



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**U.80**

(03/93)

**TELEGRAPH SWITCHING  
TELEX STORE AND FORWARD**

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**INTERNATIONAL TELEX STORE  
AND FORWARD ACCESS  
FROM A TELEX SUBSCRIBER**

**ITU-T Recommendation U.80**

(Previously "CCITT Recommendation")

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## 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 U.80 was revised by the ITU-T Study Group IX (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

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## 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 Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.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 U.80****INTERNATIONAL TELEX STORE AND FORWARD ACCESS  
FROM A TELEX<sup>1)</sup> SUBSCRIBER***(Malaga-Torremolinos, 1984; amended at Melbourne, 1988 and at Helsinki, 1993)*

The CCITT,

*considering*

- (a) that telex store-and-forward units exist, and are being introduced increasingly into national networks;
- (b) that access procedures and protocols differ significantly between different units;
- (c) that to facilitate international access to store-and-forward units, a standard access procedure would be desirable,

*unanimously declares the view*

that the telex access procedure described in this Recommendation should be adopted for all future store-and-forward units providing incoming international telex access.

**1 Scope**

**1.1** This Recommendation describes a procedure for a telex subscriber to gain access to a store-and-forward unit in a foreign country by using an international telex switched connection. The procedure uses two stage selection.

**1.2** This Recommendation is one of a series which defines telex store-and-forward services. The other Recommendations are:

- Recommendation F.72 *The international telex service – General principles and operational aspects of a store-and-forward facility.*
- Recommendation U.81 *International telex store-and-forward – Delivery to a telex subscriber.*

**2 Outline of service features**

**2.1** The full range of service features is described in more detail in Recommendation F.72.

**2.2 Service principles**

**2.2.1** The procedure defined in this Recommendation is a two stage selection procedure whereby a calling telex subscriber gains access to a foreign store-and-forward unit (SFU) in the first stage of selection and inputs the called address(es) and message in the second stage of selection, after the return of a call connected signal.

The option of a store and retrieval facility is for further study.

<sup>1)</sup> Throughout this Recommendation, the term "telex" should be interpreted as referring exclusively to "the international telex service", as described in Recommendations F.59 and F.60.

**2.2.2** International access to the SFU should be offered on the basis of bilateral agreement between Administrations, and barring facilities should be provided to prevent unauthorized use. The method of barring shall be the responsibility of the Administration of the SFU service and is beyond the scope of this Recommendation. It may also be necessary for Administrations to make provision to selectively bar access to international telex SFU facilities in other countries.

**2.2.3** Message input from both manual and automatic emitting devices should be accommodated. It is also possible that messages may be received from another SFU, and this type of input should also be accommodated by bilateral agreement.

**2.2.4** For calling subscribers with answerbacks that cannot be processed to obtain the calling address, the SFU shall be able to handle direct input of the address from the subscriber, with or without prompt.

**2.2.5** A status enquiry facility should be provided internationally to provide information on message delivery in response to a request from the originator. This message status enquiry point will be accessed by a separate access code to that used for message input.

When the SFU provides automatic advice of delivery and non-delivery, or a request for positive delivery can be indicated, then the provision of status enquiry facilities is optional.

**2.2.6** Address validation of the called telex subscriber(s) may be provided, however, delivery of the message to a given address cannot be fully guaranteed.

### 3 Outline of facilities

**3.1** The full range of facilities is described in more detail in Recommendation F.72.

#### 3.2 Message input access

**3.2.1** Provision should be made for both single and multi-addressed calls.

**3.2.2** Messages received by the SFU for delivery to destinations not served by that SFU should be given a Non-Delivery Notification with service code NA for the reason of non-delivery.

**3.2.3** The maximum acceptable number of addresses in a multi-address call shall be agreed between Administrations, but should be at least 20. If the maximum number of addresses is exceeded, the SFU shall return the service code TMA and clear the connection.

**3.2.4** An attention information field facility should be provided by the SFU which enables each addressee of a multi-address message to have a relevant attention prefix preceding the message.

**3.2.5** Three classes of delivery service should be provided by the SFU:

- a) *Normal delivery* – The SFU delivers the message as soon as operationally feasible after receipt.
- b) *Delayed delivery* – The delay can be either:
  - i) set by the Administration offering the SFU service, if the calling customer selects this option;
  - ii) set by the calling subscriber, such that delivery of the message is not attempted until after the expiration of the indicated delay.
- c) *Time limited delivery set by the calling subscriber* – such that delivery of the message is attempted within a specified time limit.

The desired class of delivery should be selectable on a destination address basis.

**3.2.6** Positive delivery notification (PDN) when provided may be requested by the calling subscriber on a per message or on a per address basis.

**3.2.7** Message reference number(s) should be returned to the calling subscriber.

**3.2.8** Address correction procedures are considered desirable and may be provided.

**3.2.9** Provision should be made to accept follow-on message(s) with their associated address(es) which may be sent as separate block(s) immediately after the first message. Provision should also be made to acknowledge acceptance of messages, if requested by the calling terminal, at any point during a transaction.

**3.2.10** The SFU shall not accept the input of a message or follow-on messages (in the message input mode) unless adequate storage is available. The minimum storage available per message text input should be agreed bilaterally between Administrations. However, it is recommended that the minimum storage available on a per message basis should be 24 000 characters. For an interim period 12 000 characters is acceptable. Longer messages may be accepted if storage continues to be available.

**3.2.11** An Input Transaction Accepted for Delivery (ITD) service signal should be returned to the calling subscriber to indicate that the SFU has accepted the message.

**3.2.12** The following facilities are not accommodated in the procedures, do not form part of this Recommendation and are for further study:

- a) use of pre-recorded address lists;
- b) message editing facilities;
- c) address collation facilities;
- d) requests for positive delivery advices;
- e) transparent mode in message input phase;
- f) called address format checks.

### **3.3 Status enquiry access**

**3.3.1** Status information on messages should only be available for return to the originator of the message.

**3.3.2** Status information may be requested on

- a) all addresses associated with a message reference number;
- b) addresses which have not yet received the message;
- c) a specific address.

## **4 Access procedures**

### **4.1 General**

**4.1.1** Two basic access procedures should be provided:

- a) *Interactive operation*

Input from manual calling terminals, where the SFU may return prompt signals.

- b) *Non-interactive operation*

- Either, input from automatic emitting devices or from subscribers' terminals, where prompt signals from the SFU are not required; or
- input from another SFU.

NOTE – Detection of this type of access will rely on the identification of the calling SFU answerback, the format of this answerback is for further study.