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**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**F.69**

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**OPERATIONS AND QUALITY OF SERVICE  
TELEGRAPH SERVICES**

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**THE INTERNATIONAL TELEX SERVICE –  
SERVICE AND OPERATIONAL PROVISIONS  
OF TELEX DESTINATION CODES AND  
TELEX NETWORK IDENTIFICATION CODES**

**ITU-T Recommendation F.69**

(Previously “CCITT Recommendation”)

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## FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The 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 Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation F.69 was revised by ITU-T Study Group 1 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 1st of June 1994.

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## 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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## **SUMMARY**

The interconnection of the networks of the countries and recognized operating agencies participating in the international telex service requires the development of a standardized mechanism for the routing of calls between subscribers in a transparent manner. This is achieved through the use of a telex destination code which is used for routing purposes in international exchanges. Telex destination codes may also be used within national telex networks or at international gateway exchanges for recording call details for billing and accounting purposes, or sometimes for other purposes such as segregating particular types of traffic. Furthermore, the service requirement enabling the identification of the called subscriber and thereby giving assurance of correct connection is achieved by the inclusion of a telex network identification code in the answerbacks of subscribers of the international telex service in addition to the subscribers national telex number.

This Recommendation describes the procedures to be followed in the allocation of telex destination codes and telex network identification codes. The means of promulgation publication, and date of entry into effect of code allocations are also identified.

# **THE INTERNATIONAL TELEX SERVICE – SERVICE AND OPERATIONAL PROVISIONS OF TELEX DESTINATION CODES AND TELEX NETWORK IDENTIFICATION CODES**

*(revised, 1994)*

## **1 Introduction**

The interconnection of the networks of the countries and recognized operating agencies (ROA) participating in the international telex service requires the development of a standardized mechanism for the routing of calls between subscribers in a transparent manner. This is achieved through the use of a telex destination code which is used for routing purposes in international exchanges. Telex destination codes may also be used within national telex networks or at international gateway exchanges for recording call details for billing and accounting purposes, or sometimes for other purposes such as segregating particular types of traffic. Furthermore, the service requirement enabling the identification of the called subscriber and thereby giving assurance of correct connection is achieved by the inclusion of a telex network identification code in the answerbacks of subscribers of the international telex service in addition to the subscribers national telex number.

## **2 Scope**

This Recommendation describes the procedures to be followed in the allocation of telex destination codes and telex network identification codes. The means of promulgation, publication, and date of entry into effect of code allocations are also identified.

## **3 List of associated Recommendations**

This Recommendation should be read in association with the following Recommendations:

- Recommendation F.31 *Telegram Retransmission System.*
- Recommendation F.59 *General Characteristics of the International Telex Service.*
- Recommendation F.60 *Operational Provisions for the International Telex Service.*
- Recommendation F.68 *Establishment of the automatic Intercontinental Telex Network.*
- Recommendation F.96 *Telegram Destination Indicators.*
- Recommendation R.79 *Automatic Tests of Transmission Quality on Telegraph Circuits between Switching Centres.*
- Recommendation U.7 *Numbering Schemes for Automatic Switching networks.*
- Recommendation U.11 *Telex and Gentex Signalling on Intercontinental Circuits used for Intercontinental Automatic Transit Traffic (Type C Signalling).*
- Recommendation U.74 *Extraction of Telex Selection Information from a Calling Telex Answerback.*

## **4 Definitions**

The terms “telex destination code” and “telex network identification code” are defined in Recommendation F.68.

## **5 Functions of the Telex Destination Code**

**5.1** There are many Recommendations dealing with the international telex service, several of them being many years in existence. In all cases, reference to “telex” needs to be understood to refer exclusively to the international telex service which is described in Recommendations F.59 and F.60.

**5.2** Recommendation F.60 states that “The networks of the countries participating in the international telex service shall, as far as possible, be directly connected and shall thereby constitute the international telex network”. The telex destination codes referenced in this Recommendation are, therefore, primarily used for routing purposes within international telex exchanges within the originating network and any transit network, but see also clause 1. In accordance with U-Series signalling Recommendations, the destination network may also request the receipt of the complete international telex number (which includes the telex destination code) on terminating traffic.

**5.3** Any revision to an existing code allocation requires adjustments to be made normally not in the network which has requested the change/allocation but in all other networks which comprise the international telex network. Accordingly, this procedure results in telex destination codes being of relevance primarily to originating and transit networks, and only rarely to destination networks. As the international telex service is now recognised as a mature service having evolved over many years, and some networks may use spare codes for purposes other than as stated herein, caution needs to be exercised in the future allocation of codes for emerging new networks.

**5.4** One of the unique characteristics of the international telex service is the ability to assure connection to the addressed party through the automatic return of the called subscriber answerback sequence on call set-up. The format of the answerback is specified in Recommendation F.60. This standardized structure is also used to determine the (recall) telex address by an analysis of the answerback of the calling telex subscriber in accordance with the rules laid down in Recommendation U.74 when messages are being forwarded either via a store and forward unit or in some interworking cases. Therefore, there is a firm requirement for a telex network identification code to be always associated with a telex destination code in order to fully characterize the network of any telex subscriber.

**5.5** For operational reasons, unallocated telex destination codes are sometimes used by ROAs for both national and international applications, the latter being on the basis of bilateral agreement or multilateral agreement(s). While the use of such codes internationally is discouraged except in the case of temporary expediency, such use, as well as ROAs' national applications, should be taken into account when selecting new codes for allocation.

## **6 General principles of structure of telex destination code**

**6.1** The U-Series signalling Recommendations permit a maximum of 12 selection digits to be signalled across an international link. Accordingly, in establishing the initial plan for telex destination codes, it was necessary to decide whether these codes should always comprise three digits, or whether they could be made up of two or three digits.

**6.2** The advantages of uniform three-digit codes were seen to be:

- i) by allocating the same size code to all countries, difficulties would not arise as to the relative importance of the various countries with regard to the international telex service;
- ii) uniform codes afford some simplification of the design of exchanges;
- iii) for the European system a uniform three-digit system could be readily compiled by adding a uniform digit to the range of two-digit codes already in use at the time by a number of European Administrations.

**6.3** The advantages of a mixed two or three-digit arrangement were seen to be:

- i) the use of shorter length codes reduced the risk of errors by calling subscribers;
- ii) the storage capacity of registers could be kept to a minimum by allocating shorter codes to systems having long subscribers' numbers;
- iii) the holding time of circuits could be kept to a minimum;
- iv) the maximum number of digits to be examined for routing and other purposes could be kept to a minimum by allocating shorter codes to systems in which the first two digits of a subscriber's number have to be examined in accordance with Recommendation U.7. Similarly, where a country had more than one international exchange the allocation of a shorter code would enable the routing of traffic to be controlled by the examination of a minimum number of digits.

**6.4** A mixed environment of two-digit and three-digit destination codes was seen to have the most advantages, and was adopted as the basis for this Recommendation.

**6.5** The following principles apply to the allocation of the first digit:

0 – not to be used as first digit;

1 – see 6.8 and 6.9;

2 – North America and adjacent areas;

3 – South America and adjacent areas;

4 – Europe and adjacent areas;

5 – Europe and adjacent areas and maritime-satellite services;

6 – Europe and adjacent areas;

7 – Pacific and adjacent areas;

8 – Middle East, Far East and adjacent areas;

9 – Africa, Near East and adjacent areas.

#### NOTES

1 The geographical boundaries of the continents have not been rigidly followed to permit maximum flexibility within the code system.

2 In relations using Type C signalling (see Recommendation U.11) code 000 may be used for retest signalling purposes in accordance with Recommendation R.79.

3 In case of the assignment of codes to a maritime mobile-satellite system, a three-digit code could exceptionally be assigned to each ocean area of the satellite system.

**6.6** The number of two-digit codes available is rather restricted. It is undesirable to allocate these to serve individual networks in countries where several networks exist but do not have a co-ordinated internal numbering scheme;

**6.7** It is not advisable to allocate all possible two-digit codes, so as to maintain some flexibility to allow future development to be taken into account. Accordingly, all new allocations will be of three digits in order to maximise the use of the available spare telex destination codes.

**6.8** The first digit 1 was initially reserved for special services, which led to its uncoordinated use in a variety of national and international applications in different networks. In all future networks and as soon as practicable in existing networks, it should be possible to allocate the 1 series for destination codes for international purposes.

**6.9** A block of ten destination codes (160-169) has been set aside to cover the particular needs for access to maritime mobile HF and MF radiotelex services. The choice of code or codes for these applications is left to individual ROAs for use by their own subscribers and/or (after suitable bilateral arrangements have been reached) by subscribers of other ROAs for transit calls.

NOTE – It is recognized that some ROAs use various codes in the 160-169 series at present for national and international applications.

## **7 Structure of the telex network identification code**

**7.1** The telex network identification code (TNIC) consists of either one or two letters in accordance with Recommendation F.68.

**7.2** In the case of two-letter TNICs, the code should be the same as the first two characters of the destination indicator of their country or network for the telegram retransmission system in accordance with Recommendation F.31, as noted in Recommendations F.68 and F.96.

**7.3** In principle, no further single-letter TNICs should be allocated.

## **8 Procedures for allocation of codes**

**8.1** The Administration of a ROA wishing to take part in the international automatic telex service should apply to the Director of the TSB for the assignment of an *available* three-digit destination code and a two-letter TNIC. In its request, it may indicate the available three-digit code preferred. Where the numbering scheme for the appropriate region is exhausted, a code from a proximate region may be allocated.

**8.2** In all cases, such requests should be referred to the Chairman of Study Group 1 for guidance on technical and operational issues, taking account of possible future requirements. The procedures to be followed are given in Figure 1.

**8.3** It is the responsibility of the TSB:

- to carry out the necessary discussion with the applicant Administration;
- to ensure that the Chairman of Study Group 1 is satisfied that any technical and operational requirements have been covered before final allocation of the relevant destination and network identification codes.

**8.4** Additions and changes that are accepted will be published in the ITU *Operational Bulletin*. They will become effective on the first day of the third month following publication.

**8.5** The list of allocated and spare telex destination codes, including the corresponding telex network identification codes, will be published periodically in the *Operational Bulletin*.



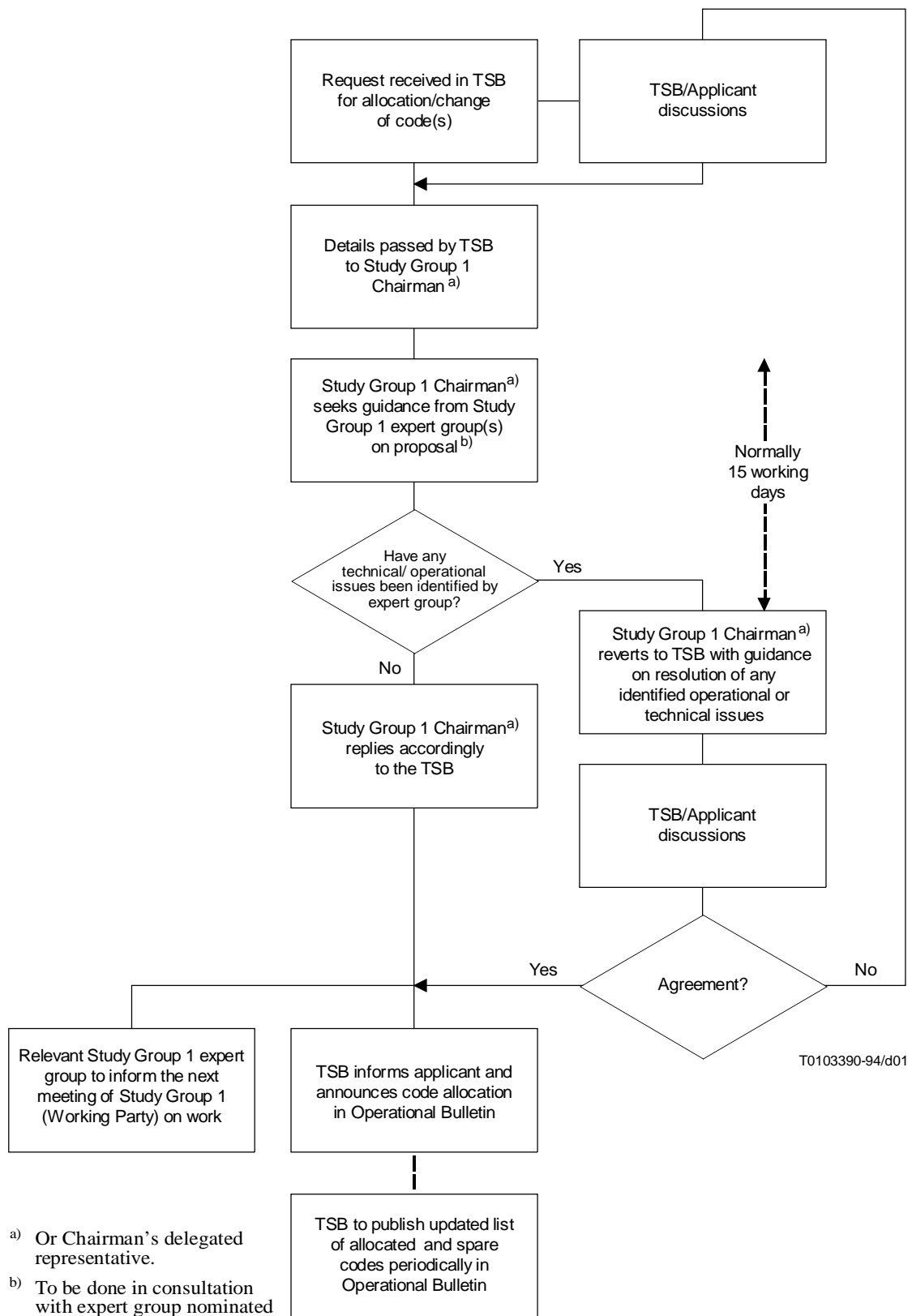


FIGURE 1/F.69

**Scheme for the allocation and publication of telex destination codes and telex network identification codes**