



INTERNATIONAL TELECOMMUNICATION UNION

**CCITT**

THE INTERNATIONAL  
TELEGRAPH AND TELEPHONE  
CONSULTATIVE COMMITTEE

**F.30**

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SERIES F: NON-TELEPHONE TELECOMMUNICATION  
SERVICES

Telegraph and Mobile Services: Operations and Quality of  
Service – Message switching

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

Reedition of CCITT Recommendation F.30 published in  
the Blue Book, Fascicle II.4 (1988)

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## NOTES

1 CCITT Recommendation F.30 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.30**

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

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/F.30 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	<b>CCCC</b>	: : : :	S.4
Disconnection of reperforator (or equivalent device)	6 6 6 6	<b>FFFF</b>	Note 1	S.4
Suppression of delay signals	8 8 8 8	<b>HHHH</b>	Note 1	S.4, U.22
Ready for test	11 11 11 11	<b>KKKK</b>	(( ((	R.79, R.79 bis
Switching a reader (or equivalent device) into circuit by remote control	11 12 11 12	<b>KLKL</b>	( ) ( )	S.4
End of message or enabling of delay signals	14 14 14 14	<b>NNNN</b>	, , , ,	F.1, F.31, S.4, U.22
Change of alphabet	19 19 19 19	<b>SSSS</b>	' ' ' '	S.15
Error signal	24 24 24 24 24	<b>XXXXX</b>	/////	F.1 (C94)
Start of message	26 3 26 3	<b>ZCZC</b>	+ : + :	F.1, F.31
End of input	26 26 26 26	<b>ZZZZ</b>	++++	F.200
Request for automatic advice of parties cleared prematurely during the broadcast call followed by call cleared	13 13 13 13 Note 3	<b>MMMM</b> Note 3	Note 2	S.4, U.44

*Note 1* – As noted in Recommendation F.1, § C4, the figure case of combinations 6, 7 and 8 is available for the internal service of each Administration.

*Note 2* – As noted in Recommendation U.44 this sequence is to be recognized in letter case only.

*Note 3* – A minimum of 4 Ms would clear a telex broadcast call. The usage of a 5th or more Ms is a national matter.



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*For further details, please refer to ITU-T List of Recommendations.*

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