grammatically correct, to the extent practicable
* contains definitions that have been developed after consulting the ITU-T terms and definitions database and following standardization committee for vocabulary (SCV) guidance
* has all acronyms, including those in the figures and tables correctly spelled out
* has the normative part making use of all references in clause 2
* has all references in clause 2 (references) compliant with Recommendation ITU-T A.5

The Rapporteur should also ensure that

* the conditions for the desired approval procedure are satisfied (refer to the rules given in WTSA Resolution 1, section 8)
* coordination with other relevant study groups, ITU sectors and/or relevant recognized external SDOs has been adequately achieved.

Note that assistance is available from TSB for pre-editing prior to initiating an approval process for a Recommendation as a supplement for English language skills of Rapporteurs or Editors, or to accelerate the publication process after approval.

Note that it is the responsibility of Rapporteurs to liaise with other groups as appropriate (A.1 clause 2.3.2).

Rapporteurs are selected by the management team and approved by the study group. Rapporteurs from the previous period may, with the permission of the chairman, continue their responsibilities up until the first plenary meeting of the new study period (A.1 clause 2.3.3.2).

Associate Rapporteurs are proposed by the Rapporteur in consultation with the management team and approved by the study group. A.1 clause 2.3.3.3 indicates “Where the work so requires, a rapporteur may propose the appointment of one or more associate rapporteurs …”. A question without an assigned Associate Rapporteur is not a vacancy, but is a case where in the Rapporteur’s judgment, there is no need to propose an appointment of an Associate Rapporteur, or they have no suitable candidate to propose. A Rapporteur should never feel pressure to propose someone they feel is unsuitable (e.g., someone who lacks the knowledge, managerial skills, or impartiality to do the job properly) as an Associate Rapporteur.

Annex 5  
Organization of Rapporteur group meetings

## Guidelines

## Planning and Confirmation of Rapporteur Group meetings

At each study group or working plenary meeting, each question should consider the need for interim Rapporteur group meetings from the time of the plenary meeting until at least two months beyond the next plenary meeting, covering the interval of possible future meetings that would need to be confirmed before the time of the next plenary meeting. Dates, locations, and hosts should be identified as far as possible.

Planned Rapporteur group meetings will be displayed on the study group web page. Each meeting will be displayed as “proposed” or “confirmed”. Proposed meetings are those which have been planned, generally at a preceding plenary meeting, usually with identified dates, location and host, and those that are confirmed are those where sufficient participation has been verified (attendance and sufficient numbers of contribution) and the meeting is approved by the SG and WP chairman. This may be done by an email poll (as generally been done in the past), but where a meeting is sufficiently close to the 2-month window after the plenary, it can also be confirmed directly at the plenary meeting where it is planned. The Rapporteur can gather information at the plenary about expected participation (number of attendees and expected contributions), for example, through a show-of-hands during the meeting.

In exceptional circumstances, it may be necessary to schedule an interim meeting that was not foreseen at the previous plenary meeting. This must be confirmed, in consultation with the WP and SG chairman, at least two months prior to the meeting. Date and location changes for planned interim meetings must also be confirmed two months before the meeting is to be held.

When a meeting is shown as “confirmed” on the web site, a link will be provided to the convening letter for the meeting.

## Input documents to Rapporteur Group meetings

Since Rapporteur meetings are by definition informal meetings, the contribution process is less formalized. Contributions are not submitted through DMS for Rapporteur group meetings, but are posted in the informal FTP area or in the Rapporteur group meeting sharepoint site. The provisions of A.1 concerning contributions to plenary meetings (e.g., free of restrictions) also apply to contributions to interim Rapporteur group meetings. The meeting should also consider any liaison statements that have been received since the last plenary meeting (generally posted as TDs for the next plenary meeting), and any contributions to the previous plenary meeting that the meeting did not have time to consider, are within the terms of reference for the meeting, and the Rapporteur agrees to put on the agenda. All input documents which are not in DMS must be uploaded to the informal FTP area in a folder specific for the meeting, or on the Rapporteur group meeting sharepoint site. The Rapporteur will establish a deadline for contributions to the Rapporteur group meeting (normally one week prior to the start of the meeting). Documents submitted after this deadline should not normally be considered unless the Rapporteur decides to accept the document and the meeting agrees to consider it.

## Output documents from Rapporteur Group meetings

The output documentation normally includes the meeting report, outgoing liaison statements, and draft Recommendation text (possibly intended for consent at future meetings). Any outgoing liaison statements must be annexed to the meeting report. TSB will be asked to post the meeting report as a TD for the next working party or study group plenary and to transmit any generated liaison statements. Liaison statements generated from rapporteur group meetings within ITU or ISO/IEC can be transmitted on authority of the Rapporteur. Liaison statements transmitted outside, per A.4 or A.6 clause 2.2.1, require permission of the working party and study group chairman. Editor drafts of text for agreement, consent or determination at a subsequent plenary meeting are also sent to TSB for posting as TDs.

All output documents should be posted in the meeting folder in the informal FTP area or on the Rapporteur group meeting sharepoint site. Once all meeting documentation is complete (as soon as possible after the conclusion of the meeting), TSB should be informed so that they can write-lock the folder to archive the record of where proposals came from that may be included in draft recommendation text.

Meeting reports should be posted for the next plenary meeting as soon as possible after the meeting. The deadlines of A.1 clause 3.3.3 should be observed. For Rapporteur group meetings that do not coincide with a stand-alone working party plenary meeting, the meeting report should normally be submitted to TSB for posting no later than the contribution deadline for the meeting. In the case of a co-located WP plenary meeting, the meeting report should be posted prior to the start of the WP plenary meeting.

Annex 6  
IPR inquiries

## Background

The common patent policy for ITU-T/ITU-R/ISO/IEC can be found at:

<http://www.itu.int/ITU-T/ipr>

The guidelines for implementation can be found at:

<http://www.itu.int/oth/T0404000001/en>

Recommendation ITU-T A.1 indicates:

**1.4.6** Chairmen will ask, during each meeting, whether anyone has knowledge of patents or software copyrights, the use of which may be required to implement the Recommendation being considered. The fact that the question was asked shall be recorded in the working party or study group meeting report, along with any affirmative responses.

Also, in clause 2.3.3.12:

Rapporteurs will ask, during each meeting, whether anyone has knowledge of patents or software copyrights, the use of which may be required to implement the Recommendation being considered. The fact that the question was asked shall be recorded in the meeting report, along with any affirmative responses.

There has been fairly uneven application of this practice, especially within Rapporteur group meetings.

All IPR declarations that have been received by TSB (patents and software copyright) are available online in the searchable patent database:

<http://www.itu.int/ipr/IPRSearch.aspx?iprtype=PS>

and software copyright database:

<http://www.itu.int/ipr/IPRSearch.aspx?iprtype=SW>

## Guideline

Since already declared IPR can be located easily online, it is not necessary to ask about it. The question that should be asked, both in WP and SG closing plenaries and stand-alone Rapporteur group meetings is “Does anyone have knowledge of patents or software copyrights, the use of which may be required to implement the Recommendation(s) being considered, which have not already been recorded in the IPR database?” The only responsibility of the chairman or Rapporteur is to ask the question and to record any affirmative responses in the meeting report. TSB should be notified of affirmative responses in a standalone Rapporteur group meeting to allow followup regarding written declarations.

Furthermore, in a SG or WP plenary where texts are being put for consent or determination, the chairman will also ask TSB whether they have received any declarations of potentially essential IPR that would prevent establishment of a standard (i.e., clause 2.3, IPR that the holder is unwilling to license).

For the delegates, responding verbally to the IPR inquiry in a meeting does not absolve them of the responsibility to submit IPR declarations in writing to TSB for IPR they are aware of that is held by themselves or the entity that they represent. It is up to each delegate or organization to determine, based on the advice of their own legal counsel, when the right time is to make a verbal or written declaration.

The chairman or Rapporteur can respond to any questions from delegates by referring them to the policy, reminding them that a verbal declaration does not remove the responsibility to also submit a written declaration, and advising them to consult with their own legal counsel. The chairman or Rapporteur should avoid responding with anything that could be construed as legal advice. It is not the place of the chairman or Rapporteur to warn of consequences of not following the policy or to make judgments about whether the policy has been followed.

Annex 7  
Work Programme details

## Background

The work programme is updated continuously, particularly following each SG or WP plenary meeting based on the content of the “Work Programme updates” table prepared at the meeting. This describes a consistent practice for how SG15 manages the work programme database and prepares status of Recommendations tables.

Updates to the work programme database may also occur based on input provided to TSB after interim meetings and correspondence activities, or in the case of obvious errors, directly from a Rapporteur or WP Chairman. Work programme update requests should be sent to [tsbsg15@itu.int](mailto:tsbsg15@itu.int), Cc’ing the Rapporteur and/or WP Chairman, respectively. Typical updates include:

* correction of obvious errors;
* updates to fields:
  + Editor(s);
  + base text;
  + timing;
  + summary, etc;
* allocation of Recommendation number;
* creation/deletion of work items.

NOTE - Rapporteur and/or WP Chairman approval is required for any significant changes, and in all cases the request should be recorded.

**Fields appearing in the default search of the work programme database**

**Work Item**

This field contains the number that has been assigned to the Recommendation, or the amendment that is currently under study. The provisional name should be inserted if number has not yet been assigned to the Recommendation, this provisional name should be retained (e.g. as G.9999 (ex G.yyy)) until the first version of the Recommendation is approved.

**Status**

All active work items have a status of “Under Study”. When the work item enters the approval process the status is changed to “Consented/Determined” or “Approved” as appropriate. When the approval process for a work item has been completed the status is automatically changed to “Approved” and this work item will no longer be visible by default in the work programme data base.

If a Question intends to continue work on the Recommendation, at the SG meeting when the current version is submitted to the approval process a new work item should be created indicating the intended target document (e.g. revision, amendment).

**Approval Process**

The value inserted in the table is the proposal from the responsible question. The valid options are Agreement, AAP or TAP. The default for SG 15 Recommendation is AAP. The value shown in the data base will be set by TSB once a work item enters the approval process.

**Timing**

This field shows either the best current view of the SG/WP meeting at which we expect to initiate the approval process, or the date of the SG/WP meeting that initiated the approval process.

This should be shown as a 4-digit year and optionally a 2-digit month. If the specific meeting is known the month of the SG/WP closing plenary session should be inserted. If the expected date is unclear TBD (to be defined) should be inserted.

Dates for “under study” items should not be in the past. For a Recommendation that has entered the approval process but has not yet been approved this entry will continue to show the date that the approval process was initiated (which will be in the past).

**Question**

Mandatory, Qx/15

**Base Text(s)**

This field provides link(s) to the current base text(s).

If a Recommendation has one or more in-force component, the words “In Force” with a hyperlink to the page with all of the in-force components are inserted in this field.

For a new Recommendation that is under study, the Base Text(s) field will contain the number of the TD[[1]](#footnote-1) that contains the latest draft text.

For an under-study item with one or more in-force components, the field will contain both “In Force” and the TD[[2]](#footnote-2) number of the latest draft text under development.

The Work Programme Updates table at the meeting which consents or determines a revision, amendment or corrigendum to a Recommendation will show only the TD/PLEN as this is intended to supersede all other texts.

**Subject/Title**

Mandatory, must show the exact title of the in force Recommendation or the exact title of the text submitted to the approval process.

**Editor(s)**

Identifies any editor(s) that have been appointed to assist the Rapporteur to prepare the text for agreement/consent/determination. If the field is empty, the Rapporteur is responsible for the text.

At every SG meeting, the editors listed in the Work Programme are reviewed and if necessary updated. The appointment of editors takes place at the closing SG plenary as part of the approval of the Work Programme.

Brief descriptions of all fields in the work programme database are given below.

**Descriptions of work programme fields**

|  |  |
| --- | --- |
| **Field\_header** | **Field\_description** |
| Work item | Short name identifying a (draft or approved) Recommendation or other text. It may be a provisional name or the final publication designation (e.g. H.264) |
| Prov. Name | Pre-approval (provisional) designation of a work item |
| Question | Number of the Question responsible for the development of a work item |
| Equiv. Num. | If any, designation of the equivalent document as published by another standards development organization (e.g., for Common texts with ISO/IEC JTC1) |
| Status | Current Approval state of a work item |
| Timing | Best current estimate of the expected year and month of Determination (TAP), Consent (AAP), or Agreement (non-normative materials) of a work item |
| Approval process | One of: Traditional Approval Process (TAP); Alternative Approval Process (AAP); or Agreement |
| Version | Indication of whether a work item is new or revised |
| Liaison relationship | List of groups/organizations coordinating work on a topic |
| Subject / Title | Best current expectation of the full name of a work item |
| Base text(s) | Previous published version of a work item and/or its latest draft. It may also include reference to A.5 justification documentation. |
| Editor(s) | Person(s) responsible for coordinating development of a work item |
| Study group | Study group responsible for developing a work item |
| Study period | The four-year period between World Telecommunication Standardization Assemblies (for administrative purposes only) |
| Priority | One of: Low; Medium; or High |
| Pages | Number of pages in the work item |
| WSIS action lines | World Summit on the Information Society (WSIS) objective(s) associated with a work item. For SG15 this is usually “Information and communication infrastructure”, see: https://www.itu.int/net/wsis/implementation/ |
| Approval date | Date when a work item was Approved (TAP Decision, AAP Approval, or agreement for non-normative material) |
| Consent/Determ. date | Date when a work item started the approval process (AAP Consent or TAP Determination) |
| Type of common text | For joint texts with ISO/IEC JTC1, one of: Common; or Twin (see ITU-T A.23 Annex A) |
| Summary | Summary of a work item as described in its latest base text |
| Comment | Note regarding the development of a work item |
| Subsidiary Questions | Question(s) in the same study group as the main Question that are actively assisting in the development of a work item |
| First registration in the WP | Date of first registration of a work item into the Work Programme database |
| Type of text | One of: Recommendation (including amendment/corrigenda); Supplement; Resolution; Handbook; Implementer's Guide; Directives; Technical papers and tutorials; or Other |
| Supporting organizations | List of ITU-T members that committed at the work item creation meeting to contributing actively |

Annex 8  
Liaison Rapporteur responsibilities

## Background

Recommendation ITU-T A.1:

**2.3.3.3** Where the work so requires, a rapporteur may propose the appointment of one or more associate rapporteurs, liaison rapporteurs or editors, whose appointments should then be endorsed by the relevant working party (or study group). Again these appointments may be made or terminated at any time in accordance with the work requirements. An associate rapporteur assists the rapporteur, either in general or to deal with a particular point or area of study in a Question. A liaison rapporteur assists the rapporteur by ensuring there is effective liaison with other groups, by attending meetings of other designated groups to advise and assist in an official capacity, by correspondence with such groups or by any other means considered appropriate by the rapporteur. In the event that a liaison rapporteur is not appointed, the responsibility to ensure effective liaison resides with the rapporteur.

WTSA Resolution 31:

an Associate may serve as rapporteur, responsible for directing the studies for the relevant study Question within the selected study group, except for taking part in any decision-making or liaison activities which are to be handled separately, in accordance with No. 248B of the Convention;

Academia is a category of membership is covered by PP Resolution 169. While there is nothing specific with regard to academia with respect to liaison activities, it would be reasonable to assume by extension of the coupling of liaison activities with decision making that neither associates nor academia may serve as liaison Rapporteurs.

## Guideline

Liaison Rapporteurs are normally proposed by a Rapporteur (or group of Rapporteurs or the management team, in the case of work that spans the responsibility of more than one question) and confirmed by the Study Group. Liaison Rapporteurs to other groups should normally be selected to be individuals who normally attend and are engaged in the work of both groups. They must represent a sector member or member state (not associates or academia). The Liaison Rapporteur is authorized to represent and explain any liaison statement that is sent to the other group and the other group’s meeting, and should be prepared to represent and explain any liaison statement sent from the other group to Study Group 15. In addition, the liaison Rapporteur should prepare, at a minimum for every plenary meeting of SG15, but also where appropriate to Rapporteur group meetings and stand-alone WP plenary meetings, a report of activities in the other group that Study Group 15 participants may be interested in. Liaison Rapporteur reports are normally posted as TD(GEN).

Annex 9  
Editor assignments and responsibilities

## Background

A.1 clause 2.3.3.3 indicates “Where the work so requires, a rapporteur may propose the appointment of one or more associate rapporteurs, liaison rapporteurs or editors, whose appointments should then be endorsed by the relevant working party (or study group).”, and further on, “The editor assists the rapporteur in the preparation of the text of draft Recommendations or other publications.”

## Guidelines

The Rapporteur is responsible for the quality of the text, and for shepherding the text through the Recommendation approval process whether or not there is an editor assigned.

Editors are only appointed when the Rapporteur requires assistance. The appointment of an editor does not remove from the Rapporteur the responsibility for ensuring the quality of the Recommendation or conducting the AAP processes.

The Rapporteur is the editor for all texts under responsibility of the question that do not have an explicitly appointed editor identified in the work programme. A Recommendation without an editor is not a vacancy, but a case where the Rapporteur has elected to retain sole responsibility for the text.

An editor is not an “honorary” position, but a commitment to do work.

Editors are proposed by the Rapporteur and confirmed by the working party or study group plenary. The complete list of editor assignments is confirmed en bloc through the acceptance of the Work Programme table which includes the editor assigned for each active work item. When a new work item is added to the work programme, the template from A.1 Annex A for Recommendations, or A.13 Annex A for non-normative texts, will identify any proposed editor. An editor assignment applies to a particular work item. There is no requirement to appoint the same editor (or any editor at all) for a subsequent amendment or revision.

The following guidelines apply both to explicitly assigned editors, and a Rapporteur when performing the editor role.

An editor is not an “author”. ITU-T publications are consensus products of the group, and not documents produced by an individual author.

The editor has the responsibility to incorporate text into the document based on documented agreements from plenary and rapporteur group meetings as well as carrying out any editing instructions in the reports of those meetings. The Rapporteur is responsible for clearly recording the consensus reached concerning proposals for each draft text in meeting reports so that it is clear what text the editor has been authorized to add to a draft. Draft text should only include the elements on which consensus has been reached and recorded in a meeting report.

The editor may (and should) do “editorial” things, including formatting and arranging the text according to the author’s guide, filling in and updating references, and inserting editor’s notes to help participants identify missing material and areas where contributions are needed to complete the document. New technical content from any source should never appear first in an editor draft without consideration of a proposal (e.g., from an interim or plenary meeting contribution or correspondence contribution/input) and documented agreement (in the meeting report or correspondence report). The editor may also be a technical contributor to the work, but the editor “hat” must always be kept distinct. The editor should never insert new text into the draft directly. Any proposed new content should be submitted as a contribution, from their company.

Draft text of documents expected for agreement, consent, or determination should normally be submitted to TSB for posting as TDs by the editor no later than the contribution deadline of the meeting at which it is to be considered. Text for approval may need to adhere to other deadlines depending on the approval process. In the case of stand-alone working party plenary meetings, text expected for consent, determination or agreement at the working party meeting should be submitted by the editor to TSB for posting as TDs no later than the contribution deadline for the meeting. While it is understood that the text will likely be updated as a result of contributions to a co-located interim meeting, this is in principle no different from the fact that text approved at a full study group plenary may also evolve based on contributions to the meeting, and a revision of the TD will be posted incorporating any agreed changes.

Note that assistance is available from TSB for pre-editing prior to initiating an approval process as a supplement for English language skills of Rapporteurs or Editors, or to accelerate the publication process after approval.

Annex 10  
Correspondence activities

## Background

A.1 indicates:

**1.6 Correspondence activities**

A correspondence activity on a particular topic may be authorized to be conducted via e-mail between meetings. Each correspondence activity should have specified terms of reference. A convener is appointed to moderate the e-mail discussion and prepare a report to a subsequent meeting. A correspondence activity should normally conclude no later than the contribution deadline of the meeting to which it is expected to report (see also clause 2.3.3.5).

**2.3.3.5** As a general principle, work by correspondence (including electronic messaging and telephone communications) is preferred (see also clause 1.6) and the number of meetings should be kept to a strict minimum, consistent with the scale and milestones agreed by the parent group. Where possible, meetings in related areas of study or within a work area covered by a JCA should be coordinated. In any case, this work should proceed in a continuous fashion between meetings of the parent group.

## Guideline

In order to advance work between interim and plenary meetings, the rapporteur may propose correspondence activities. Correspondence activities are authorized at an interim or plenary meeting, to be conducted prior to a future meeting that will address the same topic. The report of the meeting that authorizes a correspondence activity should include the terms of reference for that activity, the name of the convener, the email reflector on which the discussion is to take place, and the concluding date for the correspondence. While the concluding date should be no later than the contribution deadline for the next meeting, for active discussions or controversial topics, consideration should be given to establishing an earlier concluding date for the correspondence so that the report can be considered by those preparing contributions into the next meeting.

In the case that the correspondence content is fully in email messages on an ITU-T reflector (normally the question email reflector), it is straightforward for the report to link to the messages in the email archive. In the case where input documents (correspondence documents) are submitted to the correspondence, the same practice should be followed as for Rapporteur group meetings: a dedicated folder should be created in the IFA to contain all of the files submitted to the correspondence, and when the correspondence is complete, the TSB should be asked to write-lock the folder to preserve the record of proposals made into the correspondence.

Any new technical content in a draft Recommendation that arises from the correspondence activity should be traceable to the proposal that it came from: the email or correspondence document that made the proposal should be linked in the correspondence report, as well as documenting the agreements for proposals that are accepted.

Annex 11  
Living Lists

## Background

A number of questions in SG15 maintain “living lists”, which is not a term defined in A.1 nor something for which there are any prescribed procedures. Living lists are used to capture discussion about items under study where agreement has not yet been reached about selection of solutions.

Living lists can be maintained at several levels: for a specific Recommendation, for a topic area, or for a question (e.g., proposed new work items under consideration where there is no agreement yet to develop a Recommendation).

## Guideline

Living lists should generally be a set of study items (questions that need to be answered or problems that need to be solved) and not just a compilation of proposals. There is little value to refining competing proposals independently as different living list items.

A living list for a Recommendation is generally maintained by the editor. A living list for a question is generally maintained by the Rapporteur. A living list for a topic area (which may span multiple questions) will have someone appointed to maintain the living list by the Rapporteur or the set of involved Rapporteurs.

The most recent version of a living list should be posted in the IFA or question sharepoint. Living lists may be posted as TDs.

Living lists should include a set of maintenance procedures: e.g., criteria for; adding a study point; adding text to an existing study point; removing inactive items after some number of meetings not receiving contributions; removing items once a solution is agreed and included in draft Recommendation text.

The text of a study point should be developed in three distinct phases:

1 Provide a concise description of the issue or problem to be solved, this should include references to any other relevant study points.

2 Exploration of potential solutions, if multiple study points are interdependent, this may include developing working assumptions or strawman proposals to allow work on all study points to advance.   
If no solution can be agreed for example because no contributions are received to advance work on the study point, the study point should be closed.

3 - Develop initial draft Recommendation text (Only after a solution is agreed). That text should be reviewed and refined to the level where sufficient agreement is reached that the text can be included in a draft Recommendation. After the text is included in a draft Recommendation the study point should be closed.  
In the case of a question or topic level living list, a study point with an agreed solution may be moved to a Recommendation living list before any draft Recommendation text is developed.

Living lists should not generally be used as “killing lists”, i.e., as a place to park an unagreed proposal from a persistent contributor who is demanding something be done with their contribution. A rapporteur or chairman should normally be able to describe when a contribution has no support in their meeting report.

Note that a living list is different from the “Issue List” maintained by Q3 and Q4.

Annex 12  
Non-normative texts

## Background

As described in ITU‑T Recommendation A.13 ITU-T agrees and publishes a number of types of non-normative texts. Some document types are covered by procedures described in A‑series Recommendations, while others are governed by established practice.

## Guidelines

Non-normative texts are not “approved” in the sense of WTSA Resolution 1 or Recommendation A.8 procedures, but are “agreed” in a one-step process by members present at a plenary meeting without the need for member state consultation or a “last call” process.

The work on a non-normative text has two distinct phases:

* **Decision to Initiate a Work Item**: Recommendation A.13 process for deciding to start new work and add new work items to the work programme, documenting that decision using the template in A.13/Annex A. This is the opportunity to debate whether to do the work and to identify the relationship of the work to that in other study groups or other standards bodies, which is called out in the template.
* **Development of Draft Text:** Once the work has been initiated and added to the work programme, the process of developing text through consideration of proposals contained in written contributions is the opportunity to debate the solution chosen for the given problem.

An Appendix, when put for approval together with a base Recommendation (containing both normative and non-normative content) will follow the same Resolution 1 (TAP) or A.8 (AAP) approval procedures as the base Recommendation. A new or revised Appendix may also be agreed separately from the base Recommendation. Recommendation A.1 clause 1.8.2.3 indicates:

NOTE 1 – An appendix is not considered to be an integral part of the Recommendation and thus it does not require the same approval procedures as Recommendations; agreement by the study group is sufficient.

Note that according to this language, an Appendix separate from its base Recommendation can be agreed only at a Study Group plenary and not at a Working Party plenary.

An implementer’s guide is also agreed, but A.13 clause 3.2.1 indicates:

NOTE – An implementers' guide is issued by ITU-T following agreement by a study group, or following agreement by a working party with concurrence of the study group chairman.

So an implementer’s guide could be agreed at either a Study Group or Working Party plenary meeting with the concurrence of the Study Group chairman.

Supplements are governed by Recommendation A.13 which indicates:

**6.2** Non-normative documents require agreement by the study group or TSAG (in the case of a document developed by TSAG), but they do not require approval according to [b-WTSA Res. 1] or [b-ITU-T A.8] procedures.

According to this wording, agreement to a new or revised supplement can occur only at a Study Group plenary and not at a Working Party plenary.

A variety of other publication types exist, including documents like Handbooks, Manuals, Technical Papers, Technical Reports and Tutorials. Among them, Handbooks and Technical Papers are indicated as being “Work Items”, and therefore should appear in the Work Programme database along with all normative work items (Recommendations and their amendments and corrigenda). Per Recommendation A.13 clause 8.1: “The decision to add a new work item for a non-normative ITU-T publication (see clause 6) to the work programme of a study group (or TSAG) should be documented in the report of the meeting using the template in Annex A.”. Therefore, this template should be used to start work on Handbooks and Technical Papers.

Agreement for all non-normative texts can only be reached in a Study Group plenary and not in a Working Party plenary.

Annex 13  
Document Development Lifecycle

## Background

This describes the steps in the development of a Recommendation or a non-normative text.

## Guidelines

Development of Recommendations generally consists of three steps: initiation of work, development of draft text, and approval of the document.

## Initiation of Work

Work items under study are described in the work programme database. The decision to begin a new work item for the development of a new Recommendation or an amendment, corrigendum, or revision to an existing Recommendation (and to add it to the work programme database) is made by consensus, and the agreed scope of work to be undertaken is documented by filling out the template in Recommendation ITU‑T A.1 Annex A. The decision to add a new work item for the development of a new non-normative document or revision to an existing non‑normative text such as a Supplement (and to add it to the work programme database) is made by consensus, and is documented by filling out the template in Recommendation ITU-T A.13 Annex A. As described in the companion guideline on Scope of Work, the proposed new work item must be within the scope of SG15 and, to minimize the need for cross-Question coordination, should be within the scope of the question that creates the work item.

Given the broad participation in Study Group 15, we require that at least four entities from among the membership (Member States, Sector Members, Associates, or Academia) support a new work item, Note that “support” in this context means that these are members committing to do work (e.g., provide contributions, editor, etc.) to complete the work item, and this provides assurance that we don’t have work items “on the books” that do not progress due to lack of contributions. Discussion of elements to be documented in this template provides the opportunity to identify other related standards and other related standards organizations who should be engaged when proceeding with the work. Where liaison relationships are identified in filling out the template, it may be appropriate to send a liaison statement to the identified standards organization(s) informing them of the new work that has been started.

Article 17 of the ITU Constitution indicates that the function of ITU-T “shall be, bearing in mind the particular concerns of the developing countries, to fulfil the purposes of the Union relating to telecommunication standardization, as stated in Article 1 of this Constitution, by studying technical, operating and tariff questions and adopting recommendations on them with a view to standardizing telecommunications on a worldwide basis.” Members should keep this in mind when submitting proposals for new work items and when assessing whether proposed new work items should be added to the work programme.

**Development of Draft Text**

Once it has been agreed to start a new work item, the responsible question will proceed to consider and adopt proposals to develop text for the Recommendation or non-normative document.

From Recommendation ITU-T A.1:

**2.3.3.9** Rapporteurs should normally base any draft new or substantially revised Recommendations on written contribution(s) from ITU-T members.

In general, any new technical provision in draft Recommendation text, or information contained in a non-normative document, should result from a proposal made in a written contribution. It could be a formal contribution to a question during a Study Group plenary, an informal contribution into a Rapporteur group meeting, or a submission to an authorized correspondence activity. Proposals for content of a Recommendation must be within the scope of the work item as described in the companion guideline on Scope of Work.

The meeting report or the correspondence report contains a record of the contributions that were discussed and which proposals were agreed for incorporation into the draft text. Note that while an agreed proposal may come directly from a contribution, it may also be a proposal from a contribution with modifications arising from discussion in the meeting, or may be a proposal resulting from the discussion of one or more input contributions. In any of these cases, the agreement to incorporate the proposal and the origin of the text should be clear from the meeting report.

In general, when items (e.g. sub-clauses) that are identified as “for further study” should not be included in the text that is submitted to the agreement or approval process. It is usually more appropriate to document such outstanding items elsewhere (e.g. on a living list).

When developing an amendment or revision for an approved document that includes items that are “for further study” the Question should normally remove any “for further study” items before the text is submitted for approval.

During development of the text for the work item, the entry in the work programme database for the work item should be updated at each SG or WP plenary meeting with any updates to the title, projected completion date, or exceptionally scope (documented in an update to the A.1 or A.13 template). Updates can also occur from an interim meeting when title, or projected completion date change, but this doesn’t have the same sense of “reaffirming” the plan for work items not modified as when this is done at a plenary. The projected completion date represents a “current working view” and not a committed delivery date. The work of ITU-T is contribution-driven, a Rapporteur should not submit incomplete or immature text into the approval process in order to meet a date if the contributions have not materialized that allow the work to be completed. When a projected date is missed, a more realistic projected completion date should be inserted when the work programme database is updated at the next SG or WP plenary.

**Removal of a Work Item**

If a date is moved too many times without completing the work, or if a work item goes for too many meetings without receiving contributions, or if adequate breadth of support is not maintained, the question should consider removing the work item from the work programme.

**Agreement or Approval of the Text**

Once the draft text is complete and mature, it will be considered at a SG or WP plenary meeting for:

* Agreement, for a non-normative document following the process of A.13.
* For a normative document, either the Alternative Approval Process (AAP) of Recommendation ITU-T A.8, or the Traditional Approval Process (TAP) of WTSA Resolution 1 clause 9 is followed for approval. See related guidelines on the selection of the approval process and AAP Best Practices.

**Summary**

Tools and procedures exist at every phase of Recommendation development to allow for having the right debate at the right time.

* The debate about whether to start the work in the first place should occur when the decision is being taken to initiate a work item, including agreement on the elements of the template used to add the new work item to the work programme.
* The debate about which solution to choose should occur during development of the Recommendation text.
* The Recommendation approval process should be a final check for completeness and correctness of the document so that it can be published. The approval process is not the right place to be debating whether the work should have been done in the first place, or whether the correct solution was chosen during the consideration of proposals.

Annex 14  
Recommendation Approval and Publication Process

## Background

Approved Recommendations and Supplements are published on the ITU-T web site. For example, the G-series of Recommendations, where the majority of SG15 work output is contained, are available for download at:

<https://www.itu.int/itu-t/recommendations/index.aspx?ser=G>

“Editions” of a Recommendation are numbered as follows:

The first approved version of a Recommendation is numbered as Edition 1.0, which will be shown as “In force”. Subsequent Amendments and Corrigenda to this Recommendation will be numbered as Editions 1.1, 1.2, 1.3, etc., which will also be shown as “In force”. A subsequent (full) revision of the Recommendation integrates all “In-force” Amendments and Corrigenda. This revision becomes Edition 2.0 which is marked as “In force” once approved, and the status of Edition 1.0, 1.1, 1.2, 1.3, etc. become marked as “Superseded”.

New and Revised Recommendations are published as an “x.0” edition as full, clean text. Amendments and Corrigenda are published as full text, showing the changes against the “n‑0.1” edition of the document in revision marks. For example, a new Recommendation would be published as full, clean text for Edition 1.0. If the next approved document is Corrigendum 1, edition 1.1 is published as full text, showing in revision marks the changes introduced by the corrigendum. If the next approved text is Amendment 1, then this is published as full text of Edition 1.2, which is produced by accepting the revisions shown in Edition 1.1, and applying the changes introduced in the Amendment, showing these changes with revision marks. A new “x.0” edition number will be published when the study group approves a revision to the document. The document is produced by accepting all of the revisions in the last Edition and applying the changes introduced in the Revision, showing these changes with revision marks.

Note that if the in-force text is the result of an Amendment or Corrigendum (i.e., Edition x.y, y≠0), a member may view a “clean text” version of the in-force text by downloading the MS Word version and viewing without markup.

## Guideline

* New and revised Recommendations are presented for consent or determination as full text. New Recommendations do not contain any revision marks and revised Recommendations show changes with respect to the in-force version after all approved Amendments and Corrigenda have been applied.
* Amendments and Corrigenda are presented for consent or determination as full text, with the changes introduced by the Amendment or Corrigendum shown with revision marks against the n‑0.1 edition of the Recommendation. Per the SG15 guideline on AAP best practices, the scope of LC comments is limited to the changes introduced by the Amendment or Corrigendum. Note that this may expedite pre-publication once an Amendment or Corrigendum is approved, as the text put for consent or determination is in the same format as is intended for publication.

A consequence of the current publication practices is that the end user is unlikely to examine the full set of in-force Amendments and Corrigenda, as the largest edition number will be published as full text and will contain the text as modified by all previous Amendments and Corrigenda since the last revision. But this has the risk of hiding the effects of some of the changes. For example, if the version in force is Edition 1.0, and the study group consents a Corrigendum and an Amendment to this document in the same meeting. Presuming that the Corrigendum is approved (slightly) earlier, it becomes Edition 1.1, published with revision marks against Edition 1.0. The Amendment approved slightly after becomes Edition 1.2, published at nearly the same time, accepting the revisions in Edition 1.1 and shown with only the changes introduced by the Amendment. The end user is likely to download only Edition 1.2, where they may miss the fact that changes were made by the corrigendum as they are not highlighted by revision marks.

As a result, with the current publication practice, it is preferable to combine corrections and additions into a single Amendment when consented or determined in the same meeting.

Excessive numbers of Corrigenda or Amendments should be avoided without a periodic revision of the Recommendation where the full, integrated text is reviewed for consistency. Questions are encouraged to consider doing a (full) revision of a Recommendation rather than an Amendment when either:

* There are three or more Amendments in force.
* It has been at least 4 years since the last revision.

Annex 15  
AAP Best Practices

## Background

AAP was introduced by the approval of Recommendation ITU-T A.8 by WTSA-2000 (Montreal), and the practice and application were discussed in ITU-T Study Group chairmen’s meetings of the first period of its application. Guidelines concerning LC and AR comments are taken from that work, from an email from the SG15 chairmen to the general SG15 list (17 March 2003), and documented in COM15-R45 (2001-2004 period). WTSA-20 added guidance to handle the addition of new references during AAP based on a request from SG15.

## Guidelines

The approval process of Recommendation A.8 is the final step of a larger Recommendation development process in which the right debate should be held at the right time. The work on a Recommendation has three distinct phases:

* **Decision to Initiate a Work Item**: Recommendation A.1 (Hammamet, 2016) provides a more rigorous process for deciding to start new work and add new work items to the work programme, documenting that decision using the template in A.1/Annex A. This is the opportunity to debate whether to do the work and to identify the relationship of the work to that in other study groups or other standards bodies, which is called out in the template.
* **Development of Draft Recommendation Text:** Once the work has been initiated and added to the work programme, the process of developing Recommendation text through consideration of proposals contained in written contributions is the opportunity to debate the solution chosen for the given problem.
* **Recommendation Approval**: Once the work has reached sufficient maturity, a non-normative text is agreed, or the approval process is initiated (consent or determination) for a normative text. This provides an opportunity to undertake a final check for any typographical, editorial or technical errors in need of correction. It is not the place where debate should (re-)occur on whether the work should have been done in the first place, nor where debate should (re-)occur over which solution has been selected.

To allow delegates to judge maturity of the text for consent, editor drafts of texts expected for consent, agreement, or determination should normally be submitted to TSB for posting as TD(PLEN) no later than the contribution deadline for the plenary at which they are to be considered, understanding that additional work may occur during the meeting to develop the final text which will be posted as a revision of that TD(PLEN) prior to consent in working party or study group closing plenary meeting.

In the case of a stand-alone working party meeting, editor drafts of documents expected for consent should be submitted to TSB for posting as TD(PLEN) no later than the contribution deadline for the plenary meeting (even though contributions are not normally expected to a stand-alone WP meeting, a contribution deadline exists). Further work may occur at the co-located Rapporteur group meetings which may result in a revision of the TD(PLEN) for consent.

Note that there may be cases of an unforeseen amendment or corrigendum, or very exceptionally a revision of a Recommendation that arise due to the consideration of contributions during a meeting. So the process of posting editor drafts in advance applies to the planned completion of work, and not necessarily every document that may be considered for consent or agreement based on contributions.

So bearing in mind that by the time text is posted for Last Call, the question has taken a conscientious decision to start the work, has developed Recommendation text through the consideration of proposals and reaching agreement to those proposals, and has made the decision at a plenary meeting that the text is of sufficient maturity to initiate the approval process, and further considering that the goal of the AAP is to approve Recommendations as quickly as possible, without the need to wait for a subsequent plenary meeting, participants should take the following into account when submitting comments:

* Only member states, sector members and associates are permitted to make comments during Last Call – not others such as academia, observers, and invited guests.
* LC and AR comments cannot be submitted via a liaison statement.
* Only member states and sector members are permitted to make comments during Additional Review.
* Comments should not be submitted merely for the purpose of delaying or preventing approval of previously consented text. Note that A.8 requests “comments”, not “objections” during the LC and AR phases.
* ITU-T members are expected to not submit comments that simply negate previously given consent.
* Last Call (LC) comments should only address consented new or modified text; comments on previously approved Recommendation text or parts thereof are excluded from comments under the AAP.
* LC comments should present new/additional points for consideration, and should not repeat material previously submitted, and already considered and discussed prior to achieving consent.
* LC comments should not only indicate the reasons for not approving the consented text, but also indicate possible changes that would facilitate further consideration and approval of the consented text.
* Discussion of LC comments should only occur once the SG chairman has made the LC judgment and the 'comment resolution' process has been initiated.
* For AR comments considerations similar to those outlined for LC comments apply.
* Additional Review (AR) is not meant as another opportunity to submit late LC comments. Hence AR comments should only address those parts of the text that were changed as an outcome of the LC comment resolution process.

## Handling of LC comments

If comments are received during the LC period, the study group chairman, in consultation with the working party chairman, rapporteur and editor as appropriate, makes the following judgements:

* Whether the comments are valid, in-scope comments.
* Whether the comments are entirely typographical in nature, allowing the text to be approved “AT” without additional review.
* Whether there is sufficient time prior to the next study group meeting to resolve the comments and conduct “additional review”, with sufficient margin such that if AR comments were to be received, the 33-day deadline (i.e., posting documents 12-days prior to the 3-week announcement deadline) can be met to announce the intention to approve at the next study group meeting.

Where the comments are valid, in-scope, non-typographical, and where there is sufficient time to conduct comment resolution and additional review prior to the next study group meeting, a table summary of the comments will be produced in a spreadsheet within two weeks of the end of LC and then comment resolution will be conducted involving “appropriate study group experts” (per A.8). This is led by the Rapporteur with the assistance of Editor of the Recommendation as appropriate. The amount of discussion required may vary depending on the nature of the comments: for obvious corrections, it may be sufficient for the editor to prepare a proposed resolution and provide an interval of time for participants to review and comment if necessary on the question email reflector. If more extensive discussion is needed (for example, to consider alternative proposals for how to resolve some of the comments), this may involve email correspondence on the question email reflector, the possible scheduling of electronic meetings, or, in the case of a planned interim meeting in the appropriate timeframe, discussion at an interim meeting. When comment resolution is complete, the Rapporteur or Editor will post a comment resolution spreadsheet and proposed revised text for additional review in the informal FTP area. Unless the comment resolutions were agreed at an interim meeting of the question that included the Recommendation in the terms of reference at least 5 business days will be provided for participants to review and comment on the proposed resolutions of the comments. In the absence of further comments, the draft text and comment resolution spreadsheet are submitted to the WP and SG15 chairs for approval.

Note that the addition of a new normative reference to document produced by another organization, as a result of AAP comments, requires A.5 justification documentation published in a TD before progressing.

Once comment resolution is complete, if there is sufficient time prior to the next study group meeting to complete additional review, and, if AR comments are received, to allow meeting the 33-day deadline (i.e., posting documents 12-days prior to the 3-week announcement deadline) prior to the meeting, with the approval of the working party chairman and study group chairman, AR will be initiated for the text at the next AAP announcement opportunity and TSB will post these files in the AAP site. If there is not sufficient time prior to the next study group meeting (which may occur in the case where comment resolution took more time than foreseen), the study group chairman will request the Director, through the TSB to announce the intention to approve the Recommendation at the next study group meeting. This announcement normally occurs through an addendum to the collective letter. In this case, in addition to the (complete or incomplete) comment resolution spreadsheet being posted as a TD(PLEN), the text resulting from LC comment resolution will be posted as a TD(PLEN) for the next meeting with (for approval) in the document title. Both documents should be published twelve days before the announcement in the collective letter.

In cases where comment resolution fails to produce consensus on the changes that are necessary, approval may be considered at the next plenary based on the originally consented text (LC text).

## Handling of AR Comments

If comments are received during the AR period, the study group chairman, in consultation with the working party chairman, rapporteur and editor as appropriate, makes the following judgements:

* Whether the comments are valid, in-scope comments.
* Whether the comments are entirely typographical in nature, allowing the text to be approved “AC” without the need to bring to a study group meeting for approval. (Note that this is AC rather than AT, since resolution of LC comments will have introduced substantive change as compared to the consented text even when all AR comments are typographical in nature).

If there are valid, in-scope, non-typographical comments received during AR, the study group chairman will ask the Director, through the TSB, to announce the intention to consider approval of the Recommendation at the next study group meeting. This announcement normally occurs through publication of an addendum to the collective letter. Again, documentation should be published as TDs twelve days before the announcement.

## AAP Process Timing

The state of documents moving through the AAP process may be updated only at the time of issuing an AAP announcement letter. These letters are issued on the 1st and 16th of every month except January, which only has an AAP announcement letter issued on 16 January.

TSB must be informed and approvals of the study group and working party chairmen must normally be obtained at least 3 business days prior to issuing an AAP announcement letter (since the letters are ITU-T-wide and require some time to prepare) if the status of a Recommendation is to be updated (e.g., to initiate AR for a document where comment resolution is complete).

LC and AR periods always commence on the date of an AAP announcement letter. Formal announcement of approval of a Recommendation does not occur until the next AAP announcement letter after the conditions for approval have been met. For example, if AR commences on 1 December and no comments are received by 21 December, the Recommendation is indicated as approved in the next AAP announcement letter on 16 January. If LC begins on 1 June and comments are received by 28 June, the state of the Recommendation becomes LJ (last-call judgment) in the AAP announcement letter of 1 July. But if the study group chairman, in consultation with the working party chairman and rapporteur, determine on 3 July that the comments received are all typographical in nature, the Recommendation will be announced as approved “AT” (approved with typographical changes) in the AAP announcement letter of 16 July.

## AAP Comment Resolution Spreadsheet

A summary table of the comment resolution shall be provided as a spreadsheet similar to the example the format provided below (per A.8).

**AAP Last Call comment and resolution for ###**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Comment number | Comment made by | Editorial /Technical | Clause | Comment | Commenter’s proposal | Question Decision |
|  |  |  |  |  |  |  |

Annex 16  
Deadlines

**Background**

A number of changes have been made in Recommendation ITU-T A.1 concerning deadlines, including some deadlines that affect the posting of TDs. SG15 has had some normal practices of deadlines regarding posting of documents containing editor drafts of text for consent, determination, agreement or approval.

Recommendation ITU-T A.1 includes a formalization of what had been done on a trial basis for a few years:

**3.1.9** The full text of contributions that are to be considered at a study group or working party meeting shall reach TSB at least twelve calendar days before the meeting.

Also mentioned is:

**3.2.5** Contributions received by the Director less than twelve calendar days before the meeting will not appear on the agenda of the meeting, will not be distributed and will be held for the next meeting. Contributions judged to be of extreme importance may be admitted by the Director at shorter notice. The final decision as to their consideration by the meeting shall be taken by the study group (or working party).

In addition, there are new deadline requirements that can affect TDs:

**3.3.3** TDs input before the start of the study group or working party meeting, including documents from the ITU secretariat, should be posted on the relevant page of the website not later than three working days from the date on which they are received by the secretariat, to ensure their availability not later than seven calendar days before the start of the meeting. This deadline shall not extend to administrative documents or reports on events that have taken place less than 21 calendar days before the start of the meeting, nor to proposals from Chairmen and convenors of ad hoc groups, compilations of proposals prepared by chairmen or the secretariat, or documents specifically requested by the meeting. Reports on events that have taken place less than 21 calendar days before the start of the meeting should normally be posted on the relevant page of the website not later than two calendar days before the beginning of the discussion of the item in question at the meeting, unless otherwise agreed by the meeting.

**Guidelines**

The contribution deadline for plenary meetings is clear: final contributions must be received by the TSB before midnight Geneva time twelve calendar days before the meeting, normally a Tuesday, as indicated in the collective letter. As Study Group 15 addresses primarily technical standardization issues without regulatory or policy implications, the subject of a late technical contribution will never be judged by the director, with the advice of the management team, to be of “extreme importance”, and therefore late contributions will not be placed on the agenda of the meeting or uploaded to the contribution website for that meeting.

Contributors are encouraged to use direct document posting (DDP) for their contributions. But, as with any automated system, responsibility for verifying that the posting of their contribution worked properly falls with the contributor. After posting your contribution, go to the website and make sure that it is visible, can be downloaded, and that the downloaded file can be opened. If, after working hours in Geneva on the day of the contribution deadline, you cannot download and open your contribution and you cannot resolve this issue, send your contribution as an attachment in an email to the secretariat ([tsbsg15@itu.int](mailto:tsbsg15@itu.int)) at least one hour before midnight Geneva time to ensure that the received timestamp on your email is before the midnight Geneva time contribution deadline.

Contributions to Rapporteur group meetings held outside of a plenary meeting are not “contributions” in the formal ITU-T sense. They are often referred to as working documents. These contributions must respect a deadline established by the Rapporteur for each meeting, normally one week before the meeting. Contributions to Rapporteur group meetings are normally posted by uploading to a designated folder in the informal FTP area (IFA) or the Rapporteur group meeting sharepoint site, depending on the practices of the particular question.

The new requirements for TD deadlines require some clarification since “events” is not a defined term in A.1. The language was adapted from some of the rules for Council documents, which tend to be different in nature from the kinds of documents we see in a technical study group.

An interim Rapporteur group meeting should be considered to be an event concerning the deadlines of 3.3.3, and in all cases where a Rapporteur group meeting is not immediately adjacent in time to a stand-alone WP plenary meeting, those deadlines should be observed. In principle, of course, the report of a Rapporteur group meeting should be posted as soon as possible after the conclusion of that meeting. The case of a Rapporteur group meeting that immediately precedes a stand-alone WP plenary is a recognized exception, permitted by the word “normally” in 3.3.3.

A liaison Rapporteur report of something that occurred at a meeting of a different SDO, or even a different ITU-T study group, that is being brought to SG15 for information rather than any kind of decision, will not be considered an “event” with respect to 3.3.3.

A basic summary of deadlines:

* Contributions to SG or WP plenary meetings – 12 days.
* Editor Drafts of texts expected for consent, determination, agreement, approval – 12 days (same as contribution deadline). Note that this deadline does not apply to unforeseen amendments, corrigenda, etc., that may arise during a meeting as a result of contributions.
* Rapporteur group meeting reports normally follow the requirements of A.1/3.3.3, in principle being posted as soon as possible after the meeting.

Annex 17  
Remote Participation

**Background**

A-series Supplement 4, *Supplement on guidelines for remote participation*, indicates that:

Meetings of ITU-T groups may be conducted in the following formats:

• physical meetings (face-to-face);

• physical meetings with remote observation (i.e., webcast);

• physical meetings with (active) remote participation;

• e-meetings, also called virtual meetings.

The same format may not apply to all sessions of a given meeting.

WTSA Resolution 32 (Hammamet, 2016) instructs the TSB director to:

• take action, in order to provide appropriate electronic participation or observation facilities (e.g. webcast, audioconference, webconference/document sharing, videoconference, etc.) in ITU‑T meetings, workshops and training courses for delegates unable to attend events in person, and coordinate with BDT to assist in the provision of such facilities;

This guideline applies to the case where remote participation in a face to face meeting has been requested. The ability to support remote participation should be considered when selecting the location for a face to face meeting. The local time zone may also be a consideration. This is particularly important if external factors (e.g., travel restrictions due to a pandemic) may make it difficult for some delegates to attend. A separate guideline describes the process for changing a face to face meeting to a virtual meeting.

**Guidelines**

The meeting hours will be based on the normal working hours of the local time zone of the physical meeting location.

It is recommended that delegates presenting proposals to the work of SG15 participate in person whenever possible. SG15 normally considers multiple, competing technical proposals in an area of study. The process of developing consensus around the technical details, often involves merging the best aspects of multiple input proposals. This process usually occurs in ad hoc groups, e.g. drafting sessions, coffee break discussions, and informal evening discussions. While a remote participant can join the formal part of the meeting, remote participants cannot join the informal ad hoc discussions, which can create a situation where there is nobody to explain or advocate for any technical proposal that was presented by a remotely connected member who has no delegate physically attending the meeting.

Where necessary, and where facilities allow (e.g., for meetings in Geneva), observation or remote participation can be used to facilitate the participation of experts who are not able to travel. The participant has to complete necessary meeting registration (if applicable) process for remote participation.

Some particular guidelines for chairmen and Rapporteurs concerning meetings with remote participation or observation:

* Remote participation or observation for a physical, face-to-face meeting is provided on a “best effort” basis. If the audio quality of a remote participant’s connection is not sufficient to allow them to be understood by those in the room, the chairman should interrupt the speaker, and refrain from giving them the floor again until the audio problem is resolved. The meeting should not stop or be interrupted because of a remote observer or active participant’s ability to connect or to hear.
* The agenda as established by the chairman, based on the contributions received, applies to all delegates, local and remote. There is no obligation to rearrange the meeting agenda based on when various local participants will be present or remote participants are able to dial in.
* The chairman retains the same abilities according to the general rules as with delegates in the room. The chairman may interrupt any delegate, local or remote, for example, in cases where the delegate exceeds the amount of time allotted for presentation, or strays from the topic under discussion.
* If time requires limitations on the debate (for example, if the chairman must limit the number of times, or the total amount of time a member can speak on a given topic). Such limitation should apply to the total number of interventions allowed across all local and remote delegates representing the same member.
* Remote participants have no role in decision-making. Decisions are generally described in Resolutions and A-series Recommendations as being made by “Member States and Sector Members Present in the meeting”, which has been legally understood to be only those members with a delegate physically present. As a practical matter, if a remote participant has a valid point with which other members in the room agree, the group will surely do the right thing, but formally this is due to the views of members in the room, and never directly due to the views of a remote participant.

Concerning delegates participating in the meeting:

* Physical attendance at face-to-face meetings will always be the most effective form of participation for members presenting proposals, creating the best opportunity for the member’s proposals to be adopted by enabling participation in ad hoc groups, drafting sessions, coffee break discussions, and informal evening discussions.
* A member who has some delegates attending physically, while others are participating remotely, may find it more effective to use a spokesperson in the room rather than attempting to advocate remotely. A presenter in the room can get a better sense of whether what they are presenting is being understood, and is also able to participate in the related ad hoc groups, drafting sessions, coffee breaks, and informal evening discussions.
* Each delegate must register for the meeting and be identified when taking the floor regardless of whether they are participating locally or remotely.

SG15 routinely provides webcasting of plenary sessions allowing for remote observation of the plenary. The normal default format for other sessions is a physical meeting (face-to-face). In the case where the management team considers that external factors (e.g., travel restrictions due to a pandemic) make it difficult for some delegates to attend remote observation or active participation will be provided, on a “best effort” basis, for those delegates, if the facilities are available.

A Suppl.4 provides additional guidance for conducting physical meetings with active remote participation. A.suppl4 also provides additional guidance regarding conducting of virtual meetings (or e-meetings), which are described in a different guideline.

Annex 18  
Re-planning between physical and virtual meeting formats

**Background**

Traditionally, physical and virtual meetings have been used for different purposes, with decision making or development of merged or compromise proposals normally only occurring at physical meetings. Each type of meeting has its own set of procedures for approval with its own set of deadlines:

* Decision-making SG or WP plenary meetings are confirmed by collective letter at least 2 months prior to the start of the meeting, or if occurring on a date other than one previously planned or scheduled, the collective letter is issued at least 3 months prior to advertise a new date.
* Interim face-to-face Rapporteur group meetings are confirmed at least 2 months prior to the meeting after confirmation of all meeting logistics and an adequate number of expected attendees and contributions. A convening letter is available on the SG web site providing the logistical information normally required for attendees to request visas.
* Interim Rapporteur group E-meetings are confirmed at least 2 weeks in advance, with less attention normally given to expected contribution levels as it is easier to cancel an e-meeting if expected contributions do not materialize. The logistics for the e-meeting are advertised on the Study Group web site.

Normally, once a meeting has been advertised and confirmed, it is not expected to be changed.

There have been certain circumstances where it has been necessary to cancel, re-schedule, or change the format of a planned face-to-face event to a virtual one due to a force majeure type event (natural disasters such as earthquake, acts of war, or a pandemic).

In the case of a force-majeure event of unknown duration (e.g., a pandemic), it is also foreseen that it may be desirable to change the format of a meeting originally planned as virtual to a physical format once normalcy is restored.

This guideline provides the procedures to be followed when making these kinds of changes to meeting plans.

**Guidelines**

Different guidelines are provided depending on the type of meeting being re-planned or re-scheduled. In all cases, announcement of any change should be made as soon as possible, recognizing of course that force majeure events are often sudden and unexpected.

**Meeting originally planned as a face-to-face SG or WP plenary meeting**

It may occur that an event prevents the holding of a face-to-face meeting in the location or on the dates originally envisioned, and this event occurs after the collective letter has been issued announcing the meeting, and likely after some delegates have planned their travel. Obviously, any decision for a change should not be taken lightly. There are five courses of action that may be considered, depending on the nature of the situation:

* Defer the meeting to a future date;
* Change the meeting to a different geographic location;
* Defer the meeting and change to a different geographic location
* Change the meeting from a physical to a virtual format;
* Cancel the meeting altogether.

In the case of deferring a meeting to a future date, a corrigendum should be issued to the original collective letter indicating that the original meeting has been cancelled. A new collective letter should be issued for the new, replacement meeting. The starting date of the replacement meeting should be at least three months from the date that the new collective letter is issued, as with any previously unplanned plenary meeting.

In the case of changing a meeting to a different geographic location while maintaining the original dates for the meeting, this change may be announced through a corrigendum to the collective letter. The corrigendum should be issued three months in advance of the start of the meeting.

In the case of deferring a meeting to a future date and changing the geographic location, a corrigendum should be issued to the original collective letter indicating that the original meeting has been cancelled. A new collective letter should be issued for the new, replacement meeting. The starting date of the replacement meeting should be at least three months from the date that the new collective letter is issued, as with any previously unplanned plenary meeting.

In the case of converting from a physical meeting to a virtual one, if the replacement virtual meeting occurs on the same dates as the originally planned physical meeting, this may be advertised with a corrigendum to the collective letter. If the planned virtual meeting is to be for different dates than the original physical meeting, the originally planned meeting should be cancelled with a corrigendum to the collective letter, and a new collective letter should be issued for the replacement virtual meeting occurring on different dates. Since this is an announcement for a decision-making meeting, the starting date of the replacement meeting should be at least two months from the date that the new collective letter is issued, as with any previously unplanned plenary meeting.

In the case of meeting cancellation, this is announced with a corrigendum to the collective letter.

**Meeting originally planned as a face-to-face Rapporteur Group meeting**

A planned face-to-face Rapporteur group meeting may be in one of two states: planned or confirmed. If an event prevents that such a meeting can be held on the planned dates or in the planned venue, the same five options can be considered:

* Defer the meeting to a future date;
* Change the meeting to a different geographic location;
* Defer the meeting and change to a different geographic location
* Change the meeting from a physical to a virtual format;
* Cancel the meeting altogether.

In the case of deferring the meeting to a future date, if the meeting has not already been confirmed and hence the planned date is at least two months in the future, the planned dates for the meeting can be moved further into the future on the study group web site and a notification made to the question email reflector.

In the case of deferring a confirmed meeting to a future date (where the original dates may have been inside of two months of the current date), the date to which the meeting is being changed should be at least two months from the current date. Notification of the change is made to the question email reflector. In addition, a specific notification will be made to any individual who has already registered or confirmed their attendance at the meeting. The meeting is updated on the study group web site, going back to the “planned” (rather than confirmed) state. The meeting can be changed back to “confirmed” for the new dates once the Rapporteur has confirmed sufficient attendance for the new dates and once the logistics around the new dates are solid, at least two months prior to the new dates.

In the case of changing a meeting to a different geographic location, if the meeting has not already been confirmed and hence the planned date is at least two months in the future, the updated location for the meeting can be indicated on the study group web site and a notification made to the question email reflector.

In the case of changing a confirmed meeting to a different geographic location (where the original dates are inside of two months of the current date), the date of the meeting should also be moved to at least two months from the current date, with notifications as described above for the case of only changing the date of a confirmed meeting.

In the case of converting from a physical meeting to a virtual meeting, as long as the dates of the original physical meeting are maintained, this change can be made even at short notice. If the dates of the replacement virtual meeting are to be different than those of the original face-to-face meeting, the 2-week deadline for the planning of e-meetings will apply. Notification of the change is made to the question email reflector. In addition, a specific notification will be made to any individual who has already registered or confirmed their attendance at the physical meeting. The meeting is updated on the study group web site.

In the case of cancelling a planned or confirmed physical Rapporteur group meeting, this announcement should be made to the question email reflector, any registered or confirmed attendees should be notified directly, and this cancellation should be indicated on the study group web site.

**Meetings originally planned as virtual**

There may be cases where meetings may be originally planned as virtual due to a force majeure event of unknown duration, even though the preference would have been to schedule such a meeting as a physical meeting if that had been possible. If the force majeure event subsides, the following procedures can be followed to re-plan a virtual meeting as a physical meeting.

**Meeting originally planned as a virtual SG or WP plenary meeting**

In the case of a virtual plenary meeting that has already been announced by way of a collective letter, the dates for the meeting are at least three months in the future, and the original dates are maintained, the change to a physical meeting can be announced with a corrigendum to the collective letter.

If the original dates of the virtual meeting are less than three months from the current date, the meeting should be postponed to a date that is at least three months away when re-planning from a virtual meeting to a physical one. If the date of a meeting is changed, a corrigendum should be issued to the original collective letter cancelling the meeting for the original dates. A new collective letter for the physical meeting should be issued three months before the start of the meeting announcing the new dates and location.

**Meeting originally planned as a virtual Rapporteur Group meeting**

In the case of a Rapporteur group meeting originally planned as virtual where there is a desire to re-plan as face-to-face: Whether the original dates are maintained or not, the dates for the physical meeting should be at least three months from the current date when the meeting is announced as being face-to-face. At the time of announcement, the dates and the geographic location (city, airport(s)) should be known, and the meeting can be indicated in the “planned” state. Changing the meeting from “planned” to “confirmed” must occur at least two months before the physical meeting dates based on availability of final logistics for the meeting, and the Rapporteur confirming sufficient expected attendance and contributions for the physical meeting in the planned location. The meeting is updated on the study group web site.

Annex 19  
Virtual Meeting Procedures

# Guidelines

**Confirmation of virtual meetings:** A virtual plenary meeting should normally be confirmed at least 60 days in advance, a virtual meeting of a Rapporteur group should normally be confirmed at least two weeks prior to the meeting. Unlike face-to-face meetings, participants are not all physically present in the same time zone, and this should be taken into account when selecting meeting times.

## Participation in a virtual meeting.

**Use of video:** While the MyMeetings tool can support video, participants are requested to not use the share video option and to turn off their cameras to avoid creating bandwidth problems for delegates with slow connections.

**Requesting the floor:** Participants wishing to request the floor should use the “raise hand” button in the tool, and wait to be given the floor by the chairman or Rapporteur before speaking. If, after being granted the floor, a participant experiences a problem with the quality of the audio the chairman or Rapporteur may request that participant to make the intervention using the public chat window. Any other comments entered in a chat window are not considered as a part of the discussion. Participants should use the “lower hand” button after speaking.

## Working Hours

In order to maintain the quality of SG15 work, it is important that all delegates are able to pay careful attention throughout the meeting. A-series Supplement 4, *Supplement on guidelines for remote participation*, recommends that the core working hours for virtual meetings should be between 1200 and 1500 hours, Geneva time. When selecting the working hours, the geographic location of the participants should be considered. The participants in the work of SG15 are typically spread from as far West as the West Coast of North America, and as far East as Japan. For example, if the selected working hours are 13:00-17:00 Geneva time this becomes 0400-0800 for the West Coast of North America and 2000-midnight for Japan.

In a virtual meeting it is not possible to work outside of the normal meeting hours without being unfair to some delegates, e.g., requiring them to meet before 4am or after midnight.

For virtual interim meetings of Rapporteur groups, the core working hours may be optimized by considering the time zones of the expected participants. Even in this case working outside of the agreed core working hours should be avoided.

During a plenary meeting, certain management team meetings and working party report preparation sessions will be held outside of these core working hours.

In addition, for virtual meetings it is important to take regular breaks to ensure the focus of delegates who are participating from multiple time zones. Considering this, A-series Supplement 4 recommends that e-meetings limit itself to sessions of 1 hour and 15 minutes, interspersed with breaks of a minimum of 10 minutes.

## No Weekend Work

Normally, in a Geneva plenary meeting, it is possible to spend one, or even both days of the weekend for drafting and other breakout activities. This becomes practical when for many delegates, it is not possible to travel back home for the middle weekend of a SG15 meeting.

However, in a virtual format, it is expected that all delegates are at home on the weekend, where they are likely to have family responsibilities (e.g., children not in school), and therefore the SG15 management team has judged that we should not require delegates to be available over the weekend.

## All normal meeting rules apply

While a virtual meeting may feel less formal than a face to face meeting, all relevant meeting rules apply.

Any virtual meeting which is considering written proposals for developing draft Recommendation text should follow the same procedures as for Rapporteur group meetings or correspondence activities: specifically, all input documents/proposals should be placed in a dedicated folder in the IFA or rapporteur group meeting Sharepoint, and TSB should be asked to write-lock the folder after documentation of the virtual meeting is complete. The provisions of A.1 concerning contributions to plenary meetings (e.g., free of restrictions) also apply to contributions to virtual meetings. The same IPR inquiry should be made at a virtual meeting considering written proposals for draft Recommendation text as would be made at a face-to-face meeting.

The guidelines for the chairman and participants in virtual meetings specified in A.suppl4 should be applied as appropriate.

The contribution deadline for a plenary meeting 12 working days before the meeting and late contributions are not accepted. For an interim meeting of a Question the contribution deadline is set by the Rapporteur and normally late contributions are not accepted.

The use of the question email reflectors and the IFA should be limited to the ways in which we use these tools during a face to face meeting: Specifically, for reporting on tasks that the Rapporteur has asked to be carried out.

As an example, in a face to face meeting, the Rapporteur may charter a breakout group on a particular topic. The assigned breakout convener may send an email to the reflector announcing the location and time when the group will meet and to announce, on the email reflector, the availability of a breakout report that has been uploaded to the IFA.

However, since work outside of the identified working hours in a virtual meeting is not possible, an analogous situation might be that the Rapporteur might ask the editor to capture some provisional agreements reached in, for example, a meeting on Tuesday during the normal meeting hours, into a Working Document for discussing on Wednesday, that editor may upload and announce the availability of that document on the question email reflector. If there are editorial issues with the document, a participant can reply privately to the editor.

Debate about the substance of a document must always occur during the actual live meeting not on the email reflector. Discussion on the email reflector may exclude participants in some time zones. For example, a participant on the West coast of North America, when waking up to join the meeting at 0400, finds that there is a long email thread of detailed technical discussion among delegates from Asia and Europe that must be read and absorbed before they can participate in the discussion.

And most importantly, as in any meeting, participants should not make new proposals (perhaps inspired by the previous day’s discussion) via the email reflector or IFA. Such inputs will be considered as late contributions, that may have bypassed required national processes, and will not be considered by the meeting.

## Time Management

The working hours of virtual meeting are approximately half of the working hours of a face to face meeting. The time available for the discussion of contributions is further reduced since the Rapporteurs must allocate time during the meeting hours for drafting and review of texts that are being prepared for consent or agreement. These activities usually take place outside normal meeting hours in a face to face meeting. In a virtual meeting it is not possible to work outside of the normal meeting hours without being unfair to some delegates, e.g., requiring them to meet before 4am or after midnight.

It can be expected that in some cases the number of input contributions and the limited time available will make it difficult to allocate time for the presentation of all of the input contributions. In these cases, the Rapporteur should give priority to the discussion of the proposals in the input contributions.

Even in a virtual meeting, all of the General Rules of Conferences still apply: The Rapporteur has full authority to set the agenda, and to interrupt any speaker who strays from the topic under discussion or exceeds the amount of time they are given.

In a plenary meeting the Rapporteurs will create agendas that prioritize the work items that are planned for consent and agreement during the meeting. Work on items not planned for consent or agreement at the meeting, including the presentation of contributions on those topics, may be deferred to subsequent interim meetings. This is something that occurs even in face-to-face plenary meeting, but it is likely to occur to a much greater extent (e.g., maybe we are deferring 50% of the contributions to interim meetings instead of 10% of the contributions) in a virtual plenary meeting.

In an interim meeting the Rapporteurs will create agendas based on the priority of the work items in the work program.

For a plenary meeting there are 12 calendar days between the contribution deadline and the start of a meeting. For an interim meeting the contribution deadline can be set by the Rapporteur so that the participants have adequate time to review the contributions before the meeting (normally one week). ***In the interest of using the available time efficiently, it is assumed that all delegates who care about a given topic have read the contributions related to that topic. Therefore, it is not necessary to allocate meeting time to the presentation of background portions of a contribution or the alternatives considered (but not being proposed).*** When developing the agenda, the Rapporteur should, as in a face to face meeting, identify groups of related contributions. To facilitate an efficient discussion of the proposals in these contributions, the Rapporteur should identify the topics where these contributions make proposals on a common topic and move directly into discussion of those proposals and make of decisions without the need for separate presentations of each individual contribution. This approach is within the Rapporteur’s authority to set the agenda.

***Note that it may be necessary to use the approach described above for a face to face meeting if a large number of contributions are received***. In the past some Questions have received more than 100 contributions to a plenary meeting.

Annex 20  
Scope of Work

## Background

SG15 management and Rapporteurs have the responsibility to ensure that work carried out is appropriately within the scope of a particular group or work item. While there is nothing that precludes a member from submitting a contribution containing proposals outside of the scope of the group to which it is submitted, proposals that are not within the scope, or could not be accommodated with “reasonable” extensions to the scope of work of the group to which they are submitted should not be placed on the agenda.

## Guidelines

### ITU-T Scope

The scope and responsibilities of the three sectors of the ITU are broadly described in the Constitution and Convention (CS/CV). Modifications at this level are not described by this guideline.

### ITU-T SG15 Scope

The responsibility and mandate of each of the ITU-T Study Groups is described in WTSA [Resolution 2](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.2-2016). This scope is normally reviewed and updated at WTSA just prior to the beginning of each 4-year study period, and Study Group 15 has the opportunity to submit its proposals for update through liaison to TSAG late in each Study Period and through its own report to WTSA.

Study Group 15 will consider contributions containing proposals that are within its defined scope of work.

In addition, Study Group 15 may discuss contributions containing proposals that are judged by the management team to be possible to accommodate with a “reasonable” extension to the mandate of the study group. The judgement of what is reasonable should include consideration of:

* Whether the work is closely related to existing in-scope work currently carried out in SG15.
* If the appropriate experts to perform the new work are among the current attendees of SG15.
* That the work does not clearly overlap or duplicate the work of another ITU-T Study Group or another SDO.

Should discussion of such a proposal lead to consensus to propose to modify the scope of SG15 at the Resolution 2 level, and it is not sufficiently near the end of the study period to wait for that scope change until the next study period, TSAG has the authority according to [Resolution 22](https://www.itu.int/pub/publications.aspx?lang=en&parent=T-RES-T.22-2016) to act between WTSAs to make these sorts of modifications. TSAG has in the past made modifications to the scope and the title of existing study groups, and in one case, created a new Study Group between WTSAs. SG15 should send any proposed modification of SG scope that reaches consensus to TSAG for consideration according to its authority under Resolution 22.

Study Group 15 should not adopt new questions or work items related to an expanded scope of work until that expanded scope has been agreed by TSAG.

### Scope of the Questions

The scope of each Question within SG15 is described in the Question Text. The text of all current SG15 Questions is available in the “Terms of Reference” link from each question at: <https://www.itu.int/net4/ITU-T/lists/loqr.aspx?Group=15&Period=17>.

Contributions containing proposals that are within the scope of an existing Question will be considered by that Question.

The procedure for creation, modification, and deletion of Questions is described in WTSA [Resolution 1](https://www.itu.int/pub/T-RES-T.1-2022).

Should SG15 receive a proposal that is within the responsibility and mandate of the study group as described in Resolution 2, but is not within (or close to) the scope of an existing Questions, SG15 may consider this proposal at the SG (or WP) level as proposal for the creation of a new Question. Should SG15 reach consensus on a proposal to create a new Question, that proposal will be sent to TSAG for endorsement, which is a mechanism to ensure that the proposed new Question does not overlap the responsibility of other, existing groups.

A Question may discuss proposals that are judged by the Rapporteur (in consultation with the management team) that may be accommodated with a “reasonable” extension to the Question text/terms of reference. As above, the judgment of what is “reasonable” should include:

* Whether the work is closely related to existing in-scope work currently carried out in the Question.
* If the appropriate experts to perform the new work are among the current participants in the work of the Question.
* That the work does not clearly overlap or duplicate the work of another Question, ITU-T Study Group or another international SDO.

Should discussion of such a proposal lead to consensus within the Question that the scope/terms of reference of the Question should be modified or expanded, the Question may develop a proposed update of the Question text to be forwarded to the Working Party, and then to SG15 for consideration. Provided there is also consensus at the SG15 level, the revised Question text will be forwarded to TSAG for endorsement.

A Question should not adopt new work items related to the expanded scope of work until the revised Question text has been endorsed by TSAG.

### Scope of Work Items

The SG15 guideline on the “Document Development Lifecycle” describes the procedure for creating new work items.

Contributions containing proposals that are within the scope of an existing work item may be considered by the Question for the purpose of making technical selections and developing Recommendation text within the scope of that work item.

Should a Question receive a contribution containing a proposal that is within the scope of the Question, but not part of (or close to) the scope of any existing work item within the question, the Question may consider that contribution as a proposal to start a new work item. Procedures for creation of a new work item described in the Document Development Lifecycle guideline should be followed.

Should a Question receive a contribution whose proposals could be accommodated with a “reasonable” extension or modification of the scope of an existing work item, the Question should first consider whether the of scope of the work item should be modified or extended. The judgement of what is “reasonable” should include:

* Whether the proposed new content is closely related to other in-scope content in the document under development.
* Whether the appropriate experts to develop the new content are among the normal participants in the Question.
* That the proposed extension of work does not overlap the scope of another work item within the Question, of another Question, Study Group, or SDO.

If modifications to the scope of a work item are agreed, a new A.1 or A.13 justification form should be developed as described in the guideline on the “Document Development Lifecycle”.

New technical elements or Recommendation text related to an expanded/modified scope of a work item should not be adopted prior to reaching consensus on the change of scope.

### Meeting Scope

At plenary meetings of SG15, all topics within the responsibility and mandate of the Study Group and for the Questions are in scope for contributions.

Certain stand-alone Working Party or Rapporteur Group meetings may have specific terms of reference that limit the scope to a specific set of work items or topics. Contributions received on topics outside of the terms of reference for the meeting will be deferred for consideration to a subsequent meeting with appropriate scope.

Annex 21  
External Release of Information on Work in Progress

## Background

ITU-T publishes for free public download all of its approved Recommendations and agreed non-normative texts.

To avoid any market confusion, ITU-T does not normally publish unagreed proposals or work in progress beyond the membership and associates of a given study group. This is reflected in the fact that ITU-T contributions and TDs normally contain the page footer:

|  |
| --- |
| **Attention:** This is not a publication made available to the public, but **an internal ITU-T Document** intended only for use by the Member States of ITU, by ITU-T Sector Members and Associates, and their respective staff and collaborators in their ITU related work. It shall not be made available to, and used by, any other persons or entities without the prior written consent of ITU-T. |

It is natural that the work of SG15 is of interest to other standards development organizations and the trade media, however, any external release of information related to work in progress should be controlled to ensure that the current status is represented accurately and consistently.

Recommendation ITU-T A.1 clause 3.1.6 indicates that material contributed to ITU-T is expected to be free of restrictions, which is an essential element in ITU-T’s ability to develop and later approve and publish Recommendation text based on member proposals. But members do not give up any rights to reuse the material or proposals they submit to ITU-T as a result of making a contribution.

## Guidelines

A member is free to release information that they have contributed to ITU-T, and in fact ITU-T procedures will even allow a member to indicate that their contribution should be made publicly available on the ITU-T web site. Such release of information should always be clearly identified that this is the member’s proposal, and no claim should be made as to broader agreement to this proposal before such a proposal is accepted and included in an approved Recommendation or agreed non-normative text. Note that this is not normal practice. Most members consider it more appropriate to conduct debates within ITU-T rather than publicly advocating at conferences, etc. by bringing proposals to ITU-T in the spirit of compromise which is normally required in order to reach an agreement. Compromise tends to be easier to achieve if one doesn’t feel that winners and losers might be identified later by comparing early proposals to the final result. A member should not release information on the proposals of others, and should not describe their own impression of agreements and directions that have not been finalized through the approval of a Recommendation or the agreement to a non-normative text.

There are a few circumstances where SG15 and its management may decide to release information on work in progress.

In general, any external release of information on work in progress should be limited to topics that may be of significant interest externally. The content of any such external communications should be limited to those aspects of the work that have reached a reasonable level of stability such that major changes in direction are unlikely to occur.

There may be cases where work in progress needs to be shared with another standards organization, another ITU-T study group, or another ITU sector. Generally this occurs when there is a need to align specifications across multiple SDOs, or if there is a desire to review material with an appropriate group of industry experts before initiating an approval process. A liaison statement is used to communicate information for these purposes, and reaching agreement to transmit the liaison statement ensures that the question, working party, or study group sending the liaison statement agrees with the information to be released and that the status of the work is appropriately described.

Study Group and Working Party chairmen will prepare, at the conclusion of each plenary meeting, an executive summary of the results. This is reviewed among the management team to ensure that the status of any work in progress is appropriately described.

Occasionally, certain SG15 participants (often SG and WP chairmen, Rapporteurs and editors) may be called on to represent SG15 at conferences or external events. Such representation should be coordinated through the Promotion and Coordination Group, which meets during plenary meetings and works by correspondence with the relevant Rapporteurs, WP Chairmen as well as SG15 Chairman and TSB. Any material to be presented on behalf of ITU-T SG15 on the ITU-T template should be reviewed and approved as described in the section “Promotion” of the SG15 Guidelines Promotion and Coordination Group prior to presentation to ensure agreement of relevant Rapporteurs, WP Chairmen, SG15 Chairman and TSB advisor with the information as it is presented.

Any communication of information, regarding the status of work in progress to the trade media should be coordinated with the ITU Strategic Engagement Division. The prime contact for SG15 is Fred Werner ([frederic.werner@itu.int](mailto:frederic.werner@itu.int) ). This will normally be coordinated with the relevant WP Chairmen, Rapporteurs and Editors for describing results achieved in a given meeting. While it does not represent the same level of agreement as approval of a Recommendation, “consent” or “determination” of a major Recommendation is often newsworthy, and the release of this type of information is coordinated with those with the appropriate roles in the study group.

Annex 22  
Lead Study Group Activities

## Background

From Resolution 1 (Rev. Geneva, 2022):

**2.1.5** A study group may be designated by WTSA or TSAG as the lead study group for ITU-T studies forming a defined programme of work involving a number of study groups. This lead study group is responsible for the study of the appropriate core Questions. In addition, in consultation with the relevant study groups and, where appropriate, giving due consideration to the work of national, regional and other international standardization organizations (No. 196 of the Convention), the lead study group has the responsibility to define and maintain the overall framework and to coordinate, assign (in consultation with, and recognizing the mandates of, the relevant study groups) and prioritize the studies to be carried out by the study groups, and to ensure the preparation of consistent, complete and timely Recommendations. The lead study group shall inform TSAG on the progress of the work as defined in the scope of the lead study group activity. Issues which cannot be resolved by the study group should be raised for TSAG to offer advice and proposals for the direction of the work.

Study Group 15 has been assigned three lead study group roles in WTSA-20 Resolution 2 Part 2:

SG 15 Lead study group on access network transport

Lead study group on home networking

Lead study group on optical technology

## Guidelines

These areas are continuation of the lead study group roles of SG15 in the previous study period. Lead study group roles are carried out by way of maintaining a standardization work plan (SWP) which describes the activities and status of SG15, other ITU-T study groups, and other standards organizations in the area. The SWP is revised in each plenary meeting, and liaised to TSAG, other study groups, and other standards development organizations as appropriate to check the accuracy and completeness of the material and solicit updates.

The Access Network Transport standardization work plan (ANT-SWP) is under the responsibility of Q1/15.

The Home Network Transport standardization work plan (HNT-SWP) is under the responsibility of Q1/15.

The Optical Transport Networks and Technology standardization work plan (OTNT-SWP) is under the responsibility of Q12/15 and encompasses the lead study group roles on optical technology and optical transport networks.

Annex 23  
Promotion and Coordination Group

## Background

Over time, a group of issues that are not directly addressed by the technical work of the study questions of SG15 has been collected by a promotion and coordination group. This group addresses a broader set of issues including, but not limited to, promotion of SG15 standardization work, bridging the standardization gap, conformance and interoperability testing, Green ICT, future SG15 directions, responses to incoming liaisons from other SDOs, ITU Study Groups (SGs), Focus Groups (FGs), Joint Coordination Activities (JCAs), Committees, including those from TSAG and TSB (e.g. on Inter-Sector Coordination, Hot Topics, WTSA preparation towards the end of each study period) that are addressed to all questions of SG15.

## Guidelines

The Promotion and Coordination Group will meet at each plenary, normally in an evening (or exceptionally lunchtime) session during the second week of the plenary meeting when Rapporteurs, WP Chairmen, and interested delegates are available to attend. The Chairman of the group will conduct the session according to a meeting agenda distributed via TD in advance to all questions of SG15. The agenda will list the issues to be addressed such as those mentioned in the above section and any others allocated to this group in the SG15 opening plenary session not normally covered in the work of the study questions. During the Promotion and Coordination Group session, the group will report on the activities related to promotion (e.g. published News and participations in conferences since the last SG15 plenary meeting, status of on-going promotion activities) and agree proposals for new items to promote and future participations in conferences and events. The group will examine the received contributions from developing countries, discuss and agree on actions if required. It will consider the relevant liaisons statements received from other SDOs, ITU SGs, FGs, JCAs and Committees, including those from TSAG and TSB that require specific responses to be coordinated with Rapporteurs and WP Chairmen. During the plenary meeting, the Promotion and Coordination Group Chairman will liaise with the Rapporteurs of the relevant questions and WP Chairmen per mails and/or side meetings to acquire their inputs in order to prepare the necessary output documents and responses to the received requests via liaison statements. The study group Chairman will issue a final report that will highlight the actions resulting from the Promotion and Coordination Group session and provide in annexes the resulting output documents and liaison statements. The final report and its annexes will be distributed via TD to all questions of SG15 and submitted for approval during the SG15 closing plenary.

Moreover between study group plenary meetings, the group will coordinate by correspondence with TSB, including the TSB Communications Officer when required, the relevant Rapporteurs and WP Chairmen the required activities in order to achieve the agreed topics on promotion. This group may also convene electronic meetings as necessary between study group plenary meetings and resolve issues by correspondence.

Details of particular topic areas are as follows:

* **Promotion**: From Recommendation ITU-T A.1:

**2.1.6** As the promotion of study group activities is an essential element in any ITU-T marketing plan, each study group chairman, supported by other study group leaders and subject matter experts, is encouraged to establish, maintain and participate in a promotion plan, coordinated with TSB, whose emphasis is the dissemination of study group information to the telecommunication community. Such study group information dissemination should cover, but is not limited to, new work initiatives and significant accomplishments regarding technologies and technical solutions.

The Chairman of the Promotion and Coordination Group should proactively examine new work items and expected deliverables of the working parties at each plenary meeting to identify noteworthy items for promotion.   
The promotion of SG15 standardization work can be realized in different forms according to wishes and availabilities of the relevant Rapporteurs, WP Chairmen, as well as SG15 Chairman and TSB advisor.

* Advertising new Recommendations, Supplements, Technical Reports or Papers via ITU-News prepared by the TSB Communications Officer based on inputs provided by the relevant Rapporteurs
* Video interviews – e.g., of Rapporteurs or WP Chairmen – realized in close collaboration with the TSB Communications Officer
* Publication of news and articles in IEEE Communication Standards Magazine
* Publication of Technical Flyers available on SG15 webpage
* Participation with presentations and/or podium discussions in conferences and external events (e.g., conferences such as OFC, NGON & DCI World, UFBB Conference, forums such as WSIS Forum, ITSF, Broadband World Forum, workshops such as WSTS and Broadband Forum BASe). The participation can be remotely or face to face, done by individuals representing a single or a group of questions or a WP or the entire SG15. In certain cases, and in addition to a SG15 technical session, the conference organization may offer to SG15 to participate in their event with an exhibition booth.
* TSB supports also the organization of ITU Workshops on specific topics and offers in close collaboration with the TSB Communications Officer the possibility to arrange Podcasts and Webinars.

Individuals who represent SG15 at conferences and other external events may be identified during the Promotion and Coordination Group meeting at study group meetings, or may be approved between meetings by the relevant Rapporteurs, WP Chairmen, SG15 Chairman and TSB advisor.

Final texts for ITU-News proposed by the TSB Communications Officer should be reviewed and approved by the relevant Rapporteurs, WP Chairmen as well as SG15 Chairman and TSB advisor before publication.

Text of news articles proposed by Rapporteurs for publication in IEEE Communication Standards Magazine should be reviewed and approved by the relevant WP Chairmen as well as SG15 Chairman and TSB advisor before submission to the editor of the IEEE Communication Standards Magazine.

Technical Flyers prepared by Rapporteurs should be reviewed and approved by the relevant WP Chairmen as well as SG15 Chairman and TSB advisor before publication on the SG15 webpage.

PPT material to be presented at conferences and external events and prepared by Rapporteurs should be provided sufficiently in advance to the relevant WP Chairmen as well as SG15 Chairman and TSB advisor for review and approval.

The Chairman of the Promotion and Coordination Group should be kept informed during the reviews and approvals of above materials for promotion in order to follow and facilitate the process if necessary.

## Coordination

* **Bridging the Standardization Gap**: WTSA-20 Resolution 44 calls upon TSB Director and ITU-T Study Groups to implement measures to reduce the standardization gap between developed and developing countries. The promotion and coordination group will address BSG-related input documents received at a study group meeting, and examine the received contributions from developing countries, discuss and agree on actions if required. A summary note of these contributions and the resulting actions considered by SG15 will be communicated via liaison statement to the study groups of the ITU-D Sector.
* As stated in the section “*instructs study groups of the ITU Telecommunication Standardization Sector and the Telecommunication Standardization Advisory Group*” of Resolution 44, the Promotion and Coordination Group may be actively involved in the implementation of the programmes set forth in the action plan annexed to this resolution. For example such activities may include:
  1. Assist the initiative to include implementation guidelines for developing countries related to ITU-T SG15 Recommendations where these could provide advice to assist developing countries in adopting them
  2. Support in close collaboration with TSB, the ITU-D sector and coordinated with Telecommunication Development Bureau (BDT) the organization of capacity-building events that enable better application of specific ITU-T SG15 Recommendations and on methods of examining compliance of manufactured products with these Recommendations
* **Conformance and Interoperability Testing**: WTSA-20 Resolution 76 assigns to ITU-T Study Group 11 responsibility to coordinate the sector’s activities with regard to conformance and interoperability testing. SG11 has formed a Conformance and Interoperability Steering Committee (CASC). While individual questions or working parties may coordinate directly with SG11 and the CASC concerning testing for their technologies, the promotion and coordination group will take responsibility for dealing with SG15 overall coordination with SG11, in particular, ensuring the completeness and accuracy of the SG11-maintained reference table of ITU-T Recommendations which are suitable for C&I and relevant pilot projects.
* **Green ICT:** ITU-T Study Group 5 is the lead study group on ICTs and Climate Change. WTSA-20 Resolution 73 instructs all ITU-T study groups to cooperate with ITU-T Study Group 5 to develop appropriate Recommendations on ICTs, the environment and climate-change issues within the mandate and competency of ITU-T. The promotion and coordination group will address ICT and climate-change-related documents (in particular, from SG5) at a SG15 level, coordinating, for example, the information exchange concerning energy-efficient (through power saving features) and high speed (multi‑Mbit/s and Gbit/s) broadband technologies in WP1/15 Recommendations and the work items on scientific monitoring submarine cable system enabling both telecommunication and sensing functionalities for ocean and climate monitoring as well as disaster warning in WP2/15 Work Programme.
* **Future Directions for SG15:** SG15 should continue to maintain a structure and work programme that is prepared for the future. The promotion and coordination group will consider proposals for new work within SG15 that is not within the scope of the existing study questions or working parties including, if appropriate, the development of text for new questions and the proposed assignment to a working party. In addition, the promotion and coordination group will consider inputs from various sources for future work, including, but not limited to:
  1. Inputs from TSB, TSAG (e.g. from the Hot Topics Repository), other ITU Study Groups and Focus Groups as well as from other SDOs
  2. Inputs resulting from TSB director’s CTO group meetings established according to WTSA-20 Resolution 68
  3. Inputs from papers to the Kaleidoscope conferences relevant to SG15
  4. Inputs from papers in the ITU Journal on Future and Evolving Technologies (ITU J-FET) relevant to SG15

Approaching the end of each study period, the Promotion and Coordination Group will coordinate in close collaboration with WP Chairmen and SG15 Chairman updates to the text of SG15 questions, generating text for proposed new questions, and generating proposed updates to WTSA-20 Resolution 2 concerning the responsibility and mandate of SG15.

Annex 24  
Selection of Approval Process

## Background

WTSA Resolution 1 indicates:

**8.1 ITU-T Recommendation approval processes and selection of the approval process**

Procedures for approval of Recommendations which require formal consultation of Member States (traditional approval process, TAP) are specified in Section 9 of this resolution. Procedures for approval of Recommendations which do not require formal consultation of Member States (alternative approval process, AAP) are specified in Recommendation ITU‑T A.8. In accordance with the ITU Convention, the status of Recommendations approved is the same for both methods of approval.

"Selection" refers to the act of choosing AAP or choosing TAP for the development and approval of new and revised Recommendations.

**8.1.1 Selection at a study group meeting**

As a general approach, ITU‑T Recommendations having policy or regulatory implications, such as tariff and accounting issues and relevant numbering and addressing plans, or Recommendations where there is any doubt about their scope, are assumed to follow TAP in accordance with Nos. 246D, 246F and 246H of the Convention. Likewise, ITU‑T Recommendations relating to other issues are assumed in general to follow AAP. However, explicit action at the study group meeting can change the selection from AAP to TAP, and vice versa, if so decided by consensus of the Member States and Sector Members present at the meeting.

When determining whether a new or revised draft Recommendation has policy or regulatory implications, such as tariff and accounting issues and relevant numbering and addressing plans, study groups should refer to WTSA Resolution 40 (Rev. Geneva, 2022).

If consensus is not achieved, the same process used at a WTSA, as described in 1.13 above, shall be used to decide the selection.

Recommendation ITU-T A.8 indicates:

**1.1** Recommendations of the ITU Telecommunication Standardization Sector (ITU-T) will be approved using this alternative approval process (AAP), except Recommendations that have policy or regulatory implications, which will be approved using the traditional approval process (TAP) found in Resolution 1 of the World Telecommunication Standardization Assembly (WTSA).

The competent study group may also seek approval at a World Telecommunication Standardization Assembly (WTSA).

## SG15 Guidelines

Since SG15 does no work in topics of numbering, addressing, tariff, charging and accounting, the default approval process for all SG15 Recommendations is AAP.

Certain areas of work may be considered to have “policy or regulatory implications”, e.g., radio spectrum of PLT. Where it is necessary to approve these aspects using TAP, to the extent possible, policy and regulatory aspects and technical standardization aspects should be separated into different documents so that the technical work can proceed at a faster pace, keeping policy and regulatory aspects more stable.

TAP should generally only be used where there is a legitimate reason to believe a regulatory or policy concern exists. It should not be used simply as a way to make it easier to delay approval. Changing from the default process of AAP for a current or new work item requires explicit action, e.g., reconsideration of the approval process per Resolution 1 clause 8.3, which indicates “Any request for reconsideration (of the approval process) must be in writing (e.g. a contribution, or if submitted after the expiry of the deadline for a contribution, a written document that is then reflected in a TD) to a study group or working party meeting, accompanied by the reasons for reconsideration of the selection.”

Approval under one process does not require that the same approval process be used for a subsequent amendment or revision if a regulatory or policy concern has emerged or been removed. Resolution 1 clause 8.1 indicates that the procedure can be changed from AAP to TAP “and vice-versa” using the same process at a study group meeting.

While WTSA approvals should be the exception rather than the rule, it is not necessary to move a Recommendation to TAP to seek approval at WTSA. Recommendation ITU-T A.8 clause 1.1, 2nd paragraph indicates “The competent study group may also seek approval at a World Telecommunication Standardization Assembly (WTSA).”

Annex 25  
  
Objectives for the Study Group 15 meeting, 17 to 28 April 2023

* Review the interim activities since September 2022
* Review TSAG outcomes relevant for SG15
* WP Chair and Rapporteur Appointments
* Provide guidance for the work of SG15
* Progress the work of the Questions
* Progress work on Lead Study Group issues
* Prepare texts of Recommendations for ‘SG approval’ at the closing plenary
* Prepare texts of Recommendations for ‘Determination’ at the closing plenary
* Prepare texts of Recommendations for ‘Consent’ at the closing plenary
* Prepare texts for ‘Agreement’ at the closing plenary
* Deal with the approval of draft Recommendations, texts for Agreement and deletion of existing Recommendations
* Process Liaison Statements from/to other groups
* Begin preparations for WTSA-24
* Plan interim activities
* Review and update the Study Group 15 work programme
* Review and update the SG15 representatives and other role’s activities
* Prepare SG15’s involvement in future workshops and external events
* Prepare SG15’s material for promotion activities

Annex 26  
SG15 Recommendations approved via AAP since 30 September 2022

| **Recommendation** | **Title** | **Approval Date** |
| --- | --- | --- |
| [G.9903 (2017) Amd.2](https://www.itu.int/t/aap/recdetails/10324) | [Narrowband orthogonal frequency division multiplexing power line communication transceivers for G3-PLC networks](https://www.itu.int/t/aap/recdetails/10324) | 2023-03-09 |
| [G.9903 (2017) Cor.1](https://www.itu.int/t/aap/recdetails/10325) | [Narrowband orthogonal frequency division multiplexing power line communication transceivers for G3-PLC networks - Corrigendum 1](https://www.itu.int/t/aap/recdetails/10325) | 2023-03-09 |
| [G.9802.1 (2021) Amd.1](https://www.itu.int/t/aap/recdetails/10327) | [Wavelength division multiplexed passive optical networks (WDM PON): General requirements - Amendment 1](https://www.itu.int/t/aap/recdetails/10327) | 2023-02-22 |
| [G.9804.2 (2021) Amd.1](https://www.itu.int/t/aap/recdetails/10331) | [Higher Speed Passive Optical Networks - Common Transmission Convergence Layer Specification - Amendment 1](https://www.itu.int/t/aap/recdetails/10331) | 2023-02-22 |
| [G.9804.3 (2021) Amd.1](https://www.itu.int/t/aap/recdetails/10336) | [50-Gigabit-capable passive optical networks (50G-PON): Physical media dependent (PMD) layer specification Amendment 1](https://www.itu.int/t/aap/recdetails/10336) | 2023-02-22 |
| [G.9807.1](https://www.itu.int/t/aap/recdetails/10333) | [10-Gigabit-capable symmetric passive optical network (XGS-PON)](https://www.itu.int/t/aap/recdetails/10333) | 2023-02-22 |
| [G.987.2](https://www.itu.int/t/aap/recdetails/10332) | [10-Gigabit-capable passive optical networks (XG-PON): Physical media dependent (PMD) layer specification](https://www.itu.int/t/aap/recdetails/10332) | 2023-02-22 |
| [G.8152.1/Y.1375.1 (2021) Amd.1](https://www.itu.int/t/aap/recdetails/10408) | [Operation, administration, maintenance (OAM) management information and data models for the MPLS-TP network element - Amendment 1](https://www.itu.int/t/aap/recdetails/10408) | 2023-02-06 |
| [G.8052.1/Y.1346.1 (2021) Amd.1](https://www.itu.int/t/aap/recdetails/10365) | [Operation, administration, maintenance (OAM) management information and data models for the Ethernet-transport network element - Amendment 1](https://www.itu.int/t/aap/recdetails/10365) | 2023-01-13 |
| [G.9711 (2021) Cor.1](https://www.itu.int/t/aap/recdetails/10330) | [Multi-gigabit fast access to subscriber terminals (MGfast) Physical layer specification - Corrigendum 1](https://www.itu.int/t/aap/recdetails/10330) | 2022-12-22 |
| [G.8152.2/Y.1375.2 Amd.1](https://www.itu.int/t/aap/recdetails/10369) | [Resilience information/data models for the MPLS-TP network element - Amendment 1](https://www.itu.int/t/aap/recdetails/10369) | 2022-11-29 |
| [G.709.1/Y.1331 (2018) Amd. 3](https://www.itu.int/t/aap/recdetails/10343) | [Flexible OTN short reach interfaces - Amendment 3](https://www.itu.int/t/aap/recdetails/10343) | 2022-11-13 |
| [G.709.3/Y.1331.3 (2020) Amd. 1](https://www.itu.int/t/aap/recdetails/10344) | [Flexible OTN long reach interfaces - Amendment 1](https://www.itu.int/t/aap/recdetails/10344) | 2022-11-13 |
| [G.709/Y.1331 (2020) Cor.2](https://www.itu.int/t/aap/recdetails/10342) | [Interfaces for the optical transport network -Corrigendum 2](https://www.itu.int/t/aap/recdetails/10342) | 2022-11-13 |
| [G.7703 (2021) Amd.1](https://www.itu.int/t/aap/recdetails/10347) | [Architecture for the automatically switched optical network – Amendment 1](https://www.itu.int/t/aap/recdetails/10347) | 2022-11-13 |
| [G.7710/Y.1701 (2020) Amd.1](https://www.itu.int/t/aap/recdetails/10361) | [Common equipment management function requirements: Amendment 1](https://www.itu.int/t/aap/recdetails/10361) | 2022-11-13 |
| [G.7716](https://www.itu.int/t/aap/recdetails/10362) | [Architecture of management and control operations](https://www.itu.int/t/aap/recdetails/10362) | 2022-11-13 |
| [G.7718/Y.1709 (2020) Amd.1](https://www.itu.int/t/aap/recdetails/10363) | [Framework for the management of management-control components and functions - Amendment 1](https://www.itu.int/t/aap/recdetails/10363) | 2022-11-13 |
| [G.7721 (2018) Amd.1](https://www.itu.int/t/aap/recdetails/10364) | [Management requirement and information model for synchronization – Amendment 1](https://www.itu.int/t/aap/recdetails/10364) | 2022-11-13 |
| [G.781 (2020) Amd.1](https://www.itu.int/t/aap/recdetails/10348) | [Synchronization layer functions for frequency synchronization based on the physical layer - Amendment 1](https://www.itu.int/t/aap/recdetails/10348) | 2022-11-13 |
| [G.781.1 (2022) Amd.1](https://www.itu.int/t/aap/recdetails/10349) | [Synchronization Layer Functions for packet-based networks - Amendment 1](https://www.itu.int/t/aap/recdetails/10349) | 2022-11-13 |
| [G.806 (2012) Amd.1](https://www.itu.int/t/aap/recdetails/10345) | [Characteristics of transport equipment - Description methodology and generic functionality - Amendment 1](https://www.itu.int/t/aap/recdetails/10345) | 2022-11-13 |
| [G.8121.1/Y.1381.1 (2018) Cor.1](https://www.itu.int/t/aap/recdetails/10340) | [Characteristics of MPLS-TP equipment functional blocks supporting ITU-T G.8113.1/Y.1372.1 OAM mechanisms -Corrigendum 1](https://www.itu.int/t/aap/recdetails/10340) | 2022-11-13 |
| [G.8121.2/Y.1381.2 (2018) Cor.1](https://www.itu.int/t/aap/recdetails/10341) | [Characteristics of MPLS-TP equipment functional blocks supporting ITU-T G.8113.2/Y.1372.2 OAM mechanisms -Corrigendum 1](https://www.itu.int/t/aap/recdetails/10341) | 2022-11-13 |
| [G.8251](https://www.itu.int/t/aap/recdetails/10350) | [The control of jitter and wander within the optical transport network (OTN)](https://www.itu.int/t/aap/recdetails/10350) | 2022-11-13 |
| [G.8260](https://www.itu.int/t/aap/recdetails/10351) | [Definitions and terminology for synchronization in packet networks](https://www.itu.int/t/aap/recdetails/10351) | 2022-11-13 |
| [G.8262.1/Y.1362.1](https://www.itu.int/t/aap/recdetails/10352) | [Timing characteristics of enhanced synchronous equipment slave clock](https://www.itu.int/t/aap/recdetails/10352) | 2022-11-13 |
| [G.8265.1/Y.1365.1](https://www.itu.int/t/aap/recdetails/10353) | [Precision time protocol telecom profile for frequency synchronization](https://www.itu.int/t/aap/recdetails/10353) | 2022-11-13 |
| [G.8271.1/Y.1366.1](https://www.itu.int/t/aap/recdetails/10354) | [Network limits for time synchronization in packet networks with full timing support from the network](https://www.itu.int/t/aap/recdetails/10354) | 2022-11-13 |
| [G.8271.2/Y.1366.2 (2021) Amd.1](https://www.itu.int/t/aap/recdetails/10355) | [Network limits for time synchronization in packet networks with partial timing support from the network - Amendment 1](https://www.itu.int/t/aap/recdetails/10355) | 2022-11-13 |
| [G.8272/Y.1367 (2018) Amd.2](https://www.itu.int/t/aap/recdetails/10368) | [Timing characteristics of primary reference time clocks - Amendment 2](https://www.itu.int/t/aap/recdetails/10368) | 2022-11-13 |
| [G.8273.2/Y.1368.2 (2020) Amd. 2](https://www.itu.int/t/aap/recdetails/10356) | [Timing characteristics of telecom boundary clocks and telecom time slave clocks for use with full timing support from the network - Amendment 2](https://www.itu.int/t/aap/recdetails/10356) | 2022-11-13 |
| [G.8273.4/Y.1368.4 (2020) Amd.2](https://www.itu.int/t/aap/recdetails/10357) | [Timing Characteristics of Telecom Boundary Clocks and Telecom Time Slave Clocks for Use with Partial Timing Support from the Network - Amendment 2](https://www.itu.int/t/aap/recdetails/10357) | 2022-11-13 |
| [G.8275.1/Y.1369.1](https://www.itu.int/t/aap/recdetails/10359) | [Precision time protocol telecom profile for phase/time synchronization with full timing support from the network](https://www.itu.int/t/aap/recdetails/10359) | 2022-11-13 |
| [G.8275.2/Y.1369.2](https://www.itu.int/t/aap/recdetails/10360) | [Precision time protocol telecom profile for phase/time synchronization with partial timing support from the network](https://www.itu.int/t/aap/recdetails/10360) | 2022-11-13 |
| [G.8275/Y.1369 (2020) Amd. 3](https://www.itu.int/t/aap/recdetails/10358) | [Architecture and requirements for packet-based time and phase distribution - Amendment 3](https://www.itu.int/t/aap/recdetails/10358) | 2022-11-13 |
| [G.8321](https://www.itu.int/t/aap/recdetails/10346) | [Characteristics of Metro Transport Network equipment functional blocks](https://www.itu.int/t/aap/recdetails/10346) | 2022-11-13 |
| [G.8350](https://www.itu.int/t/aap/recdetails/10366) | [Management and control for metro transport network](https://www.itu.int/t/aap/recdetails/10366) | 2022-11-13 |
| [G.874 (2020) Amd.1](https://www.itu.int/t/aap/recdetails/10367) | [Management aspects of optical transport network elements - Amendment 1](https://www.itu.int/t/aap/recdetails/10367) | 2022-11-13 |
| [G.9701 (2019) Cor.3](https://www.itu.int/t/aap/recdetails/10335) | [Fast access to subscriber terminals (G.fast) - Physical layer specification: Corrigendum 3](https://www.itu.int/t/aap/recdetails/10335) | 2022-11-13 |
| [G.988](https://www.itu.int/t/aap/recdetails/10334) | [ONU management and control interface (OMCI) specification](https://www.itu.int/t/aap/recdetails/10334) | 2022-11-13 |
| [G.9901 (2017) Cor.1](https://www.itu.int/t/aap/recdetails/10326) | [Narrowband orthogonal frequency division multiplexing power line communication transceivers – Power spectral density specification - Corrigendum 1](https://www.itu.int/t/aap/recdetails/10326) | 2022-11-13 |
| [G.997.2 (2019) Cor.2](https://www.itu.int/t/aap/recdetails/10328) | [Physical layer management for G.fast transceivers: Corrigendum 2](https://www.itu.int/t/aap/recdetails/10328) | 2022-11-13 |
| [G.997.3 (2021) Cor.1](https://www.itu.int/t/aap/recdetails/10329) | [Physical layer management for MGfast transceivers - Corigendum 1](https://www.itu.int/t/aap/recdetails/10329) | 2022-11-13 |
| [L.109.1](https://www.itu.int/t/aap/recdetails/10338) | [Type II optical/electrical hybrid cables for access points and other terminal equipment](https://www.itu.int/t/aap/recdetails/10338) | 2022-11-13 |
| [L.210](https://www.itu.int/t/aap/recdetails/10339) | [Requirements for passive optical nodes: optical wall outlets and extender boxes](https://www.itu.int/t/aap/recdetails/10339) | 2022-11-13 |

Annex 27  
TAP text approved at this meeting

**WP1/15 - Approval**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Recommendation** | **N=new R=rev.** | **TSB announcement** | **Title** | **Text** |
| G.9901 Amd.1 | N | [CIR 51](https://www.itu.int/md/T22-TSB-CIR-0051/en) | Narrowband orthogonal frequency division multiplexing power line communication transceivers - Power spectral density specification | [SG15-R5](https://www.itu.int/md/T22-SG15-R-0005/en) |

Annex 28  
AAP texts approved at this meeting

**WP1/15 - Approval**

| **Recommendation** | **N=new R=rev.** | [**Title**](javascript:__doPostBack('_ctl0$_ctl0$cphContent$cphContent$dgSearchResult$_ctl2$_ctl1','')) | **TD** |
| --- | --- | --- | --- |
| G.9962 Amd.2 | N | Unified high-speed wire-line based home networking transceivers – Management Specification (2018) – Amendment 2 | [TD115R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0115/en) |

Annex 29  
Texts determined at this meeting

WP1/15

| **Recommendations** | **N=new R=rev.** | **Title** | **Text in Doc(s)** |
| --- | --- | --- | --- |
| G.9964 | R | Unified high-speed wireline-based home networking transceivers – Power spectral density specification | [TD162/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0162/en) |

Annex 30  
Texts consented at this meeting

**WP1/15 - Consent**

| **Recommendations** | **N=new R=rev.** | **Title** | **Text in Doc(s)** |
| --- | --- | --- | --- |
| G.9802.2 | N | Wavelength division multiplexed passive optical networks (WDM PON): physical media dependent (PMD) layer and transmission convergence (TC) layer specification | [TD167R3/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0167/en) |
| G.987.2 Amd.1 | N | 10-Gigabit-capable passive optical networks (XG-PON): Physical media dependent (PMD) layer specification - Amendment 1 | [TD161/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0161/en) |
| G.9805 Amd.1 | N | Coexistence of Passive Optical Network Systems -Amendment 1 | [TD166R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0166/en) |
| G.9806 Amd.3 | N | Higher speed bidirectional, single fibre, point-to-point optical access system - Amendment 3 | [TD153R2/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0153/en)  A5 in [TD181/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0181/en) |
| G.989.3 Amd.1 | N | 40-Gigabit-capable passive optical networks (NG-PON2): Transmission convergence layer specification - Amendment 1 | [TD170R2/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0170/en) |
| G.9963 | R | Unified high-speed wireline-based home networking transceivers – Multiple input/multiple output specification | [TD168R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0168/en) |
| G.9961 | R | Unified high-speed wireline-based home networking transceivers – Data link layer specification | [TD159R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0159/en) |
| G.9940 (G.fin-SA) | N | High speed fibre-based in-premises transceivers - system architecture | [TD152R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0152/en) |
| G.9960 | R | Unified high-speed wireline-based home networking transceivers – System architecture and physical layer specification | [TD113/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0113/en) |
| G.9701 Cor.4 | N | Fast access to subscriber terminals (G.fast) - Physical layer specification: Corrigendum 4 | [TD118/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0118/en) |
| G.9711 Cor.2 | N | Multi-gigabit fast access to subscriber terminals (MGfast) - Physical layer specification - Corrigendum 2 | [TD117/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0117/en) |

**WP2/15 – Consent**

| **Recommendation** | **N=new R=rev.** | **Title** | **Text in Doc(s)** |
| --- | --- | --- | --- |
| G.698.4 | R | Multichannel bi-directional DWDM applications with port agnostic single-channel optical interfaces | [TD165R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0165/en)  A5 in [TD178/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0178/en) |
| G.698.1 | R | Multichannel DWDM applications with single-channel optical interfaces | [TD171R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0171/en) |
| L.340 (ex L.74) | R | Maintenance of telecommunication underground facilities | [TD163R2/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0163/en) |

**WP3/15 – Consent**

| **Recommendation** | **N=new R=rev.** | **Title** | **Text in  Doc(s)** |
| --- | --- | --- | --- |
| G.8013/Y.1731 | R | Operation, administration and maintenance (OAM) functions and mechanisms for Ethernet-based networks | [TD157R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0157/en) A.5 in [TD180/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0180/en) |
| G.709.1/Y.1331.1 Amd.4 | N | Flexible OTN short-reach interfaces - Amendment 4 | [TD114R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0114/en) A.5 in [TD179/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0179/en) |
| G.798 | R | Characteristics of optical transport network hierarchy equipment functional blocks | [TD160R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0161/en)  A.5 in [TD176/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0176/en) |
| G.8251 Cor.1 | N | The control of jitter and wander within the optical transport network (OTN) Corr 1 | [TD173/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0173/en) |
| G.8271.1/Y.1366.1 Amd.1 | N | Network limits for time synchronization in packet networks with full timing support from the network - Amendment 1 | [TD151R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0151/en) |
| G.8273/Y.1368 | R | Framework of phase and time clocks | [TD155R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0155/en) A.5 in [TD177/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0177/en) |
| G.8273.2/Y.1368.2 | R | Timing characteristics of telecom boundary clocks and telecom time synchronous clocks for use with full timing support from the network | [TD156R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0156/en) |
| G.8051 Amd.1 | N | Management aspects of the Ethernet transport (ET) capable network element - Amendment 1 | [TD158R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0158/en) A.5 in [TD174/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0174/en) |

Annex 31  
Texts agreed at this meeting

**WP3/15 – Agreement**

| **Document.** | **N=new R=rev.** | **Title** | **Text in Doc(s)** |
| --- | --- | --- | --- |
| G Suppl. 58 | R | Optical transport network module framer interfaces | [TD116R1/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0116/en) |
| G.8052.2 Cor.1 | N | Resilience information/data models for the Ethernet transport network element - Corrigendum 1 | [TD175/P](https://www.itu.int/md/T22-SG15-230417-TD-PLEN-0175/en) |

Annex 32  
List of outgoing Liaison Statements agreed

| **oLS** | **Title** | **For action to** | **For info. to** | **Deadline** |
| --- | --- | --- | --- | --- |
| [SG15-LS69](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00069.docx) | LS/r to ITU-T SG20 on J-SCTF Task & Finish Group 2 "Mapping exercise on the existing SDOs work in smart and sustainable cities" (reply to SG20-LS69) | - | SG20; | - |
| [SG15-LS68](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00068.docx) | LS/r on definitions being developed by ITU-T SG11, SG12, SG16, SG17 and SG20 (reply to SCV-LS5) | - | SCV; | - |
| [SG15-LS67](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00067.zip) | LS/r to JCA-IMT2020 on invitation to update the information in the IMT-2020 roadmap (reply to JCA-IMT2020-LS12) | - | JCA-IMT2020; | - |
| [SG15-LS66](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00066.zip) | LS/r to ITU-D SG2 on new Question 1/2 and collaboration (reply to ITU-D Q1/2-2/86) | - | ITU-D SG 2; | - |
| [SG15-LS65](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00065.docx) | LS/r on disaster risk reduction and management (reply to ITU-D Q3/1-1/106) | - | ITU-D SG 1; | - |
| [SG15-LS64](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00064.docx) | LS on contributions from developing countries | - | ITU-D SG 2; ITU-D SG 1; SG11; | - |
| [SG15-LS63](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00063.zip) | LS/r on Telecommunication Management and OAM Project Plan (reply to SG2-LS61) | - | SG2; | - |
| [SG15-LS62](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00062.docx) | LS on IM/DM modelling coordination | IEEE 802.1; IEEE 1588; | BROADBAND FORUM; TM Forum; IETF; MEF; IEEE 802.3 Ethernet WG; ONF; | 2023-05-28 |
| [SG15-LS61](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00061.docx) | LS on the use of inclusive language in IEEE Std 1588 YANG work | IEEE 1588; | IEEE 802.1; | 2023-06-14 |
| [SG15-LS60R2](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00060r2.docx) | LS on information on actions taken by SG15 on inclusive language | SCV; TSAG; | - | 2023-10-02 |
| [SG15-LS59](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00059.zip) | LS on information on actions taken by SG15 on inclusive language | - | IETF; IEEE 802.1; IEEE 802.3 Ethernet WG; 3GPP TSG RAN; IEEE 1588; O-RAN; | - |
| [SG15-LS58](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00058.zip) | LS on OTNT Standardization Work Plan Issue 32 | ATIS; IEC; MEF; IEEE 802.1; IEEE 802.3 Ethernet WG; IETF CCAMP Working Group; IETF MPLS; TIA; IETF PCE; OIF; IETF TEAS WG; IETF PALS WG; SG12; SG13; SG17; TSAG; | - | 2023-11-06 |
| [SG15-LS57R1](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00057r1.zip) | LS on concerns with IEEE 2893-2023 | IEEE COM/PLC; IEEE P2893; | IEEE SA; | 2023-06-20 |
| [SG15-LS56](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00056.docx) | LS on ITU-T G.709 Amendment 3 | - | OIF; | - |
| [SG15-LS55](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00055.zip) | LS on intent to initiate approval of Amendment to MPLS-TP Recommendation | - | IETF MPLS; | - |
| [SG15-LS54](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00054.zip) | LS/r on 800 Gbit/s FlexO (reply to OpenROADM MSA-LS4, OIF-LS54) | OIF; OpenROADM MSA; | - | - |
| [SG15-LS53](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00053.docx) | LS/r on invitation to join the activities and nominate the representative to the ITU-T JCA-ML (reply to ITU-T JCA-ML LS1) | - | JCA-ML; | - |
| [SG15-LS52](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00052.docx) | LS/r on clarification of ITU-T G.698.2 (11/2018) application codes (reply to IETF ccamp WG-LS19) | - | IETF CCAMP Working Group; | - |
| [SG15-LS51](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00051.zip) | LS on G.652 fibre link property | - | IEEE 802.3 Ethernet WG; | - |
| [SG15-LS50](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00050.docx) | LS/r on joint FTTR workshop (reply to ETSI ISG F5G-LS10, BBF-LS170 and CCSA-LS10) | - | BROADBAND FORUM; CCSA; ETSi ISG F5G; | - |
| [SG15-LS49](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00049.zip) | LS/r on 100 Gb/s bidirectional point-to-point optical access (reply to IEEE 802.3 Ethernet WG-LS116) | - | IEEE 802.3 Ethernet WG; | - |
| [SG15-LS48](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00048.docx) | LS on the new version of the Access Network Transport (ANT) and Home Network Transport (HNT) Standards Overviews and Work Plans | - | ITU-D SG 2; SG20; | - |
| [SG15-LS47](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00047.zip) | LS on Conformance and Interoperability Testing (CIT) activities for WP1/15 Recommendations (reply to SG11-LS61) | - | SG11; | - |
| [SG15-LS46](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00046.docx) | LS on the new version of the Home Network Transport (HNT) Standards Overview and Work Plan | BROADBAND FORUM; ITU-R SG 1; ITU-R SG 5; ITU-R SG 6; ISO/IEC JTC1/SC25; IEEE 802.3 Ethernet WG; ETSI TC ATTM; MoCA; SG5; SG9; SG13; SG16; SG17; TSAG; | - | 2023-10-31 |
| [SG15-LS45](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00045.docx) | LS on the new version of the Access Network Transport (ANT) Standards Overview and Work Plan | BROADBAND FORUM; ITU-R SG 1; ITU-R SG 5; ITU-R SG 6; IEEE 802.3 Ethernet WG; ETSI TC ATTM; SG9; SG12; SG13; SG16; SG17; TSAG; | - | 2023-10-31 |
| [SG15-LS44](https://www.itu.int/ifa/t/2022/ls/sg15/sp17-sg15-oLS-00044.docx) | LS/r on the latest version of Access Network Transport (ANT) and Home Network Transport (HNT) Standards Overviews and Work Plans (reply to SG5-LS44, SG9-LS5, IEEE802.3EthernetWG-LS120 and IEEE802.3EthernetWG-LS121) | - | IEEE 802.3 Ethernet WG; SG5; SG9; | - |

Annex 33  
In-person Meetings Agreed

WP1/15

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q.** | **Topic** | **Date** | **Location/Host** | **Confirmed/Proposed** |
| 2 | LC comments and all topics under development | 14-16 June 2023 | Boston / Verizon Futurewei | Confirmed |
| 2 | All topics under dev. | 5-8 Sept 2023 | TBD | Proposed |
| 3 | All Q3/15 | 27 – 29 June 2023 | Paris, France/EDF | Confirmed |
| 3 | All Q3/15 | 19 – 21 September 2023 | Berlin, Germany / HHI | Confirmed |

WP2/15

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q.** | **Topic** | **Date/ time** | **Location/ host** | **Confirmed/ proposed** |
| 6 | * To prepare a stable draft of G.owdm, so that it can be sent for consent at the next SG15 Plenary Meeting. * To prepare a stable draft of G.owdm2, so that it can be sent for consent at the next SG15 Plenary Meeting. * To prepare a stable draft of G.959.1 with new 100G per lane OTN application codes, so that it can be sent for consent at the SG15 Plenary Meeting. * To consider contributions for the specification of G.fso systems, including optical parameter definitions and their values based on measurements. * To consider contributions to define a list of requirements for P2MP systems (WD06-04R1, Geneva 13-16 Feb 2013), in order to evaluate whether or not to start a new related work item. * To consider contributions for the definitions of SCM and subcarrier in P2MP systems * To consider contributions for the definition of OTSi, making it independent of NMC and covering both P2P and P2MP systems. * To consider contributions for the definition of suitable metrics to specify the transmitter quality in 400G and Beyond 400G systems. * To consider contributions for defining the application space and high-level requirements of 400G and beyond 400G systems, in terms of distance, number of spans, OSNR, number of channels, frequency spacing, bìt rate, type of FEC, modulation format. * To consider contributions with proposals on modifications needed to G.698.4 or other new Recommendations to enable remote performance monitoring features in optical modules. * To consider contributions to revise Supplement G.Sup39, including PCS, revising the material covering SCM and improving the descriptions of modulation formats, according to Annex 1 of this report. | 25-27 July 2023 | Pisa, Italy. Ericsson and Institute of Communication, Information and Perception Technologies - Scuola Superiore Sant'Anna, Pisa | Confirmed |

WP3/15

| **Q** | **Topics** | **Date** | **Location/ Host** | **Status** |
| --- | --- | --- | --- | --- |
| 11 | B400G, sub1G, G.709.x | 26-30 June 2023 | Zurich, Switzerland / Huawei | Approved |
| 12 & 14 | * Q12 Topics: Architecture Recommendations * Q14 Topics: Transport management   Q12 and Q14 Joint Topics: G.7701 Amd. 1, G.7702 Amd. 1, G.7703 Amd 2, MC LL, Next Study Period Question Text | 18-22 September 2023 | Hong Kong/ Huawei | Confirmed |
| 13 | -AAP comments if needed  -Q13 docs for consent in December 2023  -Simulations for fgOTN based on the HRM discussed at the joint Q11 and Q13 meeting at the SG15 Plenary in April 2023.  -Others if time permits | 25-29 September 2023 | San Jose / Microchip | Confirmed |

Annex 34  
Virtual meetings agreed

WP1/15

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q.** | **Topic** | **Date** | **Time (Geneva)** | **Confirmed/ Proposed** |
| 2 | All topics under dev. | 25 July 2023 | 14:00-16:00 | Confirmed |
| 2 | All topics under dev. | 17 Oct 2023 | 14:00-16:00 | Confirmed |
| 3 | All topics | 23 May 2023 | 14:00-17:00 | Confirmed |
| 4 | All projects | 27 June 2023 | 14:00-17:00 | Confirmed |
| 4 | All projects | 10 October 2023 | 14:00-17:00 | Confirmed |

WP3/15

| **Q.** | **Topics** | **Date** | **Location/ Host** | **Status** |
| --- | --- | --- | --- | --- |
| 12 | Network media channel eMeeting | 2023-07-06 | MyMeetings/ITU | Confirmed |
| 13 & 14 | Sync Modelling | 2023-06-21 | MyMeetings/ITU | Confirmed |
| 14 | IM/DM coordination eMeetings and correspondence activity (Track A) | 2023-06-07 2023-07-05 2023-08-02 2023-09-06 | Zoom/ITU | Confirmed |
| 14 | Transport management and ETH, MPLS-TP, MTN, and TCIM UML modelling eMeetings and correspondence activity (Track C) | 2023-05-10 2023-06-14 2023-07-12 2023-08-09 2023-10-11 | MyMeetings/ITU | Confirmed |
| 14 | Transport management and OTN, Media, and TCIM UML modelling eMeetings and correspondence activity (Track D) | 2023-05-17 2023-07-19 2023-08-16 2023-10-18 | MyMeetings/ITU | Confirmed |

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1. The Status of Recommendations table may include a TD/WP if that is the only text available. The work programme data base will only show TD/PLEN documents. [↑](#footnote-ref-1)
2. 2 The Status of Recommendations table may include a TD/WP if that is the only text available. The work programme data base will only show TD/PLEN documents. [↑](#footnote-ref-2)