INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.686

(03/93)

INTERWORKING OF SIGNALLING SYSTEMS

INTERWORKING OF SIGNALLING SYSTEMS – LOGIC PROCEDURES FOR INTERWORKING OF SIGNALLING SYSTEM R2 TO SIGNALLING SYSTEM No. 7 (ISUP)

ITU-T Recommendation Q.686

(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 Q.686 was prepared by the ITU-T Study Group XI (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 Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.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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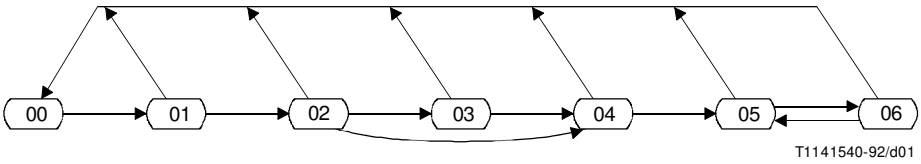
INTERWORKING OF SIGNALLING SYSTEMS – LOGIC PROCEDURES FOR INTERWORKING OF SIGNALLING SYSTEM R2 TO SIGNALLING SYSTEM No. 7 (ISUP)

(Helsinki, 1993)



State number	*State description*	*Sheet reference*
00	Idle	1, 2, 3
01	Wait for CPCI-FITE	1
02	Wait for Z-digit	1
03	Wait for address-complete	2
04	Wait for answer	3
05	Answered	3
06	Wait for resume	3

FIGURE 1/Q.686

State overview diagram for interworking of Signalling System R2 to Signalling System No. 7 (ISUP)

FIGURE 2/Q.686

(Reserved for future notes)

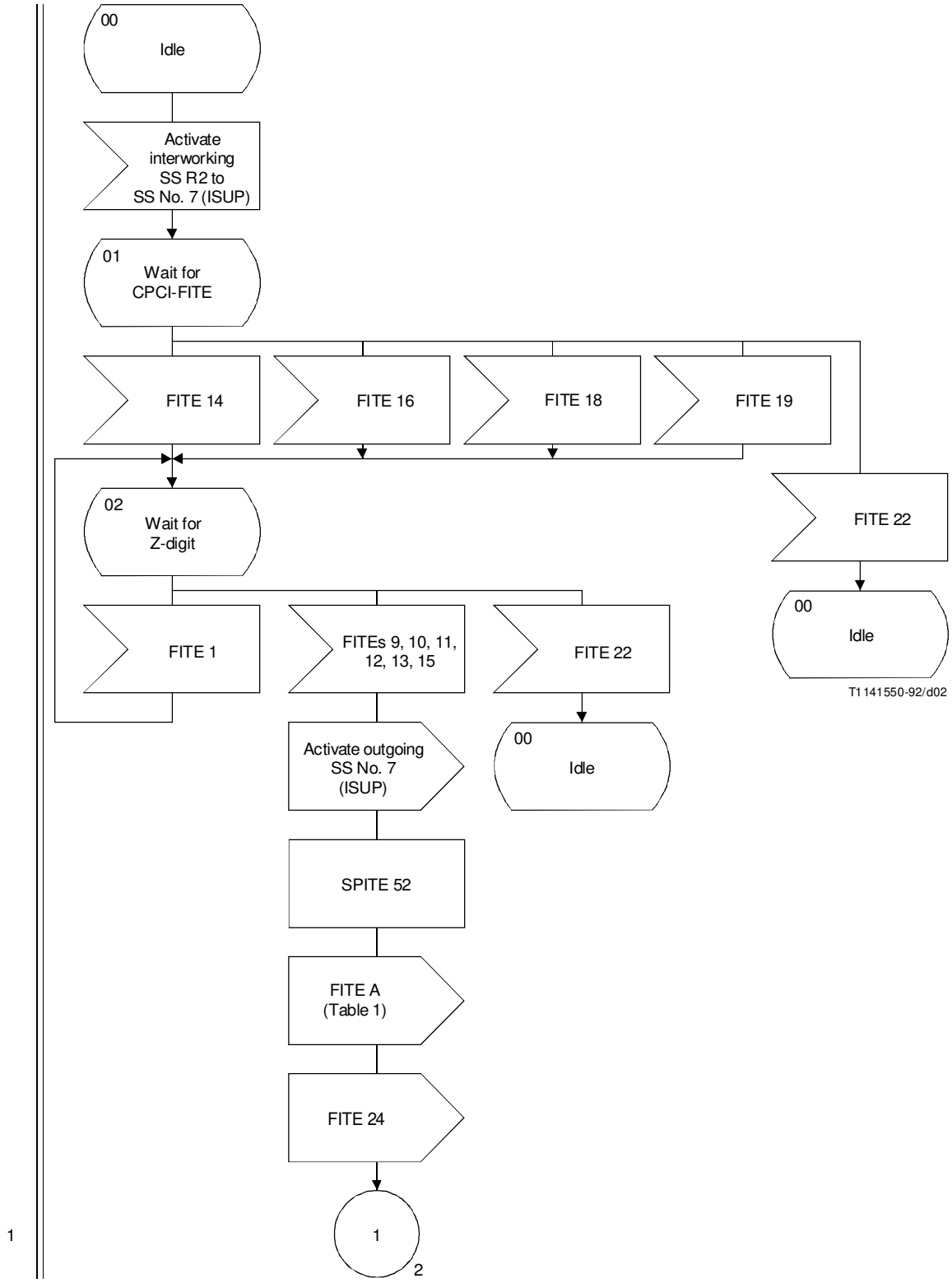
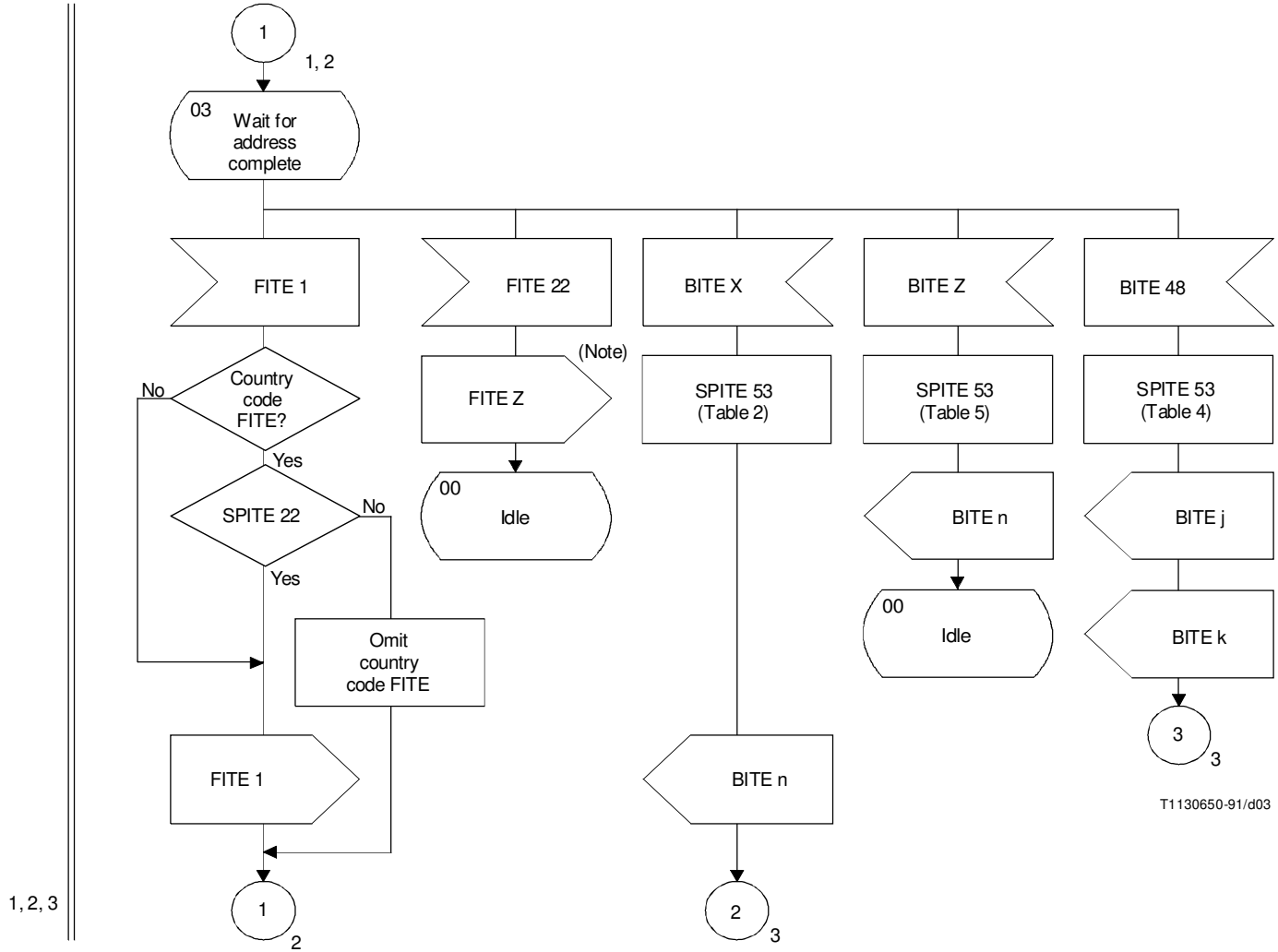


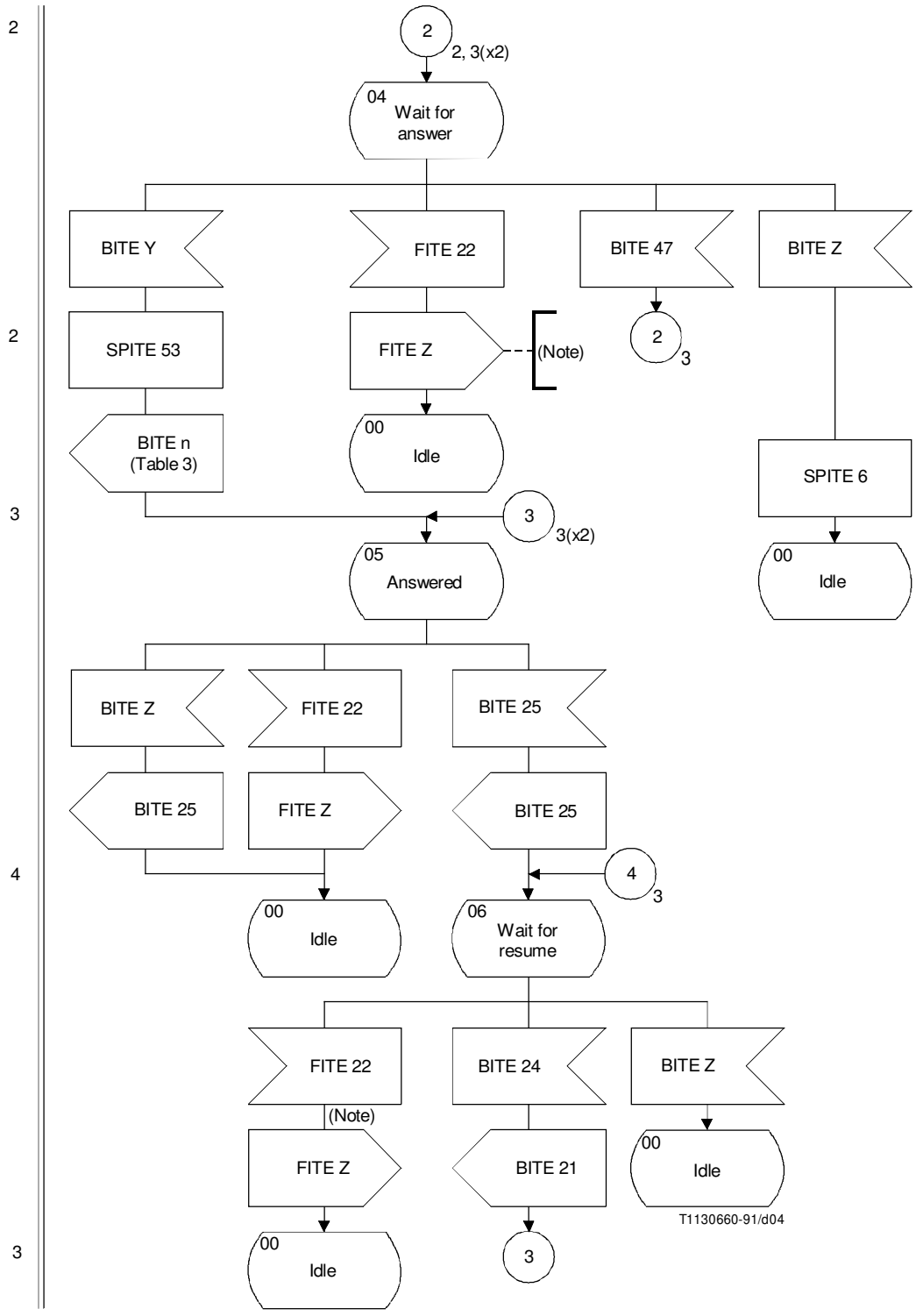
FIGURE 3/Q.686 (sheet 1 of 3)

Interworking of Signalling System R2 to Signalling System No. 7 (ISUP)



NOTE – In principle, FITE 22 should result in cause 16. However, in cases where FITE 22 results from a timeout expiry, cause 127 should be sent.

FIGURE 3/Q.686 (sheet 2 of 3)
Interworking of Signalling System R2 to Signalling System No. 7 (ISUP)



NOTE – In principle, FITE 22 should result in cause 16. However, in cases where FITE 22 results from a timeout expiry, cause 127 should be sent.

FIGURE 3/Q.686 (sheet 3 of 3)

Interworking of Signalling System R2 to Signalling System No. 7 (ISUP)

TABLE 1/Q.686

FITE A construction

Received FITE	CPC
9	1
10	2
11	3
12	4
13	5
14, 15, 16	10
18	11
19	12

SPITE 36	CCH
Yes	01
No	00

SPITE 22	NAI
Yes	100
No	011

SPITE 20	SI
Yes	01
No	00

SPITE 21	ECI
Yes	1
No	0

TMR = 11
CPC Calling party's category
CCH Continuity check indicator
NAI Nature of address indicator
SI Satellite indicator
ECI Echo control indicator
TMR Transmission medium requirement

TABLE 2/Q.686

BITE X analysis

Received BITE X			BITE n to be sent
CH	ST	CAT	
00	00	00	BITE 2 + BITE 27
00	00	01	BITE 2 + BITE 27
00	00	10	BITE 2 + BITE 27
00	01	00	BITE 5
00	01	01	BITE 5
00	01	10	BITE 5
01	00	00	BITE 6
01	00	01	BITE 6
01	00	10	BITE 6
01	01	00	BITE 6
01	01	01	BITE 6
01	01	10	BITE 6
10	00	00	BITE 2 + BITE 27
10	00	01	BITE 2 + BITE 27
10	00	10	BITE 2 + BITE 27
10	01	00	BITE 5
10	01	01	BITE 5
10	01	10	BITE 5

CH Charge indicator
ST Called party's status indicator
CAT Called party's category indicator

TABLE 3/Q.686

BITE Y analysis

Received BITE Y CH	BITE n to be sent
–	BITE 21
00	BITE 21
01	BITE 21
10	BITE 21

TABLE 4/Q.686

CONNECT analysis

Received CONNECT fields			BITE J	BITE K
CH	ST	CAT		
00	00	00	BITE 2 + BITE 27	BITE 21
00	00	01	BITE 2 + BITE 27	BITE 21
00	00	10	BITE 2 + BITE 27	BITE 21
00	01	00	BITE 5	BITE 21
00	01	01	BITE 5	BITE 21
00	01	10	BITE 5	BITE 21
01	00	00	BITE 6	BITE 21
01	00	01	BITE 6	BITE 21
01	00	10	BITE 6	BITE 21
01	01	00	BITE 6	BITE 21
01	01	01	BITE 6	BITE 21
01	01	10	BITE 6	BITE 21
10	00	00	BITE 2 + BITE 27	BITE 21
10	00	01	BITE 2 + BITE 27	BITE 21
10	00	10	BITE 2 + BITE 27	BITE 21
10	01	00	BITE 5	BITE 21
10	01	01	BITE 5	BITE 21
10	01	10	BITE 5	BITE 21

TABLE 5/Q.686

Received RELEASE analysis before ACM

Received BITE Z Cause	Sent BITE n
34	11
28	20
1	15
17	16
27	17
31	11
4	20
Other	12