INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.624

(03/93)

INTERWORKING OF SIGNALLING SYSTEMS

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

ITU-T Recommendation Q.624

(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.624 was revised 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 Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.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.

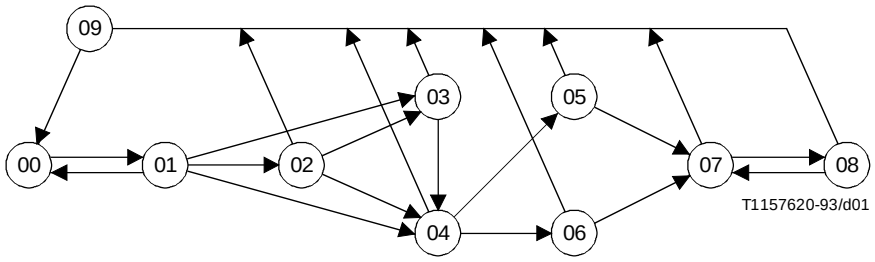
© ITU 1994

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

Recommendation Q.624

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

(Melbourne, 1988; revised Helsinki at 1993)



State number	*State description*	*Sheet reference*	*Timers running*
00	Idle	1, 10	
01	Wait for FITEs of IAM/IAI	1	
02	Wait for continuity check	3	t_1, t_2
03	Wait for continuity indicator	3	t_2
04	Wait for address complete	7	t_2
05	Wait for answer	7	
06	Wait for answer (subscriber free)	9	
07	Answered	9	
08	Clear-back	9	
09	Wait for release-guard	10	t_3, t_4

FIGURE 1/Q.624

State overview diagram for outgoing Signalling System No. 7 (TUP)

Supervisory timers for outgoing Signalling System No. 7

t_1 = 2 s 7.4.1/Q.724

t_2 = 20-30 s 6.4.1/Q.724

t_3 = 4-15 s 6.2.3/Q.724

t_4 = 1 min 6.2.3/Q.724

Procedures not shown

The following procedures, not directly relevant to interworking, are not shown in the logic procedures:

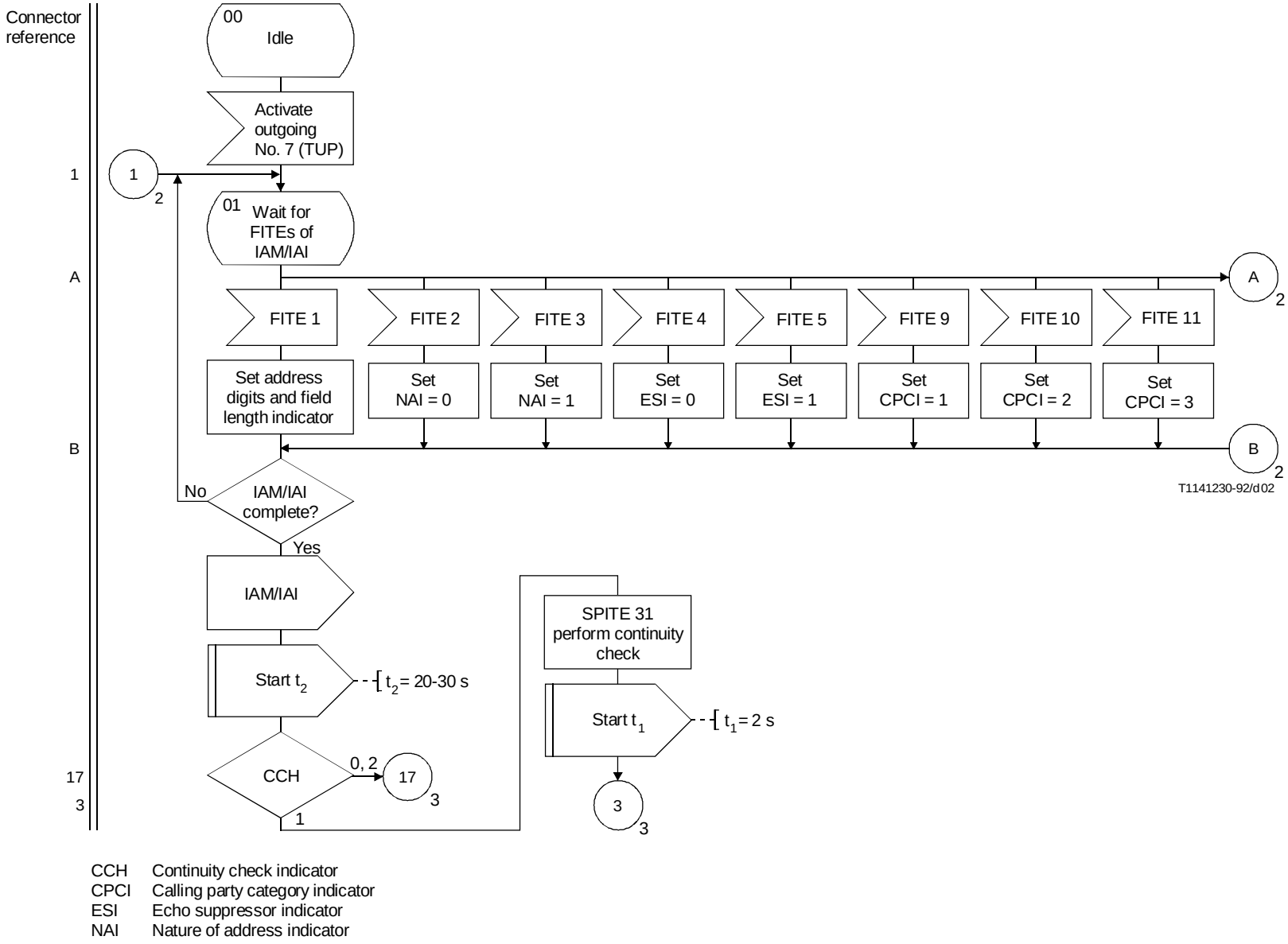
- Dual seizure.
- Blocking and unblocking sequences.
- Reset signals.
- Test call procedures.
- Out of service.

Signal abbreviations used

The signal abbreviations used correspond to those of the Signalling System No. 7 Specifications and are listed in Figure 2/Q.614.

FIGURE 2/Q.624

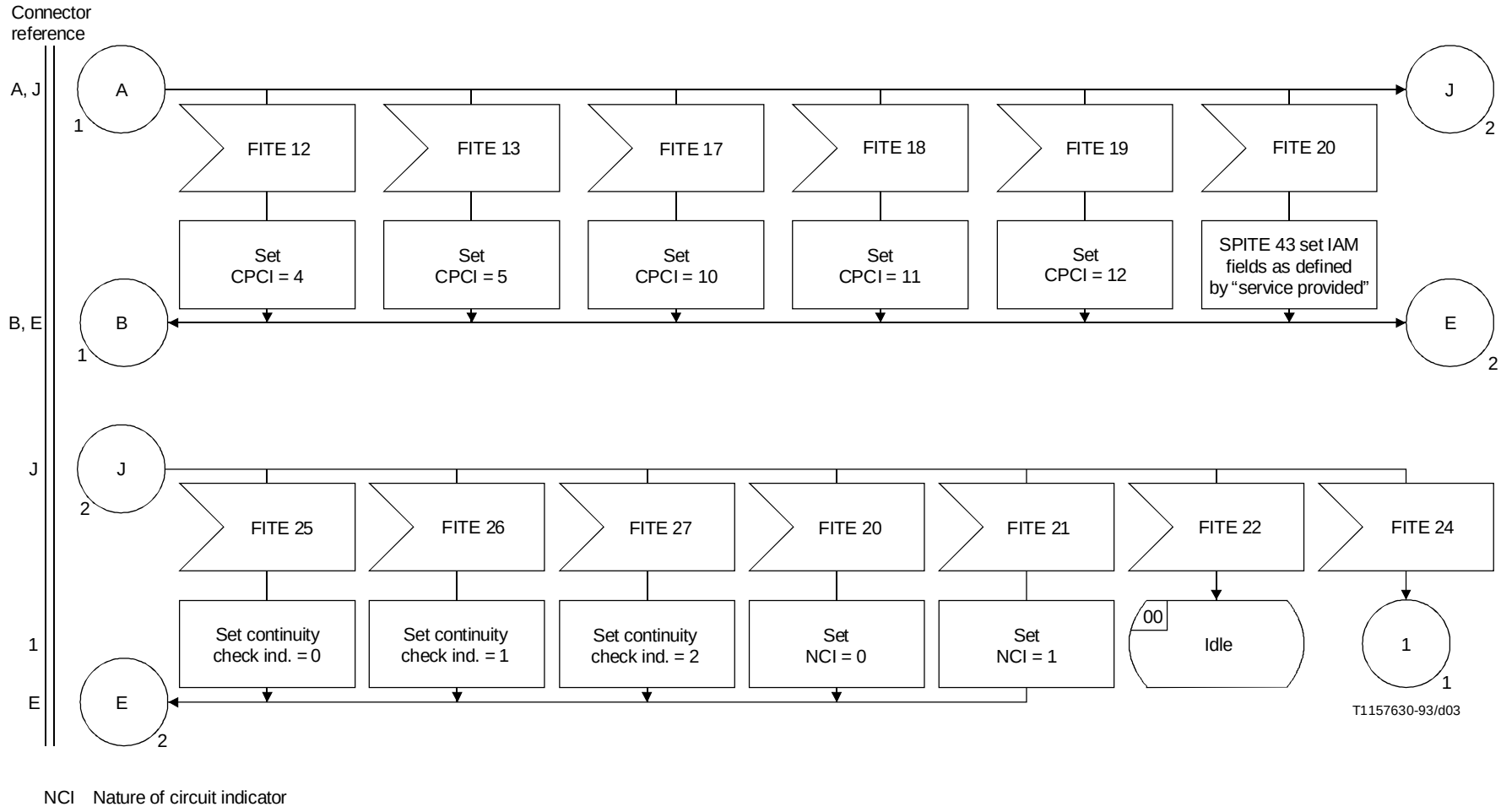
Notes to outgoing Signalling System No. 7 (TUP)



CCH Continuity check indicator
CPCI Calling party category indicator
ESI Echo suppressor indicator
NAI Nature of address indicator

FIGURE 3/Q.624 (sheet 1 of 10)

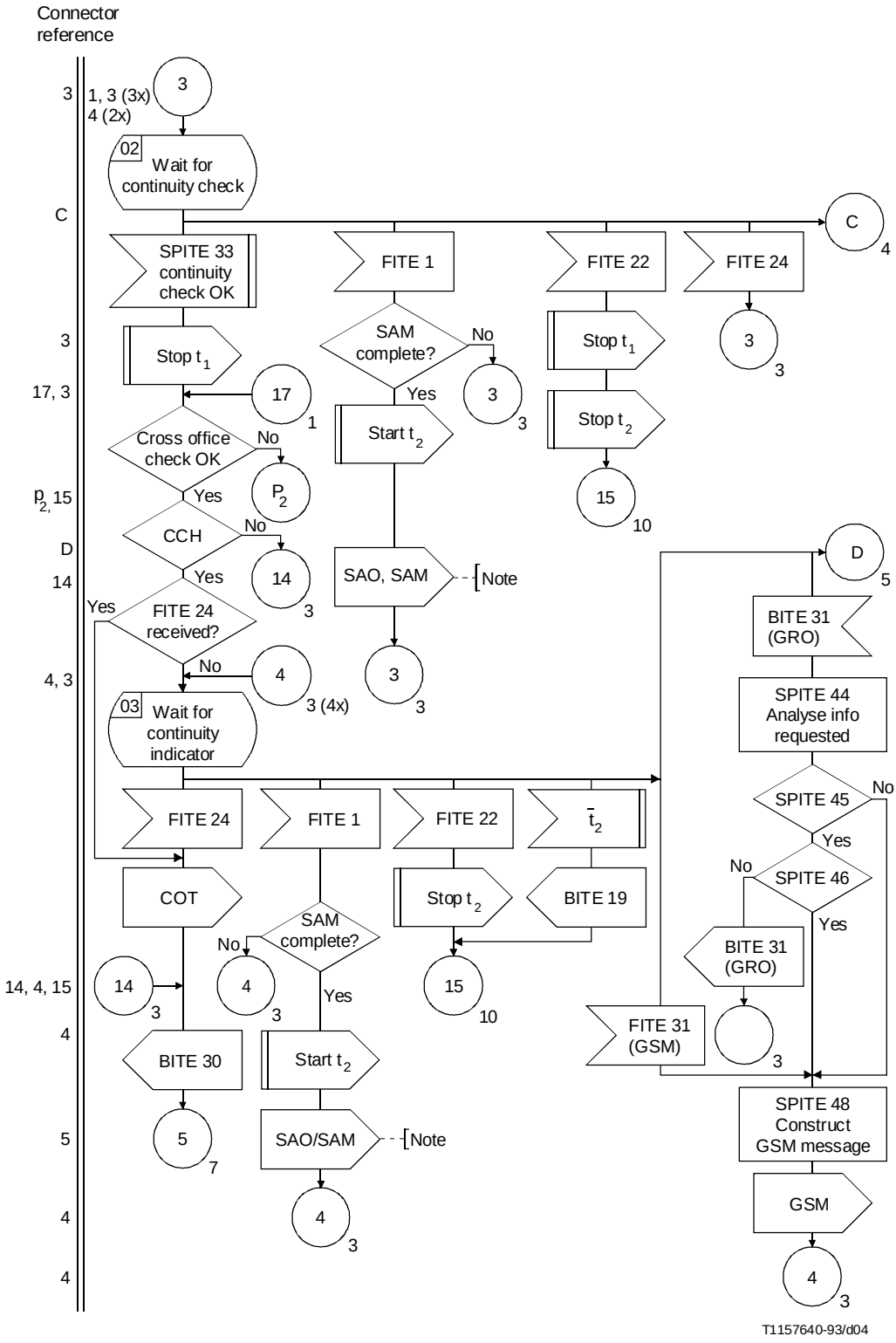
Outgoing Signalling System No. 7 (TUP)



NCI Nature of circuit indicator

FIGURE 3/Q.624 (sheet 2 of 10)

Outgoing Signalling System No. 7 (TUP)



NOTE – Digits should be forwarded to the outgoing link as soon as they are available, multi digit SAMs should only be sent if more than one address digit is awaiting.

FIGURE 3/Q.624 (sheet 3 of 10)

Outgoing Signalling System No. 7 (TUP)

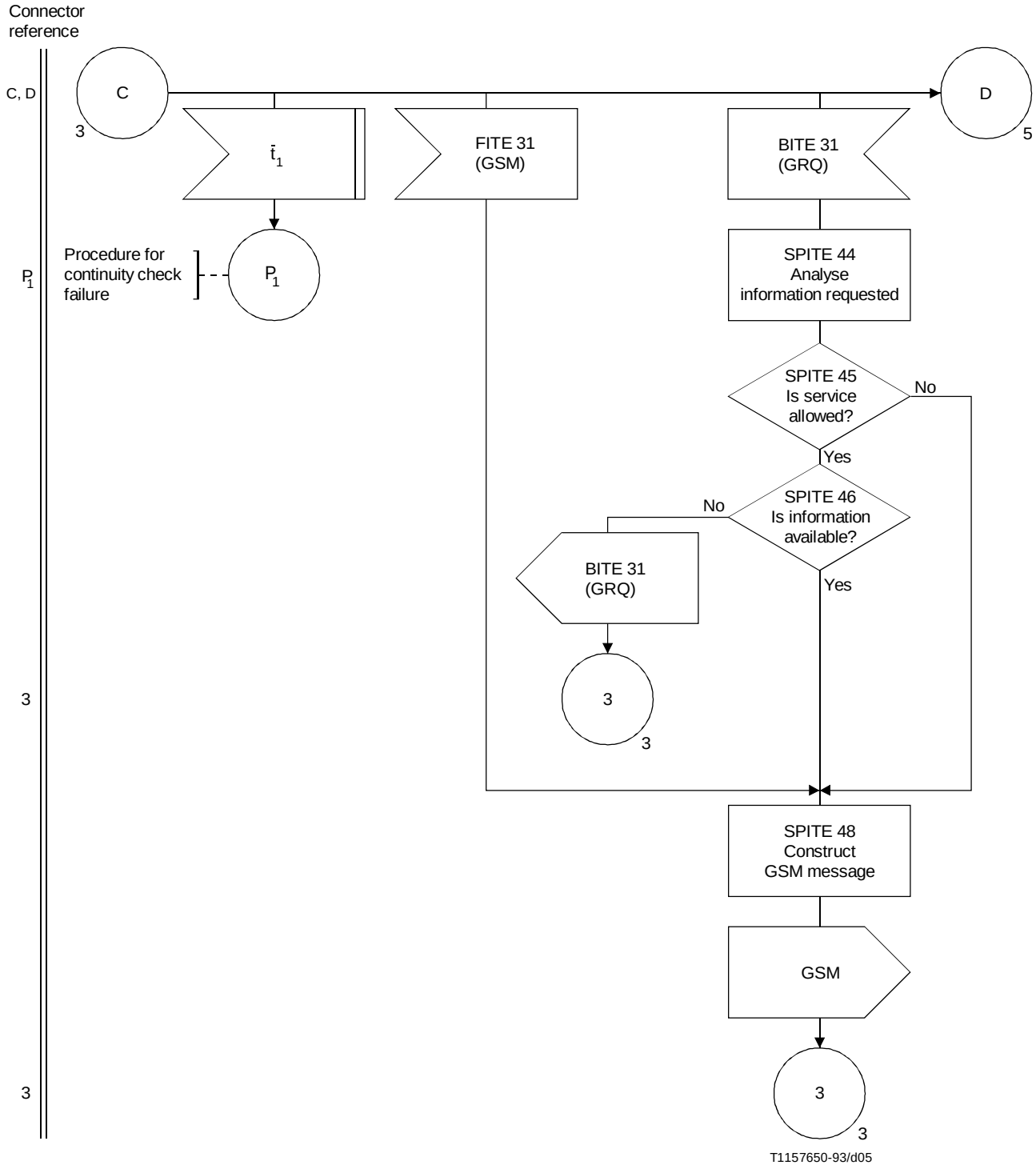


FIGURE 3/Q.624 (sheet 4 of 10)

Outgoing Signalling System No. 7 (TUP)

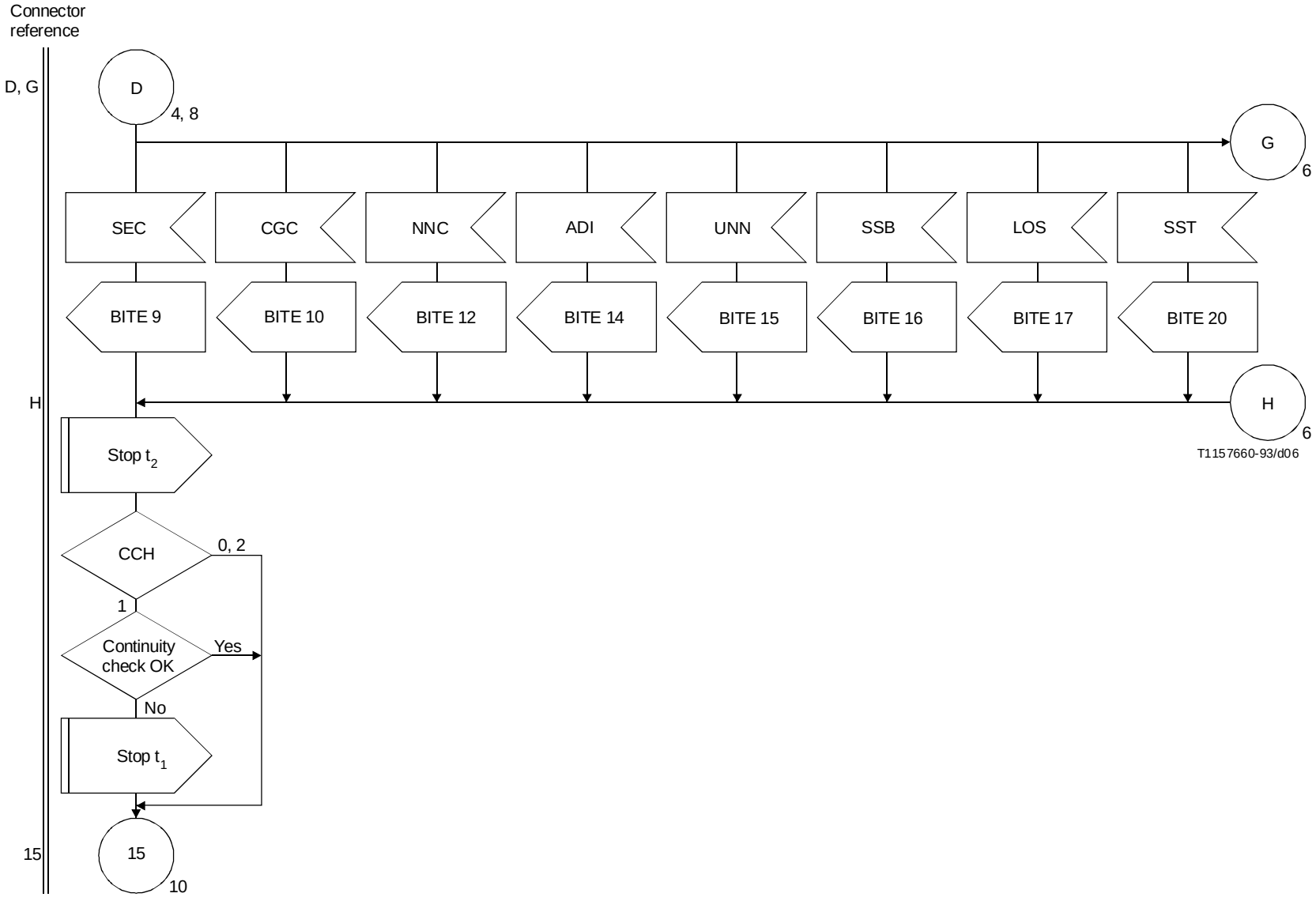


FIGURE 3/Q.624 (sheet 5 of 10)

Outgoing Signalling System No. 7 (TUP)

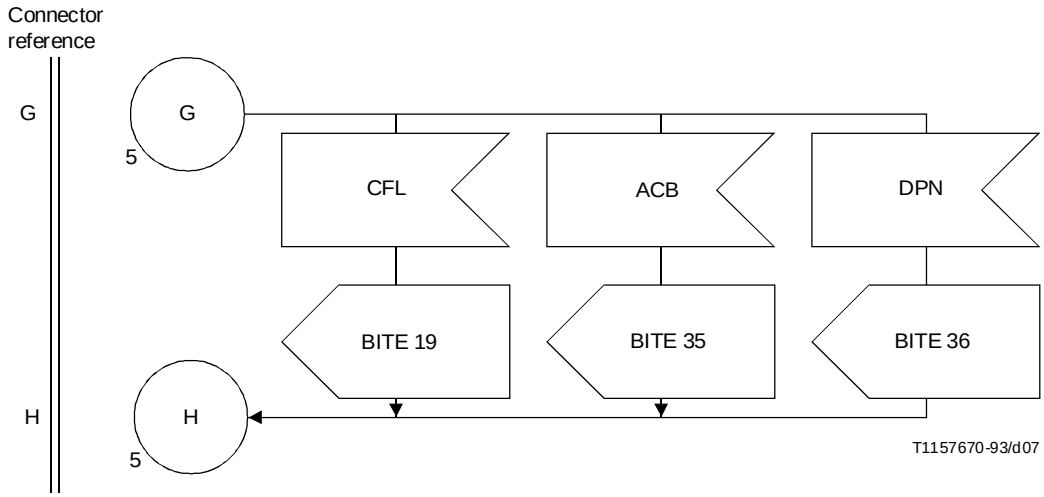


FIGURE 3/Q.624 (sheet 6 of 10)

Outgoing Signalling System No. 7 (TUP)

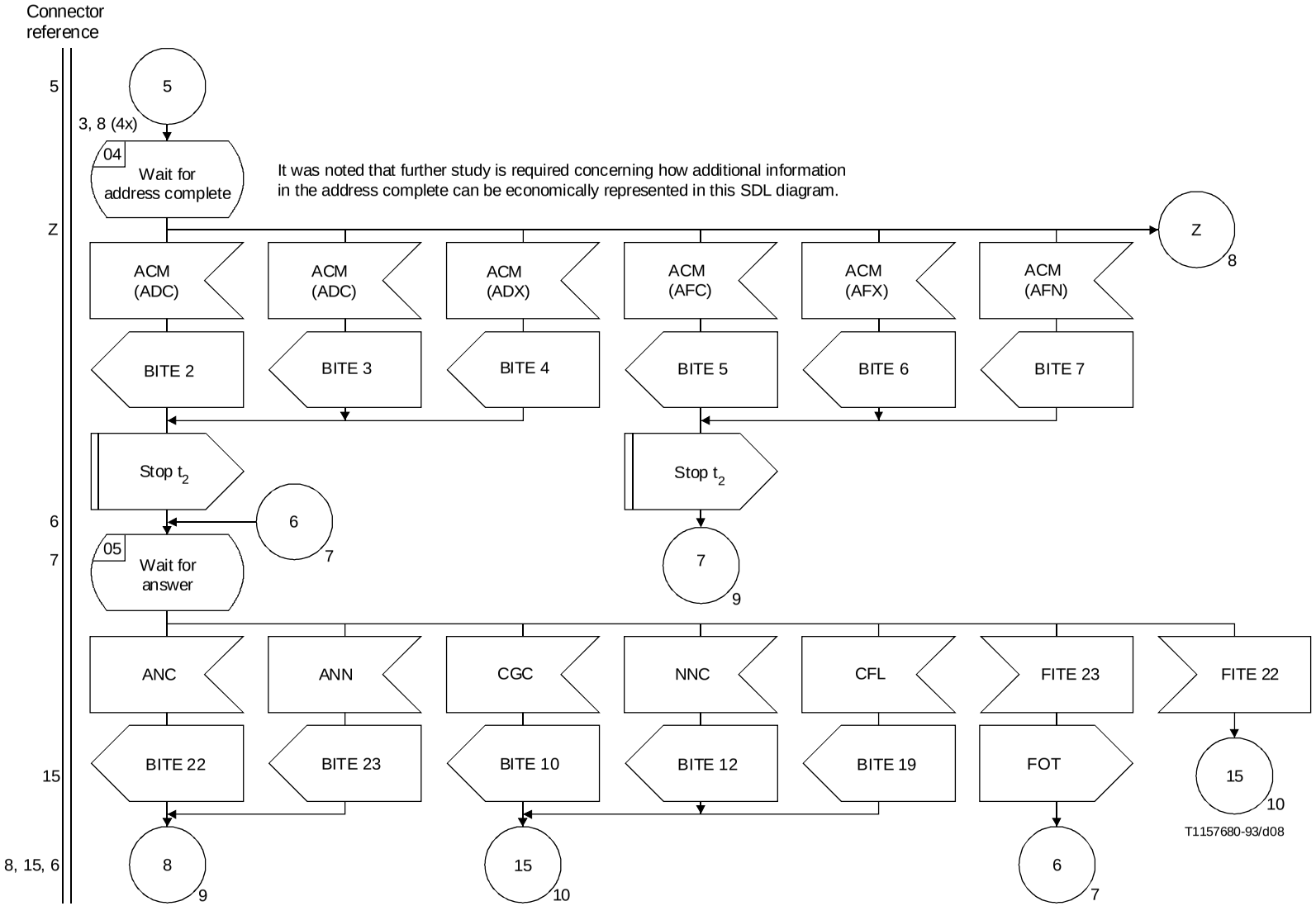
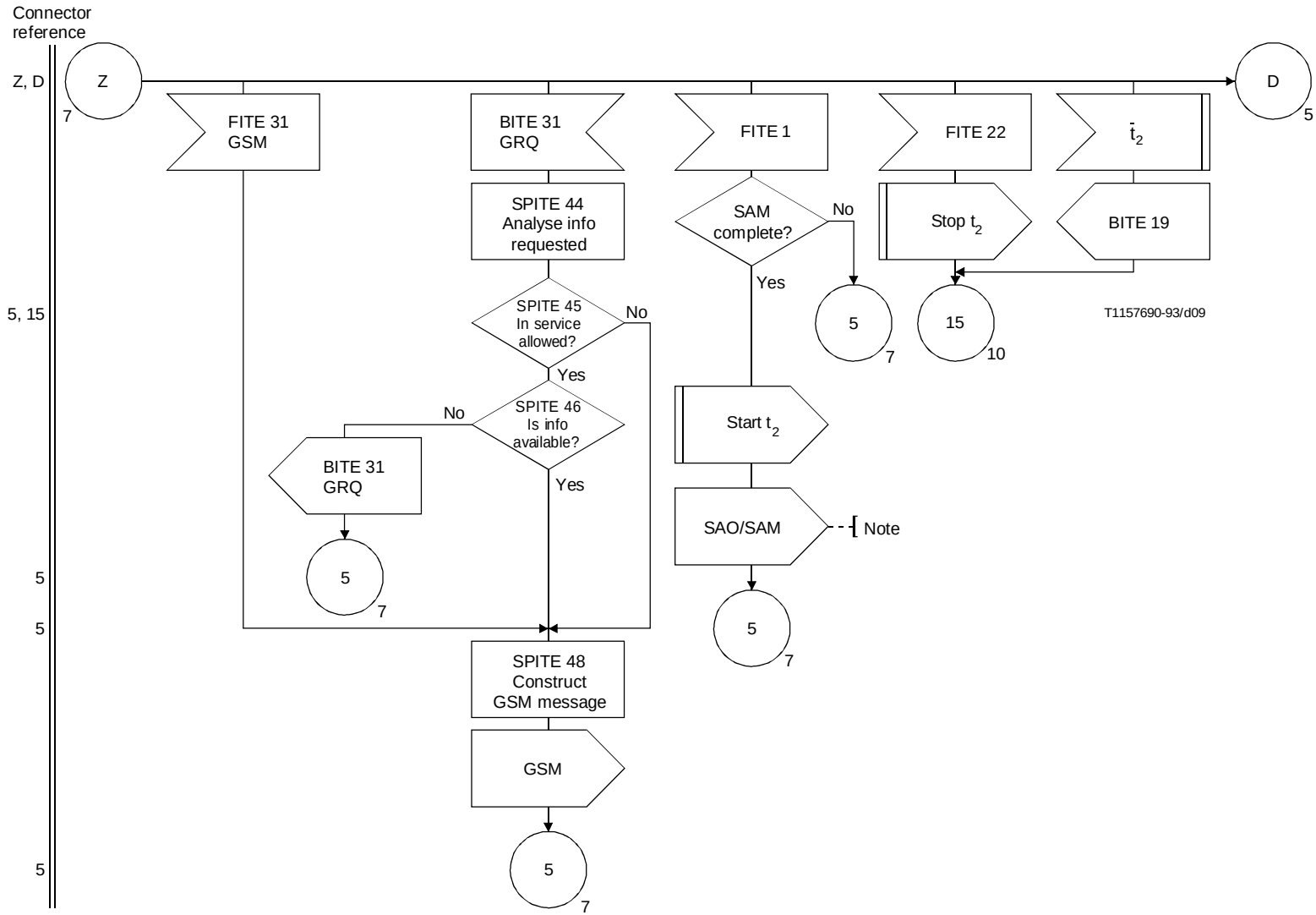


FIGURE 3/Q.624 (sheet 7 of 10)

Outgoing Signalling System No. 7 (TUP)



NOTE – Digits should be forwarded to the outgoing link as soon as they are available. Multi digits SAMs should only be sent if more than one address digit is waiting.

FIGURE 3/Q.624 (sheet 8 of 10)

Outgoing Signalling System No. 7 (TUP)

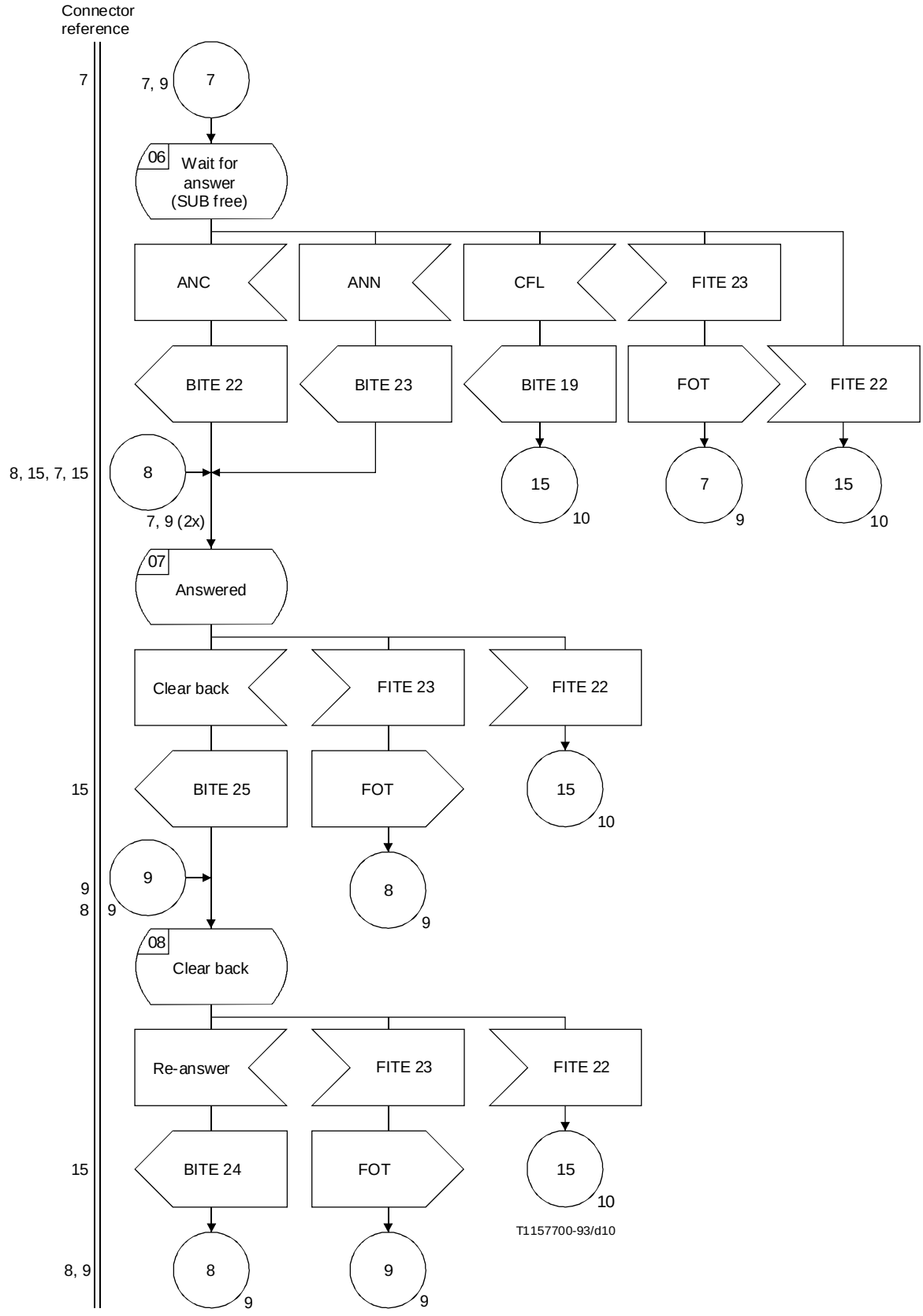


FIGURE 3/Q.624 (sheet 9 of 10)

Outgoing Signalling System No. 7 (TUP)

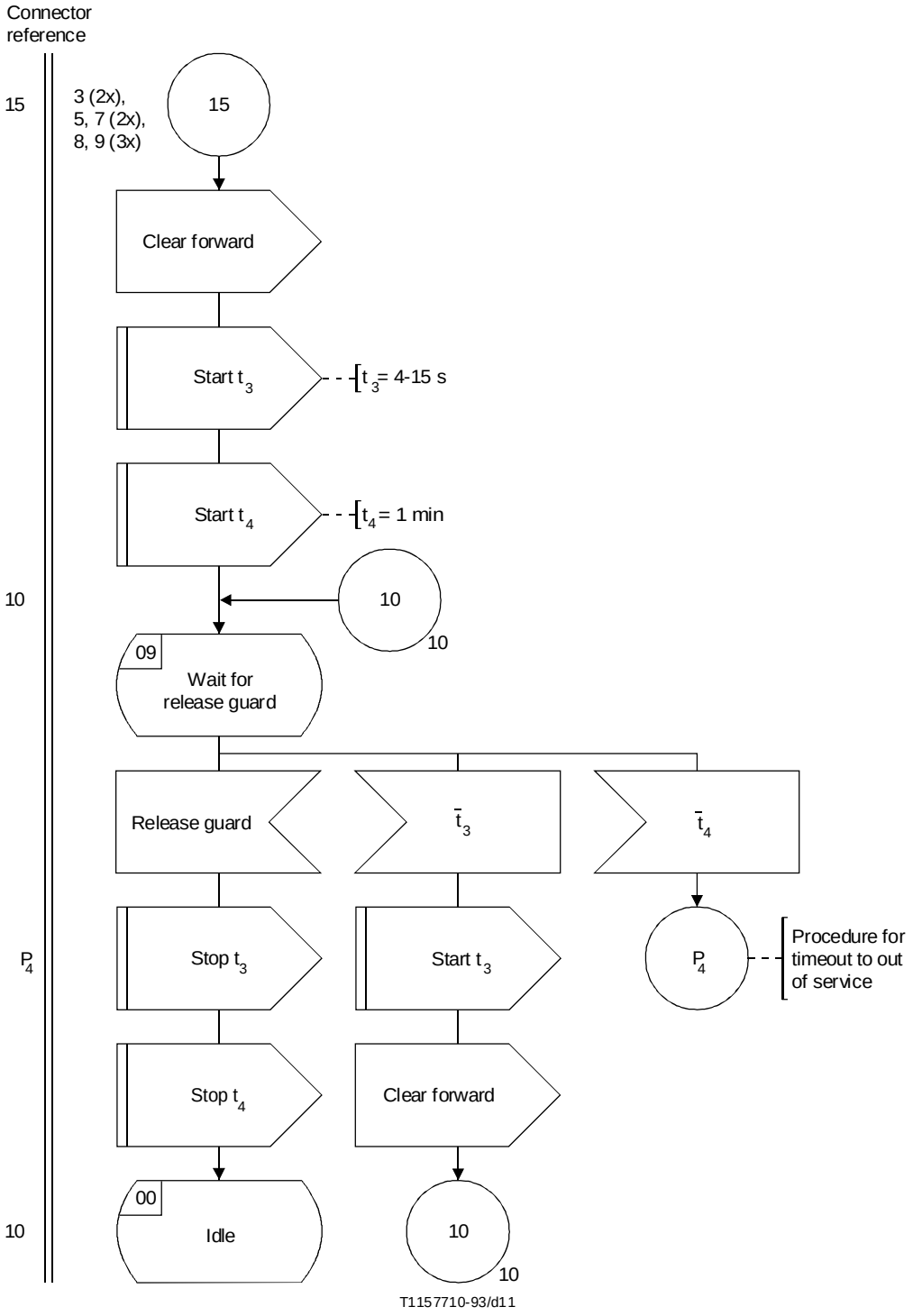


FIGURE 3/Q.624 (sheet 10 of 10)

Outgoing Signalling System No. 7 (TUP)