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SERIES S: TELEGRAPH SERVICES TERMINAL
EQUIPMENT

Start-stop terminals

**AUTOMATIC REQUEST OF THE ANSWERBACK
OF THE TERMINAL OF THE CALLING PARTY,
BY THE TELEX TERMINAL OF THE CALLED
PARTY OR BY THE INTERNATIONAL NETWORK**

Reedition of CCITT Recommendation S.23 published in
the Blue Book, Fascicle VII.1 (1988)

NOTES

- 1 CCITT Recommendation S.23 was published in Fascicle VII.1 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 S.23

AUTOMATIC REQUEST OF THE ANSWERBACK OF THE TERMINAL OF THE CALLING PARTY, BY THE TELEX TERMINAL OF THE CALLED PARTY OR BY THE INTERNATIONAL NETWORK

(Melbourne, 1988)

The CCITT,

considering

(a) that a *telex automatic emitting device (TAED)*, store and forward unit (SFU) or conversion facility (CF) – when called – may automatically request the identification of the calling party's telex terminal, after having supplied its own answerback;

(b) that a mismatch of answerback may be detected by the calling party's terminal, or SFU or CF, if the “Who are you” from the called party's terminal immediately follows the called party's answerback at automatic speed;

(c) that the calling party's telex terminal, or equivalent, may commence text transmission on receipt of a valid answerback *without waiting for a possible “Who are you” from the distant network*;

(d) that corruption of text may occur if the “Who are you” from the *distant network* is received when transmitting text;

(e) that automatic telex terminals, an SFU or CF may detect a mismatch between the initial answerback – with an integrated “Who are you” signal – and the answerback at the end of the message. In this case, the message may be delivered several times, but the calling party could be advised of an unsuccessful message delivery;

(f) that an Administration, or RPOA, may on an outgoing international call, request a second answerback, if unstandard characters, including an unexpected “Who are you” signal, are received at the time of call establishment;

(g) that an Administration or RPOA may not permit “Who are you” signals to be generated from any TAED under their control, but that future designs of TAEDs should be in a position to receive “Who are you” signals on originated international telex calls;

(h) that this Recommendation recognizes that currently implemented terminal devices are not required to conform to these provisions. However, there would be advantages if existing equipment complies with the requirement of this Recommendation,

unanimously declares the view

that the following procedures should be adopted as follows:

1 Originating telex terminals (TAED), store-and-forward units or conversion facilities, should use standard telex procedures, (e.g. those shown in Recommendation U.75) to identify the answerback of the called party from the string of characters sent from the network. Having verified this as being the expected answerback:

1.1 It should pause a minimum of 1.5 seconds.

1.2 If no “Who are you” signal is received during this period, it may send its own answerback and commence text transmission.

1.3 In this 1.5 second period, it should be prepared to respond to a “Who are you” signal by generating its own answerback.

1.4 If a “Who are you” signal is received, it should generate the answerback of the calling party within 150 milliseconds to 600 milliseconds of recognition of the “Who are you” signal (refer to Recommendation S.6). After the answerback has been sent, text transmission should be delayed for at least 1.5 seconds. This period is to allow the terminating network sufficient time to examine the answerback of the calling party, and to send a further “Who are you” signal, if necessary. After this delay, text transmission may commence, without having to repeat the answerback of the calling party.

However, if a second “Who are you” signal is received in this 1.5 second period, the terminal should send a further answerback and then commence text transmission.

1.5 If signals, other than a “Who are you” signal, are received within 1.5 seconds from the end of the answerback string of the called party, then the action to be taken is at the discretion of the calling party.

1.6 An Administration, or RPOA, may, as a national matter choose to request a second answerback from the distant network by generating a “Who are you” signal if:

- a) the received character string (at automatic speed) consists of more than 20 characters and includes a “Who are you” signal;
- b) a “Who are you” signal is received within a period less than 800 milliseconds from the end of the answerback string.

2 A terminating automatic terminal, store-and-forward unit (SFU), conversion facility (CF), maritime satellite switching centre (MSSC) or distant international network, when called, should react as follows:

2.1 The called terminal or network may return a WRU sequence to the calling party, 800 milliseconds after the return of the answerback string of the called party, provided that the forward path remains idle.

2.2 It is not permitted to return the WRU sequence once the text transmission from the calling party has commenced.

2.3 The WRU sequence may be repeated only once:

- a) 2 seconds after the first WRU if a response to the first WRU was not received; or
- b) 300 milliseconds after the receipt of a sequence which could not be identified as a valid answerback.

In any event, if the answerback of the calling party is not detected correctly after two WRU attempts, the call should not be cleared by the called party, or the distant network with the exception of called devices (such as a CF) which are required to capture the calling answerback for administration reasons.

2.4 Some Administrations or RPOAs may not allow WRU signals to be generated from terminals in their countries.

2.5 It is preferable that one uniform procedure be developed for the exchange of the called and calling party's answerback after the call connect signal. The mechanism for achieving this is for further study.

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