



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

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STANDARDIZATION SECTOR
OF ITU

F.71

**OPERATIONS AND QUALITY OF SERVICE
TELEGRAPH SERVICES**

**INTERCONNECTION OF PRIVATE
TELEPRINTER NETWORKS WITH
THE TELEX NETWORK**

ITU-T Recommendation F.71

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation F.71 was published in Fascicle II.4 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

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

Recommendation F.71

INTERCONNECTION OF PRIVATE TELEPRINTER NETWORKS WITH THE TELEX NETWORK

The CCITT,

considering

- (a) the operational provisions for the international telex service laid down in Recommendation F.60;
- (b) that in various countries possessing public telex networks there also exist numerous private teleprinter networks using their own exchanges and conforming with the national regulations of the country concerned;
- (c) that the owners of these private networks are frequently substantial users of the telex service employing multiple subscriber lines;
- (d) that, consequently, it is very desirable to allow the through-connection of calls between teleprinters connected to private exchanges and those connected to the public telex network;
- (e) that in the telephone service the ability to establish calls between stations connected to private and public exchanges has long been available;
- (f) that the operation of the international public telex service must be neither hampered nor limited by private exchanges and hence the conditions for interconnection of the two types of network should be standardized,

declares the following

- 1** Any terminal in a private network that may be directly connected (circuit switched) to a terminal in the international telex network must conform to the relevant requirements for terminals in the telex network as laid down in the Series F and S Recommendations.
- 2** A private network must not be allowed to provide communication between two external telex stations. For the provisions concerning interconnection between international leased circuits and the telex network, see Recommendation D.1 [1].
- 3** Where a private network uses a message store-and-forward system, it may be authorized to accept and deliver messages from and to the public network. The signals from the private network must always conform with the telex network's signalling standards.
- 4** When a private network connected to the telex network offers an external caller the facility of selecting a given extension directly, this should be clearly indicated in the public telex directory.
- 5** Either two-stage or single stage selection may be used as a means of automatic selection of a subsidiary station in the private network by an external caller.
- 6** For two-stage selection the following provisions should be applied:
 - 1) The first stage of the selection should designate the called private network, using a conventional national subscriber number. Following the normal telex procedure, this sequence should start the selection process, resulting in the caller's being connected to a teleprinter (or any other appropriate device in the private network) that is ready to record a message. For networks where the called telex subscriber's answer-back is tripped automatically, this answer-back code must designate and be common to the whole of the private network concerned.
 - 2) Application of the second stage by the calling telex subscriber is optional. The selection sequence used to designate a particular extension station may have a special composition for the network that is quite independent of the national telex numbering scheme, but it must always consist of teleprinter characters.

- 3) If the caller wishes to use the second stage of selection, he advises the private network by sending the sequence **XVXV** (combination 24, 22, 24 and 22 successively), to which the network responds with a proceed-to-select signal $\leftarrow \equiv \downarrow \mathbf{GA} \rightarrow$ (combinations 27, 28, 29, 7, 1 and 31 successively).
- 4) This optional second stage of selection is ignored by the telex network. The corresponding selection time in the private network is charged in the same way as a telex call. The composition of the answer-back codes transmitted, where appropriate, after the second stage of selection may therefore be left to the discretion of the subscriber.

7 Where single-stage selection is used for connection to extension stations, the following provisions should be applied.

- 1) The single sequence used to select an extension station must be in the form of a national subscriber number, comprising a number to designate the called private network followed by further digits to specify the particular station required. When the caller sends this full sequence of digits, through-connection to the required extension is achieved, first by selection in the public network then in the private network. For networks where the called telex subscriber's answer-back is automatically tripped, the answer-back sent when the complete connection has been set up is specific to the selected extension.
- 2) If the caller wishes to communicate, not with any specific subsidiary extension, but with a teleprinter (or any other appropriate device in the private network) that is ready to record a message, the selection sequence should consist of the number designating the private network followed by the figure **0**.
- 3) If the caller only sends a selection sequence specifying the private network (i.e. neither **0**, nor a specific extension number nor an end-of-selection signal is added), the call should be automatically diverted after a period of 10 s to a main station.
- 4) If the caller specifies a particular extension station that is engaged or otherwise unavailable, the call should be automatically diverted to a main station.
- 5) With single-stage selection, the answer-back codes for all stations, including extension stations, must comply with the requirements in Recommendation F.60 for the composition of telex answer-back codes.

8 In the event that the external caller fails either partially or totally to meet the requirements of the procedures of a private teleprinter network as in §§ 3 to 7 above, the call should be intercepted by, or directed to, an enquiry teleprinter (or any other appropriate device) in the private network. On no account must the call be terminated by the private network if the procedures are not followed.

Reference

- [1] CCITT Recommendation *General principles for the lease of international (continental and intercontinental) private leased telecommunication circuits*, Rec. D.1.