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TELEGRAPHY

ALPHABETICAL TELEGRAPH TERMINAL EQUIPMENT

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

ITU-T Recommendation S.23

(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 S.23 was revised by the ITU-T Study Group IX (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 Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.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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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; modified at Helsinki, 1993)

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" signal 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" signal from the distant network*;

(d) that corruption of text may occur if the "Who are you" signal 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 ROA, 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 ROA 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 ROA, 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 signal 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 signal once the text transmission from the calling party has commenced.

2.3 The WRU signal 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 ROAs 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.