INTERNATIONAL TELECOMMUNICATION UNION

ITU-T Q.667

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(03/93)

INTERWORKING OF SIGNALLING SYSTEMS

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

ITU-T Recommendation Q.667

(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.667 was prepared by the ITU-T Study Group XI (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

NOTES

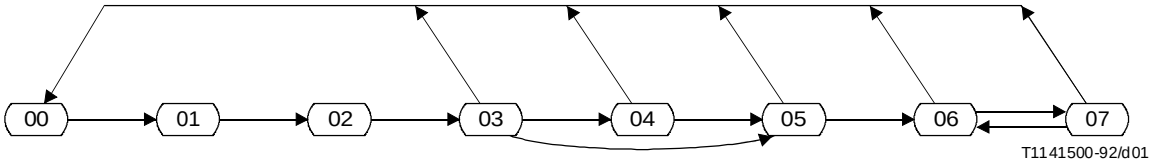
1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.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.

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

(Helsinki, 1993)



State number	*State description*	*Sheet reference*
00	Idle	1, 2, 3, 4, 5
01	Wait for service provided FITE	1
02	Wait for information FITE	1
03	Wait for continuity FITE	1
04	Wait for address-complete	1
05	Wait for answer	3
06	Answered	3
07	Wait for resume	4

FIGURE 1/Q.667

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

FIGURE 2/Q.667

(Reserved for future notes)

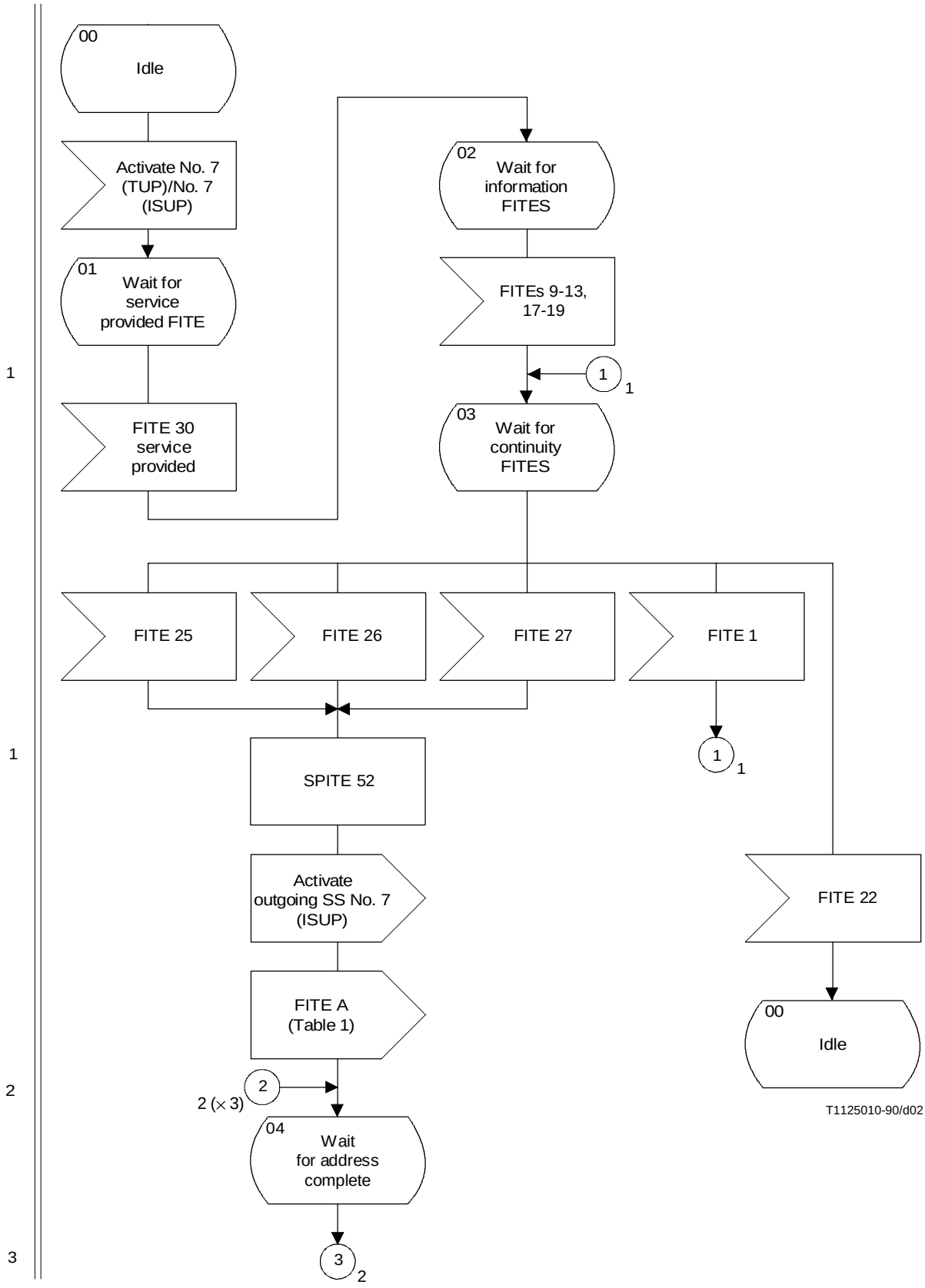
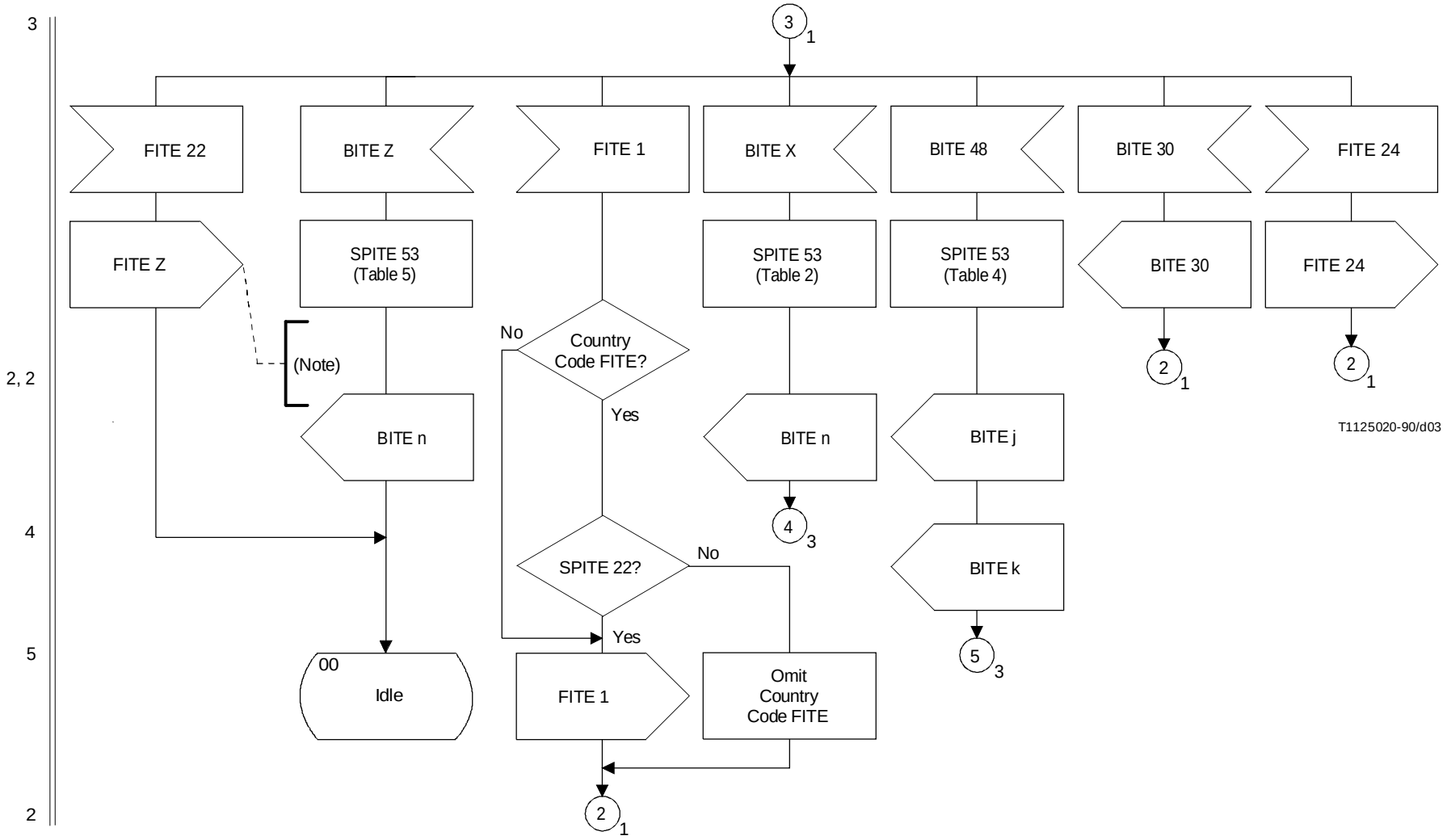


FIGURE 3/Q.667 (sheet 1 of 5)

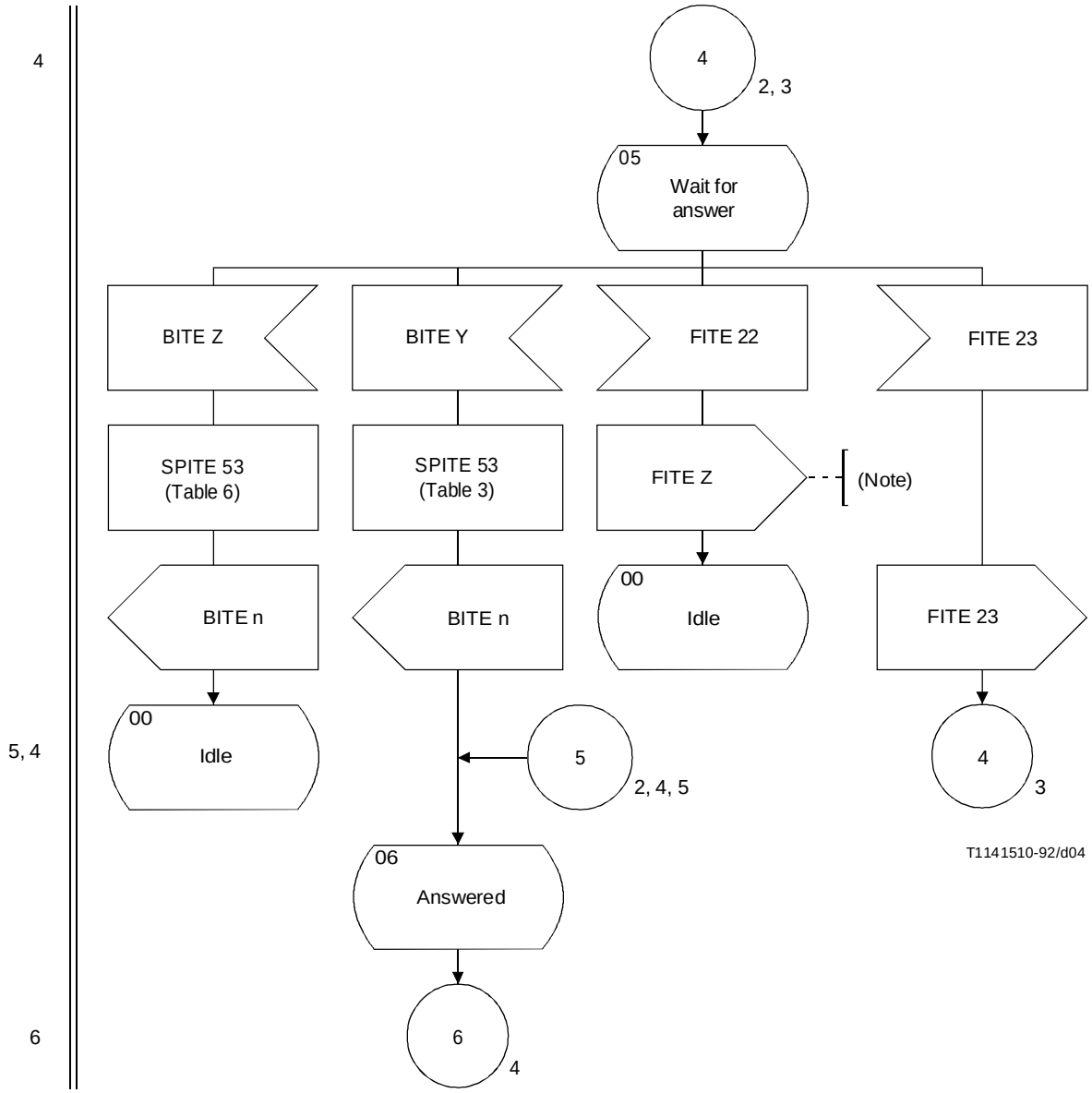
Interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)



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.667 (sheet 2 of 5)

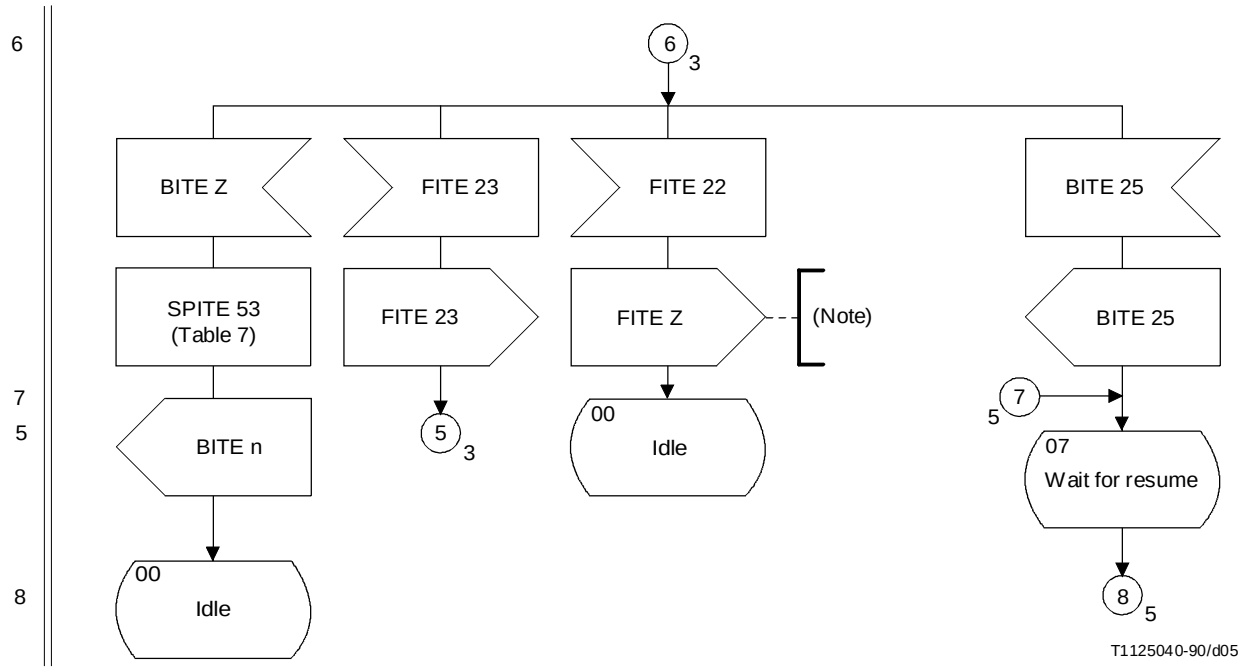
Interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)



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.667 (sheet 3 of 5)

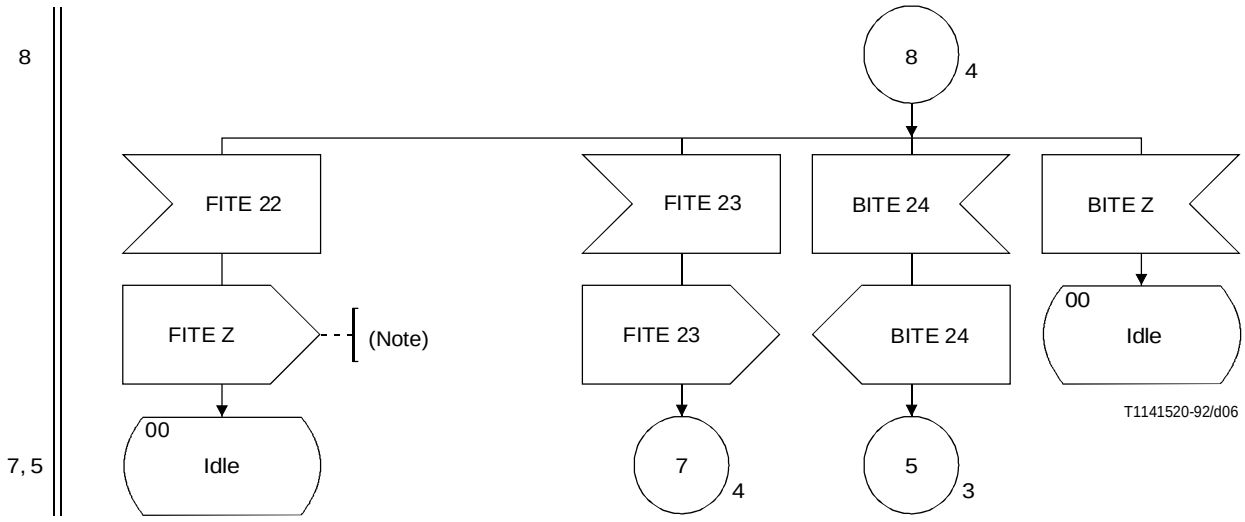
Interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)



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.667 (sheet 4 of 5)

Interworking of Signalling System No. 7 (TUP) 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.667 (sheet 5 of 5)

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

TABLE 1/Q.667

FITE A construction – Interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)

Received FITE	CPC
9	1
10	2
11	3
12	4
13	5
17	10
18	11
19	12
Pay phone	15

Received FITE	SPITE 36	CCH
25	Yes	01
25	No	00
26	Yes	01
26	No	10
27	Yes	01
27	No	10

SPITE 22	NAI
Yes	100
No	011

SPITE 20	SI
Yes	01
No	00

SPITE 21	ECI
Yes	1
No	0

FITE 30 Digital connectivity requested	TMR
No	11
Yes	10

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.667

BITE X analysis – Interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)

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 4
00	01	00	BITE 5
00	01	01	BITE 5
00	01	10	BITE 7
01	00	00	BITE 3
01	00	01	BITE 3
01	00	10	BITE 4
01	01	00	BITE 6
01	01	01	BITE 6
01	01	10	BITE 7
10	00	00	BITE 2 + BITE 27
10	00	01	BITE 2 + BITE 27
10	00	10	BITE 4
10	01	00	BITE 5
10	01	01	BITE 5
10	01	10	BITE 7
CH Charge indicator ST Called party's status indicator CAT Called party's category indicator			

TABLE 3/Q.667

BITE Y analysis – Interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)

Received BITE Y CH	BITE to be sent
– 00 01 10	BITE 22 BITE 22 BITE 23 BITE 22
NOTE – With this proposal, BITE 22 (answer, charge) may be sent for a call where an address complete no charge message was previously sent. It is assumed that it does result in charging the call.	

TABLE 4/Q.667

CONNECT analysis – Interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)

Received CONNECT fields			BITE J	BITE K
CH	ST	CAT		
00	00	00	BITE 2 + BITE 27	BITE 22
00	00	01	BITE 2 + BITE 27	BITE 22
00	00	10	BITE 4	BITE 22
00	01	00	BITE 5	BITE 22
00	01	01	BITE 5	BITE 22
00	01	10	BITE 7	BITE 22
01	00	00	BITE 3	BITE 23
01	00	01	BITE 3	BITE 23
01	00	10	BITE 4	BITE 23
01	01	00	BITE 6	BITE 23
01	01	01	BITE 6	BITE 23
01	01	10	BITE 7	BITE 23
10	00	00	BITE 2 + BITE 27	BITE 22
10	00	01	BITE 2 + BITE 27	BITE 22
10	00	10	BITE 4	BITE 22
10	01	00	BITE 5	BITE 22
10	01	01	BITE 5	BITE 22
10	01	10	BITE 7	BITE 22

NOTE – In this proposal, an answer, no charge BITE is generated when a no charge information is carried through the connect message.

TABLE 5/Q.667

Received RELEASE analysis before ACM – Interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)

Received BITE Z Cause	Sent BITE n
42	9
34	10
28	14
31	15
17	16
27	17
31	19
44	20
88	35
65	36
Other	19