International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY
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Resolution 2 – ITU-T study group responsibility and mandates

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

RESOLUTION 2

ITU-T study group responsibility and mandates

(Helsinki, 1993; Geneva, 1996; Montreal, 2000; Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

the resolutions adopted by this assembly which contain many instructions and implications for the work of the relevant study groups,

considering

a) that the mandate for each study group needs to be clearly defined in order to avoid duplication of effort between study groups and to ensure the coherence of the overall work programme of the ITU Telecommunication Standardization Sector (ITU-T);

b) that ITU-T has to evolve in order to stay relevant to the changing telecommunication environment and to its membership interests;

c) that collocation of study group, working party or rapporteur group meetings could also be a means to avoid duplication of work and to improve efficiency of work; in practice, collocation enables:

– attendees' participation in the work of more than one study group;

– reduction in the need for exchange of liaison statements between the study groups concerned;

– saving costs for ITU and for ITU members and other experts;

d) that the World Telecommunication Standardization Assembly (WTSA), through Resolution 22, assigns authority to the Telecommunication Standardization Advisory Group (TSAG) in the interval between WTSAs to restructure and establish ITU-T study groups in response to changes in the telecommunication marketplace,

noting

that the study group structure, responsibilities and mandates agreed at WTSA may be modified in the interval between WTSAs, and that the current study group structure, responsibility and mandates may be found on the ITU-T website or obtained from the Telecommunication Standardization Bureau (TSB),

resolves

1 that the mandate of each study group, which it shall use as the basis for organizing its study programme, shall consist of:

– a general area of responsibility, as set out in Annex A, within which the study group may amend existing Recommendations, in collaboration with other groups, as appropriate;

– a set of Questions related to particular areas of study, which are compatible with the general area of responsibility and which should be results-oriented (refer to Section 7 of Resolution 1 of this assembly);

2 to encourage the study groups to consider collocation (e.g. of study group plenaries, working parties or rapporteur meetings) as a means to improve cooperation in some areas of work; the study groups involved will need to identify the areas in which they need to cooperate, based on their mandates, and keep TSAG and TSB informed,

instructs the Telecommunication Standardization Bureau

to support and facilitate the operational aspects of such collocation.

Annex A
(to Resolution 2)

PART 1 – GENERAL AREAS OF STUDY

Study Group 2
Operational aspects of service provision and telecommunication management

Responsible for studies relating to:

- principles of service provision, definition and operational requirements of service emulation;
- numbering, naming, addressing and identification requirements and resource assignment including criteria and procedures for reservation, assignment and reclamation;
- routing and interworking requirements;
- human factors;
- operational and management aspects of networks including network traffic management, designations, and transport-related operations procedures;
- operational aspects of interworking between traditional telecommunication networks and evolving networks;
- evaluation of feedback from operators, manufacturing companies and users on different aspects of network operation;
- management of telecommunication services, networks, and equipment via management systems, including support for next-generation networks (NGN) and the application and evolution of the telecommunication management network (TMN) framework;
- ensuring the consistency of the format and structure of IdM identifiers; and
- specifying interfaces to management systems to support the communication of identity information within or between organizational domains.

Study Group 3
Tariff and accounting principles including related telecommunication economic and policy issues

Responsible, among others, for studies relating to tariff and accounting matters (including costing methodologies) for international telecommunication services and study of related telecommunication economic, accounting and policy issues. To this end, Study Group 3 shall in particular foster collaboration among its members with a view to the establishment of rates at levels as low as possible consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunications on a sound basis.

Study Group 5
Protection against electromagnetic environment effects

Responsible for studies relating to protection of telecommunication networks and equipment from interference and lightning.

Also responsible for studies related to electromagnetic compatibility (EMC), to safety and to health effects connected with electromagnetic fields produced by telecommunication installations and devices, including cellular phones.

Responsible for studies on the existing copper network outside plant and related indoor installations.

Study Group 9
Television and sound transmission and integrated broadband cable networks

Responsible for studies relating to:

- use of telecommunication systems for contribution, primary distribution and secondary distribution of television, sound programmes and related data services including interactive services;
- use of cable and hybrid networks, primarily designed for television and sound programme delivery to the home, as integrated broadband networks to also carry voice or other time-critical services, video on demand, interactive services, etc.

Study Group 11
Signalling requirements, protocols and test specifications

Responsible for studies relating to signalling requirements and protocols, including those for IP-based networks, NGN, mobility, some multimedia related signalling aspects, ad hoc networks (sensor networks, RFID, etc.), QoS, and internetwork signalling for ATM, N-ISDN and PSTN networks. This also includes reference signalling architectures and test specifications for NGN and emerging networks (e.g., USN).

Study Group 12
Performance, QoS and QoE

Responsible for Recommendations on performance, quality of service (QoS) and quality of experience (QoE) for the full spectrum of terminals, networks and services ranging from speech over fixed circuit-based networks to multimedia applications over networks that are mobile and packet based. Included in this scope are the operational aspects of performance, QoS and QoE.

A special focus is given to interoperability to ensure end-to-end users' satisfaction.

Study Group 13
Future networks including mobile and NGN

Responsible for studies relating to the requirements, architecture, evolution and convergence of future networks. Also includes NGN project management coordination across study groups and release planning, implementation scenarios and deployment models, network and service capabilities, interoperability, impact of IPv6, NGN mobility and network convergence, public data network aspects and network aspects of IdM. Responsible for studies relating to network aspects of mobile telecommunication networks, including International Mobile Telecommunications (IMT), wireless Internet, convergence of mobile and fixed networks, mobility management, mobile multimedia network functions, internetworking, interoperability and enhancements to existing ITU-T Recommendations on IMT.

Study Group 15
Optical transport networks and access network infrastructures

Study Group 15 is responsible in ITU-T for the development of standards on optical transport networks and access network infrastructures, systems, equipment, optical fibres and cables, and their related installation, maintenance, test, instrumentation and measurement techniques, and control plane technologies to enable the evolution toward intelligent transport networks. This encompasses the development of related standards for the customer premises, access, metropolitan and long-haul sections of communication networks.

Study Group 16
Multimedia coding, systems and applications

Responsible for studies relating to ubiquitous applications, multimedia capabilities for services and applications for existing and future networks, including NGN and beyond. This encompasses accessibility, multimedia architectures, terminals, protocols, signal processing, media coding and systems (e.g. network signal processing equipment, multipoint conference units, gateways and gatekeepers).

Study Group 17
Security

Responsible for studies relating to security including cybersecurity, countering spam and identity management. Also responsible for the application of open system communications including directory and object identifiers, and for technical languages, the method for their usage and other issues related to the software aspects of telecommunication systems.

PART 2 – LEAD STUDY GROUPS IN SPECIFIC AREAS OF STUDY

SG 2	Lead study group for service definition, numbering and routing Lead study group on telecommunications for disaster relief/early warning Lead study group on telecommunication management
SG 5	Lead study group on electromagnetic compatibility and electromagnetic effects
SG 9	Lead study group on integrated broadband cable and television networks
SG 11	Lead study group on signalling and protocols Lead study group on intelligent networks Lead study group on test specifications
SG 12	Lead study group on quality of service and quality of experience
SG 13	Lead study group for future networks and NGN Lead study group on mobility management and fixed-mobile convergence
SG 15	Lead study group on access network transport Lead study group on optical technology Lead study group on optical transport networks
SG 16	Lead study group on multimedia coding, systems and applications Lead study group on ubiquitous applications ("e-everything", such as e-health) Lead study group on telecommunication/ICT accessibility for persons with disabilities
SG 17	Lead study group on telecommunication security Lead study group on identity management (IdM) Lead study group on languages and description techniques

Annex B
(to Resolution 2)

Points of guidance to study groups for the development of the post-2008 work programme

B.1 This annex provides points of guidance to study groups for the development of the post-2008 study Questions in accordance with the proposed structure and general areas of responsibility. The points of guidance are intended to clarify, where appropriate, interaction between study groups in certain areas of common responsibility and are not intended to provide a comprehensive list of such responsibilities.

B.2 This annex will be reviewed by TSAG as necessary to facilitate interaction between study groups, to minimize duplication of effort and to harmonize the overall ITU-T work programme.

Study Group 2

Study Group 2 is the lead study group for service definition (including all types of mobile services) and for numbering and routing. Study Group 2 has a responsibility for creating principles of service and operational requirements, including billing and operational quality of service/network performance. Service principles and operational requirements must be developed for current and evolving technologies.

Study Group 2 shall define and describe services from a user's point of view to facilitate global interconnection and interoperation and, to the extent practicable, ensure compatibility with the International Telecommunication Regulations and related intergovernmental agreements. Study Group 2 should continue to study service policy aspects including those that may arise in the operation and provision of transborder, global and/or regional services taking due account of national sovereignty.

Study Group 2 is responsible for studying, developing and recommending general principles of numbering and routing for all types of network.

The chairman of Study Group 2 (or, if necessary, the chairman's delegated representative), in consultation with Study Group 2's membership, should provide technical advice to the Director of TSB concerning general principles for numbering and routing and the effect on allocation of international codes.

Study Group 2 should provide the Director of TSB with advice on technical, functional and operational aspects in the assignment, reassignment and/or reclamation of international numbering and addressing resources in accordance with the relevant E- and F-series Recommendations, taking into account the results of any ongoing studies.

Study Group 2 should recommend measures to be taken to assure operational performance of all networks (including network management) in order to meet the in-service network performance and QoS.

As the lead study group on telecommunication management, Study Group 2 also has the responsibility for the development and maintenance of a consistent ITU-T work plan, prepared with the cooperation of relevant ITU-T study groups, on activities associated with telecommunication management and with operations, administration and management (OAM). In particular, this work plan will focus on activities involving two types of interfaces:

- for fault, configuration, accounting, performance and security management (FCAPS) interfaces between network elements and management systems, and between management systems; and
- for transmission interfaces between network elements.

In support of market-acceptable FCAPS interface solutions, Study Group 2 studies will identify service provider and network operator requirements and priorities for telecommunication management, continue the evolution of the telecommunication management framework currently based on telecommunication management network (TMN) and NGN concepts, and address the management of NGN as well as the mixed circuit-switched and packet-switched network environment present during the transition to NGN.

Study Group 2 FCAPS interface solutions will specify reusable management information definitions via protocol-neutral techniques, continue management information modelling for the major telecommunication technologies, such as optical and IP-based networking, and extend management technology choices consistent with market needs, industry recognized value, and major, emerging technical directions.

To support the generation of such interface solutions, Study Group 2 will strengthen the collaborative relationships with standards development organizations (SDOs), forums, consortia and other experts as appropriate.

Additional studies will also cover network and service operational requirements and procedures, including support for network traffic management, support for the Service and Network Operations (SNO) group, and designations for interconnections among network operators.

Study Group 3

All study groups shall notify Study Group 3 at the earliest opportunity of any development that may have an impact on tariff and accounting principles, including the related telecommunication economic and policy issues.

Study Group 5

Study Group 5 will develop Recommendations, Handbooks and other publications related to:

– protection of telecommunication networks and equipment from interference and lightning;

– electromagnetic compatibility (EMC); and

– safety and health effects connected with electromagnetic fields produced by telecommunication installations and devices.

Study Group 5 will also take care of the aspects related to the deployment of new services on existing copper network, such as co-existence of different services from different providers in the same cable and positioning of components (e.g. xDSL filters) inside the central office main distribution frame, including also the need to provide performance requirements of new copper pair cables designed to support higher bandwidth.

This activity is strictly related to the continuation of studies on the local loop unbundling (LLU) with the scope to provide all the correct technical solutions needed to assure network integrity and interoperability, the easy use of equipment and access security in a context where operators can interact without affecting the quality of service defined by regulatory and administrative issues.

Study Group 9

Within its general area of responsibility, Study Group 9 will develop and maintain Recommendations on:

- the use of IP, ATM or other appropriate protocols and middleware to provide time-critical services, services on demand, or interactive services over cable or hybrid networks, in cooperation with other study groups when necessary;
- procedures for operation of television and sound-programme networks;
- television and sound-programme systems for contribution and distribution networks;
- transmission systems for television, sound-programmes and interactive services including internet applications on networks intended primarily for television;

- the delivery of broadband audio/visual services over home networks.

Study Group 9 is responsible for coordination with ITU-R on broadcasting matters.

Study Group 9 will hold collocated meetings with Study Group 16. The work of Study Group 9 on quality assessment will be coordinated with Study Group 12.

Study Group 11

Study Group 11 will develop Recommendations related to signalling requirements and protocols, including those for IP-based networks, NGN, mobility, some related signalling aspects, ad hoc networks (sensor networks, RFID, etc.), QoS and internetwork signalling for ATM, N-ISDN and PSTN networks. This also includes reference signalling architectures and test specifications for NGN and emerging networks (e.g., USN).

In addition, Study Group 11 will develop Recommendations on the following subjects:

- network signalling and control functional architectures in emerging NGN environments;
- application control and signalling requirements and protocols;
- session control and signalling requirements and protocols;
- bearer control and signalling requirements and protocols;
- resource control and signalling requirements and protocols;
- signalling and control requirements and protocols to support attachment in NGN environments;
- reference signalling architecture and test specifications for NGN and emerging networks (e.g., USN) to assure interoperability.

Study Group 11 is to lend assistance in the preparation of a handbook on the deployment of packet-based networks.

Study Group 11 is to reuse, where appropriate, protocols that are being developed by other SDOs, in order to maximize standards investments.

Study Group 11 is to work on enhancements to existing Recommendations on access and internetwork signalling protocols of BICC, ATM, N-ISDN and PSTN, i.e., SS No. 7, DSS1 and DSS2, etc. The objective is to satisfy business needs of member organizations that wish to offer new features and services on top of networks based on existing Recommendations.

Study Group 11 will hold collocated meetings with Study Group 13.

Study Group 12

Within its general area of study, a particular focus of Study Group 12 is the end-to-end transmission quality delivered using a path that, with increasing frequency, involves new interactions between terminal types and network technologies (e.g. mobile terminals, multiplexers, gateway and network signal processing equipment, and networks with IP segments).

As the lead study group on QoS and QoE, Study Group 12 ensures coordination within ITU-T, but also with other SDOs and forums, and develops frameworks to improve collaboration.

The study group plans to undertake work on:

- transmission planning, in particular focused on NGN;
- QoS interoperability, including static and dynamic apportionment of end-to-end performance objectives among independent networks;

- quality modelling (psychophysical models, INMD, opinion models) for speech (including wideband) and multimedia, and subjective quality assessment;
- speech quality in motor vehicle environments;
- speech terminal characteristics and measurement methods;
- performance and resource management;
- QoS and QoE coordination (as lead study group or as a coordination project);
- Quality of Service Development Group (QSDG).

The work of Study Group 9 on quality assessment will be coordinated with Study Group 12.

Study Group 13

The key areas of competence of Study Group 13 include:

- Communication networks aspects: study for requirements, functional architectures and their capabilities of future networks including NGN according to a layered approach such as transport (access and core), transport control, service control and service/application support functions including support of mobility.
- Mobile aspects: studies relating to network aspects of mobile telecommunication networks, including International Mobile Telecommunications (IMT), wireless Internet, convergence of mobile and fixed networks, mobility management, mobile multimedia functions, internetworking, interoperability and enhancements to existing ITU-T Recommendations on IMT. This study will incorporate harmonization with relevant standards that are developed in mobile-related standards development organizations.
- Content distribution networks aspects: study for the requirements, functions and mechanisms to support distribution of contents which are requested by end users. This will include capabilities to support content finding/metadata, content distribution, rights management and media coding. This study will incorporate broadcasting and other standards integration within the context of future networks including NGN and mobile communication networks.
- Ad hoc networks aspects: study of requirements, functions and mechanisms needed to support configuration of ad hoc networks used for identifying service discovery and activation, and context description/distribution including peer-to-peer networking. This study should be based on preliminary work in Study Groups 13 and 19 performed during the previous study period.
- Common function aspects: study of functions and relevant capabilities including NGN-specific identity management functional architecture that supports value-added identity services, the secure exchange of identity information and the application of bridging/interoperability between a diverse set of identity information formats. Also to be studied are any identity management threats within the NGN and the mechanisms to counter them. In addition, Study Group 13 will study the protection of personally identifiable information (PII) in the NGN to ensure that only authorized PII is disseminated within the NGN, as well as future networks.

  This study also will cover regulatory implications including telecommunications for disaster relief and emergency communications.

In order to assist countries with economies in transition, developing countries, and especially the least developed countries, in the application of IMT and related wireless technologies, consultations should be held with representatives of ITU-D with a view to identifying how this might best be done through an appropriate activity conducted in conjunction with ITU-D.

Study Group 13 shall maintain strong cooperative relations with external SDOs and 3GPPs and develop a complementary programme. It shall proactively promote communications with external organizations to allow for normative referencing in ITU-T Recommendations of mobile network specifications developed by those organizations.

Study Group 13 will hold collocated meetings with Study Group 11.

Study Group 15

Study Group 15 is the focal point in ITU-T for the development of standards on optical transport networks and access network infrastructures, systems, equipment, optical fibres and cables, and their related installation, maintenance, test, instrumentation and measurement techniques, and control plane technologies to enable the evolution toward intelligent transport networks. This encompasses the development of related standards for the customer premises, access, metropolitan and long-haul sections of communication networks.

Within this framework, the study group will also handle the reliability and security aspects of the entire range of fibre and cable performance, field deployment and the integrity of installations. The activity on the construction of infrastructure will perform the investigation and standardization of new techniques to allow faster, more cost-effective and safer cable installation, also taking into account social issues such as the reduction of excavation, the problems caused to traffic and the generation of noise. Maintenance and physical infrastructure management will be also addressed, taking into account the advantages of emerging technologies, such as RFID and ubiquitous sensor networks.

Particular emphasis is given to global standards providing for a high-capacity (terabit) optical transport network (OTN) infrastructure, and for high-speed (multi-Mbit/s and Gbit/s) network access and home networking. This also includes related work on modelling for network, system and equipment management, transport network architectures and layer interworking. Special consideration is being given to the changing telecommunication environment towards IP-type networks as part of the evolving next-generation network (NGN).

Network, system and equipment features covered include routing, switching, interfaces, multiplexers, cross-connect, add/drop multiplexers, amplifiers, repeaters, regenerators, multilayer network protection switching and restoration, operations, administration and maintenance (OAM), network synchronization, transport equipment management and control plane capabilities to enable evolution toward intelligent transport networks (e.g. automatically switched optical networks (ASON)). Many of these topics are addressed for various transport media and technologies, such as metallic and terrestrial/submarine optical fibre cables, dense and coarse wavelength division multiplexing (DWDM and CWDM) optical systems, optical transport network (OTN), Ethernet and other packet-based data services, synchronous digital hierarchy (SDH), asynchronous transfer mode (ATM), and plesiochronous digital hierarchy (PDH).

In its work, Study Group 15 will take into account related activities in other ITU study groups, SDOs, forums and consortia, and collaborate with them to avoid duplication of effort and identify any gaps in the development of global standards.

Study Group 16

Study Group 16 will work on the following items:

- development of a framework and roadmaps for the harmonized and coordinated development of multimedia telecommunication standardization over wired and wireless networks to provide guidance across all ITU-T and ITU-R study groups (in particular ITU-T SG 9 and ITU-R SG 6), and in close cooperation with other regional and international SDOs and industry forums; these studies will include mobility, IP and interactive broadcasting aspects; close cooperation between ITU-T and ITU-R is encouraged at all levels;

- development and maintenance of a database of existing and planned multimedia standards;
- development of multimedia end-to-end architectures, including home network environments (HNE) and vehicle gateway for ITS;
- operation of multimedia systems and applications, including interoperability, scalability and interworking over different networks;
- high-layer protocols and middleware for multimedia systems and applications, including IPTV, USN and ID triggered multimedia/multimode applications and services for NGN and beyond;
- media coding and signal processing;
- multimedia and multimode terminals;
- terminals, network signal processing equipment, gateway implementations, and characteristics;
- QoS and end-to-end performance in multimedia systems;
- security of multimedia systems and services;
- accessibility to multimedia systems and services for persons with disabilities;
- ubiquitous applications ("e-everything", such as e-health, e-business, e-government, multimedia emergency communication for disaster relief);
- studies on appropriate character sets, especially for non-Latin scripts and languages.

Study Group 16 will hold collocated meetings with Study Group 9.

Study Group 17

Study Group 17 is responsible for studies relating to security, including cybersecurity, countering spam and identity management. Also responsible for the application of open system communications including directory and object identifiers, and for technical languages, the method for their usage and other issues related to the software aspects of telecommunication systems.

In the area of security, Study Group 17 is responsible for developing the core Recommendations on telecommunication and ICT security such as security architecture and frameworks; the fundamentals of protection including threats, vulnerabilities and risks; authentication and identity management, incident handling and forensics; and security aspects of communication applications. In addition, Study Group 17 provides overall coordination of security work in ITU-T.

Study Group 17 is responsible for studies relating to the development of a generic identity management model that is independent of network technologies and supports the secure exchange of identity information between entities. This work also includes studying the process for discovery of authoritative sources of identity information; generic mechanisms for the bridging/interoperability of a diverse set of identity information formats; identity management threats, the mechanisms to counter them, the protection of personally identifiable information (PII) and to develop mechanisms to ensure that access to PII is only authorized when appropriate.

In the area of open system communication, Study Group 17 is responsible for Recommendations in the following areas:

- open systems interconnection (OSI) (X.200-, X.400-, X.600-, X.800-series, etc.);
- directory services and systems (F.500- and X.500-series); and
- open distributed processing (ODP) (X.900-series).

In the area of languages, Study Group 17 is responsible for studies on modelling, specification and description techniques. This work, which includes languages such as ASN.1, SDL, MSC, URN, and TTCN, will be developed in line with the requirements of and in cooperation with the relevant study groups such as SG 2, SG 9, SG 11, SG 13, SG 15 and SG 16.

The work of Study Group 17 will be coordinated with developments carried out by other standardization bodies such as ISO/IEC JTC1, IETF and ETSI. Applicable work done in forums and consortia, such as OMG, TMF, SDL Forum Society, ASN.1 Consortium, OASIS, OMA, will also be considered in order to get the maximum synergy and to minimize the efforts in the development of new Recommendations.

Annex C
(to Resolution 2)

List of Recommendations under the responsibility of the respective study groups and TSAG in the 2009-2012 study period

Study Group 2

E-series, except those in conjunction with Study Group 17 or under the responsibility of Study Group 12

F-series, except those under the responsibility of Study Groups 13, 16 and 17

Recommendations of the I.220-, I.230-, I.240-, I.250-series and I.750-series

G.850-series

M-series

O.220-series

Q.513, Q.800 – Q.849, Q.940-series

Maintenance of the S-series

V.51/M.729

X.160-, X.170-, X.700-series

Z.300-series

Study Group 3

D-series

Study Group 5

K-series

L.9, L.18, L.19, L.62, L.71, L.75, L.76

Study Group 9

J-series

N-series

P.900-series

Study Group 11

Q-series, except those under the responsibility of Study Groups 2, 13, 15 and 16

Maintenance of the U-series

X.600 – X.609

Study Group 12

E.420 – E.479, E.800 – E.859

G.100-series, except G.160-, G.180- and G.190-series

G.1000-series

I.350-series (including Y.1501/G.820/I.351), I.371, I.378, I.381

P-series, except P.900-series

Y.1220-, Y.1530-, Y.1540-, Y.1560-series

Study Group 13

F.600-series

G.801, G.802, G.860-series

I-series, except those under the responsibility of Study Groups 2, 12 and 15, and those having double/triple numbering in other series

Q.933, Q.933 *bis*, Q.10xx-series, and Q.1700-series, X.1 – X.25, X.28 – X.49, X.60 – X.84, X.90 – X.159, X.180 – X.199, X.272, X.300-series

Y-series, except those under the responsibility of Study Groups 12, 15 and 16

Study Group 15

G-series, except those under the responsibility of Study Groups 2, 12, 13 and 16

I.326, I.414, I.430-series, I.600-series and I.700-series, except I.750-series

L-series, except those under the responsibility of Study Group 5

O-series (including O.41/P.53), except those under the responsibility of Study Group 2

Q.49/O.22 and Q.500-series, except Q.513 (see SG 2)

Maintenance of the R-series

X.50-series, X.85/Y.1321, X.86/Y.1323, X.87/Y.1324

V.38, V.55/O.71, V.300

Y.1300 – Y.1309, Y.1320 – Y.1399, Y.1501, and Y.1700-series

Study Group 16

F.700-Series

G.160-series, G.190-series, G.710 – G.729 (except G.712), G.760-series (including G.769/Y.1242), G.776.1, G.799.1/Y.1451.1

H-series

T-series

Q.115-series

V-series, except those under the responsibility of Study Groups 2 and 15

X.26/V.10 and X.27/V.11

Study Group 17

E.104, E.115, E.409 (in conjunction with Study Group 2)

F.400-series; F.500 – F.549

X-series, except those under the responsibility of Study Groups 2, 11, 13, 15, and 16

Z-series except Z.300-series

TSAG

A-series Recommendations