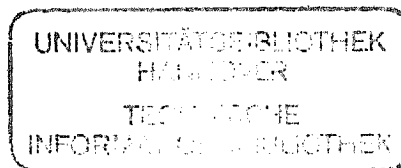




INTERNATIONAL TELECOMMUNICATION UNION

# CCITT

THE INTERNATIONAL  
TELEGRAPH AND TELEPHONE  
CONSULTATIVE COMMITTEE



**BLUE BOOK**

---

**VOLUME VII – FASCICLE VII.2**

## TELEGRAPH SWITCHING

**SERIES U RECOMMENDATIONS**

---



**IXTH PLENARY ASSEMBLY**  
MELBOURNE, 14-25 NOVEMBER 1988

Geneva 1989

UB/TIB Hannover 89

115 598 294



ISBN 92-61-03601-5

## CONTENTS OF FASCICLE VII.2 OF THE BLUE BOOK

### Part I – Series U Recommendations

#### Telegraph switching

Rec. No.		Page
SECTION 1 – <i>General</i>		
U.1	Signalling conditions to be applied in the international telex service . . . . .	3
U.2	Standardization of dials and dial pulse generators for the international telex service . .	14
U.3	Arrangements in switching equipment to minimize the effects of false calling signals . .	14
U.4	Exchange of information regarding signals destined to be used over international circuits concerned with switched teleprinter networks . . . . .	15
U.5	Requirements to be met by regenerative repeaters in international connections . . . . .	16
U.6	Prevention of fraudulent transit traffic in the fully automatic international telex service	17
U.7	Numbering schemes for automatic switching networks . . . . .	18
U.8	Hypothetical reference connections for telex and gentex networks . . . . .	18
U.10	Equipment of an international telex position . . . . .	23
SECTION 2 – <i>Specific signalling schemes and interworking between signalling systems</i>		
U.11	Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type C signalling) . . . . .	25
U.12	Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling) . . . . .	40
U.15	Interworking rules for international signalling systems according to Recommendations U.1, U.11 and U.12 . . . . .	66
SECTION 3 – <i>Signalling over radio and multiplexed channels</i>		
U.20	Telex and gentex signalling on radio channels (synchronous 7-unit systems affording error correction by automatic repetition) . . . . .	75
U.21	Operator recall on a telex call set up on a radiotelegraph circuit . . . . .	81

U.22	Signals indicating delay in transmission on calls set up by means of synchronous systems with automatic error correction by repetition . . . . .	82
U.23	Use of radiotelegraph circuits with ARQ equipment for fully automatic telex calls charged on the basis of elapsed time . . . . .	83
U.24	Requirements for telex and gentex operation to be met by synchronous multiplex equipment described in Recommendation R.44 . . . . .	87
U.25	Requirements for telex and gentex operation to be met by code- and speed-dependent TDM systems conforming to Recommendation R.101 . . . . .	92
SECTION 4 – <i>Gentex signalling</i>		
U.30	Signalling conditions for use in the international gentex network . . . . .	97
U.31	Prevention of connection to faulty stations and/or station lines in the gentex service . .	98
SECTION 5 – <i>Particular signalling facilities</i>		
U.40	Reactions by automatic terminals connected to the telex network in the event of ineffective call attempts or signalling incidents . . . . .	99
U.41	Changed address interception and call redirection in the telex service . . . . .	102
U.43	Follow-on calls . . . . .	104
U.44	Multi-address calls in real time for broadcast purposes in the international telex service	105
U.45	Response to the not-ready condition of the telex terminal . . . . .	107
SECTION 6 – <i>Radiotelex interworking</i>		
U.60	General requirements to be met in interfacing the international telex network with maritime satellite systems . . . . .	111
U.61	Detailed requirements to be met in interfacing the international telex network with maritime satellite systems . . . . .	112
U.62	General requirements to be met in interfacing the international telex network with the fully automated maritime VHF/UHF radio system . . . . .	121
U.63	General requirements to be met in interfacing the international telex network with the maritime “direct printing” system . . . . .	126
SECTION 7 – <i>Interworking between new information services and telex</i>		
U.70	Telex service signals for telex to teletex interworking . . . . .	129
U.74	Extraction of telex selection information from a calling telex answerback . . . . .	132
U.75	Automatic called telex answerback check . . . . .	135

SECTION 8 – *Telex store and forward*

U.80	International telex store and forward access from telex . . . . .	139
U.81	International telex store and forward – Delivery to telex . . . . .	151
U.82	International telex store and forward – Interconnection of telex store and forward units . . . . .	159

SECTION 13 – *Definitions*

U.140	Definitions of essential technical terms relating to telegraph switching and signalling . .	201
U.201	Interworking between the teletex service and the telex service . . . . .	215
U.202	Requirements to be met in providing the telex service within the ISDN . . . . .	233
U.204	Interworking between the telex service and the public interpersonal messaging service .	242

**Part II – Supplements to the series U Recommendations**

Supplement No. 1	Signalling characteristics and timing of the MARISAT telex service . . . . .	267
Supplement No. 2	Signalling arrangements in the Maritime Satellite Telex Service via the MARISAT system . . . . .	273
Supplement No. 3	Telex signalling arrangements in the Nordic Maritime Satellite Coast Earth Station .	283

## PRELIMINARY NOTES

1 The Questions entrusted to each Study Group for the Study Period 1989-1992 can be found in Contribution No. 1 to that Study Group.

2 In this Fascicle, the expression “Administration” is used for shortness to indicate both a telecommunication Administration and a recognized private operating agency.