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OPERATIONS AND QUALITY OF SERVICE

TELEMATIC SERVICE

OPERATIONAL PROVISIONS FOR THE INTERNATIONAL PUBLIC FACSIMILE SERVICE BETWEEN SUBSCRIBERS' STATIONS WITH GROUP 3 FACSIMILE MACHINES (TELEFAX 3)

ITU-T Recommendation F.182

(Previously "CCITT Recommendation")

FOREWORD

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

ITU-T Recommendation F.182 was revised by the ITU-T Study Group I (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

2 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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Recommendation F.182

OPERATIONAL PROVISIONS FOR THE INTERNATIONAL PUBLIC FACSIMILE SERVICE BETWEEN SUBSCRIBERS' STATIONS WITH GROUP 3 FACSIMILE MACHINES (TELEFAX 3)

(Melbourne, 1988; revised Helsinki, 1993)

1 Introduction

1.1 Scope

1.1.1 This Recommendation defines the rules to be followed in the international Group 3 Facsimile (Telefax 3) Service.

1.1.2 The Telefax 3 is an international service offered by Administrations enabling subscribers to exchange correspondence either manually or automatically via telecommunication networks.

1.1.3 The basic element of the correspondence between people using the service is the page, as the smallest unit of text treated as an entity. No restrictions shall exist as far as the operator procedures for generation of the text or the positioning of text within the reproducible area on a page are concerned.

1.1.4 Questions of an essentially technical nature concerning the Telefax 3 Service are dealt with in the T-Series Recommendations.

1.1.5 In this Recommendation, the word "terminal" is used instead of "apparatus" which appears in Recommendations T.4 and T.30. These two words should be considered as being equivalent.

2 Service definitions

2.1 General

The essential characteristic of the Telefax 3 Service is that it provides a basic level of compatibility between all terminals participating in the service.

2.2 Basic requirements

a) The basic level of compatibility is provided between any two terminals both nationally and internationally so that they may communicate image coded information to each other. This is to be achieved by requiring that terminals comply with Recommendations T.4 and T.30;

b) it is for each Administration to decide on the network(s) on which the Telefax 3 Service will be carried. There shall be no restriction on the type of network to be used;

c) it should be possible to extend the Telefax 3 Service to any number of countries;

d) to permit private use options, for example encryption, there shall be no technical limitation on the bit sequence of the subscriber's information that may be transmitted;

e) a received Telefax 3 message can be printed or displayed as decided by the recipient and the terminal characteristics. If the message is printed, the receiving subscriber will be furnished with a document that is identical with that produced by the sending subscriber as far as its contents, layout and format are concerned;

f) it is intended that the Telefax 3 Service should require no changes to the Recommendations for existing services or networks.

2.3 Standardized options

2.3.1 It is recognized that some subscribers may need to use their Group 3 facsimile terminals to communicate nationally and internationally using service features that are not included in the basic requirements. A number of CCITT standardized options have therefore been defined. However, the provision of any option in a service leads to some degree of incompatibility and the number of standardized options has been restricted to those features which are listed below for which a clear international need can be foreseen.

The sending terminal shall ensure the transmission of documents using only those options that have been indicated as being available at the receiving terminal.

2.3.2 The standardized options provide means for:

a) higher resolutions (T.4);

b) optional coding schemes (T.4 and T.6);

c) higher data signalling rates (T.4);

d) coded character mode (T.4);

e) binary file transfer mode (T.4);

f) basic transfer mode (T.4);

g) document transfer mode (T.4);

h) electronic document interchange (EDI) (T.4);

i) simple mixed mode (T.4);

j) selective polling (T.30);

k) password (T.30);

l) digital network operation (T.30);

m) optional page sizes (T.4).

NOTES

1 Administrations are encouraged to ensure that standardized and nationally defined options are used in such a way as to minimize the need for the introduction of private use options.

2 As the service develops, there is a need for further study and consequently changes may be required to the above list.

2.4 Communication between terminals should take place at the level of compatibility at, or nearest to, the parameters initially selected by the originating user. The determination of this level should be carried out automatically via the pre-message procedures. This should take into account aspects of the quality of transmission media available in the participating networks and the options available on the receiving terminal.

2.5 Restrictions on the use of the Telefax 3 Service

Please refer to Recommendation F.160.

3 Network requirements

3.1 It is the responsibility of each Administration to decide on which network(s) the Telefax 3 Service is to be provided.

3.2 The Telefax 3 Service may be provided over all public networks using the appropriate CCITT technical Recommendations.

If the Integrated Services Digital Network is used, the Telefax 3 Service will be provided as appropriate.

3.3 Terminals on any public network which belong to the Telefax 3 Service shall be able to communicate automatically with terminals belonging to the Telefax 3 Service on any other public network.

4 Procedures for the transmission of documents

The technical procedures for transmitting documents in the Telefax 3 Service are given in Recommendation T.30.

5 Coding scheme

5.1 The basic coding scheme for the Telefax 3 Service is given in Recommendation T.4

5.2 The optional image coding schemes are given in Recommendations T.4 and T.6.

5.3 The optional character coding repertoire is given in Recommendation T.4.

5.4 The use of other recognized national and/or application oriented coding schemes is for further study.

6 Operation of the Telefax 3 Service

6.1 General

6.1.1 The Telefax 3 Service in each country and the interconnection between countries or networks shall use fully automatic switching so that it is possible for any Telefax 3 subscriber to reach any other Telefax 3 subscriber using fully automatic selection. This shall not, however, preclude, on a purely interim basis, the use of manual call set-up by international operators, where the calling terminal is served from a PSTN in which international call access to another PSTN serving the called terminal cannot be automatically provided.

6.1.2 It is a requirement to allow the through connection of a call between Group 3 facsimile terminals connected to a private automatic branch exchange (or similar systems) and those connected to public exchanges used for the Telefax 3 Service.

6.1.3 Interworking with other facsimile services – Please refer to Recommendation F.180.

6.1.4 Interworking with Message Handling Services – Please refer to Recommendation F.423 (for further study).

6.1.5 Interworking with the Telex Service – Please refer to Recommendation F.87.

6.1.6 Interworking with other services – For further study.

7 Terminal identification

7.1 Manual operation

In manual operation, it is assumed that terminal identification is established by normal telephone conversation.

7.2 Automatic operation

7.2.1 On the PSTN, in the case of automatic operation at the called station, an answering tone of 2100 Hz shall identify connection to a non-voice terminal. Additionally, an automatic identification shall be provided, see 7.2.3.

7.2.2 If the pages are printed, it is desirable for the identification of the transmitting station to appear at the receiving station, in the form of an identification line printed at the top of each page received, in an area 10 mm deep extending across the whole width of the page. This area may be either inside or outside the nominal A4 page, in accordance with the option selected by the user.

7.2.3 The digital station identification shall consist of up to 20 characters (including only digits and spaces). For the PSTN and the ISDN, the identification shall be the international telephone number and the format should be as follows: plus sign, country code, space, area code, space, subscriber's number. The coding arrangements are defined in Recommendation T.30.

The form of the digital station identification on other networks is for further study.

7.2.4 At the transmitting station, the identification of the receiving station may be either displayed or printed.

8 Quality of Service

For further study.

9 Subscriber terminals

9.1 In order to support a high Quality of Service, a range of data signalling rates has been defined as follows:

9.1.1 Public switched telephone network

Terminals on the public switched network shall be able to operate at the basic data signalling rate of 4800 bit/s with fallback to 2400 bit/s. In addition, data signalling rates of 9600/7200 bit/s and/or 14.4/12 kbit/s may be provided. Details are given in Recommendation T.30.

9.1.2 Integrated Services Digital Network (ISDN)

If the Integrated Services Digital Network is used, the Telefax 3 Service will be provided as appropriate.

9.1.3 Public data networks

For further study.

9.2 The facilities required in terminals participating in the international Telefax 3 Service are listed in the following subclauses.

9.2.1 Group 3 facsimile terminals shall have the ability to send, receive and display documents encoded with the image coding scheme defined in Recommendation T.4. In addition, they may have the ability to utilize the optional coding schemes defined in Recommendations T.4 and T.6.

9.2.2 No constraints shall be placed upon the type of presentation technology employed.

10 Directories

Please refer to Recommendation F.180.

11 Tariff principles

Please refer to Recommendation F.180.