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SERIES T: TERMINALS FOR TELEMATIC SERVICES

**Facsimile code points for use with
Recommendations V.8 and V.8 *bis***

ITU-T Recommendation T.66

(Previously CCITT Recommendation)

ITU-T T-SERIES RECOMMENDATIONS
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ITU-T RECOMMENDATION T.66

FACSIMILE CODE POINTS FOR USE WITH RECOMMENDATIONS V.8 AND V.8 *bis*

Summary

This Recommendation defines the coding to be used in V.8 and V.8 *bis* negotiation to enable the selection of T.30 facsimile related capabilities.

Source

ITU-T Recommendation T.66 was revised by ITU-T Study Group 8 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 1st of April 1999.

FOREWORD

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NOTE

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**FACSIMILE CODE POINTS FOR USE WITH
RECOMMENDATIONS V.8 AND V.8 bis**

(revised in 1999)

1 Scope

This Recommendation defines the code points reserved in Recommendations V.8 and V.8 *bis* for T.30 facsimile applications and further defines in successive octets the capabilities that may be negotiated.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; all users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published.

- ITU-T Recommendation H.324 (1996), *Terminal for low bit rate multimedia communication.*
- ITU-T Recommendation T.30 (1996), *Procedures for document facsimile transmission in the general switched telephone network.*
- ITU-T Recommendation T.39 (1997), *Application profiles for simultaneous voice and facsimile terminals.*
- ITU-T Recommendation V.8 (1998), *Procedures for starting sessions of data transmission over the public switched telephone network.*
- ITU-T Recommendation V.8 bis (1998), *Procedures for the identification and selection of common modes of operation between data circuit-terminating equipments (DCEs) and between data terminal equipments (DTEs) over the public switched telephone network and on leased point-to-point telephone-type circuits.*
- ITU-T Recommendation V.34 (1996), *A modem operating at data signalling rates of up to 33 600 bit/s for use on the general switched telephone network and on leased point-to-point 2-wire telephone-type circuits.*
- ITU-T Recommendation V.61 (1996), *A simultaneous voice plus data modem, operating at a voice plus data signalling rate of 4800 bit/s, with optional automatic switching to data-only signalling rates of up to 14 400 bit/s, for use on the general switched telephone network and on leased point-to-point 2-wire telephone type circuits.*
- ITU-T Recommendation V.70 (1996), *Procedures for the simultaneous transmission of data and digitally encoded voice signals over the GSTN, or over a 2-wire leased point-to-point telephone type circuits.*

3 Abbreviations

This Recommendation uses the following abbreviations:

ASVF	Analogue simultaneous voice and facsimile communication
CCITT	International Telegraph and Telephone Consultative Committee
DSVF	Digital simultaneous voice and facsimile communication
GSTN	General Switched Telephone Network
ISO	International Organization for Standardization
ITU-T	International Telecommunication Union – Telecommunication Standardization Sector
MS	Mode Select

4 Introduction

Recommendations V.8 and V.8 *bis* define code points used in negotiating capabilities during connection establishment procedures. Certain of these codes have been reserved for definition and use by Study Group 8.

This Recommendation defines the code points as dedicated to T.30 facsimile and related applications and further defines in successive octets the capabilities that may be negotiated.

5 Code points used with V.8 procedures

5.1 Coding for V.8 information categories

Table 1 shows the bits b5, b6 and b7 on line 8 reserved for facsimile function in Table 2/V.8. These bits are used to define the call function categories.

Table 1/T.66 – Information categories

Start	b0	b1	b2	b3	b4	b5	b6	b7	Stop	Category octets (b4 = 0) with category given by tag b0-b3
0	1	0	0	0	0	x	x	x	1	Call function
0	1	0	1	0	0	x	x	x	1	Modulation modes
0	0	1	0	1	0	x	x	x	1	Protocols
0	1	0	1	1	0	x	x	x	1	PSTN access
0	1	1	1	1	0	x	x	x	1	Non-standard facilities
0	0	1	1	0	0	x	x	x	1	For use by the Telecommunications Industries Association (United States of America)
0	1	1	1	0	0	x	x	x	1	PCM modem availability
0	0	1	1	1	0	x	x	x	1	Facsimile function

Table 2 shows the call function categories defined by Study Group 8.

6 Code points used with V.8 *bis* procedures

6.1 Coding for the Standard Information Field

Bit 5 of Table 6-2/V.8 *bis* (Standard Information Field – {SPar(1)} Coding) is indicated as "Reserved for use by ITU-T/Study Group 8". The accompanying Note 4 specifies that the Level 2 and 3 Pars associated with this SPar(1) are reserved for allocation by ITU-T/Study Group 8.

Table 3 defines the label of Bit 5 of Table 6-2/V.8 *bis* (Standard Information Field – {SPar(1)} Coding) as T.30 Facsimile.

6.2 Coding for the Standard Information Field – T.30 facsimile

The coding of the first octet of the NPar(2) coding is shown in Table 4 codes. The T.30 procedures code point is applicable in the case where V.8 *bis* is used with facsimile/telephone switching (OutGoing Message – OGM) and no V.8 is forthcoming, i.e. T.30 modulation schemes that do not depend on V.8 for initiation. The other code point contains the modulation types which could be indicated with V.8 *bis* in the facsimile environment.

Table 2/T.66 – The facsimile function category

Start	b0	b1	b2	b3	b4	b5	b6	b7	Stop	Octet –"callf0"	ITU-T Recommendation Reference
0	0	1	1	1						Tag b0-b3 indicating the Study Group 8 category	
					0					Indicates a category octet	
								x		A "1" denotes calls for applications using Group 3 extended negotiation protocol	Recommendation T.30
							x			A "1" denotes reserved for caller initiated session for applications using Group 3 extended negotiation protocol	Recommendation T.30
						x				Reserved (Note)	
									1	Stop bit	

NOTE – Reserved bits, when sent, should be set to 0 and ignored by the receiver.

Table 3/T.66 – Standard Information Field – {SPar(1)} coding

SPar(1)s	8	7	6	5	4	3	2	1
Defined in V.8 bis	x	x	x	x	x	x	x	1
Defined in V.8 bis	x	x	x	x	x	x	1	x
Defined in V.8 bis	x	x	x	x	x	1	x	x
Defined in V.8 bis	x	x	x	x	1	x	x	x
T.30 Facsimile	x	x	x	1	x	x	x	x
Defined in V.8 bis	x	x	1	x	x	x	x	x
Defined in V.8 bis	x	1	x	x	x	x	x	x
Defined in V.8 bis	x	0	0	0	0	0	0	0

Table 4/T.66 – Standard Information Field – T.30 facsimile {NPar(2)} coding – Octet 1

NPar(2)s	8	7	6	5	4	3	2	1
T.30 procedures (without V.8)	x	x	x	x	x	x	x	1
V.34 (half duplex mode)	x	x	x	x	x	x	1	x
V.34 (duplex mode)	x	x	x	x	x	1	x	x
V.61 (ASVF)	x	x	x	x	1	x	x	x
V.70 (DSVF)	x	x	x	1	x	x	x	x
Non-standard capabilities	x	x	1	x	x	x	x	x
No parameters in this octet	x	x	0	0	0	0	0	0

The coding of second octet of the Group 3 facsimile Standard Information Field is used to indicate other capabilities, as shown in Table 5 codes.

Table 5/T.66 – Standard Information Field – T.30 facsimile {NPar(2)} coding – Octet 2

NPar(2)s	8	7	6	5	4	3	2	1
H.324 (MSVF)	x	x	x	x	x	x	x	1
Extended negotiation method	x	x	x	x	x	x	1	x
MS initiated session (Note)	x	x	x	x	x	1	x	x
Reserved for allocation by ITU-T	x	x	x	x	1	x	x	x
Reserved for allocation by ITU-T	x	x	x	1	x	x	x	x
Reserved for allocation by ITU-T	x	x	1	x	x	x	x	x
No parameters in this octet	x	x	0	0	0	0	0	0
NOTE – Session initiated by the responding terminal.								

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