



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

E.195

(09/2000)

SERIES E: OVERALL NETWORK OPERATION,
TELEPHONE SERVICE, SERVICE OPERATION AND
HUMAN FACTORS

International operation – Numbering plan of the
international telephone service

**ITU-T International numbering resource
administration**

ITU-T Recommendation E.195

(Formerly CCITT Recommendation)

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ITU-T Recommendation E.195

ITU-T International Numbering Resource Administration

Summary

This ITU-T Recommendation proposes the formation and functions/responsibilities of the centralized ITU Numbering Administration Group (ITU-NAG) within TSB. It provides recommended procedures to ensure that all requests for resources are handled in an impartial, uniform, consistent, and effective manner.

Source

ITU-T Recommendation E.195 was prepared by ITU-T Study Group 2 (1997-2000) and approved by the World Telecommunication Standardization Assembly (Montreal, 27 September - 6 October 2000).

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.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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Introduction

The evolution of global telecommunications in the areas of services, capabilities, and technologies often results in the need for new ITU-T Numbering Resources (hereafter "resource" or "resources") that serve such functions as numbering, naming, addressing, routing, and identification. Although varying in format and function, the one common aspect of these resources is their need for an impartial, uniform, consistent, and effective centralized administration. For those resources under the purview of ITU-T, TSB has, and will continue, to perform the function of centralized administrator/registrar.

ITU-T Resolution 20 designates ITU-T Study Group 2 (SG 2) as the lead Study Group (SG) with regard to the Administration of ITU-T Numbering Resources. SG 2's responsibilities, under this mandate, include overseeing the administration of all such resources in order to ensure uniformity and equity in their assignment, despite the technical responsibilities for these resources being dispersed across multiple SGs. It is in this context that this Recommendation is developed and maintained by SG 2. Should this responsibility be transferred to another SG in the future, this Recommendation will become the responsibility of that SG and need not be revised just to reflect that transfer of responsibility.

This Recommendation is based on number management and organizational practices used in many countries and is intended to assist TSB in its function as the centralized administrator of numbering resources, not to direct TSB with regard to how it should organize and perform this function. TSB should use this Recommendation as a resource document when establishing, organizing and managing the centralized administrative function.

ITU-T Recommendation E.195

ITU-T International Numbering Resource Administration

(Montreal, 2000)

1 Introduction

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2 Scope

This Recommendation proposes the formation and functions/responsibilities of the centralized ITU Numbering Administration Group (ITU-NAG) within TSB. It provides recommended procedures to ensure that all requests for resources are handled in an impartial, uniform, consistent, and effective manner.

3 References

The following ITU-T Recommendations and other references contain provisions which, through references in this text, constitute provisions of this Recommendation. At the time of publication the editions indicated were valid. All Recommendations and other references are subject to revision. All users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendation and other references listed below. A list of the current valid ITU-T Recommendations is regularly published.

- ITU-T Recommendation E.164 (1997), *The international public telecommunications numbering plan*.
- ITU-T Recommendation E.164.1 (1998), *Criteria and procedures for the reservation, assignment, and reclamation of E.164 country codes and associated Identification Codes (ICs)*.

- ITU-T Recommendation E.169.2 (2000), *Application of Recommendation E.164 numbering plan for universal international premium rate numbers for the international premium rate service.*
- ITU-T Recommendation E.169.3 (2000), *Application of Recommendation E.164 numbering plan for universal international shared cost numbers for international shared cost service.*
- ITU-T Recommendation E.190 (1997), *Principles and responsibilities for the management and assignment of E-series international numbering resources.*
- ITU-T Recommendation E.191 (2000), *B-ISDN addressing.*
- ITU-T Recommendation X.121 (2000), *International numbering plan for public data networks.*
- ITU-T Recommendation X.125 (1998), *Procedure for the notification of the assignment of international network identification codes for public frame relay data networks and ATM networks numbered under the E.164 numbering plan.*

4 Definitions

This ITU-T Recommendation defines the following terms:

4.1 administration: The function that monitors and reports the status/adequacy of numbering resources as well as identifies and offers proposed resolutions for issues regarding resource reservation, assignment, and reclamation procedures. For the purposes of this Recommendation, this function is performed by ITU-NAG.

NOTE – This "administration" should not be confused with the national "Administration" of each country.

4.2 administrator: The entity charged with the administration of numbering resources. For the purpose of this Recommendation, the administrator is ITU-NAG.

4.3 management: The function developing methods to ensure that there are adequate resources available for appropriate uses as defined in ITU-T Recommendations. For the purpose of this Recommendation, the appropriate SG, in consultation with ITU-NAG, performs this function.

4.4 resource: Codes or numbers used in the provisioning of public services or the operation of the networks offering such services and defined in an ITU-T Recommendation.

4.5 registration: The function of reserving, assigning, reclaiming, and recording resources in accordance with ITU-T Recommendations. For the purpose of this Recommendation, this function is performed by ITU-NAG.

4.6 registrar: The entity charged with the registration of numbering resources. For the purpose of this Recommendation, the Registrar is ITU-NAG.

5 Abbreviations

This ITU-T Recommendation uses the following abbreviations (excluding the annex):

ITU-NAG	International Telecommunication Union – Numbering Administration Group
ITU-T	International Telecommunication Union – Telecommunication Standardization Sector
TSB	Telecommunication Standardization Bureau
Res. 20	Resolution No. 20, WTSC, Geneva, 1996
SG	Study Group
TSAG	Telecommunication Standardization Advisory Group

6 ITU-NAG Functions and Responsibilities

This clause describes the recommended functions and responsibilities that should be routinely performed by ITU-NAG as the administrator of ITU-T numbering resources.

The two primary responsibilities of ITU-NAG should be:

- resource administration – support ITU's efforts to accommodate current and future numbering needs, and to provide advice relative to numbering issues for the resources administered by ITU-NAG (e.g. potential resource exhaust);
- resource registration – assign and administer resources in an impartial, uniform, consistent, and effective manner consistent with ITU-T-developed Recommendations.

The procedures by which ITU-NAG performs its functions and responsibilities are largely contained in the Recommendations specific to the resource being considered for reservation, assignment, registration, or reclamation, e.g. ITU-T Recommendations E.164.1, E.169.1, Q.708, X.121, X.125. Where such procedures do not exist or require change, ITU-NAG may propose new procedures or changes for consideration by the appropriate SG.

Other internal administrative procedures not specified in the appropriate Recommendations, but necessary for the day-to-day functioning of ITU-NAG, should be developed by ITU-NAG staff. Examples of such procedures include, but are not limited to, the development/deployment/ operation of an ITU-NAG support system, the method of applicant interface with ITU-NAG support system, the hours of operation of ITU-NAG, the facilities (telephones, e-mail, voicemail, facsimile) required for the performance of ITU-NAG functions, etc. Although these procedures are internal to ITU-NAG, it is suggested that ITU-NAG staff consult with the appropriate SG(s) to determine the facilities' expectations of the SG collaborators.

TSB will appoint a manager of ITU-NAG (hereafter "manager"). The manager is responsible for the supervision and management of ITU-NAG and its staff and to ensure that the staffing and operation of ITU-NAG are adequate, consistent, and that there is sufficient expertise to perform all the functions detailed below.

To optimize the quality and continuity of the work of ITU-NAG, it is recommended that ITU-NAG staff should be retained on a long term and dedicated basis and at sufficient levels and quantities to ensure the consistent integrity of ITU-NAG's performance. ITU-NAG manager should determine that there is sufficient training for ITU-NAG staff to ensure an adequate level of knowledge for the performance of its resource administration responsibilities, including cross training to ensure operational continuity during staff absences.

When a national Administration has indicated to the TSB Director that the Administration exercises domestic authority with regard to the processing of international resource applications to ITU-NAG by entities within its jurisdiction, ITU-NAG will adhere to such procedures as directed by the specific national authority. Such adherence will occur only within the context of the legal mandate of ITU Constitution and Convention, and in conformance with the appropriate and specific resource Recommendation. Absent specific notification and intervention on the part of an Administration, ITU-NAG will process resource applications directly from qualified applicants.

The following detailed functions and responsibilities are all components of the primary registration and administration responsibilities.

6.1 Administration and Registration of ITU-T Numbering Resources

ITU-NAG will administer and register all resources under the purview of ITU-T. A list of such resources, as of the date of publication for this Recommendation, is contained in Annex A. In addition to the resources listed in Annex A, ITU-NAG will administer and register any additional resources that are subsequently either developed by or come under the purview of ITU-T. In the

performance of this function, ITU-NAG will ensure that there is impartial, uniform, consistent, and effective reservation, assignment, reclamation, and administration of resources.

ITU-NAG should process requests for resources and make assignments in accordance with the appropriate Recommendation. Where Recommendations do not exist for resources, or where a question arises regarding appropriate assignments, consultation should occur with the appropriate SG(s). Occasions do arise where decisions and interpretations are required on issues that have not yet been addressed by the SG. The administrator must have the knowledge and capability to recognize these instances and either resolve them, based on its experience and expertise, or refer them to the appropriate SG for resolution.

6.2 Consultation with relevant Study Groups

In conformance with ITU Res. 20, ITU-NAG, as a unit of TSB, will consult with appropriate ITU-T SGs as necessary to solicit technical, administrative, and managerial assistance with regard to the administration and registration of resources. For example, for technical issues relating to the international telephone, telegraph, and telex services, SG 2 will need to be consulted. For issues related to international signalling system No. 7, SG 11 should be consulted; for carrier codes, SG 4; for ITU-T Recommendation T.35, SG 8; and for international data services it should be SG 7. It should also be noted that SG 2, as the lead SG on resource administration matters, is the source for consultation on all matters of administrative and managerial process for all resources under the purview of ITU-T. These specific SGs are identified based on the organization of ITU-T at the time of publication for this Recommendation. Should ITU-T be reorganized, the appropriate SGs to be consulted may change without the revision of this Recommendation.

6.3 Information reporting and dissemination

ITU-NAG should compile and disseminate information with regard to the resources under its responsibility. The compilation and dissemination of resource information should be in accordance with the appropriate resource Recommendations and the relevant articles of ITU Constitution and Convention. However, ITU-NAG should only disseminate information with regard to assignees or their subscribers in accordance with the relevant articles of ITU Constitution and Convention and when the information is not deemed to be proprietary.

Information necessary for network operators to properly process calls should be distributed via available ITU media, e.g. ITU Operations Bulletin, and ITU website.

6.3.1 Publication of decisions on a regular basis

Annually, at a meeting of each responsible SG, the manager should provide a written and verbal report containing at least, but not limited to, the following:

- a) the quantity of assigned, reserved, or reclaimed resources (only those of interest to each SG);
- b) the quantity of unassigned resources currently available;
- c) a current list of assignments (listing only non-proprietary information);
- d) a projection of the potential exhaust date of any resource;
- e) information regarding any resource application denials, e.g. applicant name, resource requested, reason for decision;
- f) any change in the fees associated with a specific resource;
- g) any issues, with a proposed resolution, regarding the administration of resources, e.g. inadequacy of aspects of the Recommendation, necessary changes to administrative procedures.

Upon receipt of this report, the SG collaborators will review it, ask any appropriate questions of the manager, and utilize it as appropriate for its responsibility as the technical resource managers. The manager should respond to appropriate questions from the collaborators and should, if appropriate, seek assistance of same on matters of common interest with regard to the administration of the resource(s).

6.3.2 Additional report requests

The SG responsible for the technical management of a resource may request additional reports from ITU-NAG that will assist the SG in its responsibilities of technical resource manager. The responsible SG will inform ITU-NAG of the specific information required and the frequency of its reporting.

6.4 Audits of Resource Administration

As defined in clause 7, ITU-NAG should cooperate with audits of its records and should request audits of resource assignee records.

6.5 Ensure availability of resources

ITU-NAG should implement a planned approach to ensure the availability of resources to meet the current and future needs of the global telecommunications sector. It is assumed and recommended that this responsibility should be conducted in consultation with the appropriate SG(s).

6.6 Performance Measures

ITU-NAG should provide management supervision for all of the services it provides including responsibility for achieving performance measures established by ITU and the appropriate Recommendation(s) or separate documentation.

6.7 National Administration Requirements

ITU-NAG should respond to specific national Administration requirements regarding the processing of resource applications (e.g. applications to be processed via the Administration). The extent of such responses is limited to responsibilities authorized by ITU Constitution and Convention and in conformance with the specific and appropriate Recommendations.

6.8 Study Group Meeting Participation

ITU-NAG should provide its resource administration expertise to meetings of the appropriate SGs, when the SGs have a resource administration issue on their agenda. Such participation is required only with regard to the administration and registration of the resource(s) within the technical expertise of each SG. Additionally, ITU-NAG should present resource administration issues identified by it in the course of its administrative responsibilities to the appropriate SG for consideration and resolution.

6.9 Access to Support Staff

ITU-NAG management should establish access to the appropriate ITU staff to handle the legal, financial, technical, staffing, industry, and regulatory issues relevant to the management of all resources under its purview. ITU-NAG should also maintain the necessary equipment, facilities, and billing arrangements associated with the day-to-day management of all numbering resources.

6.10 Respond to Information Requests

ITU-NAG should respond to requests from the industry and from national regulators about the resources and their administration. ITU-NAG should respond to inquiries about the resources it administers. Responses to these requests should be in conformance with ITU legal rules, regulations, and jurisdiction. Information that is not authorized for transmittal under these rules and regulations should not be provided.

ITU-NAG should provide, upon request, information on how to obtain current documents related to resource administration.

6.11 Applicant Assistance

ITU-NAG should provide the appropriate level of assistance to resource applicants and assignees to enable the filing of a complete and accurate resource application and the appropriate use and return of assigned resources.

6.12 Appeals Procedures

ITU-NAG should perform those aspects of the Appeals Procedures allocated to it, in accordance with the appropriate Recommendation, including this Recommendation, and as defined in clause 8.

6.13 Funding Reporting

The Director should, on an annual basis, make available documentation regarding the administrative changes associated with ITU-NAG function. The documentation should provide adequate information to show that ITU-NAG is affecting proper accounting procedures and to ensure that the resource applicants/assignees are not being unduly charged for the processing of applications and the maintenance of resource records.

The substantiating documentation should be provided annually at a meeting of each responsible SG, the TSAG, and any other committees deemed appropriate or mandated by ITU procedures and will provide separate data for each resource administered.

7 Records Audits of ITU-NAG and the Resource Assignees

7.1 Records Audits of ITU-NAG by the appropriate Study Groups

ITU-NAG may be subject to the audit of its resource administration records as determined by the appropriate Recommendation or SG. The purpose of such a potential audit would be to ensure conformance with the appropriate and relevant ITU-T Recommendations, including this Recommendation. ITU-NAG should cooperate with such audits in a complete and timely manner. A representative of the appropriate SG, as properly authorized by the SG, at ITU-NAG office would conduct such an audit.

7.2 Records Audits of the resource assignees by ITU-NAG

ITU-NAG may request an audit of an assignee's resource records. The purpose of such audits is to ensure assignee conformance with appropriate and relevant Recommendations and to determine if the resource(s) requested are actually required based primarily on the utilization of already assigned resources.

Such audits should be conducted under two circumstances:

- at the request for an additional resource when it appears that the assigned resources may not be properly utilized; or

- when there is suspicion (by ITU-NAG or a complainant) that an assigned resource is not being used in conformance with the appropriate Recommendation(s).

It is recommended that the audit process occur in the following sequence:

- a) ITU-NAG contacts the assignee regarding its concerns and solicits a response;
- b) the assignee responds to ITU-NAG's concerns;
- c) if the response is not adequate, ITU-NAG requests copies of the assignee's resource assignment records that would substantiate or refute the need for an additional resource and/or the proper use of the assigned resource;
- d) ITU-NAG analyses the assignee's records and determines if the concern is justified;
- e) ITU-NAG informs the assignee of its conclusions and the expected actions, if any, required of the assignee; and
- f) following this communication, ITU-NAG determines what action, in accordance with the appropriate Recommendation and ITU Constitution and Convention, they will take regarding the requested or assigned resource.

At any step in this process, ITU-NAG can seek consultation with the appropriate SG regarding the instance necessitating the audit.

Lack of assignee cooperation with such a requested audit may result in the denial of additional resources or the reclamation and eventual reassignment of an assigned resource. Prior to such denial or reclamation action, ITU-NAG should seek the assistance of the national Administration for the country of the assignee in effecting the requested audit.

8 Appeal Procedures

A resource applicant should have the right to appeal the decision of a resource assignment/reservation, including the denial of a specific code or number, in the manner detailed within the resource Recommendation of each resource.

If a resource Recommendation does not exist or does not contain administrative procedures or an appeal procedure, the appeal procedure should be as follows:

Firstly, the applicant can appeal a resource decision to ITU-NAG. Such an appeal must have additional information than the initial application, specifically with regard to the reason for the decision.

Secondly, the applicant can appeal a resource decision directly to the Director. Such an appeal must contain a copy of the original application and additional justification to overturn the decision and to allow the Director the level of information necessary to review and decide an appeal. Since Res. 20 states that the "WTSC instructs the Director of the TSB before assigning, reassigning and/or reclaiming international numbering and addressing resources, to consult the Chairperson of the relevant Study Group or, if needed, the Chairperson's delegated representative" the Director might consult with the responsible SG regarding any received appeal.

Thirdly, the applicant can appeal a resource decision to the collaborators of the appropriate SG, i.e. the SG with technical knowledge of and primary responsibility for the resource that was applied for. Once this appeal is heard, the SG will consult with the manager or Director, as appropriate and in conformance with Resolution No. 20. The SG can not unilaterally overturn a resource decision, but can provide advice to ITU-NAG.

It is strongly recommended that these three appeals steps be followed in sequence. However, at the discretion of the resource applicant, the first step can be bypassed, if it is felt that there is no new information that could reverse the initial decision. Additionally, the third step can not be used without first attempting the second step.

ANNEX A

List of ITU-T Global Numbering Resources

Following is a list of ITU-T Global Numbering Resources administered or registered by ITU-NAG as of the publication of this Recommendation. Additional resources will be administered or registered by ITU-NAG as they are developed by ITU-T.

- E.164 Country Codes (including shared Country Codes and associated Identification Codes).
- Registration and Administration of E.169.1 Universal International Freephone Numbers (UIFNs).
- E.164 Dialling Procedures (International prefix, national (trunk) prefix and national significant number).
- E.118 Issuer Identifier Numbers (IINs) for the International Telecommunication Charge Card.
- ITU-International Network Designator (IND) ATM End System Addresses (AESAs).
- E.212 Mobile Country Codes.
- Q.708 Signalling Area/Network Codes (SANCs) and International Signalling point Codes (ISPCs).
- Supplement 2 to Recommendation E.180 Various Tones used in National Networks.
- F.69 Telex Destination Codes and Telex Network Identification Codes.
- F.1 Five-letter Code Groups used in the International Public Telegram Service.
- F.32 Telegram Destination Indicators.
- X.121 Data Country Codes (DCCs) and Data Network Identification Codes (DNICs).
- X.125 Identification Codes for public frame relay data networks and ATM networks numbered under the E.164 numbering plan.
- F.400 and X.400 Administration Management Domains.
- M.1400 International Carrier Codes ITU ATM End System Addresses (AESAs) (ITU-T Recommendation E.191 refers).
- T.35 Allocation of ITU-T Defined Codes for Non-Standard Facilities.
- Universal Personal Telecommunication Numbers (ITU-T Recommendation E.168 refers).
- Universal International Premium Rate Numbers (ITU-T Recommendation E.169.2 refers).
- Universal International Shared Cost Numbers; and possibly (ITU-T Recommendation E.169.3 refers).

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