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. 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.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

RESOLUTION 2

ITU-T study group responsibility and mandates

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

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

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, networks and performance

Responsible for studies relating to:

- principles of service provision, definition and operational requirements of service emulation;
- numbering, naming, addressing requirements and resource assignment including criteria and procedures for reservation and assignment;
- routing and interworking requirements;
- human factors;
- operational aspects of networks and associated performance requirements including network traffic management, quality of service (traffic engineering, operational performance and service measurements);
- operational aspects of interworking between traditional telecommunication networks and evolving networks; and
- evaluation of feedback from operators, manufacturing companies and users on different aspects of network operation.

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

Responsible for studies relating to tariff and accounting principles for international telecommunication services and study of related telecommunication economic 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 telecommunication on a sound basis.

Study Group 4
Telecommunication management

Responsible for studies regarding the management of telecommunication services, networks, and equipment, including support for next-generation networks (NGN) and the application and evolution of the telecommunication management network (TMN) framework. Additionally, it is responsible for other telecommunication management studies relating to designations, transport-related operations procedures, and test and measurement techniques and instrumentation.

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.

Study Group 6
Outside plant and related indoor installations

Responsible for studies on the outside plant and related indoor installations covering:

- construction of all types of terrestrial cable for public telecommunications, including marinized terrestrial cables and the associated hardware (closures, connectors, cabinets, poles, etc.);
- construction and maintenance of the telecommunication infrastructure. This includes interoffice, access and related building and home cable and hardware installations;
- installation, jointing and termination of cables;
- protection of the environment from the deployment of telecommunication related cable, hardware and equipment in the outside plant;
- protection from corrosion and other forms of damage from environment impact, except electromagnetic processes, of cables for public telecommunications and associated structures;
- protection against fire of telecommunication buildings and outside plant;
- procedures for safety of personnel.

Study Group 9
Integrated broadband cable networks and television and sound transmission

Responsible for studies relating to:

- 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.
- use of telecommunication systems for contribution, primary distribution and secondary distribution of television, sound programmes and similar data services.

Study Group 11
Signalling requirements and protocols

Responsible for studies relating to signalling requirements and protocols for Internet protocol (IP) related functions, some mobility related functions, multimedia functions for networks including convergence toward NGN, and enhancements to existing Recommendations on access and internetwork signalling protocols of BICC, ATM, N-ISDN and PSTN.

Study Group 12
Performance and quality of service

Responsible for Recommendations on the end-to-end transmission performance of terminals and networks, in relation to the perceived quality and acceptance by users of text, data, speech, and multimedia applications.

Although this work includes the related transmission implications of all networks and all telecommunication terminals, a special focus is given to IP QoS, interoperability and implications for NGN, and also includes work on performance and resource management.

Study Group 13
Next-generation networks

Responsible for studies relating to the architecture, evolution and convergence of next-generation networks including frameworks and functional architectures, signalling requirements for NGN, 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 and public data network aspects.

Study Group 15
Optical and other transport network infrastructures

Study Group 15 is the focal point in ITU-T for the development of standards on optical and other transport network infrastructures, systems, equipment, optical fibres, and the corresponding 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 terminals, systems and applications

Responsible for studies relating to multimedia service capabilities, and application capabilities (including those supported for NGN). This encompasses multimedia terminals, systems (e.g. network signal processing equipment, multipoint conference units, gateways, gatekeepers, modems, and facsimile), protocols and signal processing (media coding).

Study Group 17
Security, languages and telecommunication software

Responsible for studies relating to security, the application of open system communications including networking and directory, and for technical languages, the method for their usage and other issues related to the software aspects of telecommunication systems.

Study Group 19
Mobile telecommunication networks

Responsible for studies relating to network aspects of mobile telecommunication networks, including International Mobile Telecommunications 2000 (IMT-2000) and beyond, wireless Internet, convergence of mobile and fixed networks, mobility management, mobile multimedia functions, internetworking, interoperability and enhancements to existing ITU-T Recommendations on IMT-2000.

PART 2 – LEAD STUDY GROUPS IN SPECIFIC AREAS OF STUDY

SG 2	Lead study group for service definition, numbering and routing
SG 4	Lead study group on telecommunication management
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
SG 12	Lead study group on quality of service and performance
SG 13	Lead study group for NGN and satellite matters
SG 15	Lead study group on access network transport Lead study group and on optical technology
SG 16	Lead study group on multimedia terminals, systems and applications Lead study group on ubiquitous applications ("e-everything", such as e-health and e-business)
SG 17	Lead study group on telecommunication security Lead study group on languages and description techniques
SG 19	Lead study group on mobile telecommunication networks and for mobility

Annex B
(to Resolution 2)

Points of guidance to study groups for the development of the post-2004 work programme

B.1 This annex provides points of guidance to study groups for the development of the post-2004 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 also ensure compatibility with the International Telecommunication Regulations and related intergovernmental agreements. It should also recommend QoS for each service and interact with other study groups (e.g. SG 13) in this respect as required.

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 needed the chairman's delegated representative) 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 traffic engineering planning and dimensioning guidance for the implementation and operation of all types of networks and network elements.

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.

Study Group 2 identifies service and operational requirements which need the support of network capabilities.

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 4

As the lead study group on telecommunication management, Study Group 4 has the responsibility for the development and maintenance of a consistent ITU-T work plan on telecommunication management activities prepared with the cooperation of relevant ITU-T study groups. In particular, this work plan will focus on activities involving two types of interfaces:

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

In support of market-acceptable FCAPS interface solutions, Study Group 4 studies will include:

- evolution of the telecommunication management framework currently based on telecommunication management network (TMN) concepts;
- management of next-generation networks as well as the mixed circuit-switched and packet-switched network environment present during the transition to NGN;
- specification of reusable management information definitions via protocol-neutral techniques;
- continuation of management information modelling for the major telecommunication technologies, such as optical and IP-based networking;
- extension of management technology choices consistent with market needs, industry-recognized value, and major, emerging technical directions; and
- strengthening of the collaborative relationships with SDOs, forums and consortia.

Additional studies will also cover:

- designations for interconnections among network operators;
- transport network and service operations procedures for configuration, performance and fault management; and
- test and measurement techniques and instrumentation.

Study Group 5

Study Group 5 is encouraged to hold collocated meetings with Study Group 6 whenever possible, as determined by the study group management teams.

Study Group 6

The responsibility for studies involving all physical aspects of outside plant will extend its scope to cover also building and home installations, addressing construction, installation and maintenance of the cable plant, including internal cabling and hardware for termination purposes.

Within this framework, Study Group 6, addressing also reliability and security aspects,will handle cable performance, field deployment and integrity of installations also for mixed transmission media, such as hybrid fibre/copper cables and novel media, such as plastic optical fibre cables.

In this way, the complete chain of cables for interoffice, access and related buildings and home applications will be standardized.

Study Group 6 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.

The activity on the construction of infrastructures will address the investigation and standardization of all new techniques that allow faster, cost-effective and safer cable installation, also taking into account environmental issues such as the reduction of excavation, the problem for traffic, the generation of noise.

Continued strong cooperation with Study Group 15 and IEC TCs 20, 46 and 86 with the relevant subcommittees is foreseen.

Study Group 6 wishes to continue in this new study period all the activities of support to countries with economies in transition, developing countries, and especially least developed countries, with the organization of study group meetings and workshops in the ITU regions, in cooperation with local entities. Further involvement of ITU regions is envisaged with the possible setting up of regional working groups with the aim of highlighting specific needs and submitting contributions to Study Group 6.

Study Group 6 is encouraged to hold collocated meetings with Study Group 5 whenever possible, as determined by the study group management teams.

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 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 is encouraged to hold collocated meetings of relevant activities with those of other study groups whenever possible, as determined by the study group management teams.

Study Group 11

Study Group 11 is to develop Recommendations on the fundamental aspects of network signalling and control architecture and protocols for networks, including convergence toward NGN, in cooperation and close coordination with other study groups responsible for Questions dealing with other networks and NGN.

Recommendations are to be developed on the following Questions considering convergence of fixed and mobile networks:

- 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.

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 is encouraged to hold collocated meetings of relevant activities with those of Study Group 13 and Study Group 19 whenever possible, as determined by the study group management teams.

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 equipments, networks with IP segments).

As the lead study group on QoS and performance, 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 coordination (as lead study group or as a coordination project).

Study Group 13

The mission of Study Group 13 is:

- To study the functional and structural architecture of the NGN using the generic definitions, symbols and abbreviations that are defined in related ITU-T Recommendations. This study will include xDSL, IMS and other IP-related network architectures as well as the NGN work already undertaken in ITU-T, and taking account of NGN-related studies in other standards bodies.
- To study the separation of service control and provision from the underlying network, and the extension of service control to cover multimedia services across convergent fixed and mobile networks. The required service platforms should offer open interfaces, using APIs and/or proxy servers, for third-party service providers' use. The resulting services will need to be accessible to end users as they roam between networks and end-to-end services should be available between users connected to different networks using different service providers.
- To study a nomadicity architecture that includes support for broadband xDSL access. This will identify requirements about various types of mobility and its behaviours, such as nomadicity, as part of the overall NGN functional architecture. Authentication and security issues need to be resolved.
- To define an end-to-end QoS architecture that includes QoS signalling and relevant protocol aspects that will support a wide range of services (including real-time/streaming/non-real-time services and multimedia) over NGN. NGN should be capable of providing a predictable and consistent end-to-end QoS guarantee for each service flow with requested QoS class.
- To develop, in conjunction with Study Group 11, signalling requirements for NGN to enable interoperable services across different access and core bearer networks, and how the service requirements can be used to control the lower layer, transport and access level QoS mechanisms.
- To identify appropriate migration and interworking strategies for existing networks and services towards target NGN networks, taking into account that this process takes place through several evolutionary steps/milestones.
- To perform project coordination and release planning through the development of release plans for NGN, ensuring communication and cooperation within ITU and with other SDOs concerned, and increasing the visibility of NGN work through , for example, workshops.
- To provide a single focus for the participation in NGN studies of countries with economies in transition, developing countries, and especially least developed countries, and for the evolution of existing systems and networks.
- To act as the focus for NGN studies and the coordinated management of NGN across the ITU-T study groups.
- To be the parent body of the NGN focus group.

Study Group 13 is encouraged to hold collocated meetings of relevant activities with those of Study Group 11 and Study Group 19 whenever possible, as determined by the study group management teams.

Study Group 15

Study Group 15 is the focal point in ITU-T for the development of standards on optical and other transport network infrastructures, systems, equipment, optical fibres, and the corresponding 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.

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, 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);
- operation of multimedia systems and applications, including interoperability, scalability and interworking over different networks;
- high-layer protocols for multimedia systems and applications, including NGN applications and services;
- facsimile communication (facsimile terminals and gateways) and modems;
- media coding and signal processing;
- multimedia terminal including facsimile terminals;
- terminals, network signal processing equipments, 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;
- ubiquitous applications ("e-everything", such as e-health, e-business, e-government, multimedia emergency communication for disaster relief).

Study Group 17

Study Group 17 is responsible for studies relating to security, the application of open system communications including networking and directory, 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 security such as security architecture and frameworks. In addition, Study Group 17 provides overall coordination of security work in the ITU-T.

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, eODL, URN, and TTCN, will be developed in line with the requirements of and in cooperation with the relevant study groups such as SG 4, SG 9, SG 11, SG 13, SG 15 and SG 16.

In the area of software aspects of telecommunication systems, this work will concentrate on aspects for which the industry deems it useful to apply ITU-T Recommendations in order to enhance the use of software technology with associated processes and in order to stimulate the market place for such technology.

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, etc., will also be considered in order to get the maximum synergy and to minimize the efforts in the development of new Recommendations.

Study Group 19

Study Group 19 has the primary responsibility within ITU-T for overall network aspects of mobility and mobile communication networks, including IMT-2000 and beyond IMT-2000. It is responsible for:

- service and network capability requirements and network architecture;
- mobility management;
- identification of existing and evolving IMT-2000 systems;
- preparation of a handbook on IMT-2000;
- convergence of evolving IMT-2000 networks with evolving fixed networks;
- providing a migration path regarding network aspects and mobility from existing IMT-2000 systems towards systems beyond IMT-2000;
- enhancing an overview road map on network aspects and mobility of existing IMT-2000 systems specified by ITU-T and external organizations (e.g. SDOs, partnership projects (PPs), IETF, relevant external forums, etc.); and
- studying mobility management requirements and techniques with the aim of allowing for global mobility between evolving IMT-2000 systems and systems beyond IMT-2000 specified by external organizations.

The points above include the development of a long-term common IP-based network architecture applicable to mobile communication networks, including mobility within next-generation networks. Additionally, considering the ongoing evolutionary directions of network infrastructure, they include near-term IP-based internetworking.

In addition, Study Group 19 will study:

- harmonization of different IMT-2000 family member standards as they evolve beyond IMT-2000, especially with respect to mobility management and convergence with evolving fixed networks, as much as possible in cooperation with relevant bodies;
- network aspects of the convergence of fixed and wireless networks and ultimately migration to interoperable and harmonized network architectures to provide services transparently to users across different access arrangements.

In order to assist countries with economies in transition, developing countries, and especially least developed countries, in the application of IMT-2000 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 19 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 19 is encouraged to hold collocated meetings of relevant activities with those of Study Group 11 and Study Group 13 whenever possible, as determined by the study group management teams.

Annex C
(to Resolution 2)

List of Recommendations under the responsibility of the respective study groups and TSAG in the post-2004 study period

Study Group 2

E-series, except those in conjunction with Study Group 17

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

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

Maintenance of the S-series

Study Group 3

D-series

Study Group 4

G.850-series

M-series

O-series

Q.513, Q.800-849, Q.940-series

V.51/M.729, V.55/O.71

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

Z.300-series

Study Group 5

K-series

Study Group 6

L-series

Study Group 9

J-series

N-series

P.900-series

Study Group 11

Q-series, except those under the responsibility of Study Groups 4, 13, 15, 16 and 19

Maintenance of the U-series

Study Group 12

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

G.821, G.826, G.827, G.828, G.829, G.8201, G.921

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, 15, and those having double/triple numbering in other series

Q.933 and Q.933 *bis*

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 4, 12, 13 and 16

I.326, I.430 Series, I.414, I.630 and I.700-series except I.751 (see SG 4)

Q.500-series except Q.513 (see SG 4)

Maintenance of the R-series

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

V.38, V.300

Y.1300-Y.1309, Y.1330-Y.1359, Y.1700-Y.1709, Y.1720

Study Group 16

F.700 Series

G.160-series, G.190-series, G.711 and G.720-series, G. 760-series (including G.769/Y.1242), G.776.1, G.779.1/Y.1451.1

H-series

T-series

Q.115.1, Q.115.2

V-series, except those under the responsibility of Study Group 4 and 15

X.26 (V.10) and X.27 (V.11)

Study Group 17

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

F.400-series; F.500-F.549

X-series, except those under the responsibility of Study Groups 4, 13, 15, and 16

Z-series except Z.300-series

Study Group 19

Q.10xx series, Q.1700-series

TSAG

A-series Recommendations