



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

F.21

**OPERATIONS AND QUALITY OF SERVICE
TELEGRAPH SERVICES**

**COMPOSITION OF ANSWER - BACK CODES
FOR THE INTERNATIONAL GENTEX SERVICE**

ITU-T Recommendation F.21

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation F.21 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.21

COMPOSITION OF ANSWER-BACK CODES FOR THE INTERNATIONAL GENTEX SERVICE

The CCITT,

considering

(a) that the answer-back code sent by teleprinter equipment in the gentex service should provide as much useful information as possible for the operational services. Procedures for checking answer-back codes should be simple and speedy because the average time taken to transmit the text of a telegram in the gentex system is about one minute and this means that roughly every minute three answer-back codes have to be checked by the operator (two at the beginning of the telegram, the answer-back code of the station obtained and the answer-back code of the calling station, and one at the end: the answer-back code of the station obtained);

(b) that the answer-back code in the international gentex service should therefore include the call-number of the office and as much of the name of this office as possible;

(c) that it is also essential to show in the answer-back code one or two characteristic letters of the country in which the teleprinter equipment is situated, for the worst routing mistake is that of sending a telegram to the wrong country;

(d) that Administrations may identify, by additional letters in the answer-back code, not only the office but also the nature of the position in the office (outgoing position, incoming position), or the identity of the position among all similarly specialized positions, so as to facilitate the location of any faults in the equipment of the tracing of any telegrams in dispute;

(e) that the initial letters of the alphabet: **A, B, C**, etc., are to be used for identifying specialized outgoing positions and one of the final letters of the alphabet **Z, Y, X**, etc. for identifying specialized incoming positions. For very large offices, where groups of machines having the same specialized function, outgoing or incoming, may comprise more than 12 machines, it will be necessary to use additional specialization letters:

T to indicate a position specializing in transmission;

R to indicate a position specializing in reception;

(f) that if an office that uses letters denoting specialization is also equipped with combined incoming/outgoing positions, such positions will be identified by the same specialization letter as the incoming positions;

(g) that should outgoing or incoming groups comprise more than 26 machines, the letters **S** and **Q**, denoting outgoing or incoming specialization respectively, may be used in conjunction with the letters **T** and **R**, thus increasing the possibility of identification in a group of machines to 52;

(h) that in the case of overflow positions, they must indicate very clearly the name of the office obtained, for this name belongs to an office other than the one called. For this purpose, the call-number of the overflow office will not appear in the answer-back code of such a position, so as to leave space for the name of the office as complete as possible and the characteristic indication **DEB**, which has been chosen to denote *overflow*;

(i) that because machines in the gentex service can be page-printing machines, it is necessary to provide carriage-return and line-feed signals at the beginning of the answer-back code and for technical reasons the last character of the answer-back code must be the letter-shift signal,

unanimously declares

(1) that answer-back codes of machines used in the international gentex service should be made up of 20 signals;

(2) that, for machines other than those used on positions specialized for receiving overflow traffic, the series of 20 signals in the answer-back code should, in principle, be as follows:

- carriage-return,
- line-feed,
- figure-shift,

- the figures of the call-number by which the office is to be called when a telegram is sent to it [in some large offices a position (or group of positions) may specialize in dealing with service advices, and in this case it is provided with a special call-number and answer-back code – see § (6) below],
- letter-shift,
- space,
- letters indicating as explicitly as possible the name of the office,
- space,
- the characteristic letters of the name of the country, in accordance with the code listed under § (9) below,
- letter-shift.

Note – Some teleprinters are permanently arranged to transmit letter-shift as the first character of the answer-back. In this case the letter-shift should precede the carriage-return and will reduce the number of characters available for the name of the office by one.

(3) that, for Administrations that wish to give the specialization and identity of the positions with which equipment is associated in large offices, the series of 20 signals in the answer-back code should be made up as follows, according to the size of such offices:

- carriage-return,
- line-feed,
- figure-shift,
- the call number as indicated under §(2),
- letter-shift,
- one or two letters chosen in accordance with Table 1/F.21,
- space,
- the name of the office,
- space,
- the characteristic letters of the name of the country,
- letter shift;

(4) if, in the exchanges referred to in § (3) above, combined incoming/outgoing positions are used in addition to specialized incoming or outgoing positions, the answer-back codes of these combined positions should be composed in the same way as the answer-back codes of a specialized incoming position;

(5) The specialization letter **T** should be preferred to the letter **S**, and the letter **R** to the letter **Q**; the letters **S** and **Q** should be used only when such use is justified by the exchange equipment;

TABLE 1/F.21

Size of office	For a specialized outgoing position	For a specialized incoming position
Large office	one letter from A to L	one letter from Z to O
Very large office	the letter T and one letter from A to Z	the letter R and one letter from A to Z
Exceptionally large office	the letter T or the letter S and one letter from A to Z	the letter R or the letter Q and one letter from A to Z

(6) that, for the positions specialized in dealing with service messages, the series of 20 signals of the answer-back code should be as follows:

- carriage-return,
- line-feed,
- figure-shift,
- the call-number of the specialized position or group of positions,
- letter-shift,
- space,
- the name of the office,
- space,
- letters **INQ**,
- letter-shift;

(7) that, for positions specialized in the reception of overflow traffic, the series of 20 signals in the answer-back code should be as follows:

- carriage-return,
- line-feed,
- letter-shift,
- position identification letter(s),
- space,
- the name of the office,
- space,
- letters **DEB**,
- letter-shift;

(8) that, if an answer-back code does not fill the 20 places available, the unused places should be filled by the necessary number of space signals between the name of the office and the country code;

(9) that the characteristic letters of names of countries should be the same as the telex network identification code shown in the *List of Destination Indicators and Telex Network Identification Codes* [1] with the exception of the countries below, which use the characteristic letters shown:

CS Czechoslovakia

I Italy

GB United Kingdom

L Luxembourg

Reference

- [1] *List of indicators for the telegram retransmission system and telex network identification codes*, ITU, Geneva.