INTERNATIONAL TELECOMMUNICATION UNION

CCITT F.80

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

TELEGRAPH AND MOBILE SERVICES OPERATIONS AND QUALITY OF SERVICE

BASIC REQUIREMENTS FOR INTERWORKING RELATIONS BETWEEN THE INTERNATIONAL TELEX SERVICE AND OTHER SERVICES

Recommendation F.80

Geneva, 1991

FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT 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 Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation F.80 was prepared by Study Group I and was approved under the Resolution No. 2 procedure on the 11th of October 1991.

CCITT NOTES

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

2) A list of abbreviations used in this Recommendation can be found in Annex A.

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Recommendation F.80

BASIC REQUIREMENTS FOR INTERWORKING RELATIONS BETWEEN THE INTERNATIONAL TELEX SERVICE AND OTHER SERVICES

1 Scope

This Recommendation defines the basic requirements which should be observed when defining interworking relations between the international telex service and other services. The aim of this Recommendation is to ensure that by implementing such interworking relations no negative influences arise for subscribers of the international telex service.

Only the perspective of a telex subscriber communicating with terminals of another service [via an interworking function (IWF)] is considered in this Recommendation.

2 Introduction

Providers of new and evolving non-voice services are aiming to offer communication relations with the international telex service by introducing interworking functions. The provision of such interworking functions must not reduce the perceived Quality of Service or modify the operational procedures of the international telex service. Therefore, when defining interworking functions, the general characteristics of the international telex service, as well as its operational provisions, listed in Recommendations F.59 and F.60, must be considered.

Since the specific interworking procedures are defined in detail within numerous Recommendations, it seems beneficial to summarize the basic requirements for interworking relations between the international telex service and other services within one single Recommendation.

3 Interworking principles

3.0 *General*

The conformance of interworking relations to the international telex service is shown in Table 1/F.80.

Compliance with the characteristics of the international telex service in the different interworking cases

		Communication from the international telex service to destination service/terminal					
		Mode	Real-time mode			Store-and-forwa	
		Destination service/terminal	TLX	DTE (PSPDN)	Intex	INM.A/B	(TTX)	FAX
		Applicable Recommendations	F.60 U.202	F.83 U.203	F.82 U.210	F.125 F.126	F.81 U.201	F.87 U.207
	2	1. Direct communication between terminals	Y	Y	Y	Y	N	N
	2.1	2. Transmitted and received messages identical	Y	N (Note 1)	Y	Y	Y (Note 2)	Y
	2.2	3. ITA2-69 spacing characters/line	Y	N (Note 1)	Y	Y	Y (Note 2)	Y
	2.3	4. Half-duplex communication; distant terminal can interrupt transmission	Y	N (Note 1)	Y	Y	N	N
	2.6	5. Terminals continuously ready to receive	Y	N	N (Note 1)	Y	Y	N
	2.6	6. Printout in unattended mode	Y	N	N (Note 1)	Y	N	N
	2.7	7. Exchange of terminal identification at any stage of the call	Y	N (Note 3)	Y	Y	N	N
	2.8	8. Automatic printout on continuous paper at both ends	Y	N	N (Note 1)	Y	N	N
	2.9	9. Conversation character-by-character	Y	N (Note 4)	Y	Y	N	N
	3.4	10. Terminal identification protected from user access	Y	N (Note 3)	Y	Y	Y	N (Note 3)
	3.4	11. Chronological printout of answerback exchange with message	Y	N	N (Note 1)	Y	Y	N

Y Comply N does not comply INM Inmarsat TTX Teletex FAX Group 3 facsimile IPMS Interpersonal Messaging Ser equipment

Note 1 – No CCITT definition of this terminal characteristic currently exists.

Note 2 – CCITT definition of terminal characteristic does exist. The telex subscriber can structure his message according to this definitic namely, pagination and representation of ITA2 combinations 4 and 10 in figure case.

Note 3 – Provided by the IWF.

Note 4 – Text transfer takes place in packets.

3.1 *One-stage selection*

In the case of one-stage selection, where the destination terminal will have been assigned a telex number that is part of the national telex numbering plan of the destination country, the originating telex subscriber may assume, notwithstanding a received answerback conforming to Recommendation F.74, that a normal telex connection has been established and all telex characteristics (as listed in Recommendation F.59) will be available at the destination terminal.

3.2 *Two-stage selection*

3.2.1 In the case of a two-stage selection it can generally be assumed that a telex subscriber establishes by intention an interworking relationship with the subscriber of another service. However, it should be recognized that a subscriber of the international telex service may not be aware of any or all of the service parameters of the destination service, in particular of its presentation facilities.

3.2.2 In two-stage-interworking functions (IWF) the two-stage selection procedure itself is already a definite deviation from the normal operational procedures for the originating telex subscriber. Since there is a need to inform the telex subscribers about the details of the selection procedure, it is also feasible to draw the attention of the telex subscribers to the fact, that he or she cannot expect all the basic characteristics of the international telex service (as listed in Recommendation F.59) to be available at the destination terminal. This limitation must be recognized and telex customers should be recommended to inform themselves about the characteristics of the destination service.

3.3 As it may not be possible to identify the service of origin by only evaluating the text part of a received message, the operator of the receiving telex terminal should be provided with information to identify the origin of a received message. Therefore it is recommended that an IWF provide the recipient with sufficient information on how to recall the originator, for example, a recall address.

3.4 In the particular case of a two-stage IWF/CF (conversion facility) on the telex side, it is recommended that the IWF attach a herald to the text of the message to indicate the source of the message and the recall address. Such a herald should include two fields, as follows:

– the recall address, preceded by the text “FOR RECALL (service address)”;

– the IWF/CF answerback.

3.5 If, in an interworking relationship, a sender wants the recipient to receive the transmitted message in identical format, he or she should if possible, structure his message according to the presentation facilities of the receiver.

3.6 In order to offer a satisfactory usability of service interworking relations to the subscriber, the service provider should offer sufficient information on the characteristics of the services concerned.

3.7 These operational instructions for the subscriber should include indications on any deviations from the general characteristics of the international telex service, as listed in Recommendation F.59, inherent to the interworking function.

3.8 In order to keep interworking relations as transparent as possible, any concatenation of interworking relations should be indicated to the user.

3.9 In order to provide the originating telex subscriber with the ability to determine the status of a message previously deposited, or to cancel such a message, the IWF should provide, where relevant, a status enquiry function. This should be implemented in accordance with Recommendations F.89 and U.220.