



INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

Q.614

(11/1988)

SERIES Q: SWITCHING AND SIGNALLING
Interworking of signalling systems

**LOGIC PROCEDURES FOR INCOMING
SIGNALLING SYSTEM No. 7 (TUP)**

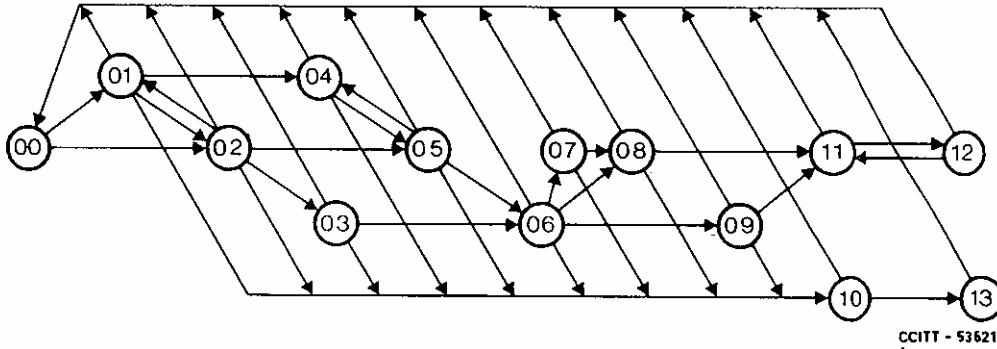
Reedition of CCITT Recommendation Q.614 published in
the Blue Book, Fascicle VI.6 (1988)

NOTES

- 1 CCITT Recommendation Q.614 was published in Fascicle VI.6 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).
- 2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Recommendation Q.614

LOGIC PROCEDURES FOR INCOMING SIGNALLING SYSTEM No. 7 (TUP)



<i>State number</i>	<i>State description</i>	<i>Sheet reference</i>	<i>Timers running</i>
00	Idle	1, 13	
01	Wait for further digits	2	t ₁ , t ₂
02	Wait for digit analysis	4	t ₁ , t ₂ or t ₃
03	Wait for continuity check (COT)	7	t ₁ , t ₂ or t ₃
04	Wait for further digits (COT received)	3	t ₂
05	Wait for digit analysis (COT received)	3	t ₂ or t ₃
06	Wait for address complete (COT received)	9	t ₂ or t ₃
07	Wait for register deactivation	10	
08	Address complete – wait for answer	12	
09	Address complete, subscriber free – wait for answer	13	
10	Call unsuccessful – wait for clear-forward	11	t ₄
11	Answered	13	
12	Clear-back	13	
13	Call failure wait for clear forward	11	

FIGURE 1/Q.614

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

Supervisory timers for incoming Signalling System No. 7 (TUP)

$t_1 = 10 - 15 \text{ s}$	Recommendation Q.724, § 6.4.2, a)	$t_4 = 4 - 15 \text{ s}$	Recommendation Q.724, § 6.4.2, b)
$t_2 = 15 - 20 \text{ s}$	Recommendation Q.724, § 1.7	$t_5 = 1 \text{ min}$	Recommendation Q.724, § 6.4.2, b)
$t_3 = 20 - 30 \text{ s}$	Recommendation Q.724, § 6.4.3		

Procedures not shown

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

- dual seizure,
- blocking and unblocking sequences,
- user part selection (see Note),
- confusion and message refusal signals,
- reset circuit procedures,
- test call procedures,
- out of service,
- national procedures.

Signal abbreviations used

The signal abbreviations used correspond to those of the Signalling System No. 7 specifications unless otherwise indicated on the same sheet.

The signal abbreviations used are listed below with their meanings:

ACM	Address complete message
ADC	Address complete, charge
ADI	Address incomplete
ADN	Address complete, no charge
ADX	Address complete, coin box
AFC	Address complete, subscriber free, charge
AFN	Address complete, subscriber free, no charge
AFX	Address complete, subscriber free, coin box
ANC	Answer charge
ANN	Answer no charge
CBK	Clear-back signal
CCF	Continuity-failure signal
CCH	Continuity check indicator
CFL	Call failure
CGC	Circuit group congestion
CLF	Clear-forward signal
COT	Continuity
CPCI	Calling party category indicator
ESI	Echo suppressor indicator
FOT	Forward-transfer signal
IAM	Initial address message
LOS	Line-out-of-service
NCI	Nature of circuit indicator
NNC	National network congestion
NAI	Nature of address indicator
RAN	Reanswer signal
RLG	Release-guard signal
SAM	Subsequent address message
SAO	Subsequent address message with one address digit
SEC	Switching equipment congestion
SSB	Subscriber busy
SST	Send special information tone
UNN	Unallocated number

Note – This SDL diagram relates only to the International Telephony User Part (TUP) specified for Signalling System No. 7 in Recommendations Q.721-Q.725. The selection of the TUP is assumed to have been made on a per message basis by the Level 3 message distribution process.

FIGURE 2/Q.614

Notes to incoming Signalling System No. 7 (TUP)

25

6

1

2

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2

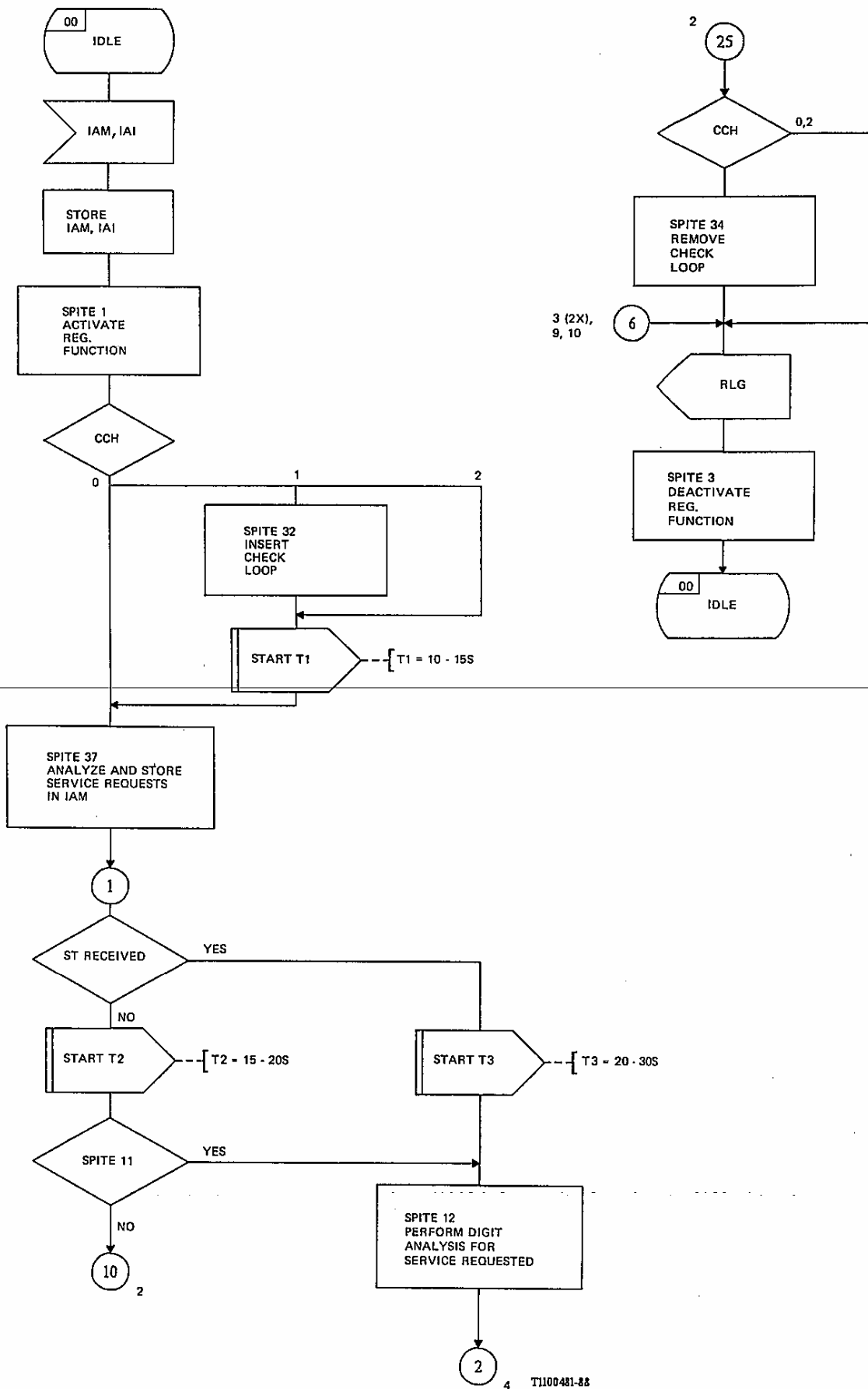
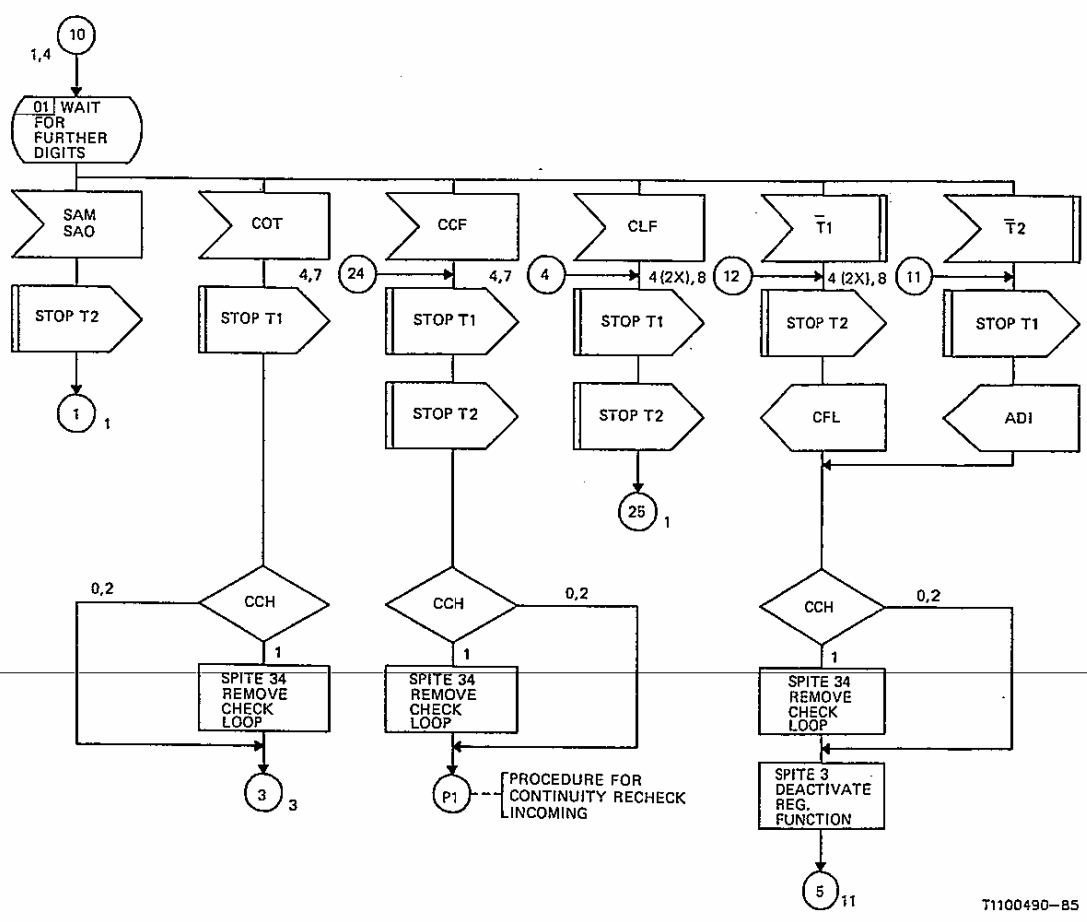


FIGURE 3/Q.614 (Sheet 1 of 14)

Incoming Signalling System No. 7 (TUP)

Connector reference

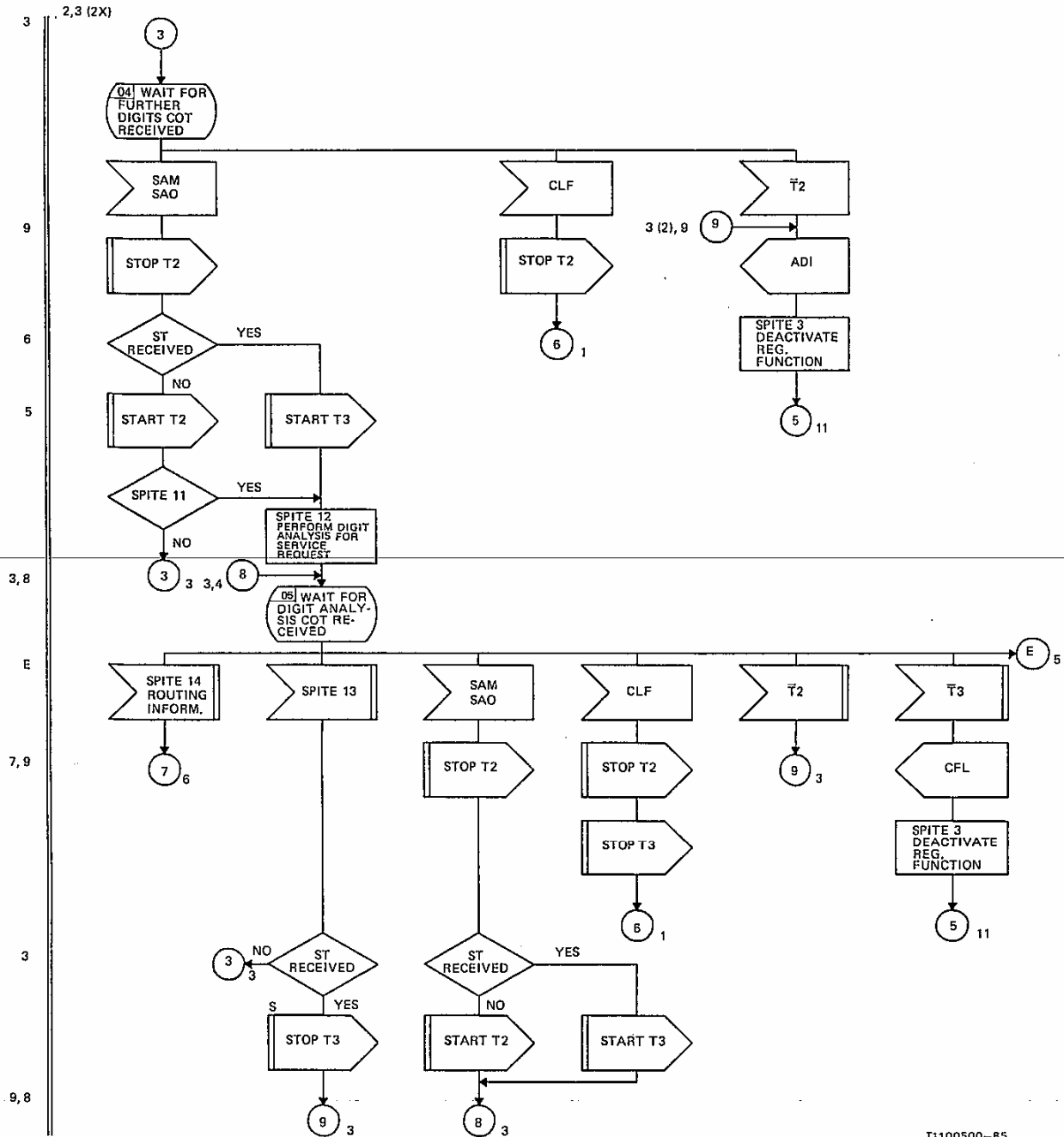
10
24, 4, 12, 11
1
25
3
5



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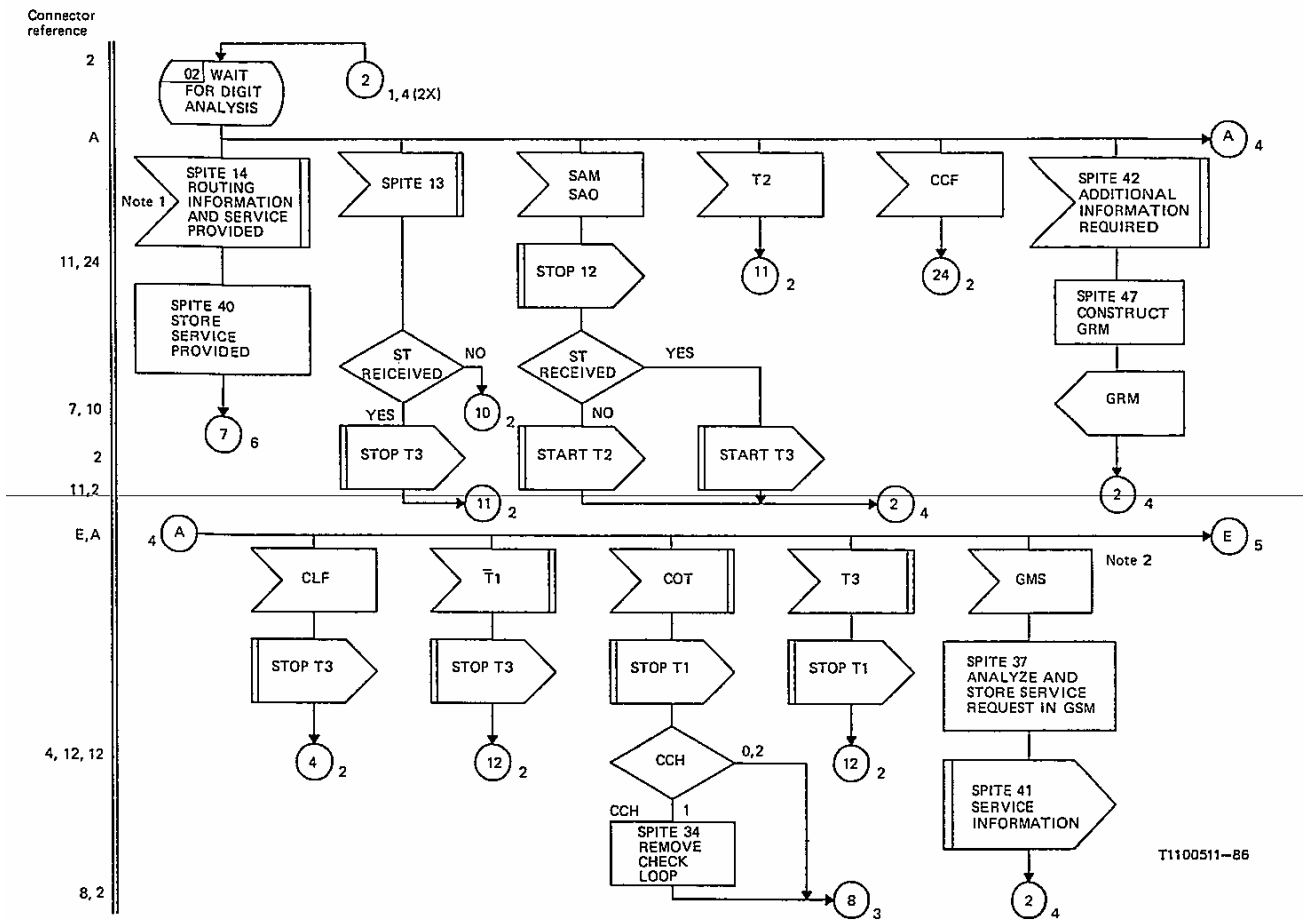
FIGURE 3/Q.614 (Sheet 2 of 14)
Incoming Signalling System No. 7 (TUP)

Connector reference



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FIGURE 3/Q.614 (Sheet 3 of 14)
Incoming Signalling System No. 7 (TUP)



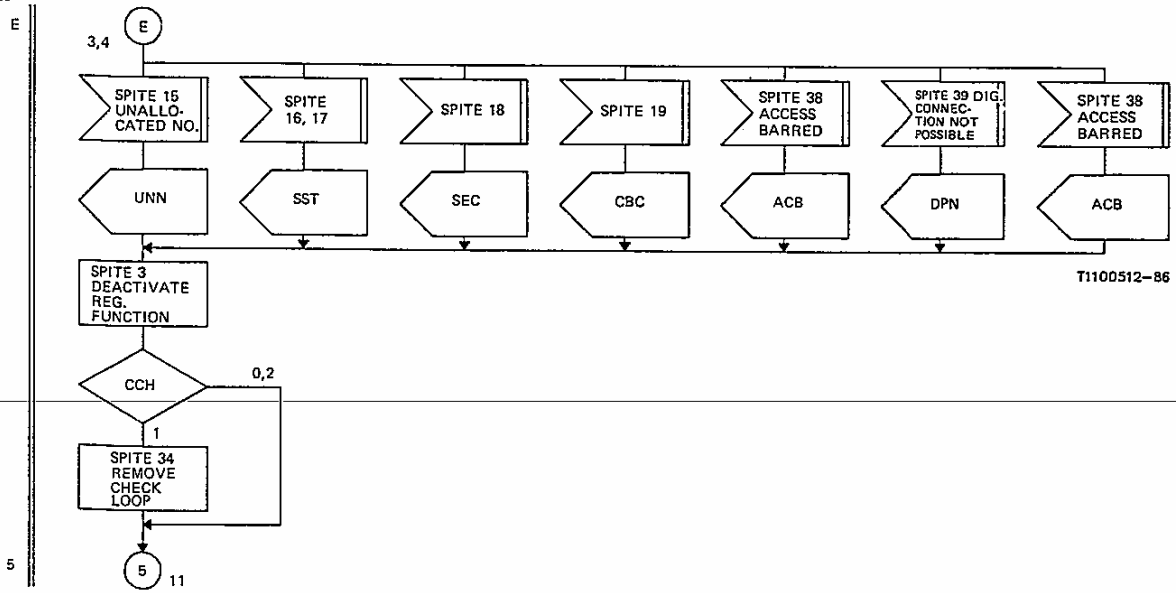
T1100511-86

Note 1 - It is assumed that if a transit exchange has requested additional information then routing information will not be received until after the requested information has been received.

Note 2 - It is assumed that GRQ was sent.

FIGURE 3/Q.614 (Sheet 4 of 14)
Incoming Signalling System No. 7 (TUP)

Connector reference



Note – It is assumed that if a transit exchange has requested additional information then routing information will not be received until after the requested information has been received.

FIGURE 3/Q.614 (Sheet 5 of 14)
Incoming Signalling System No. 7 (TUP)

Connector reference

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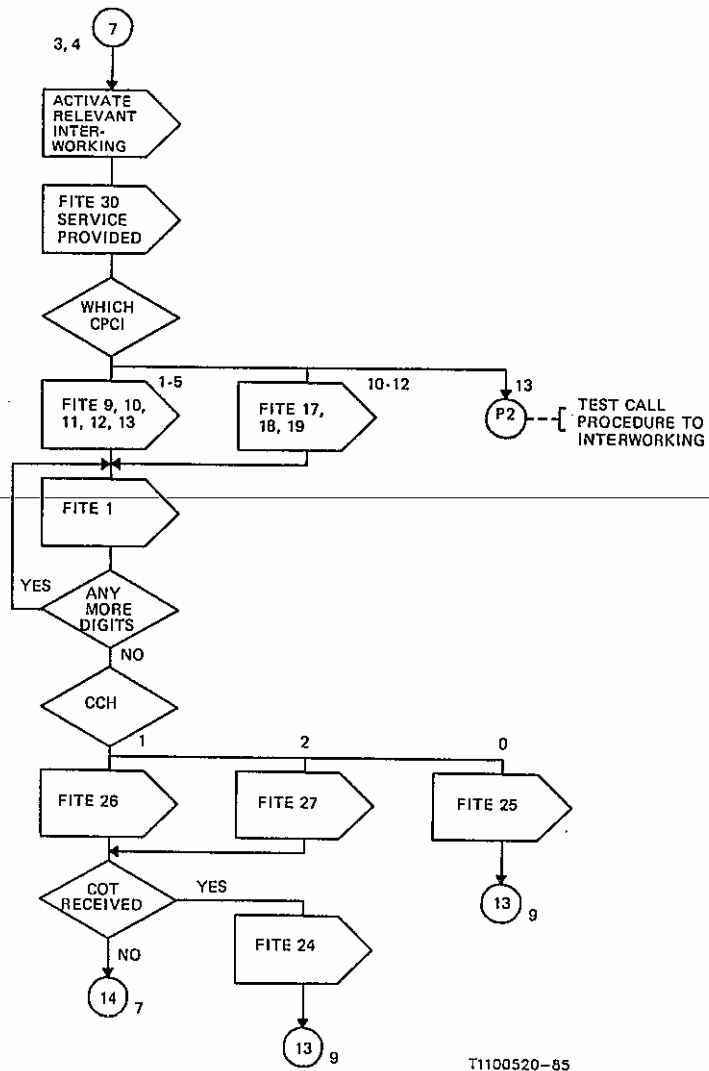
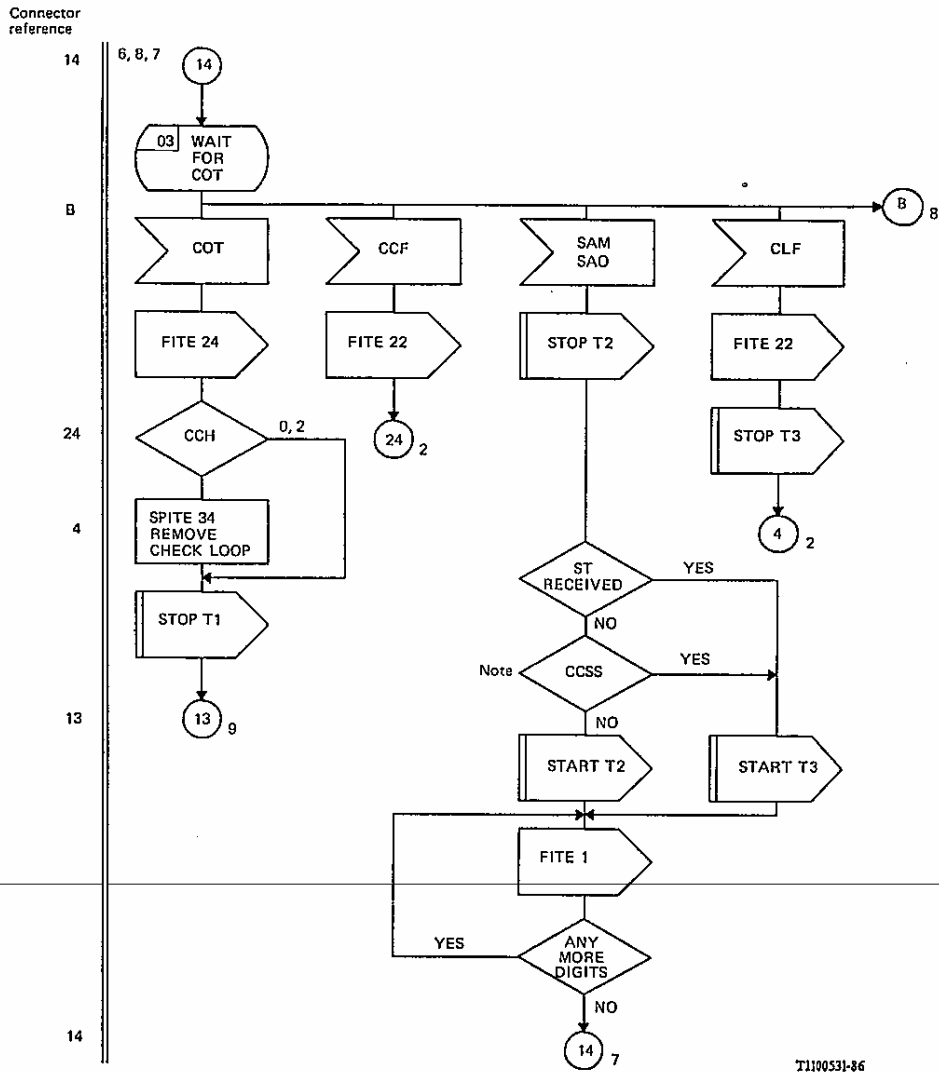


FIGURE 3/Q.614 (Sheet 6 of 14)

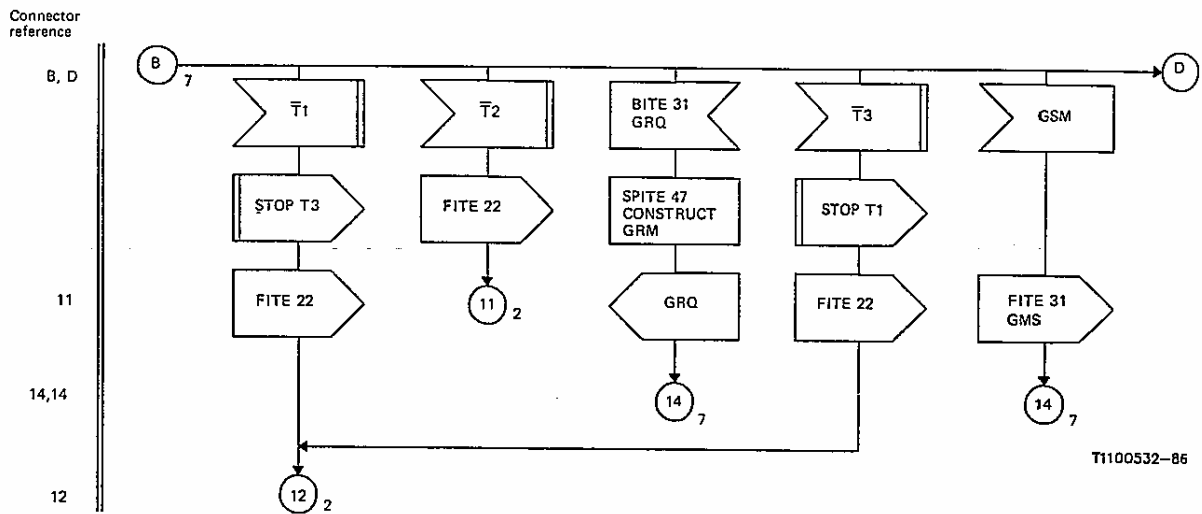
Incoming Signalling System No. 7 (TUP)



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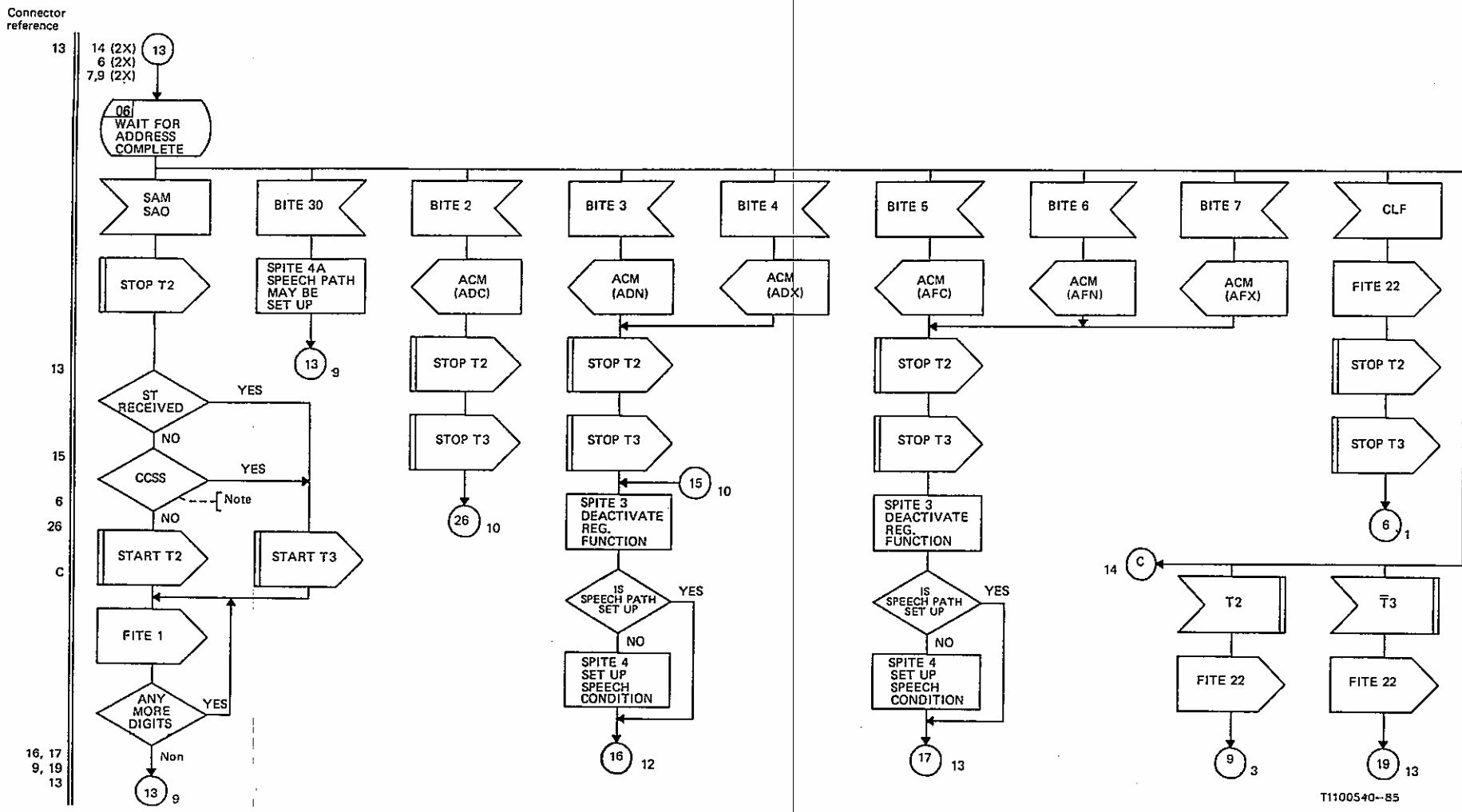
Note – Is outgoing link common channel signalling system?

FIGURE 3/Q.614 (Sheet 7 of 14)
Incoming Signalling System No. 7 (TUP)



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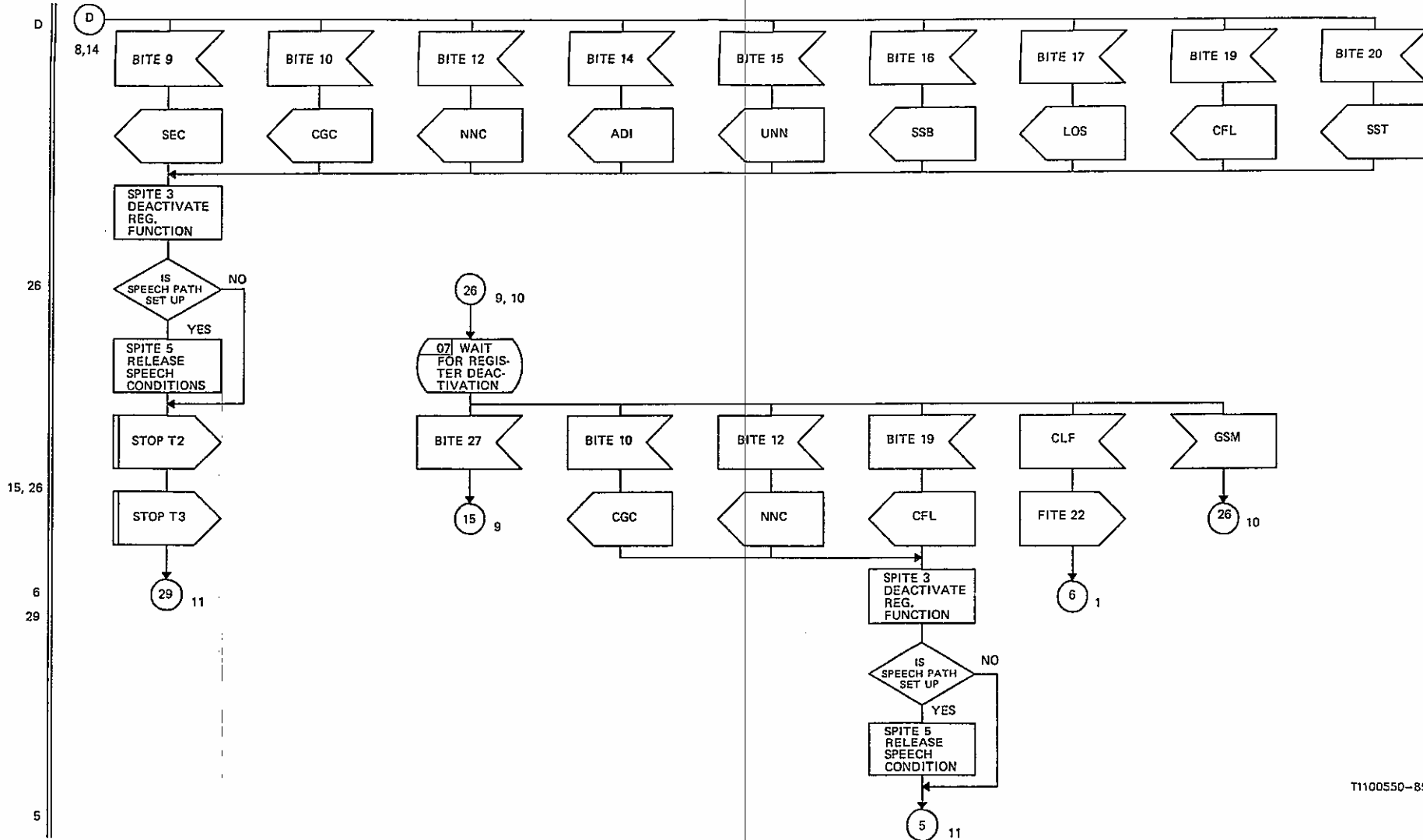
FIGURE 3/Q.614 (Sheet 8 of 14)
Incoming Signalling System No. 7 (TUP)



Note — Is outgoing link common channel signalling system?

FIGURE 3/Q.614 (Sheet 9 of 14)
Incoming Signalling System No. 7 (TUP)

Connector reference



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FIGURE 3/Q.614 (Sheet 10 of 14)
Incoming Signalling System No. 7 (TUP)

Connector reference

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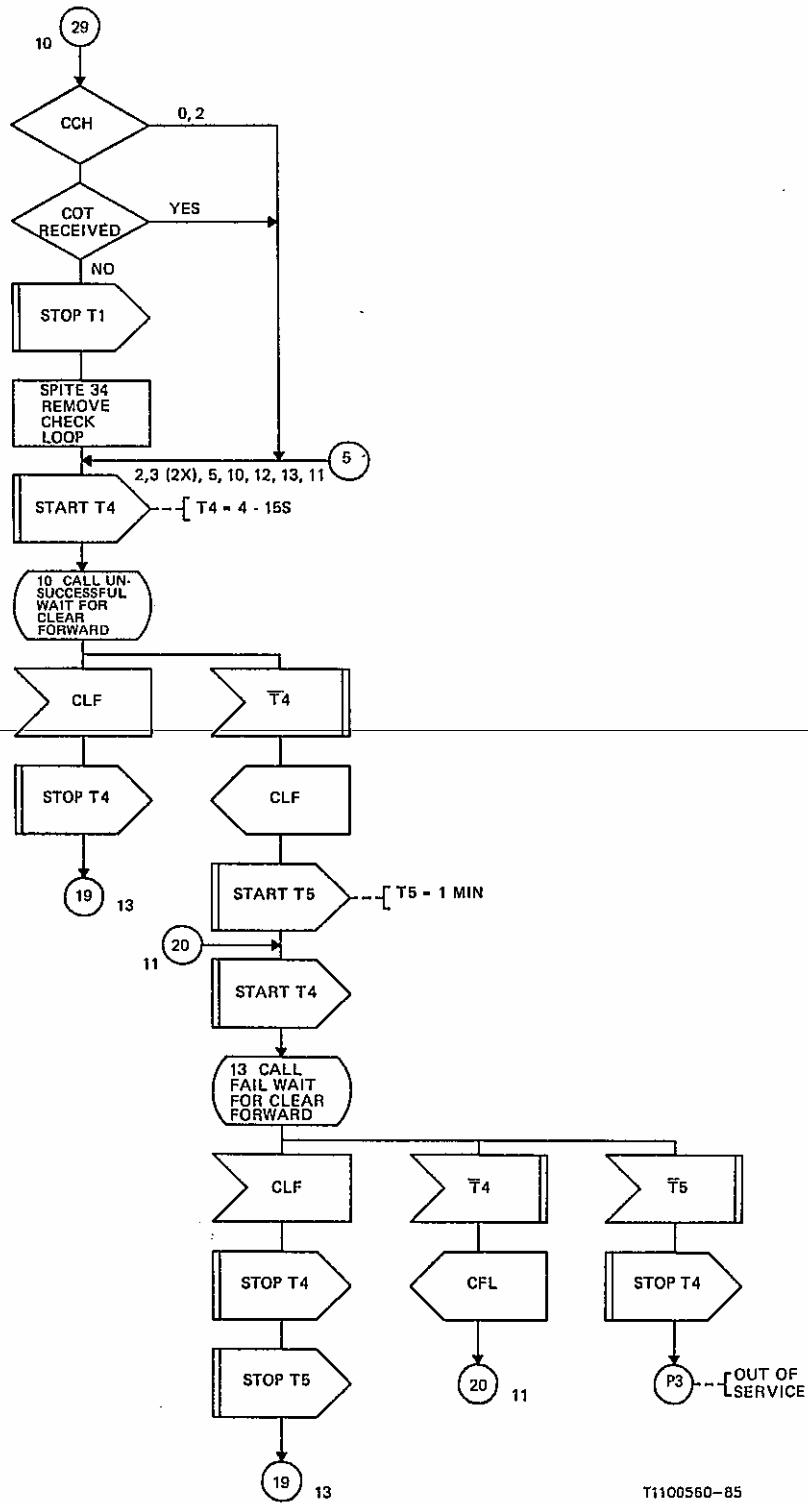
19

20

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P3

19



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FIGURE 3/Q.614 (Sheet 11 of 14)
Incoming Signalling System No. 7 (TUP)

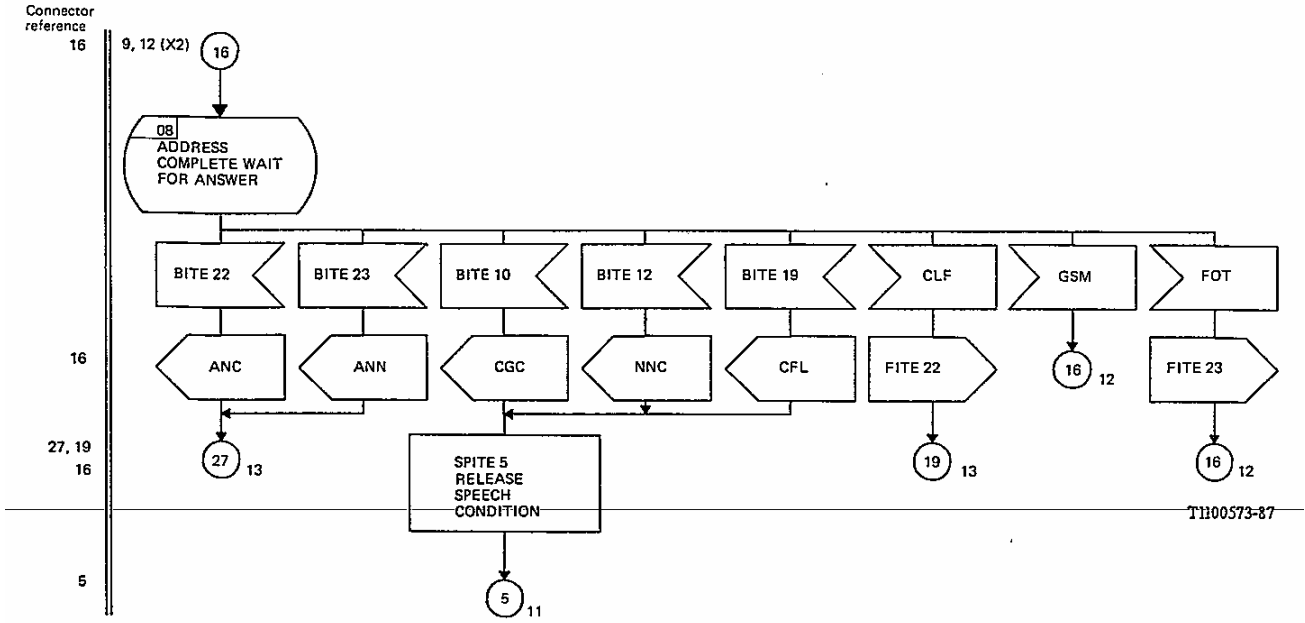


FIGURE 3/Q.614 (Sheet 12 of 14)
 Incoming Signalling System No. 7 (TUP)

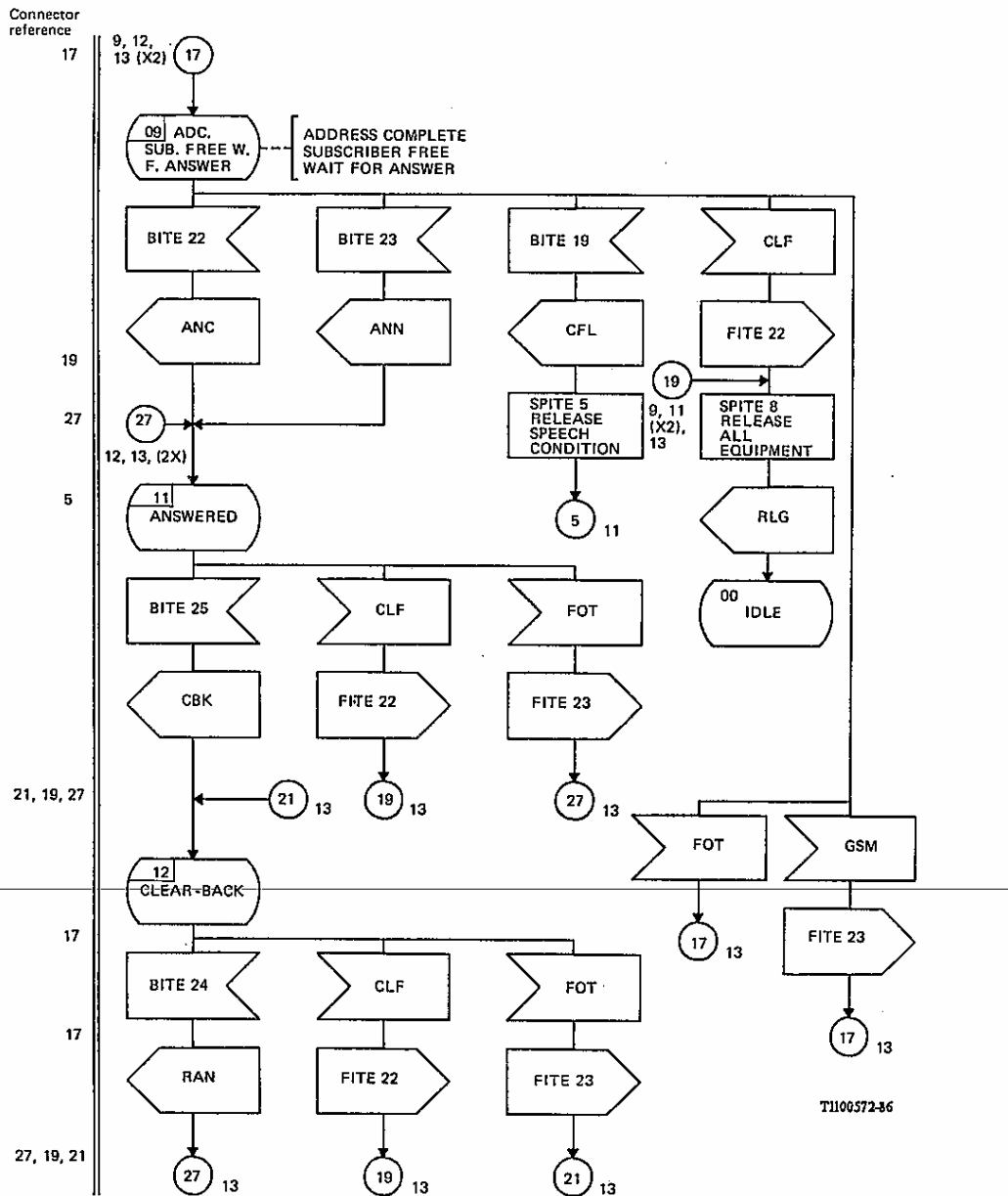


FIGURE 3/Q.614 (Sheet 13 of 14)
Incoming Signalling System No. 7 (TUP)

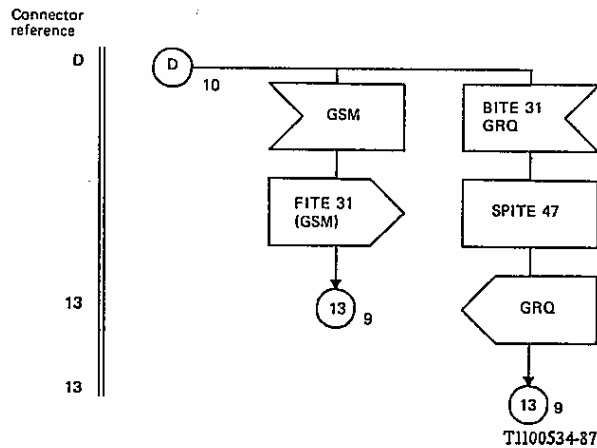


FIGURE 3/Q.614 (Sheet 14 of 14)
Incoming Signalling System No. 7 (TUP)

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