



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

F.30

(03/93)

**OPERATIONS AND QUALITY OF SERVICE
TELEGRAPH SERVICES**

**USE OF VARIOUS SEQUENCES OF
COMBINATIONS FOR SPECIAL PURPOSES**

ITU-T Recommendation F.30

(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 F.30 was revised by the ITU-T Study Group I (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 Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.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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**USE OF VARIOUS SEQUENCES OF
COMBINATIONS FOR SPECIAL PURPOSES**

(Melbourne, 1988; revised Helsinki, 1993)

The CCITT,

unanimously declares that

- 1) when it is necessary to provide for switching of telegrams to different routes in semi-automatic or fully automatic telegram retransmission systems, the beginning and ending of each telegram are identified by the insertion of start-of-message and end-of-message signals;
- 2) the start-of-message signal consists of the sequence **ZCZC** in letter case;
- 3) the end-of-message signal consists of the sequence **NNNN**, in letter case;
- 4) the equipment that recognizes the start-of-message and end-of-message signals may be designed to do so by searching only for the sequence of four combinations corresponding to **ZCZC** or **NNNN** respectively (i.e. combinations 26, 3, 26, 3 or 14, 14, 14, 14 in International Telegraph Alphabet No. 2 regardless of whether they are in letter or figure case);
- 5) Table 1 lists other sequences of combinations used for special purposes.

TABLE 1/F.30

| Purpose of sequence | Sequence of combination | Printed position | | Recommendation reference |
|--|----------------------------|-----------------------------------|-------------|--------------------------|
| | | Letter case | Figure case | |
| Connection of reperforator (or equivalent device) | 3 3 3 3 | CCCC | : : : : | S.4 |
| Disconnection of reperforator (or equivalent device) | 6 6 6 6 | FFFF | (Note 1) | S.4 |
| Suppression of delay signals | 8 8 8 8 | HHHH | (Note 1) | S.4, U.22 |
| Ready for test | 11 11 11 11 | KKKK | ((((| R.79, R.79 bis |
| Switching a reader (or equivalent device) into circuit by remote control | 11 12 11 12 | KLKL | () () | S.4 |
| End of message or enabling of delay signals | 14 14 14 14 | NNNN | , , , , | F.1, F.31, S.4, U.22 |
| Change of alphabet | 19 19 19 19 | SSSS | ' ' ' ' | S.15 |
| Error signal | 24 24 24 24 24 | XXXXX | ///// | F.1 (C111) |
| Start of message | 26 3 26 3 | ZCZC | + : + : | F.1, F.31 |
| End of input | 26 26 26 26 | ZZZZ | ++++ | F.200 |
| Request for automatic advice of parties cleared prematurely during the broadcast call followed by call cleared | 13 13 13 13 (Note 3) | MMMM (Note 3) | (Note 2) | S.4, U.44 |
| WRU signal | 30 4 | | | S.6 |
| Operator recall over radiotelegraph circuit | 28 27 27 27 27 | | (Note 6) | U.21 |
| Stop transmission from distant auto terminal | 20 20 20 ... (Note 4) | T T T ... (Note 4) | 5 5 5 ... | S.4 |
| Interrogation of distant terminal | 10 (Notes 4 and 5) | J . . . (Notes 4 and 5) | | S.4, S.22 |
| Follow-on call | 12 12 12 12 | L L L L |))) | S.4, U.43 |
| <p>NOTES</p> <p>1 As noted in C5/F.1, the figure case of combinations 6, 7 and 8 is available for the internal service of each Administration.</p> <p>2 As noted in Recommendation U.44 this sequence is to be recognized in letter case only.</p> <p>3 A minimum of 4 Ms would clear a telex broadcast call. The usage of a 5th or more Ms is a national matter.</p> <p>4 Repeated if necessary.</p> <p>5 Function only applicable in figure case.</p> <p>6 See also Table 2/S.1.</p> | | | | |