3GPP TSG-CN Meeting #24 **NP-040207**
2nd – 4th June 2004. Seoul, Korea.

Source: **3GPP TSG CN2**

Title: **CRs for Rel-5 WI CAMEL4**

Agenda item: **8.3**

Document for: **APPROVAL**

This document contains following CRs for the Rel-5WI CAMEL4 that are approved by CN2 and are forwarded to TSG CN#24 for approval:

TDoc #	Title	Spec	CR#	Rev	Cat	Rel	Version	WI
N2-040184	Correction to Tssf timer	29.078	368		F	Rel-5	5.7.0	CAMEL4
N2-040212	Correction to Tssf timer	29.078	371		A	Rel-6	6.1.0	CAMEL4
N2-040185	Correction to ERB pre-condition for gsmSSF FSM state	29.078	365		F	Rel-5	5.7.0	CAMEL4
N2-040213	Correction to ERB pre-condition for gsmSSF FSM state	29.078	372		A	Rel-6	6.1.0	CAMEL4
N2-040220	Mapping between ICA and IAM	29.078	369	1	F	Rel-5	5.7.0	CAMEL4
N2-040221	Mapping between ICA and IAM	29.078	370	1	A	Rel-6	6.1.0	CAMEL4
N2-040223	Correction to User Interaction before Answer	23.078	720	1	F	Rel-5	5.7.0	CAMEL4
N2-040237	Correction to User Interaction before Answer	23.078	727		A	Rel-6	6.1.0	CAMEL4
N2-040230	Correction to InitialDP IF for NP leg	23.078	718	3	F	Rel-5	5.7.0	CAMEL4
N2-040236	Correction to InitialDP IF for NP leg	23.078	726		A	Rel-6	6.1.0	CAMEL4
N2-040233	Correction to Tssf timer	23.078	713	2	F	Rel-5	5.7.0	CAMEL4
N2-040234	Correction to Tssf timer	23.078	721	1	A	Rel-6	6.1.0	CAMEL4
N2-040214	Correction to Move Leg pre-condition	23.078	714	1	F	Rel-5	5.7.0	CAMEL4
N2-040235	Correction to Move Leg pre-condition	23.078	725		A	Rel-6	6.1.0	CAMEL4
N2-040240	Correction to Move Leg pre-condition	29.078	373	2	F	Rel-5	5.7.0	CAMEL4
N2-040241	Correction to Move Leg pre-condition	29.078	374		A	Rel-6	6.1.0	CAMEL4
N2-040218	Correction to Entity Released for individual call party	23.078	719	1	F	Rel-5	5.7.0	CAMEL4
N2-040242	Correction to Entity Released for individual call party	23.078	728		A	Rel-6	6.1.0	CAMEL4
N2-040196	Correction to D-CSI suppression in Continue With Argument	23.078	717		F	Rel-5	5.7.0	CAMEL4
N2-040216	Correction to D-CSI suppression in Continue With Argument	23.078	722		A	Rel-6		CAMEL4

CHANGE REQUEST

⌘ **29.078** **CR** **368** ⌘ **rev** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to Tssf timer
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	27 April 2004
Category:	⌘	F (agreed by consensus)
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	The post-conditions for the procedure descriptions for the CAP Operations contain references to Tssf. These references to Tssf timer settings should reflect the SDL in TS 23.078. The SDL for CS_gsmSSF indicates that the Tssf timer is set under certain conditions. The SDL in TS 23.078 also specifies the value that shall be used for Tssf. The post-conditions in TS 29.078, regarding the Tssf timer, are often in contradiction to the SDL in TS 23.078. In general, TS 29.078 is not consistent with specifying the setting and restarting of Tssf. The present CR proposes therefore that the references to Tssf timers in the post-conditions are removed. These post-conditions do in any case not present new information for designers; the usage of Tssf is fully specified in TS 23.078.
Summary of change:	⌘	In section 11, remove the post-conditions related to the reloading & restarting Tssf.
Consequences if not approved:	⌘	Incorrect Tssf specification; the handling of Tssf may be different between various vendors. As a result, the Tssf may be loaded with incorrect value.

Clauses affected:	⌘	11.9, 11.10, 11.13, 11.14, 11.17

Other specs affected:	⌘	Y	N		⌘	
		X		Other core specifications		23078-CR713
			X	Test specifications		
			X	O&M Specifications		

Other comments:	⌘	

****** First Modification ******

11.9 Connect procedure

11.9.1 General description

…

11.9.1.1 Parameters

…

11.9.2 Responding entity (gsmSSF)

11.9.2.1 Normal procedure

gsmSSF preconditions:

(1) A control relationship exists between the gsmSSF and the gsmSCF.

(2) Basic call processing has been suspended at a DP.

(3) The gsmSSF FSM is in the state "Waiting_for_Instructions".

gsmSSF postconditions:

(1) The gsmSSF performs the call processing actions to route the call to the specified destination.

(2) In the O-BCSM, call processing resumes at PIC Analyze_Information.

~~(3) Tssf is stopped.~~

On receipt of this operation, the gsmSSF performs the following actions:

- If no EDPs have been armed and neither a CallInformationReport nor an ApplyChargingReport has been requested, then the gsmSSF transits to the state "Idle". Otherwise, the gsmSSF transits to the state "Monitoring".

The gsmSSF shall not perform any implicit arming or disarming of DPs.

Statistic counter(s) are not affected.

11.9.2.2 Error handling

…

****** Next Modification ******

11.10 ConnectToResource procedure

11.10.1 General description

…

11.10.1.1 Parameters

…

11.10.2 Responding entity (gsmSSF)

11.10.2.1 Normal procedure

gsmSSF preconditions:

(1) A control relationship exists between the gsmSCF and the gsmSSF.

(2) The gsmSSF FSM is in the state "Waiting_for_Instructions".

gsmSSF postconditions:

(1) The call segment is connected to the gsmSRF.

(2) A control relationship between the gsmSCF and the gsmSRF is established.

(3) The gsmSSF FSM transits to the state "Waiting_for_end_of_User_Interaction".

~~(4) The gsmSSF loads Tssf with the default value and starts Tssf.~~

NOTE: The successful connection to the gsmSRF causes a gsmSRF FSM state transition from the state "Idle" to the state "Connected".

11.10.2.2 Error handling

…

***** *Next Modification* *****

11.13 DisconnectForwardConnection procedure

11.13.1 General Description

…

11.13.1.1 Parameters

…

11.13.2 Responding entity (gsmSSF)

11.13.2.1 Normal procedure

gsmSSF preconditions:

(1) The basic call processing has been suspended at a DP. The gsmSSF FSM in the initiating gsmSSF is in the state "Waiting_for_end_of_User_Interaction" or in the state "Waiting_for_end_of_Temporary_Connection".

gsmSSF postconditions:

(1) The connection to the gsmSRF or assisting gsmSSF is released.

(2) The gsmSSF FSM is in the state "Waiting_for_Instructions".

The receipt of "DisconnectForwardConnection" results in a disconnection of the assisting gsmSSF or the PE containing the gsmSRF from the call. It does not result in a release of the connection between the gsmSSF and the end-user.

On receipt of this operation, the gsmSSF shall perform the following actions:

- The initiating gsmSSF releases the connection to the assisting gsmSSF or the gsmSRF.

~~- The gsmSSF loads Tssf with the default and restarts Tssf.~~

- The gsmSSF FSM transits to the state "Waiting_for_Instructions".

NOTE: The successful disconnection to the gsmSRF causes a gsmSRF FSM state transition to the state "Idle". A current order (e.g. "PlayAnnouncement" or "PromptAndCollectUserInformation") is cancelled and any queued order (e.g. "PlayAnnouncement" or "PromptAndCollectUserInformation") is discarded.

11.13.2.2 Error handling

…

***** *Next Modification* *****

11.14 DisconnectForwardConnectionWithArgument procedure

11.14.1 General Description

…

11.14.1.1 Parameters

…

11.14.2 Responding entity (gsmSSF)

11.14.2.1 Normal procedure

gsmSSF preconditions:

(1) The basic call processing has been suspended at a DP. The CS_gsmSSF FSM in the initiating gsmSSF is in the state "Waiting_for_end_of_User_Interaction" or in the state "Waiting_for_end_of_Temporary_Connection".

gsmSSF postconditions:

(1) The connection to the gsmSRF or assisting gsmSSF is released.

(2) The CS_gsmSSF FSM transits to the state "Waiting_for_Instructions".

The receipt of "DisconnectForwardConnectionWithArgument" results in disconnecting the PE containing the gsmSRF from the specified Call Segment. It does not result in a release of the connection between the gsmSSF and the end-user.

On receipt of this operation, the gsmSSF shall perform the following actions:

- The gsmSSF releases the connection to the assisting gsmSSF or the gsmSRF.

~~- The gsmSSF loads Tssf with the default value and restarts Tssf.~~

- The gsmSSF FSM transits to the state "Waiting_for_Instructions".

NOTE: The successful disconnection from the gsmSRF causes the gsmSRF to transit to the state "Idle". A current order (e.g. "PlayAnnouncement" or "PromptAndCollectUserInformation") is cancelled and any queued order (e.g. "PlayAnnouncement" or "PromptAndCollectUserInformation") is discarded.

11.14.2.2 Error handling

…

***** *Next Modification* *****

11.17 EstablishTemporaryConnection procedure

11.17.1 General Description

…

11.17.1.1 Parameters

…

11.17.2 Responding entity (gsmSSF)

11.17.2.1 Normal procedure

gsmSSF preconditions:

(1) The gsmSSF FSM is in the state "Waiting_for_Instructions".

(2) The gsmSSF is not an assisting gsmSSF.

gsmSSF postconditions:

(1) The gsmSSF performs the call processing actions to route the call to the assisting gsmSSF or gsmSRF in accordance with the "assistingSSPIPRoutingAddress" requested by the gsmSCF.

(2) The gsmSSF FSM transits to the state "Waiting_for_end_of_Temporary_Connection".

~~(3) The gsmSSF loads Tssf with the default value and starts Tssf.~~

On receipt of this operation, the gsmSSF shall perform the following actions:

- Route the call to assisting gsmSSF or gsmSRF using "assistingSSPIPRoutingAddress";

11.17.2.2 Error handling

…

****** End of Document ******

CHANGE REQUEST

⌘ **29.078** **CR** **365** ⌘**rev** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to ERB pre-condition for gsmSSF FSM state
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	27 April 2004
Category:	⌘	F (agreed by consensus)
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	The pre-conditions for the EventReportBCSM procedure specifies: For the O_Disconnect DP, T_Disconnect DP, O_Answer DP and T_Answer DP, the gsmSSF FSM is in the state "Monitoring" or in the state "Waiting_for_Instructions". For the O_Abandon DP and T_Abandon DP, the gsmSSF FSM is in any state, except "Idle". This text is incomplete, as it lists only a few DPs. In general, the gsmSSF FSM states in which a particular event may be reported to the gsmSCF, is specified in TS 23.078, in process CS_gsmSSF. The present CR proposes, therefore, that TS 29.078 does not (incorrectly) replicate this information, except for the reference to the Abandon DPs.
Summary of change:	⌘	Change the pre-condition for the EventReportBCSM procedure.
Consequences if not approved:	⌘	Confusion for designer; it is not clear in which gsmSSF FSM states particular events may be reported.

Clauses affected:	⌘	11.18

Other specs affected: ⌘	Y	N	
		X	Other core specifications
		X	Test specifications
		X	O&M Specifications

⌘

Other comments: ⌘

****** First Modification ******

11.18 EventReportBCSM procedure

11.18.1 General description

The gsmSSF uses this operation to notify the gsmSCF of a call related event previously requested by the gsmSCF in a "RequestReportBCSMEvent" operation.

11.18.1.1 Parameters

- eventTypeBCSM:
  This parameter specifies the type of event that is reported.

- eventSpecificInformationBCSM:
  This parameter indicates the call related information specific to the event.

  For Route_Select_Failure it shall contain the "FailureCause", if available.

  For O_Busy it shall contain the "BusyCause", if available.

- If the busy event is triggered by an ISUP release message, then the BusyCause is a copy of the ISUP release cause, for example: Subscriber absent, 20 or User busy, 17.

- If the busy event is trigerred by a MAP error, for example: Absent subscriber, received from the HLR, then the MAP cause is mapped to the corresponding ISUP release cause.

  NOTE 1: If no BusyCause is received, then the gsmSCF shall assume busy.

  For T_Busy it may contain the following parameters, if available.

  - CallForwarded:
    This parameter indicates that the busy event is triggered by call forwarding at the GMSC or VMSC.

  - ForwardingDestinationNumber:
    This parameter indicates the forwarding destination.

  - RouteNotPermitted:
    This parameter indicates that the busy event is triggered because call forwarding was not invoked in this GMSC due to the rules of Basic Optimal Routeing.

  - BusyCause:

    - If the busy event is triggered by an ISUP release message, then the BusyCause is a copy of the ISUP release cause, for example: Subscriber absent, 20 or User busy, 17.

    - If the busy event is triggered by a MAP error, for example: Absent subscriber, received from the HLR, then the MAP cause is mapped to the corresponding ISUP release cause.

    - If the busy event is triggered by call forwarding or call deflection invocation in the GMSC or VMSC, then the BusyCause will refer to the release cause in accordance with the mapping table in 3GPP TS 23.078 [7].

- If the busy event is triggered by call forwarding at the GMSC, then the BusyCause reflects the forwarding reason (Subscriber Absent, 20 or User busy, 17). The eventSpecificInformationBCSM shall in that case also contain the CallForwarded indication.

  NOTE 2: If no BusyCause is received, then the gsmSCF shall assume busy.

  For O_No_Answer it shall be empty.

  For T_No_Answer it may contain the CallForwarded indication and the ForwardingDestinationNumber.

- If the No_Answer event is triggered by an ISUP release message or expiry of the CAMEL timer TNRy, then the eventSpecificInformationBCSM shall be empty.

- If the No_Answer event is triggered by call forwarding at the GMSC or VMSC, then the eventSpecificInformationBCSM shall contain the CallForwarded indication and the ForwardingDestinationNumber.

  For O_Answer or T_Answer it shall contain the following information, if available:

  - The destination address for the call;
  - The OR indicator, in the case that the call was subject to Basic Optimal Routeing, as specified in 3GPP TS 23.079 [8];
  - The forwarding indicator, in the case that the Call Forwarding Supplementary Service was invoked;
  - The charge indicator;
  - The Extended Basic Service Code, for SCUDIF calls (see 3GPP TS 23.172 [16]);
  - The Extended Basic Service Code 2, for SCUDIF calls (see 3GPP TS 23.172 [16]).

  For O_Mid_Call and T_Mid_Call it shall contain the detected digit string, in accordance with the criterion defined in the RequestReportBCSMEvent operation.

  For Call_Accepted, O_Term_Seized, O_Change_Of_Position and T_Change_Of_Position it shall contain the following information:

  - locationInformation:
    This parameter indicates the location of the MS.

  For O_Disconnect and T_Disconnect it shall contain the "releaseCause", if available.

  For O_Abandon" it may contain the following parameter, if available.

  - routeNotPermitted:
    This parameter indicates that the O-Abondon event is triggered because call set up shall not be invoked in this MSC due to the rules of Basic Optimal Routeing.

- legID:
  This parameter indicates the party in the call for which the event is reported. The gsmSSF shall use the option "receivingSideID" only.

- receivingSideID:
  If not included, then the following defaults are assumed:

  "legID" = 1 for the events O_Abandon and T_Abandon,

  "legID" = 2 for the events Route_Select_Failure, O_Busy, O_No_Answer, O_Answer, T_Busy, O_Term_Seized, Call_Accepted, T_No_Answer and T_Answer.

  The "legID" parameter shall always be included for the events O_Disconnect and T_Disconnect.

- miscCallInfo:
  This parameter indicates Detection Point (DP) related information.

- messageType:
  This parameter indicates whether the message is a request, i.e. resulting from a "RequestReportBCSMEvent" with monitorMode = interrupted, or a notification, i.e. resulting from a "RequestReportBCSMEvent" with "monitorMode" = "notifyAndContinue".

11.18.2 Invoking entity (gsmSSF)

11.18.2.1 Normal procedure

gsmSSF preconditions:

(1) A control relationship or a monitoring relationship exists between the gsmSSF and the gsmSCF.

(2) ~~For the O_Disconnect DP, T_Disconnect DP, O_Answer DP and T_Answer DP, the gsmSSF FSM is in the state "Monitoring" or in the state "Waiting_for_Instructions".~~ For the O_Abandon DP and T_Abandon DP, the gsmSSF FSM is in any state, except "Idle". For other DPs, refer to 3GPP TS 23.078 [7].

(3) The BCSM proceeds to an EDP that is armed.

gsmSSF postconditions:

(1) If the message type was notification and there are still armed EDPs or pending reports, then the gsmSSF FSM stays in the state "Monitoring".

(2) If the message type was notification and there are neither any armed EDPs nor pending reports, then the gsmSSF FSM transits to the state "Idle".

(3) If the message type was request, then the gsmSSF FSM transits to the state "Waiting_for_Instructions". Call processing is interrupted.

11.18.2.2 Error handling

If the message type is "request" and the Tssf timer expires, then the gsmSSF shall abort the TC dialogue and shall instruct the MSC to treat the call in accordance with the Default Call Handling, valid for this CAMEL dialogue.

Operation related error handling is not applicable, due to class 4 operation.

****** End of Document ******

CHANGE REQUEST

⌘ **23.078** **CR** **717** ⌘**rev** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to D-CSI suppression in Continue With Argument
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4 ***Date:*** ⌘ 27 April 2004
Category:	⌘	F (agreed by consensus) ***Release:*** ⌘ Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	The Continue With Argument (CWA) Information Flow (IF) may contain the "Suppress D-CSI" Information Element (IE). This IE may be present if the CWA IF is used for an NP leg. The condition for this IE is specified as: "This IE indicates that D-CSI shall be suppressed for the new call leg. This IE can only be included if this IE is sent to the VMSC of the CAMEL subscriber." D-CSI may be sent to VLR and to GMSC. Hence, an NP leg that is created in a GMSC, may be subject to a D-CSI CAMEL Service. Hence, the gsmSCF should have the capability to use the IE "Suppress D-CSI" also in the CWA IF if this CWA IF is sent to the GMSC of the served subscriber. For that reason, the text in the description cell for this IE needs to be corrected accordingly.
Summary of change:	⌘	Correct the description of the "Suppress D-CSI" in the CWA IF.
Consequences if not approved:	⌘	A CAMEL Service which is controlling a call in the GMSC will not be able to suppress a D-CSI service.

Clauses affected:	⌘	4.6.2.9

Other specs affected:	⌘	Y	N		⌘
			X	Other core specifications	
			X	Test specifications	
			X	O&M Specifications	

Other comments:	⌘	

***** *First Modification* *****

4.6.2.9 Continue With Argument

4.6.2.9.1 Description

This IF requests the gsmSSF to continue the call processing with modified information at the DP at which it previously suspended call processing to await gsmSCF instructions or to continue call processing after a Call Party Handling IF was received. The gsmSSF completes DP processing if necessary, and continues basic call processing (i.e. proceeds to the next point in call in the BCSM) with the modified call setup information as received from the gsmSCF.

This IF may also be used to continue call processing after an Initiate Call Attempt IF and Call Party Handling IF.

The gsmSCF can send modified call information at DP Collected_Info and at DP Analysed_Info, as listed in the MO and MF columns in subclause 4.6.2.9.2.

The gsmSCF can send modified call information at DP Termination_Attempt_Authorised, as listed in the MT and VT columns in subclause 4.6.2.9.2.

The gsmSCF can send modified call information immediately after sending an Initiate Call Attempt IF, as listed in the NC and NP columns in subclause 4.6.2.9.2.

In all other cases, Continue With Argument shall contain no other IE than Leg ID or Call Segment ID.

When this IF is used to resume the processing of an Initiate Call Attempt IF, then a Leg ID shall be included and Call Segment ID shall be absent.

When this IF is used to resume the processing of a Call Party Handling IF, then a Call Segment ID shall be included and Leg ID shall be absent.

When this IF is used to resume processing after an EDP-R or TDP-R, then a Leg ID shall be included and Call Segment ID shall be absent. The following exception exists: if this IF is used to resume processing after an EDP-R or TDP-R in one of the following scenarios:

- the CSA has one Call Segment only, which includes leg 1 only;
- the CSA has one Call Segment only, which includes leg 2 only;
- the CSA has one Call Segment only, which includes leg 1 and leg 2, but no other legs;

then, the Leg ID may be present or absent, as required by the Service Logic.

4.6.2.9.2 Information Elements

Information element name	MO	MF	MT	VT	NC	NP	Description
Alerting Pattern	-	-	O	O	O	-	This IE indicates the kind of Alerting Pattern to be applied.
Calling Partys Category	O	O	O	O	O	O	This IE indicates the type of calling party (e.g., operator, pay phone, ordinary subscriber).
Generic Number	O	O	O	O	O	O	This IE contains the generic number. It is used to convey the additional calling party number, which e.g. could be used to modify the calling line ID presented to the called user.
Carrier	O	O	O	O	O	O	This IE is described in a table below.
NA Originating Line Information	O	O	O	O	O	O	This IE identifies the type of number in the Charge Number (e.g. subscriber versus PLMN operator number).
Charge Number	O	O	O	O	O	O	This IE identifies the chargeable number for the usage of a North American carrier.
Suppression Of Announcements	-	-	O	O	O	O	This IE indicates that announcements or tones generated as a result of unsuccessful call establishment shall be suppressed.

Information element name	MO	MF	MT	VT	NC	NP	Description
Service Interaction Indicators Two	O	O	O	O	O	O	This IE is described in a table below.
CUG Interlock Code	O	O	-	-	O	O	See 3GPP TS 23.085 [**Error! Reference source not found.**] for details of this IE.
Outgoing Access Indicator	O	O	-	-	O	O	See 3GPP TS 23.085 [**Error! Reference source not found.**] for details of this IE.
Basic OR Interrogation Requested	O	O	-	-	O	O,S	This IE indicates that a Basic Optimal Routeing interrogation is requested for the call. If Basic Optimal Routeing is successful, this will be reported to the gsmSCF in the Answer event report. This IE shall be ignored if the VMSC associated with the gsmSSF does not support Basic Optimal Routeing. This IE shall be ignored if it is received in a gsmSSF which is handling the MF call case in the GMSC function of the forwarding subscriber. For an NP call leg, this IE can only be included if the original call was an MO or NC call.
Leg ID	O,E	O,E	O,E	O,E	O,E	O,E	This IE indicates the party for which call processing is to be resumed.
Call Segment ID	O,E	O,E	O,E	O,E	O,E	O,E	This IE indicates the call segment for which call processing is to be resumed.
Suppress O-CSI	-	-	O	O	-	-	This IE indicates that O-CSI shall be suppressed for the forwarding leg or deflecting leg.
Suppress D-CSI	-	-	-	-	-	O	This IE indicates that D-CSI shall be suppressed for the new call leg. This IE can only be included if this IE is sent to the VMSC or GMSC of the CAMEL subscriber.
Suppress N-CSI	-	-	-	-	O	O	This IE indicates that N-CSI shall be suppressed for the new call leg.
Suppress Outgoing Call Barring	-	-	-	-	-	O	This IE indicates that Outgoing Call Barrings for the created leg shall be suppressed. This IE can only be included if the Initiate Call Attempt IF is sent to the VMSC of the CAMEL subscriber.

…

****** End of Document ******

CHANGE REQUEST

⌘	29.078	CR	371	⌘rev		⌘	Current version:	6.1.0	⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Correction to Tssf timer
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4 **Date:** ⌘ 10 May 2004
Category:	⌘	A **Release:** ⌘ Rel-6

Use one of the following categories:
- ***F*** *(correction)*
- ***A*** *(corresponds to a correction in an earlier release)*
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Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	The post-conditions for the procedure descriptions for the CAP Operations contain references to Tssf. These references to Tssf timer settings should reflect the SDL in TS 23.078. The SDL for CS_gsmSSF indicates that the Tssf timer is set under certain conditions. The SDL in TS 23.078 also specifies the value that shall be used for Tssf. The post-conditions in TS 29.078, regarding the Tssf timer, are often in contradiction to the SDL in TS 23.078. In general, TS 29.078 is not consistent with specifying the setting and restarting of Tssf. The present CR proposes therefore that the references to Tssf timers in the post-conditions are removed. These post-conditions do in any case not present new information for designers; the usage of Tssf is fully specified in TS 23.078.
Summary of change:	⌘	In section 11, remove post-conditions related to the reloading & restarting Tssf.
Consequences if not approved:	⌘	Incorrect Tssf specification; the handling of Tssf may be different between various vendors. As a result, the Tssf may be loaded with incorrect value.

Clauses affected:	⌘	11.9, 11.10, 11.13, 11.14, 11.17

		Y	N			
Other specs Affected:	⌘	X		Other core specifications	⌘	23078-CR713
			X	Test specifications		
			X	O&M Specifications		

Other comments:	⌘	

****** First Modification ******

11.9 Connect procedure

11.9.1 General description

…

11.9.1.1 Parameters

…

11.9.2 Responding entity (gsmSSF)

11.9.2.1 Normal procedure

gsmSSF preconditions:

(1) A control relationship exists between the gsmSSF and the gsmSCF.

(2) Basic call processing has been suspended at a DP.

(3) The gsmSSF FSM is in the state "Waiting_for_Instructions".

gsmSSF postconditions:

(1) The gsmSSF performs the call processing actions to route the call to the specified destination.

(2) In the O-BCSM, call processing resumes at PIC Analyze_Information.

~~(3) Tssf is stopped.~~

On receipt of this operation, the gsmSSF performs the following actions:

- If no EDPs have been armed and neither a CallInformationReport nor an ApplyChargingReport has been requested, then the gsmSSF transits to the state "Idle". Otherwise, the gsmSSF transits to the state "Monitoring".

The gsmSSF shall not perform any implicit arming or disarming of DPs.

Statistic counter(s) are not affected.

11.9.2.2 Error handling

…

****** Next Modification ******

11.10 ConnectToResource procedure

11.10.1 General description

…

11.10.1.1 Parameters

…

11.10.2 Responding entity (gsmSSF)

11.10.2.1 Normal procedure

gsmSSF preconditions:

(1) A control relationship exists between the gsmSCF and the gsmSSF.

(2) The gsmSSF FSM is in the state "Waiting_for_Instructions".

gsmSSF postconditions:

(1) The call segment is connected to the gsmSRF.

(2) A control relationship between the gsmSCF and the gsmSRF is established.

(3) The gsmSSF FSM transits to the state "Waiting_for_end_of_User_Interaction".

~~(4) The gsmSSF loads Tssf with the default value and starts Tssf.~~

NOTE: The successful connection to the gsmSRF causes a gsmSRF FSM state transition from the state "Idle" to the state "Connected".

11.10.2.2 Error handling

…

***** *Next Modification* *****

11.13 DisconnectForwardConnection procedure

11.13.1 General Description

…

11.13.1.1 Parameters

…

11.13.2 Responding entity (gsmSSF)

11.13.2.1 Normal procedure

gsmSSF preconditions:

(1) The basic call processing has been suspended at a DP. The gsmSSF FSM in the initiating gsmSSF is in the state "Waiting_for_end_of_User_Interaction" or in the state "Waiting_for_end_of_Temporary_Connection".

gsmSSF postconditions:

(1) The connection to the gsmSRF or assisting gsmSSF is released.

(2) The gsmSSF FSM is in the state "Waiting_for_Instructions".

The receipt of "DisconnectForwardConnection" results in a disconnection of the assisting gsmSSF or the PE containing the gsmSRF from the call. It does not result in a release of the connection between the gsmSSF and the end-user.

On receipt of this operation, the gsmSSF shall perform the following actions:

- The initiating gsmSSF releases the connection to the assisting gsmSSF or the gsmSRF.

~~- The gsmSSF loads Tssf with the default and restarts Tssf.~~

- The gsmSSF FSM transits to the state "Waiting_for_Instructions".

NOTE: The successful disconnection to the gsmSRF causes a gsmSRF FSM state transition to the state "Idle". A current order (e.g. "PlayAnnouncement" or "PromptAndCollectUserInformation") is cancelled and any queued order (e.g. "PlayAnnouncement" or "PromptAndCollectUserInformation") is discarded.

11.13.2.2 Error handling

…

***** *Next Modification* *****

11.14 DisconnectForwardConnectionWithArgument procedure

11.14.1 General Description

…

11.14.1.1 Parameters

…

11.14.2 Responding entity (gsmSSF)

11.14.2.1 Normal procedure

gsmSSF preconditions:

(1) The basic call processing has been suspended at a DP. The CS_gsmSSF FSM in the initiating gsmSSF is in the state "Waiting_for_end_of_User_Interaction" or in the state "Waiting_for_end_of_Temporary_Connection".

gsmSSF postconditions:

(1) The connection to the gsmSRF or assisting gsmSSF is released.

(2) The CS_gsmSSF FSM transits to the state "Waiting_for_Instructions".

The receipt of "DisconnectForwardConnectionWithArgument" results in disconnecting the PE containing the gsmSRF from the specified Call Segment. It does not result in a release of the connection between the gsmSSF and the end-user.

On receipt of this operation, the gsmSSF shall perform the following actions:

- The gsmSSF releases the connection to the assisting gsmSSF or the gsmSRF.

~~- The gsmSSF loads Tssf with the default value and restarts Tssf.~~

- The gsmSSF FSM transits to the state "Waiting_for_Instructions".

NOTE: The successful disconnection from the gsmSRF causes the gsmSRF to transit to the state "Idle". A current order (e.g. "PlayAnnouncement" or "PromptAndCollectUserInformation") is cancelled and any queued order (e.g. "PlayAnnouncement" or "PromptAndCollectUserInformation") is discarded.

11.14.2.2 Error handling

…

***** *Next Modification* *****

11.17 EstablishTemporaryConnection procedure

11.17.1 General Description

…

11.17.1.1 Parameters

…

11.17.2 Responding entity (gsmSSF)

11.17.2.1 Normal procedure

gsmSSF preconditions:

(1) The gsmSSF FSM is in the state "Waiting_for_Instructions".

(2) The gsmSSF is not an assisting gsmSSF.

gsmSSF postconditions:

(1) The gsmSSF performs the call processing actions to route the call to the assisting gsmSSF or gsmSRF in accordance with the "assistingSSPIPRoutingAddress" requested by the gsmSCF.

(2) The gsmSSF FSM transits to the state "Waiting_for_end_of_Temporary_Connection".

~~(3) The gsmSSF loads Tssf with the default value and starts Tssf.~~

On receipt of this operation, the gsmSSF shall perform the following actions:

- Route the call to assisting gsmSSF or gsmSRF using "assistingSSPIPRoutingAddress";

11.17.2.2 Error handling

…

****** End of Document ******

CHANGE REQUEST

⌘ **29.078** **CR** **372** ⌘ **rev** ⌘ Current version: **6.1.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to ERB pre-condition for gsmSSF FSM state
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	10/05/2004
Category:	⌘	A
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	The pre-conditions for the EventReportBCSM procedure specifies: For the O_Disconnect DP, T_Disconnect DP, O_Answer DP and T_Answer DP, the gsmSSF FSM is in the state "Monitoring" or in the state "Waiting_for_Instructions". For the O_Abandon DP and T_Abandon DP, the gsmSSF FSM is in any state, except "Idle". This text is incomplete, as it lists only a few DPs. In general, the gsmSSF FSM states in which a particular event may be reported to the gsmSCF, is specified in TS 23.078, in process CS_gsmSSF. The present CR proposes, therefore, that TS 29.078 does not (incorrectly) replicate this information, except for the reference to the Abandon DPs.
Summary of change:	⌘	Change the pre-condition for the EventReportBCSM procedure.
Consequences if not approved:	⌘	Confusion for designer; it is not clear in which gsmSSF FSM states particular events may be reported.

Clauses affected:	⌘	11.18			
Other specs affected:	⌘	**Y**	**N**		
			X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

****** First Modification ******

11.18 EventReportBCSM procedure

11.18.1 General description

The gsmSSF uses this operation to notify the gsmSCF of a call related event previously requested by the gsmSCF in a "RequestReportBCSMEvent" operation.

11.18.1.1 Parameters

- eventTypeBCSM:
  This parameter specifies the type of event that is reported.

- eventSpecificInformationBCSM:
  This parameter indicates the call related information specific to the event.

  For Route_Select_Failure it shall contain the "FailureCause", if available.

  For O_Busy it shall contain the "BusyCause", if available.

- If the busy event is triggered by an ISUP release message, then the BusyCause is a copy of the ISUP release cause, for example: Subscriber absent, 20 or User busy, 17.

- If the busy event is trigerred by a MAP error, for example: Absent subscriber, received from the HLR, then the MAP cause is mapped to the corresponding ISUP release cause.

  NOTE 1: If no BusyCause is received, then the gsmSCF shall assume busy.

  For T_Busy it may contain the following parameters, if available.

  - CallForwarded:
    This parameter indicates that the busy event is triggered by call forwarding at the GMSC or VMSC.

  - ForwardingDestinationNumber:
    This parameter indicates the forwarding destination.

  - RouteNotPermitted:
    This parameter indicates that the busy event is triggered because call forwarding was not invoked in this GMSC due to the rules of Basic Optimal Routeing.

  - BusyCause:

    - If the busy event is triggered by an ISUP release message, then the BusyCause is a copy of the ISUP release cause, for example: Subscriber absent, 20 or User busy, 17.

    - If the busy event is triggered by a MAP error, for example: Absent subscriber, received from the HLR, then the MAP cause is mapped to the corresponding ISUP release cause.

    - If the busy event is triggered by call forwarding or call deflection invocation in the GMSC or VMSC, then the BusyCause will refer to the release cause in accordance with the mapping table in 3GPP TS 23.078 [7].

- If the busy event is triggered by call forwarding at the GMSC, then the BusyCause reflects the forwarding reason (Subscriber Absent, 20 or User busy, 17). The eventSpecificInformationBCSM shall in that case also contain the CallForwarded indication.

  NOTE 2: If no BusyCause is received, then the gsmSCF shall assume busy.

  For O_No_Answer it shall be empty.

  For T_No_Answer it may contain the CallForwarded indication and the ForwardingDestinationNumber.

- If the No_Answer event is triggered by an ISUP release message or expiry of the CAMEL timer TNRy, then the eventSpecificInformationBCSM shall be empty.

- If the No_Answer event is triggered by call forwarding at the GMSC or VMSC, then the eventSpecificInformationBCSM shall contain the CallForwarded indication and the ForwardingDestinationNumber.

  For O_Answer or T_Answer it shall contain the following information, if available:

  - The destination address for the call;
  - The OR indicator, in the case that the call was subject to Basic Optimal Routeing, as specified in 3GPP TS 23.079 [8];
  - The forwarding indicator, in the case that the Call Forwarding Supplementary Service was invoked;
  - The charge indicator;
  - The Extended Basic Service Code, for SCUDIF calls (see 3GPP TS 23.172 [16]);
  - The Extended Basic Service Code 2, for SCUDIF calls (see 3GPP TS 23.172 [16]).

  For O_Mid_Call and T_Mid_Call it shall contain the detected digit string, in accordance with the criterion defined in the RequestReportBCSMEvent operation.

  For Call_Accepted, O_Term_Seized, O_Change_Of_Position and T_Change_Of_Position it shall contain the following information:

  - locationInformation:
    This parameter indicates the location of the MS.

  For O_Disconnect and T_Disconnect it shall contain the "releaseCause", if available.

  For O_Abandon" it may contain the following parameter, if available.

  - routeNotPermitted:
    This parameter indicates that the O-Abondon event is triggered because call set up shall not be invoked in this MSC due to the rules of Basic Optimal Routeing.

- legID:
  This parameter indicates the party in the call for which the event is reported. The gsmSSF shall use the option "receivingSideID" only.

- receivingSideID:
  If not included, then the following defaults are assumed:

  "legID" = 1 for the events O_Abandon and T_Abandon,

  "legID" = 2 for the events Route_Select_Failure, O_Busy, O_No_Answer, O_Answer, T_Busy, O_Term_Seized, Call_Accepted, T_No_Answer and T_Answer.

  The "legID" parameter shall always be included for the events O_Disconnect and T_Disconnect.

- miscCallInfo:
  This parameter indicates Detection Point (DP) related information.

- messageType:
  This parameter indicates whether the message is a request, i.e. resulting from a "RequestReportBCSMEvent" with monitorMode = interrupted, or a notification, i.e. resulting from a "RequestReportBCSMEvent" with "monitorMode" = "notifyAndContinue".

11.18.2 Invoking entity (gsmSSF)

11.18.2.1 Normal procedure

gsmSSF preconditions:

(1) A control relationship or a monitoring relationship exists between the gsmSSF and the gsmSCF.

(2) ~~For the O_Disconnect DP, T_Disconnect DP, O_Answer DP and T_Answer DP, the gsmSSF FSM is in the state "Monitoring" or in the state "Waiting_for_Instructions".~~ For the O_Abandon DP and T_Abandon DP, the gsmSSF FSM is in any state, except "Idle". For other DPs, refer to 3GPP TS 23.078 [7].

(3) The BCSM proceeds to an EDP that is armed.

gsmSSF postconditions:

(1) If the message type was notification and there are still armed EDPs or pending reports, then the gsmSSF FSM stays in the state "Monitoring".

(2) If the message type was notification and there are neither any armed EDPs nor pending reports, then the gsmSSF FSM transits to the state "Idle".

(3) If the message type was request, then the gsmSSF FSM transits to the state "Waiting_for_Instructions". Call processing is interrupted.

11.18.2.2 Error handling

If the message type is "request" and the Tssf timer expires, then the gsmSSF shall abort the TC dialogue and shall instruct the MSC to treat the call in accordance with the Default Call Handling, valid for this CAMEL dialogue.

Operation related error handling is not applicable, due to class 4 operation.

****** End of Document ******

CHANGE REQUEST

⌘ **23.078** **CR** **714** ⌘**rev** **1** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to Move Leg pre-condition
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	11 May 2004
Category:	⌘	F (essential correction)
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘

One of the pre-conditions of the ***Move Leg*** Operation is that "At least one leg in the target Call Segment is in the active phase" (refer to TS 22.078). For ***Move Leg***, the target Call Segment is always Call Segment 1 (CS1).

The Move_Leg_Allowed variable in process CSA_gsmSSF is used as an indication that the above-referred condition is fulfilled. Hereto, sheet 18 of process CSA_gsmSSF specifies that Move_Leg_Allowed shall be set TRUE when a leg in CS1 has reached the active state.

Sheet 19 of CSA_gsmSSF uses the Move_Leg_Allowed variable to verify whether above-referred pre-condition for using Move Leg is fulfilled. Sheet 19 does, however, not verify whether Move Leg is allowed w.r.t. the existence of CS1. When CS1 does not exist, then Move Leg shall not be used, but that is not verified by CSA_gsmSSF, even though the check for Move_Leg_Allowed may give this impression.

Example: the gsmSCF establishes a call (by sending the ***Initiate Call Attempt*** Operation) and Move_Leg_Allowed is set to TRUE; refer CSA_gsmSSF, sheet 2. The gsmSCF creates this leg in a Call Segment other than CS1. To place this leg into CS1, when that leg has reached the alerting state, the gsmSCF shall use ***Split Leg***; CS1 does not exist at this moment, so the gsmSCF is not allowed to use ***Move Leg***.

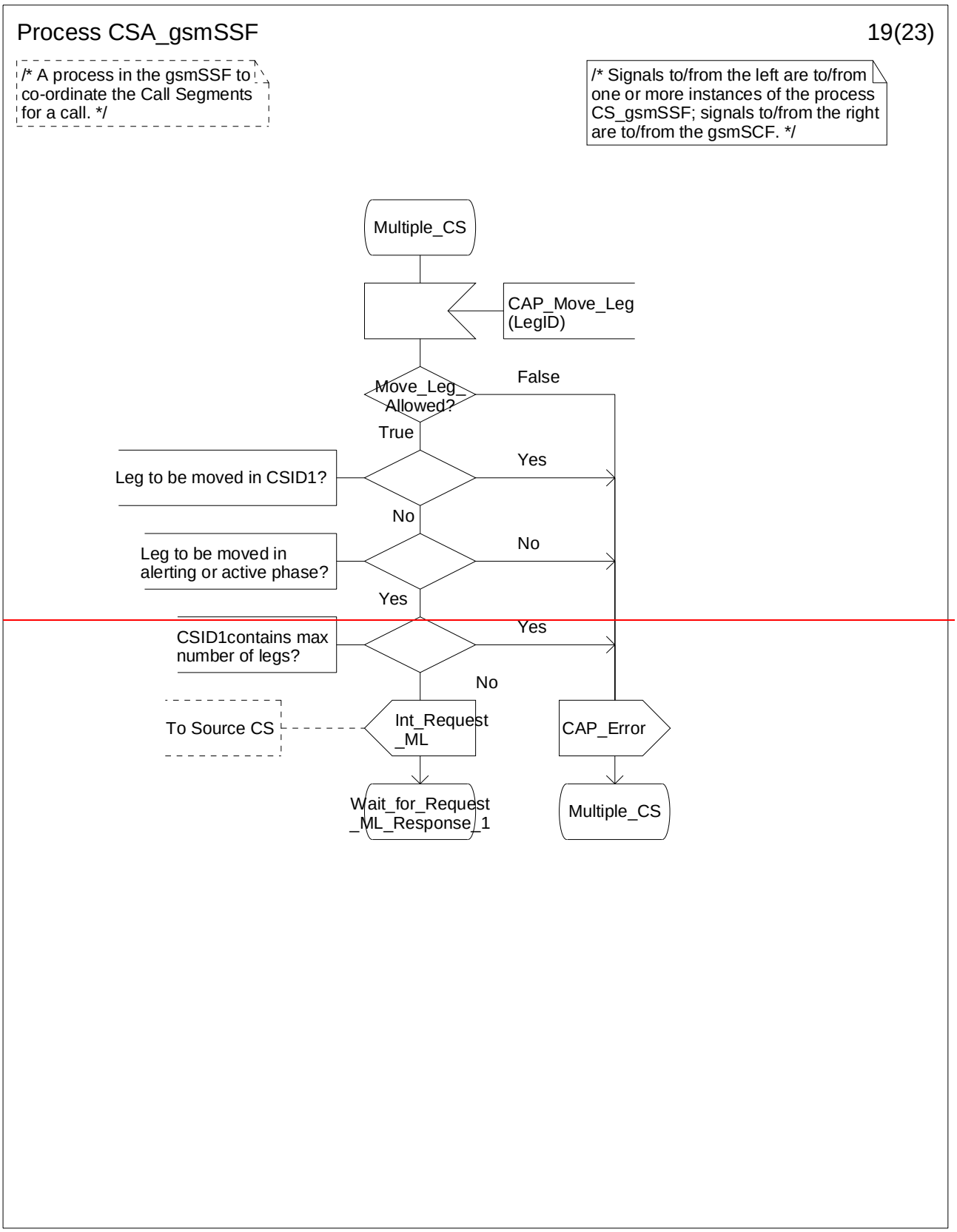
However, should gsmSCF use Move Leg at this moment, then all checks in CSA_gsmSSF, sheet 19 will pass and CSA_gsmSSF will attempt to "***move***" a leg into a non-existing CS1. This is an erroneous situation.

The present CR proposes therefore that CSA_gsmSSF, sheet 19, contain a check for the existence of CS1. If CS1 does not exist when Move Leg is used,

		then CSA_gsmSSF shall return error to gsmSCF.
Summary of change:	⌘	Correct CSA_gsmSSF, sheet 19
Consequences if not approved:	⌘	Service Logic may fail; the gsmSCF may attempt to use Move Leg at a moment that this is not allowed; further behaviour of the gsmSSF is unpredictable.

Clauses affected:	⌘	4.5.7.7				
		Y	**N**			
Other specs affected:	⌘	**X**		Other core specifications	⌘	29.078-CR373
			X	Test specifications		
			X	O&M Specifications		
Other comments:	⌘					

***** First Modification *****



~~Figure 4.113-19: Process CSA_gsmSSF (sheet 19)~~

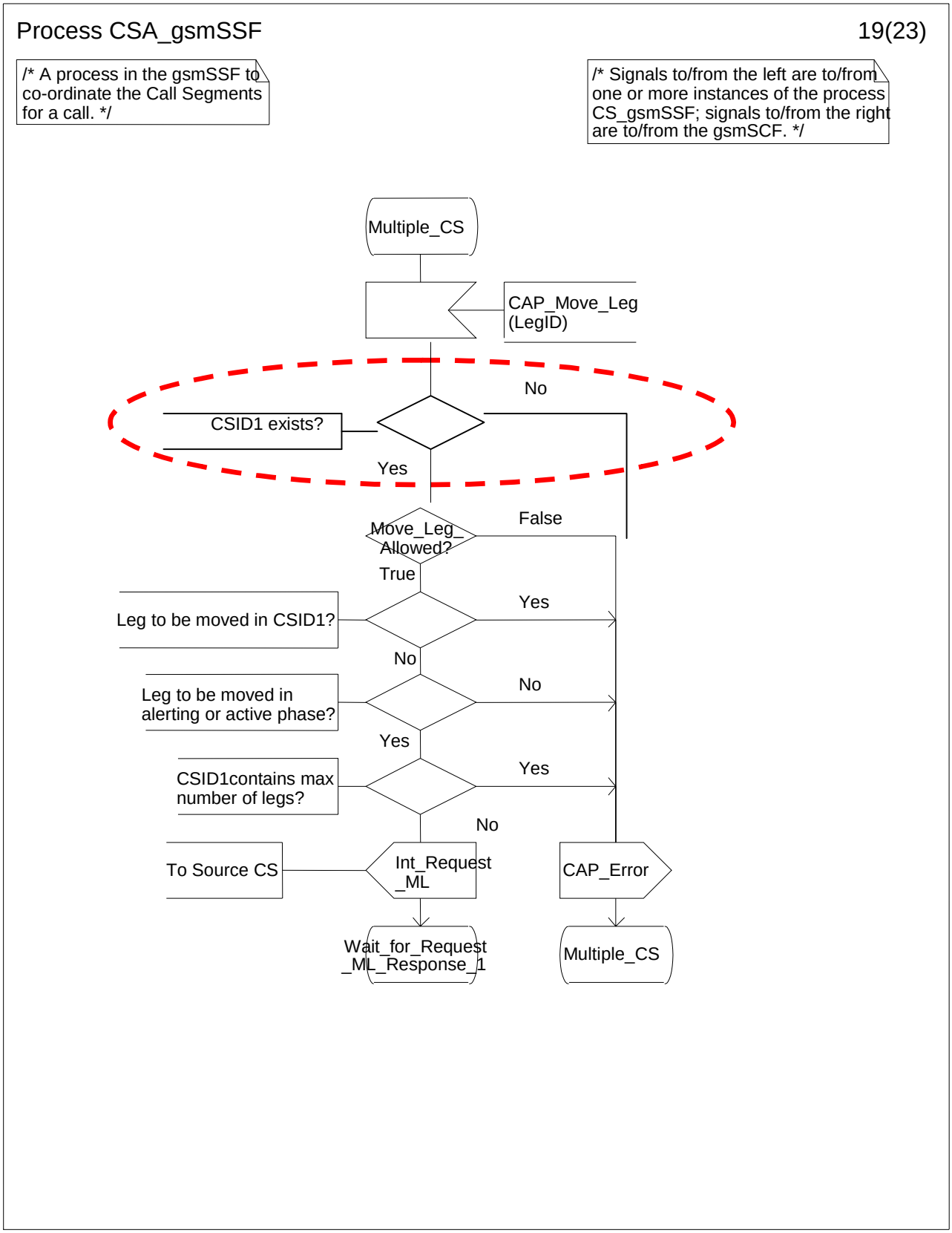


Figure 4.113-19: Process CSA_gsmSSF (sheet 19)

*** End of Document ***

CHANGE REQUEST

⌘ **23.078** **CR** **722** ⌘**rev** ⌘ Current version: **6.1.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to D-CSI suppression in Continue With Argument
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4 ***Date:*** ⌘ 10/05/2004
Category:	⌘	A ***Release:*** ⌘ Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	The Continue With Argument (CWA) Information Flow (IF) may contain the "Suppress D-CSI" Information Element (IE). This IE may be present if the CWA IF is used for an NP leg. The condition for this IE is specified as: "This IE indicates that D-CSI shall be suppressed for the new call leg. This IE can only be included if this IE is sent to the VMSC of the CAMEL subscriber." D-CSI may be sent to VLR and to GMSC. Hence, an NP leg that is created in a GMSC, may be subject to a D-CSI CAMEL Service. Hence, the gsmSCF should have the capability to use the IE "Suppress D-CSI" also in the CWA IF if this CWA IF is sent to the GMSC of the served subscriber. For that reason, the text in the description cell for this IE needs to be corrected accordingly.
Summary of change:	⌘	Correct the description of the "Suppress D-CSI" in the CWA IF.
Consequences if not approved:	⌘	A CAMEL Service which is controlling a call in the GMSC will not be able to suppress a D-CSI service.

Clauses affected:	⌘	4.6.2.9

Other specs affected: ⌘	Y	N	
		X	Other core specifications
		X	Test specifications
		X	O&M Specifications

⌘

Other comments: ⌘

***** *First Modification* *****

4.6.2.9 Continue With Argument

4.6.2.9.1 Description

This IF requests the gsmSSF to continue the call processing with modified information at the DP at which it previously suspended call processing to await gsmSCF instructions or to continue call processing after a Call Party Handling IF was received. The gsmSSF completes DP processing if necessary, and continues basic call processing (i.e. proceeds to the next point in call in the BCSM) with the modified call setup information as received from the gsmSCF.

This IF may also be used to continue call processing after an Initiate Call Attempt IF and Call Party Handling IF.

The gsmSCF can send modified call information at DP Collected_Info and at DP Analysed_Info, as listed in the MO and MF columns in subclause 4.6.2.9.2.

The gsmSCF can send modified call information at DP Termination_Attempt_Authorised, as listed in the MT and VT columns in subclause 4.6.2.9.2.

The gsmSCF can send modified call information immediately after sending an Initiate Call Attempt IF, as listed in the NC and NP columns in subclause 4.6.2.9.2.

In all other cases, Continue With Argument shall contain no other IE than Leg ID or Call Segment ID.

When this IF is used to resume the processing of an Initiate Call Attempt IF, then a Leg ID shall be included and Call Segment ID shall be absent.

When this IF is used to resume the processing of a Call Party Handling IF, then a Call Segment ID shall be included and Leg ID shall be absent.

When this IF is used to resume processing after an EDP-R or TDP-R, then a Leg ID shall be included and Call Segment ID shall be absent. The following exception exists: if this IF is used to resume processing after an EDP-R or TDP-R in one of the following scenarios:

- the CSA has one Call Segment only, which includes leg 1 only;
- the CSA has one Call Segment only, which includes leg 2 only;
- the CSA has one Call Segment only, which includes leg 1 and leg 2, but no other legs;

then, the Leg ID may be present or absent, as required by the Service Logic.

4.6.2.9.2 Information Elements

Information element name	MO	MF	MT	VT	NC	NP	Description
Alerting Pattern	-	-	O	O	O	-	This IE indicates the kind of Alerting Pattern to be applied.
Calling Partys Category	O	O	O	O	O	O	This IE indicates the type of calling party (e.g., operator, pay phone, ordinary subscriber).
Generic Number	O	O	O	O	O	O	This IE contains the generic number. It is used to convey the additional calling party number, which e.g. could be used to modify the calling line ID presented to the called user.
Carrier	O	O	O	O	O	O	This IE is described in a table below.
NA Originating Line Information	O	O	O	O	O	O	This IE identifies the type of number in the Charge Number (e.g. subscriber versus PLMN operator number).
Charge Number	O	O	O	O	O	O	This IE identifies the chargeable number for the usage of a North American carrier.
Suppression Of Announcements	-	-	O	O	O	O	This IE indicates that announcements or tones generated as a result of unsuccessful call establishment shall be suppressed.

Information element name	MO	MF	MT	VT	NC	NP	Description
Service Interaction Indicators Two	O	O	O	O	O	O	This IE is described in a table below.
CUG Interlock Code	O	O	-	-	O	O	See 3GPP TS 23.085 [**Error! Reference source not found.**] for details of this IE.
Outgoing Access Indicator	O	O	-	-	O	O	See 3GPP TS 23.085 [**Error! Reference source not found.**] for details of this IE.
Basic OR Interrogation Requested	O	O	-	-	O	O,S	This IE indicates that a Basic Optimal Routeing interrogation is requested for the call. If Basic Optimal Routeing is successful, this will be reported to the gsmSCF in the Answer event report. This IE shall be ignored if the VMSC associated with the gsmSSF does not support Basic Optimal Routeing. This IE shall be ignored if it is received in a gsmSSF which is handling the MF call case in the GMSC function of the forwarding subscriber. For an NP call leg, this IE can only be included if the original call was an MO or NC call.
Leg ID	O,E	O,E	O,E	O,E	O,E	O,E	This IE indicates the party for which call processing is to be resumed.
Call Segment ID	O,E	O,E	O,E	O,E	O,E	O,E	This IE indicates the call segment for which call processing is to be resumed.
Suppress O-CSI	-	-	O	O	-	-	This IE indicates that O-CSI shall be suppressed for the forwarding leg or deflecting leg.
Suppress D-CSI	-	-	-	-	-	O	This IE indicates that D-CSI shall be suppressed for the new call leg. This IE can only be included if this IE is sent to the VMSC or GMSC of the CAMEL subscriber.
Suppress N-CSI	-	-	-	-	O	O	This IE indicates that N-CSI shall be suppressed for the new call leg.
Suppress Outgoing Call Barring	-	-	-	-	-	O	This IE indicates that Outgoing Call Barrings for the created leg shall be suppressed. This IE can only be included if the Initiate Call Attempt IF is sent to the VMSC of the CAMEL subscriber.

…

****** End of Document ******

CHANGE REQUEST

⌘ **23.078** **CR** **719** ⌘ **rev** **1** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to Entity Released for individual call party
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	12/05/2004
Category:	⌘	F (Agreed by consensus)
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

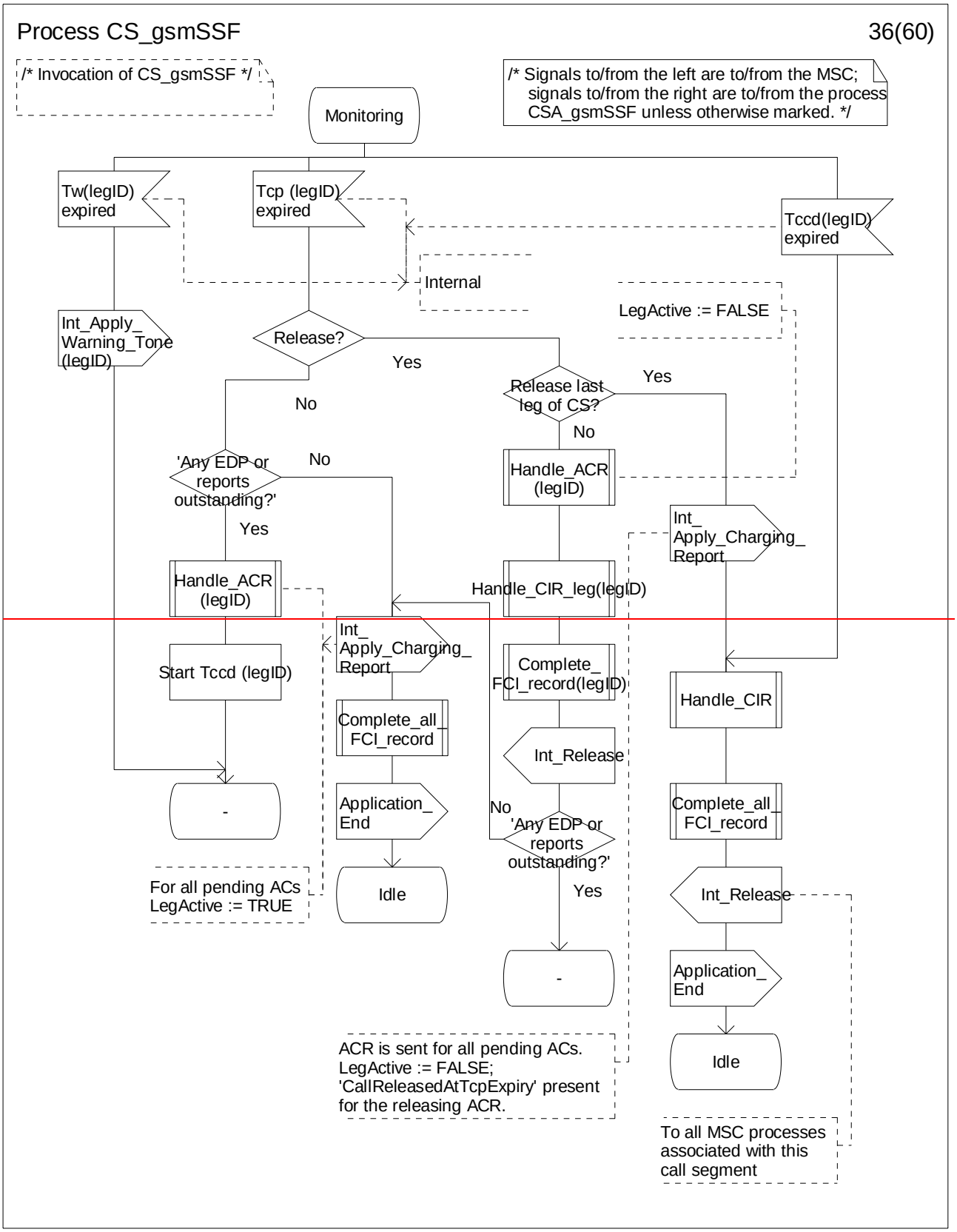
Reason for change:	⌘	When Tccd expires, then this results in signal Application_End to CSA_gsmSSF. When CSA_gsmSSF FSM is in state Multiple_CS, then the signal Application_End is currently not reported to gsmSCF. Tccd expiry leads to termination of CS_gsmSSF process and should therefore be reported to gsmSCF through Entity Released (if CSA_gsmSSF FSM is in state Multiple_CS). Therefore, CS_gsmSSF should send Application_End with a specific parameter ("CS_Failure") to CSA_gsmSSF in the case of Tccd expiry. When CSA_gsmSSF FSM is in state One_CS, an Application_End signal from CS_gsmSSF is propagated, if not already done, to gsmSCF (CSA_gsmSSF, sheet 4); when CSA_gsmSSF FSM is in state Multiple_CS, an Application_End signal with CS_Failure from CS_gsmSSF shall result in Entity Released (CallSegmentFailure).
Summary of change:	⌘	Sheet 36 and 50 of CS_gsmSSF: when Tccd expires, then CS_gsmSSF shall send Application_End with CS_Failure to CSA_gsmSSF. Sheet 21 of CSA_gsmSSF: if CSA_gsmSSF receives Application_End with CS_Failure, when CSA_gsmSSF is in state Multiple_CS, then Entity_Released (CallSegmentFailure) shall be sent to gsmSCF.
Consequences if not approved:	⌘	Release of individual call party (and associated CS) will not be signaled to gsmSCF. This may result in failure of on-line charging service.

Clauses affected:	⌘	4.5.7.5 (Process CS_gsmSSF and procedures), 4.5.7.7 (Process CSA_gsmSSF and procedures)
Other specs	⌘	Y: ☐ N: **X** Other core specifications ⌘

affected:		Test specifications
	X	O&M Specifications
Other comments:	⌘	

***** First Modification *****

4.5.7.5 Process CS_gsmSSF and procedures



~~Figure 4.96-36: Process CS_gsmSSF (sheet 36)~~

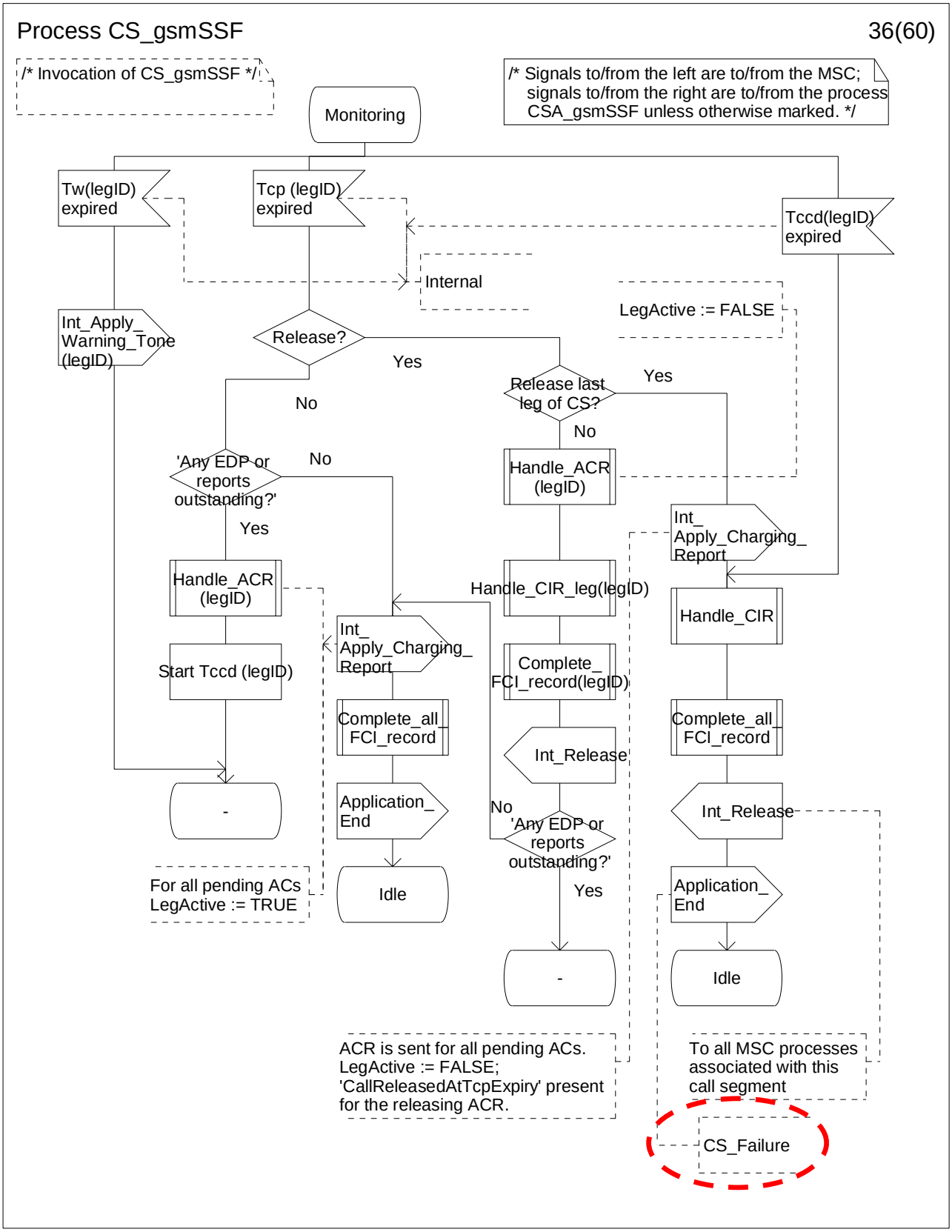
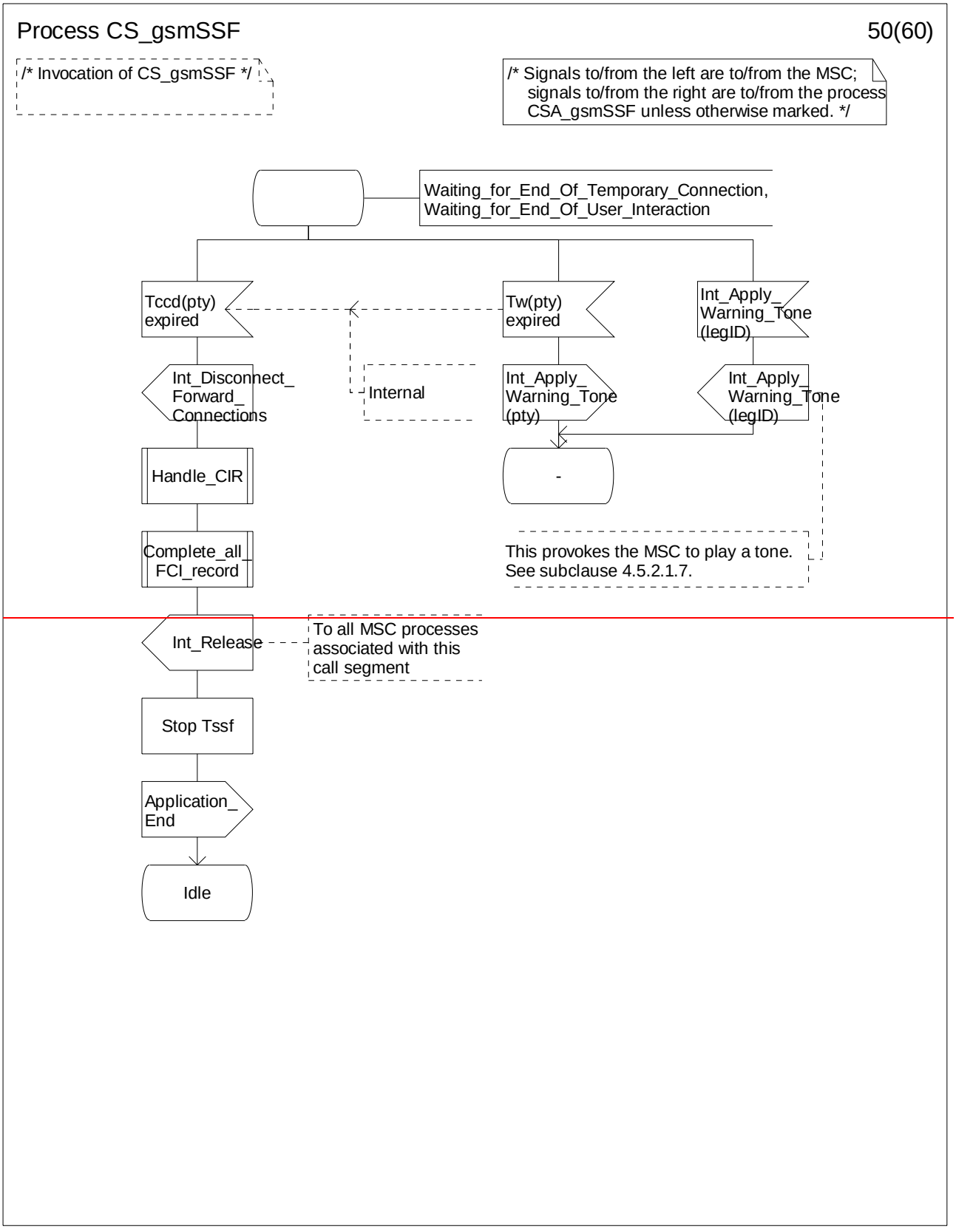


Figure 4.96-36: Process CS_gsmSSF (sheet 36)


Process CS_gsmSSF
50(60)
/* Invocation of CS_gsmSSF */
/* Signals to/from the left are to/from the MSC; signals to/from the right are to/from the process CSA_gsmSSF unless otherwise marked. */
Waiting_for_End_Of_Temporary_Connection, Waiting_for_End_Of_User_Interaction
Tccd(pty) expired
Tw(pty) expired
Int_Apply_ Warning_Tone (legID)
Int_Disconnect_ Forward_ Connections
Internal
Int_Apply_ Warning_Tone (pty)
Int_Apply_ Warning_Tone (legID)
Handle_CIR
-
Complete_all_ FCI_record
This provokes the MSC to play a tone. See subclause 4.5.2.1.7.
Int_Release
To all MSC processes associated with this call segment
Stop Tssf
Application_ End
Idle

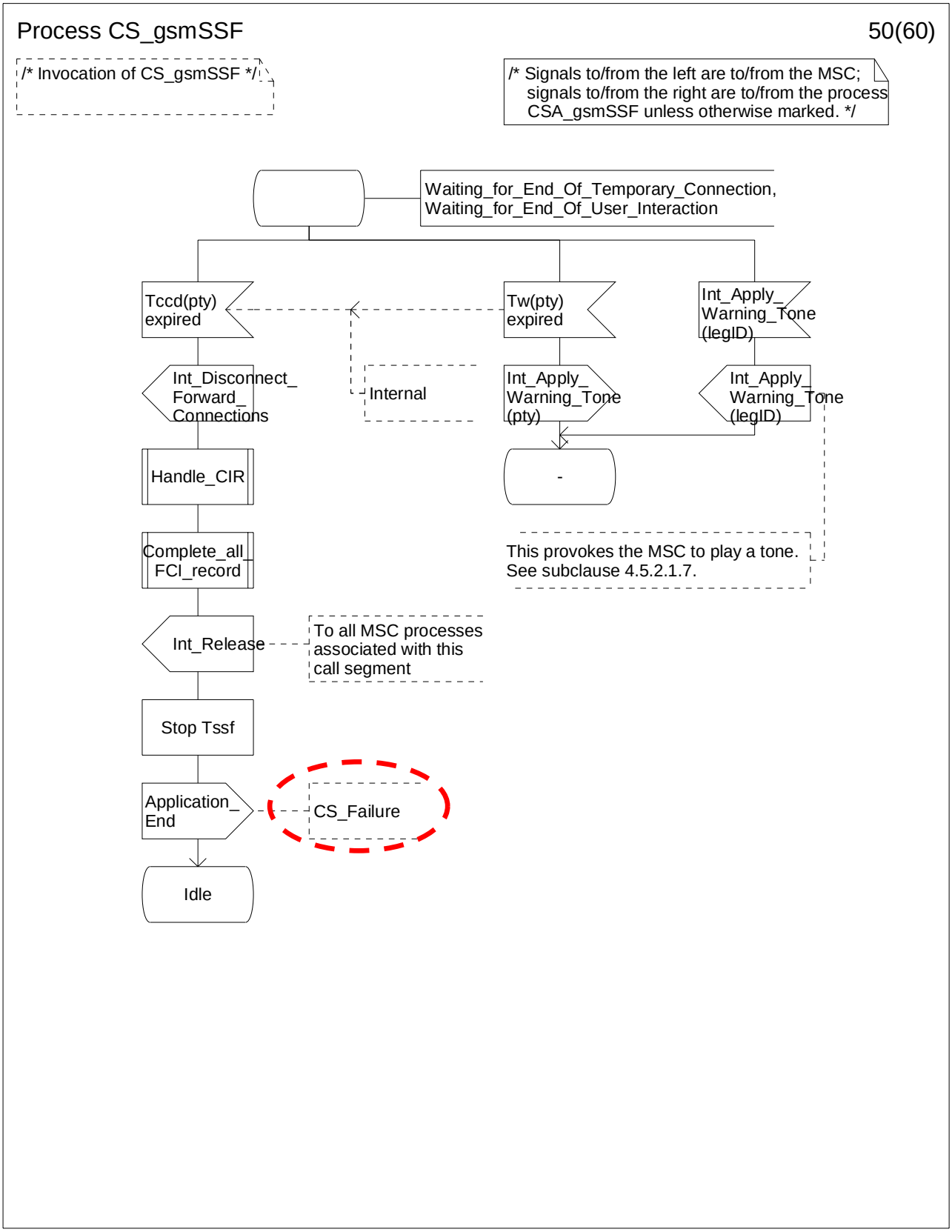
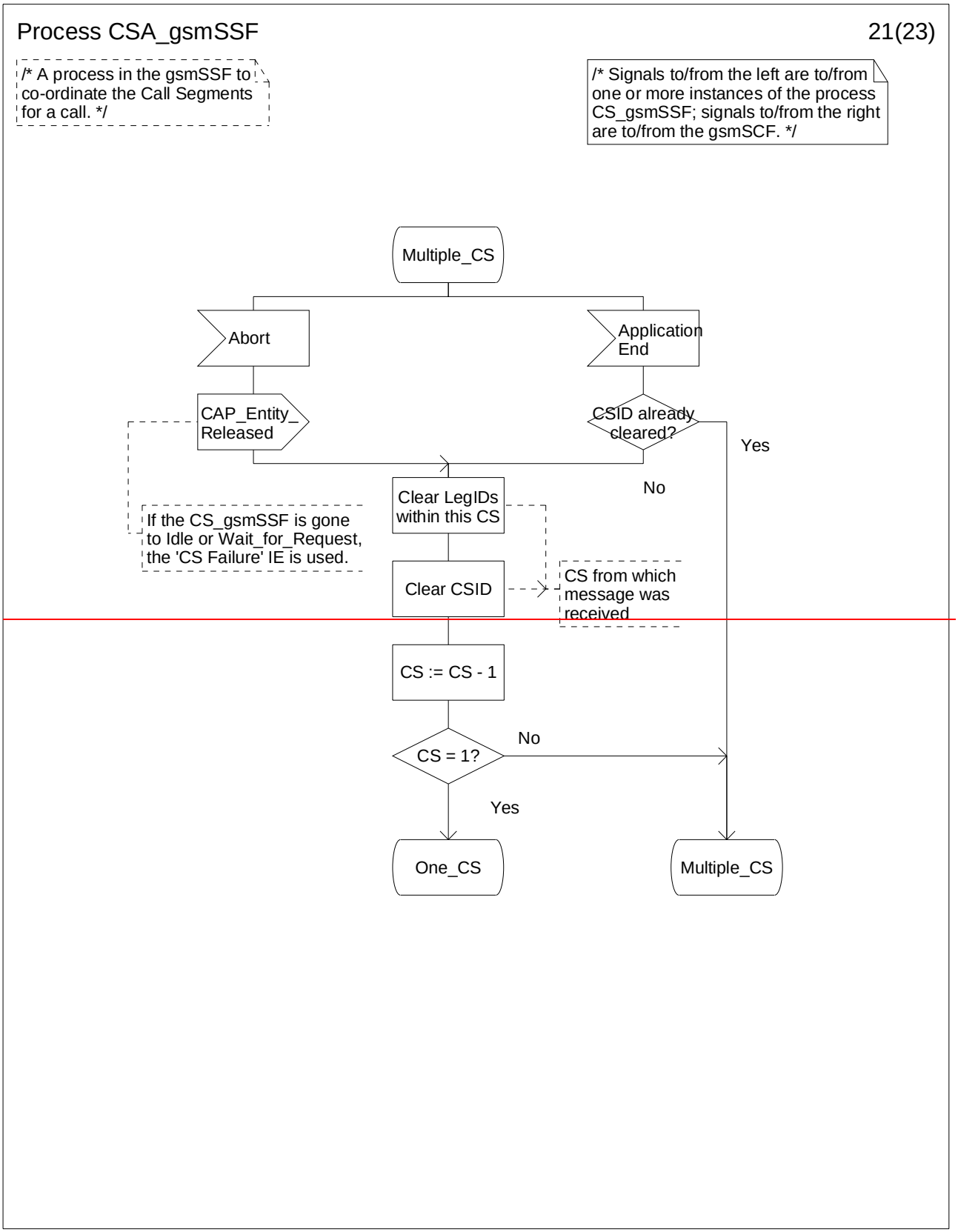


Figure 4.96-50: Process CS_gsmSSF (sheet 50)

***** Next Modification *****

4.5.7.7 Process CSA_gsmSSF and procedures



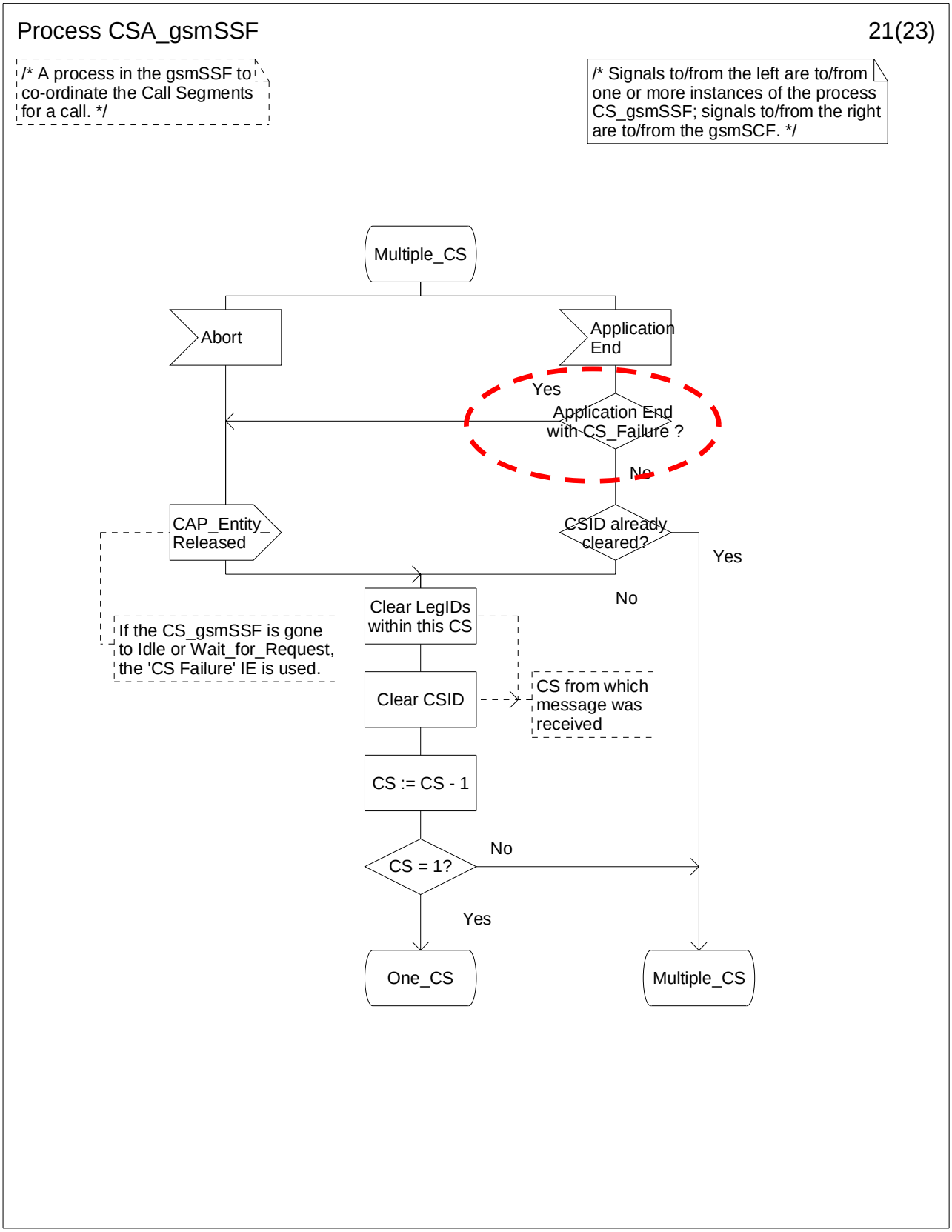


Figure4.113-21: Process CSA_gsmSSF (sheet 21)

****** End of Document ******

3GPP TSG CN WG2 Meeting #33
Zagreb, Croatia, 10th – 14th May 2004

N2-040220

CR-Form-v7

CHANGE REQUEST

⌘ **29.078** **CR** **369** ⌘ **rev** **1** ⌘ Current version: **5.7.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Mapping between ICA and IAM
Source:	⌘	Alcatel
Work item code:	⌘	CAMEL4
Date:	⌘	12/05/2004
Category:	⌘	**F (Agreed by consensus)**
Release:	⌘	*Rel-5*

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	According to the stage 1 and 2, CPH operations are allowed only for speech call. To set up a new call leg or a new call , the gsmSCF sends an ICA then CPH operations will be used in order to continue the call, so ICA call is allowed only for speech call. Nevertheless it is not clearly defined in the standard yet.
Summary of change:	⌘	Description of mapping between ICA and IAM. It has to be noted that the minimum set of parameters indicating the call is a speech call is described.
Consequences if not approved:	⌘	As it is not clearly defined how a ICA call shall be mapping on ISUP message, different implementations may occur implying interworking problems and unsuccessful calls.

Clauses affected:	⌘	§ A.8
Other specs affected:	⌘	Y / N ☐ / ☒ Other core specifications ☐ / ☒ Test specifications ☐ / ☒ O&M Specifications
Other comments:	⌘	

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm.
Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

A.8 InitiateCallAttempt operation

On receipt of an InitiateCallAttempt operation, the GMSC/gsmSSF or VMSC/gsmSSF prepares to set up a new call leg in an existing call configuration, or to set up a new call, to the destination defined by the DestinationRoutingAddress parameter. The GMSC/gsmSSF or VMSC/gsmSSF does not send the ISUP IAM until it has received a ContinueWithArgument operation, which contains additional information needed to populate the parameters of the ISUP IAM.

Table A.6 illustrates the mapping of parameters received in the InitiateCallAttempt operation to parameters sent in the ISUP IAM to the succeeding exchange.

Table A.6

CAP Operation InitiateCallAttempt (Note 1)	ISUP message IAM
DestinationRoutingAddress	Called party number
CallingPartyNumber	Calling party number
	Transmission medium requirement (Note 2) (Note 4)
	Access transport (Note 3) (Note 4)

NOTE 1: Optional parameters may be absent, i.e. they are mapped only if received.

NOTE 2: The transmission medium requirement parameter field shall be set to "speech".

NOTE 3 The "Bearer capability" and "High layer compatibility information" elements shall be filled in accordance with ETSI EN 300 403-1 [25] for speech call.

NOTE 4 Only the minimum set of parameters indicating the fact that the call is a speech call is described here.

3GPP TSG CN WG2 Meeting #33
Zagreb, Croatia, 10th – 14th May 2004

N2-040221

CR-Form-v7

CHANGE REQUEST

⌘ **29.078** **CR** **370** ⌘ **rev** **1** ⌘ Current version: **6.1.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Mapping between ICA and IAM
Source:	⌘	Alcatel
Work item code:	⌘	CAMEL4
Date:	⌘	12/05/2004
Category:	⌘	**A**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change:	⌘	According to the stage 1 and 2, CPH operations are allowed only for speech call. To set up a new call leg or a new call , the gsmSCF sends an ICA then CPH operations will be used in order to continue the call, so ICA call is allowed only for speech call. Nevertheless it is not clearly defined in the standard yet.
Summary of change:	⌘	Description of mapping between ICA and IAM. It has to be noted that the minimum set of parameters indicating the call is a speech call is described.
Consequences if not approved:	⌘	As it is not clearly defined how a ICA call shall be mapping on ISUP message, different implementations may occur implying interworking problems and unsuccessful calls.

Clauses affected:	⌘	§ A.8
Other specs affected:	⌘	Y / N Other core specifications: N (X) Test specifications: N (X) O&M Specifications: N (X)
Other comments:	⌘	

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm.
Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

A.8 InitiateCallAttempt operation

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	Access transport (Note 3) (Note 4)

NOTE 1: Optional parameters may be absent, i.e. they are mapped only if received.

NOTE 2: The transmission medium requirement parameter field shall be set to "speech".

NOTE 3 The "Bearer capability" and "High layer compatibility information" elements shall be filled in accordance with ETSI EN 300 403-1 [25] for speech call.

NOTE 4 Only the minimum set of parameters indicating the fact that the call is a speech call is described here.

CHANGE REQUEST

⌘ **23.078** **CR** **720** ⌘**rev** **1** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to User Interaction before Answer
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4 ***Date:*** ⌘ 11/05/2004
Category:	⌘	F (essential correction) ***Release:*** ⌘ Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘

Call Party Handling allows for the Disconnecting of leg2 (with Disconnect Leg) during IDP processing. The SCP may use DL at IDP in order to "replace" leg2 by an NP leg. The NP leg is created in a separate Call Segment and may be moved into Call Segment 1 as soon as the NP leg has reached the Alerting state, provided that other conditions are fulfilled.

If this mechanism is used, then the MSC starts leg 1 handling when leg 1 is not yet active.

While the NP leg is being established, the CAMEL Service may want to apply User Interaction to the calling party. Service examples include (list is not exhaustive):

- Personal Greeting Service;
- Call Hunting Announcement.

Mobile Originating call

When leg2 is disconnected at IDP for an MO call, then procedure OG_Call_Setup_MSC in TS 23.018 calls procedure CAMEL_OCH_LEG1_MSC[Leg1_status = Set-up] in TS 23.078. Procedure CAMEL_OCH_LEG1_MSC then enters the state Wait_For_ACM.

CAMEL_OCH_LEG1_MSC remains in this state, until ACM or Connect is received. The ACM or Connect would in this scenario originate from an outgoing leg, when this leg is moved into Call Segment 1.

However, until the moment that an outgoing leg is moved into Call Segment 1, it is not possible to apply User Interaction to the calling party. Reason is that there is no User Interaction input in the state Wait_For_ACM in procedure CAMEL_OCH_LEG1_MSC.

Mobile Terminating call in GMSC

When leg2 is disconnected at IDP for an MT call, then process MT_GMSC in TS 23.018 starts process CAMEL_MT_LEG1_GMSC[Leg1_status = Set-up] in TS 23.078. Process CAMEL_MT_LEG1_GMSC enters the state Wait_For_ACM.

CAMEL_MT_LEG1_GMSC remains in this state, until ACM or Connect is received. The ACM or Connect would in this scenario originate from an outgoing leg, when this leg is moved into Call Segment 1.

However, until the moment that an outgoing leg is moved into Call Segment 1, it is not possible to apply User Interaction to the calling party. Reason is that there is no User Interaction input in the state Wait_For_ACM in process CAMEL_MT_LEG1_GMSC.

Mobile Terminating call in VMSC

A similar problem exists with process CAMEL_ICH_LEG1_MSC, which is started from process ICH_MSC in TS 23.018 with Leg1_Status = Set-up.

Mobile Forwarded call

A similar problem exists with procedure CAMEL_MT_CF_LEG1_MSC, which is started from process MT_CF_MSC in TS 23.018 with Leg1_Status = Set-up.

To overcome the dilemma presented above, the present CR proposes that the MSC should allow for User Interaction in the state Wait_For_ACM in above-referred leg1 handling procedures and processes. The state Wait_For_ACM for those procedures and processes can't be compared with a ***regular*** Wait_For_ACM state, that is entered when an ISUP is generated and the process is waiting for ACM (or Connect). In above-referred leg1 handling procedures and processes, the MSC state machine has in fact no outgoing leg-in-establishment connected to it. Instead, the state machine is dependent on a CPH Operation, like MoveLeg.

When the CAMEL Service intends to move the NP leg into Call Segment 1 and User Interaction is ongoing for leg1 at that moment, then the CAMEL Service has to stop the User Interction before it can apply the Move Leg.

Summary of change: ⌘

- Correct procedure CAMEL_OCH_LEG1_MSC; include entries for User Interaction in the state Wait_For_ACM;
- Correct process CAMEL_MT_LEG1_GMSC; include entries for User Interaction in the state Wait_For_ACM;
- Correct process CAMEL_ICH_LEG1_MSC; include entries for User Interaction in the state Wait_For_ACM;
- Correct procedure CAMEL_MT_CF_LEG1_MSC; include entries for User Interaction in the state Wait_For_ACM.

When the leg1 procedure or process is in the state Wait_For_ACM and User Interaction is applied, then it is not possible that Answer is received from an outgoing leg, since there is no outgoing leg at that moment. Hence, the output of CAMEL_OCH_ETC etc. is checked for ***Fail*** and ***Else*** only.

Correct the description for process MT_GMSC in the table in section 4.5.1: CAMEL_MT_LEG1_**G**MSC and CAMEL_MT_LEG2_**G**MSC.

Consequences if not approved: ⌘

It will not be possible to play an announcement to the calling party for services that terminate the outgoing leg at call establishment. This would be a serious lack of functionality.

Clauses affected: ⌘ 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.5

Y | N

Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

***** *First Modification* *****

4.5.1 Overall SDL architecture

The following mapping from the SDL procedures to the Intelligent Network concepts apply:

SDL process	Description	SDL process specification
CSA_gsmSSF	Call Segment Association (CSA). The CSA SDL process distributes the CAP operations to the appropriate Call Segment(s).	3GPP TS 23.078
CS_gsmSSF	Call Segment (CS). Controls one or more BCSMs.	3GPP TS 23.078
OCH_MSC	O-BCSM in VMSC for Mobile Originating call controlling both Leg 1 and Leg 2. If CAP Disconnect Leg (leg 2) is received at the initial detection point (Collected_Info), then the call is not routed to the destination and the process calls the procedure CAMEL_OCH_LEG1_MSC to control Leg 1. If Answer is received, the process spawns the child process CAMEL_OCH_LEG2_MSC to control Leg 2 and calls the procedure CAMEL_OCH_LEG1_MSC to control Leg 1. The handling of the legs after answer is completely separate.	3GPP TS 23.018
MT_GMSC	T-BCSM in the GMSC controlling both Leg 1 and Leg 2. If CAP Disconnect Leg (leg 2) is received at the initial detection point (Terminating_Attempt_Authorised), then the call is not routed to the destination and the process spawns the child process CAMEL_MT_LEG1_MSC to control Leg 1. The process MT_GMSC terminates. If Answer is received, the process spawns the child process CAMEL_MT_LEG1_GMSC to control Leg 1 and calls the procedure CAMEL_MT_LEG2_GMSC to control Leg 2. The handling of the legs after answer is completely separate.	3GPP TS 23.018
MT_CF_MSC	O-BCSM in the redirecting MSC for Call Forwarding supplementary service, or Call Deflection supplementary service, or for CAMEL-based call forwarding. This process controls both Leg 1 and Leg 2. If CAP Disconnect Leg (leg 2) is received at the initial detection point (Collected_Info), then the call is not routed to the destination and the process calls the procedure CAMEL_MT_CF_LEG1_MSC to control Leg 1. If Answer is received, the process spawns the child process CAMEL_MT_CF_LEG2_MSC to control Leg 2 and calls the procedure CAMEL_MT_CF_LEG1_MSC to control Leg 1. The handling of the legs after answer is completely separate.	3GPP TS 23.018
ICH_MSC	T-BCSM in the VMSC controlling both Leg 1 and Leg 2. If CAP Disconnect Leg (leg 2) is received at the initial detection point (Terminating_Attempt_Authorised), then the call is not routed to the destination and the process spawns the child process CAMEL_ICH_LEG1_MSC to control Leg 1. The process ICH_MSC terminates. If Answer is received, the process spawns the child process CAMEL_ICH_LEG1_MSC to control Leg 1 and calls the procedure CAMEL_ICH_LEG2_MSC to control Leg 2. The handling of the legs after answer is completely separate.	3GPP TS 23.018
Assisting_MSC	The process in the MSC to handle an assist request.	3GPP TS 23.078
CAMEL_ICA_MSC	O-BCSM for gsmSCF initiated new call, or for new party set-up. This process controls the new leg.	3GPP TS 23.078

…

***** *Next Modification* *****

4.5.2 Handling of mobile originated calls

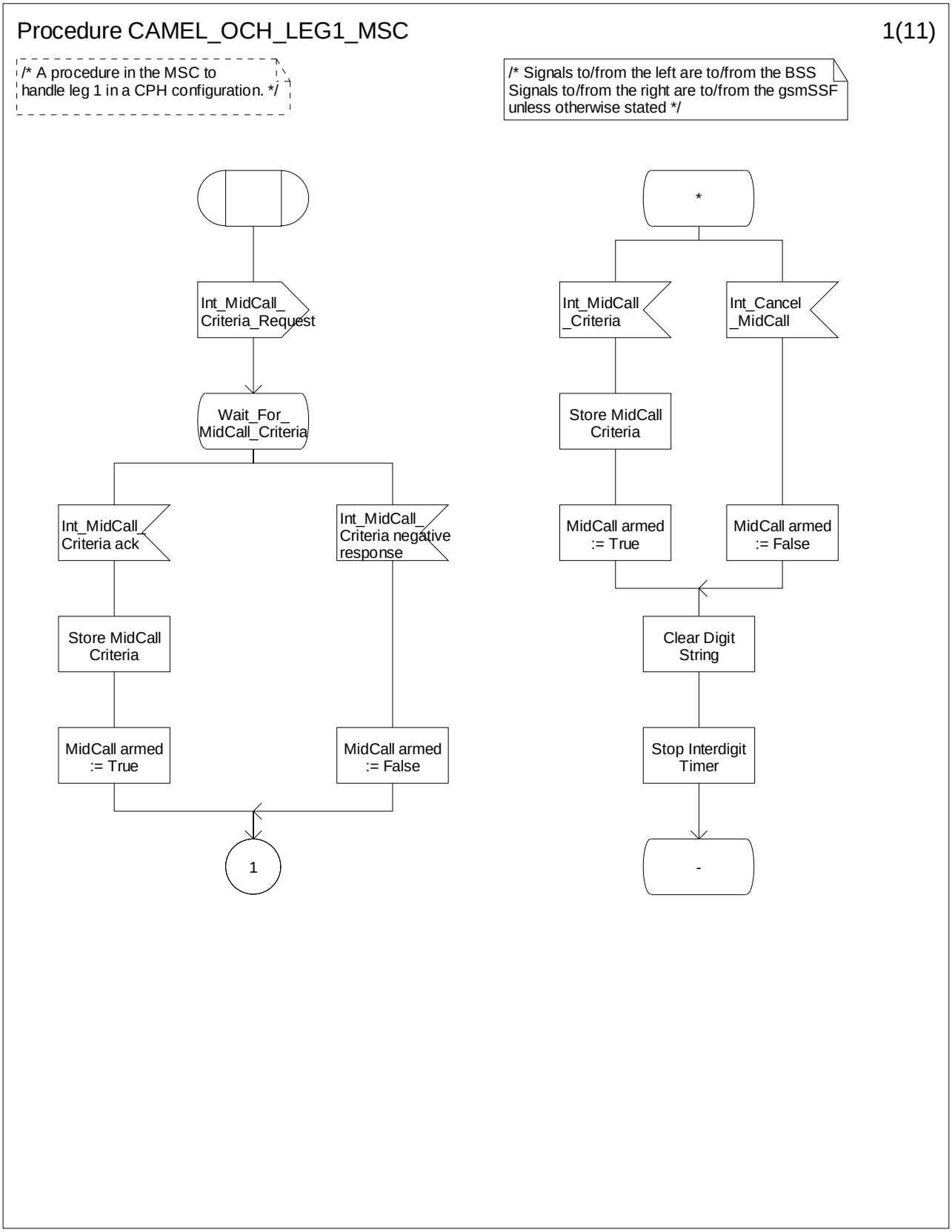


Figure Error! Reference source not found.**.1-1: Procedure CAMEL_OCH_LEG1_MSC (sheet 1)**

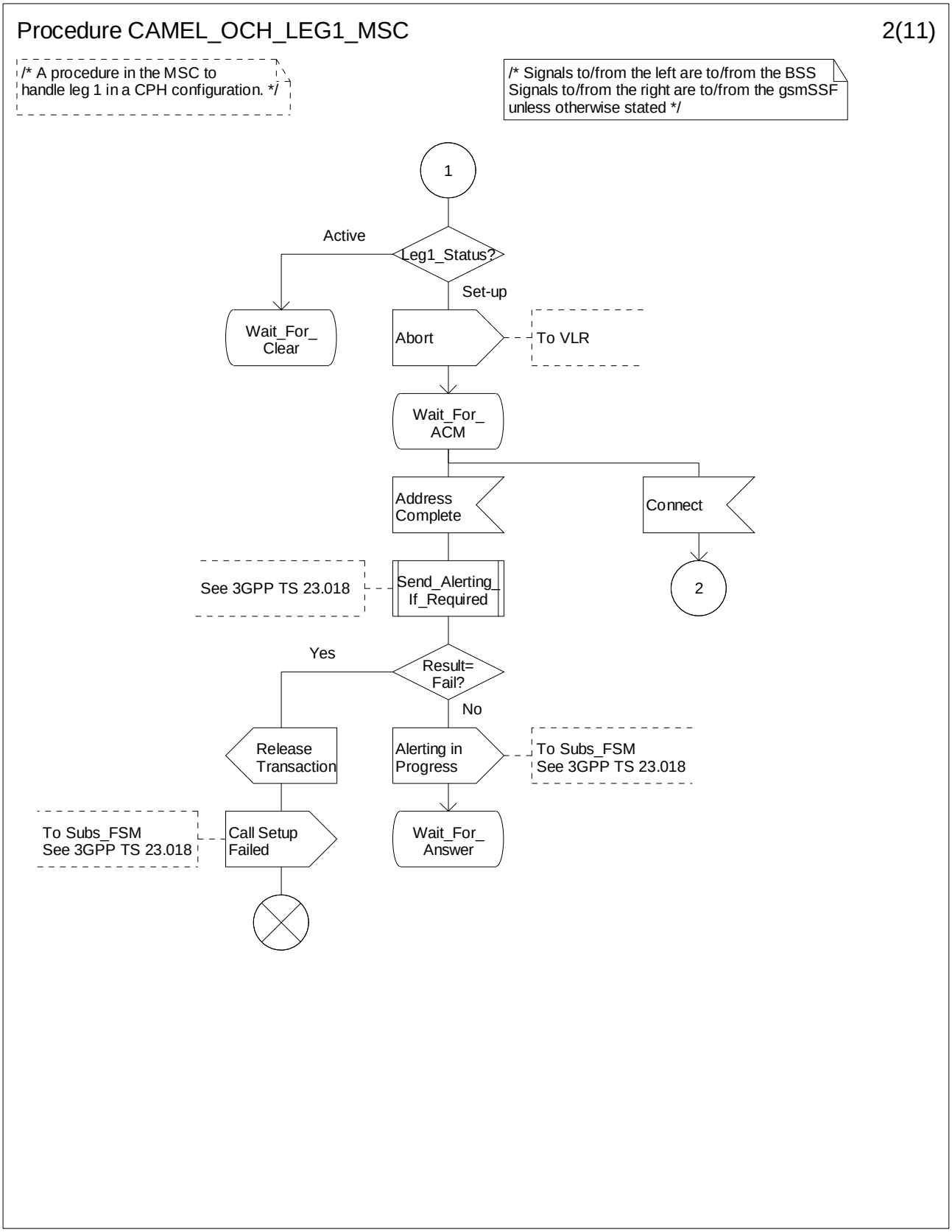


Figure Error! Reference source not found..1**-2: Procedure CAMEL_OCH_LEG1_MSC (sheet 2)**

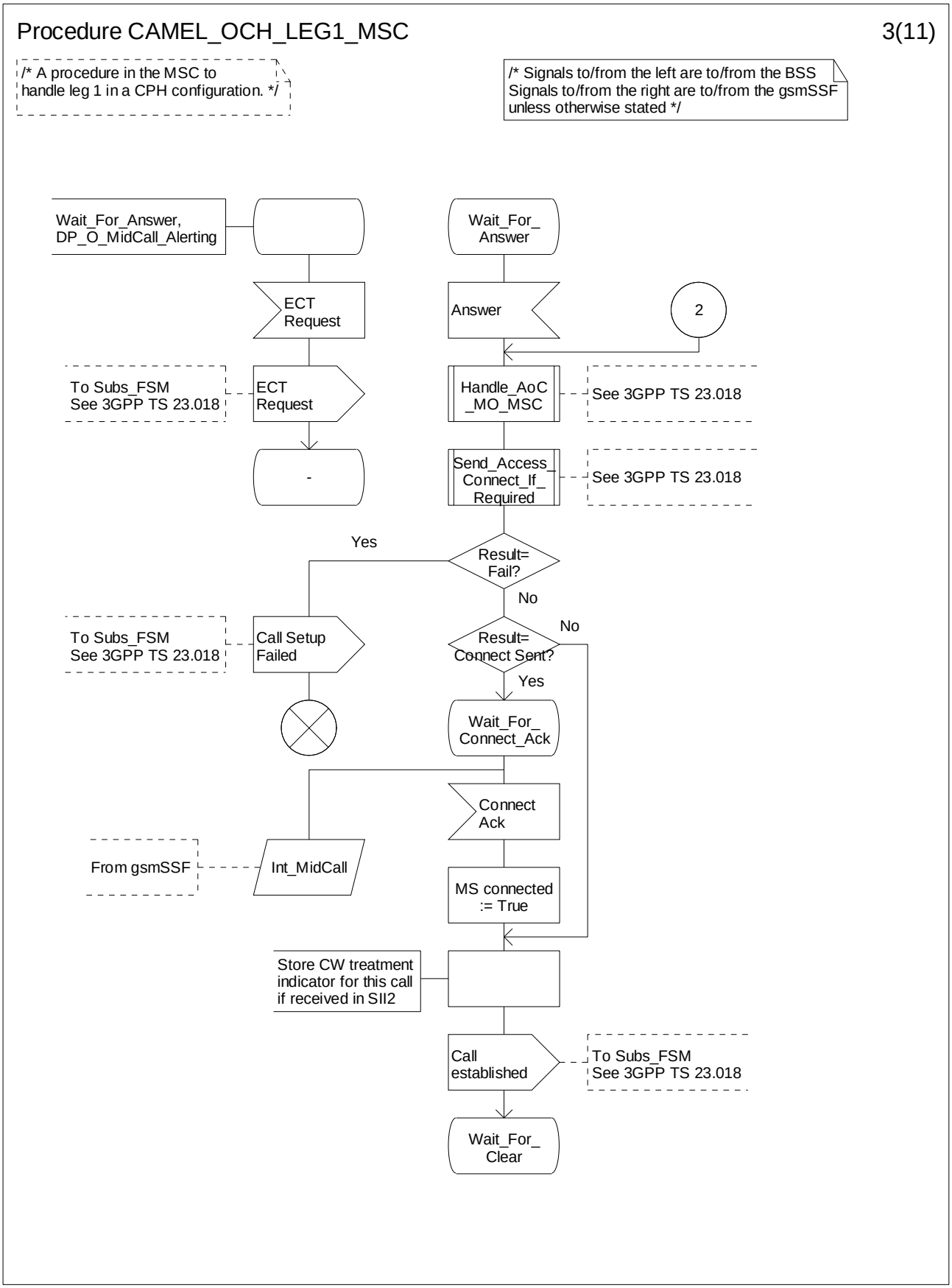


Figure Error! Reference source not found..1**-3: Procedure CAMEL_OCH_LEG1_MSC (sheet 3)**

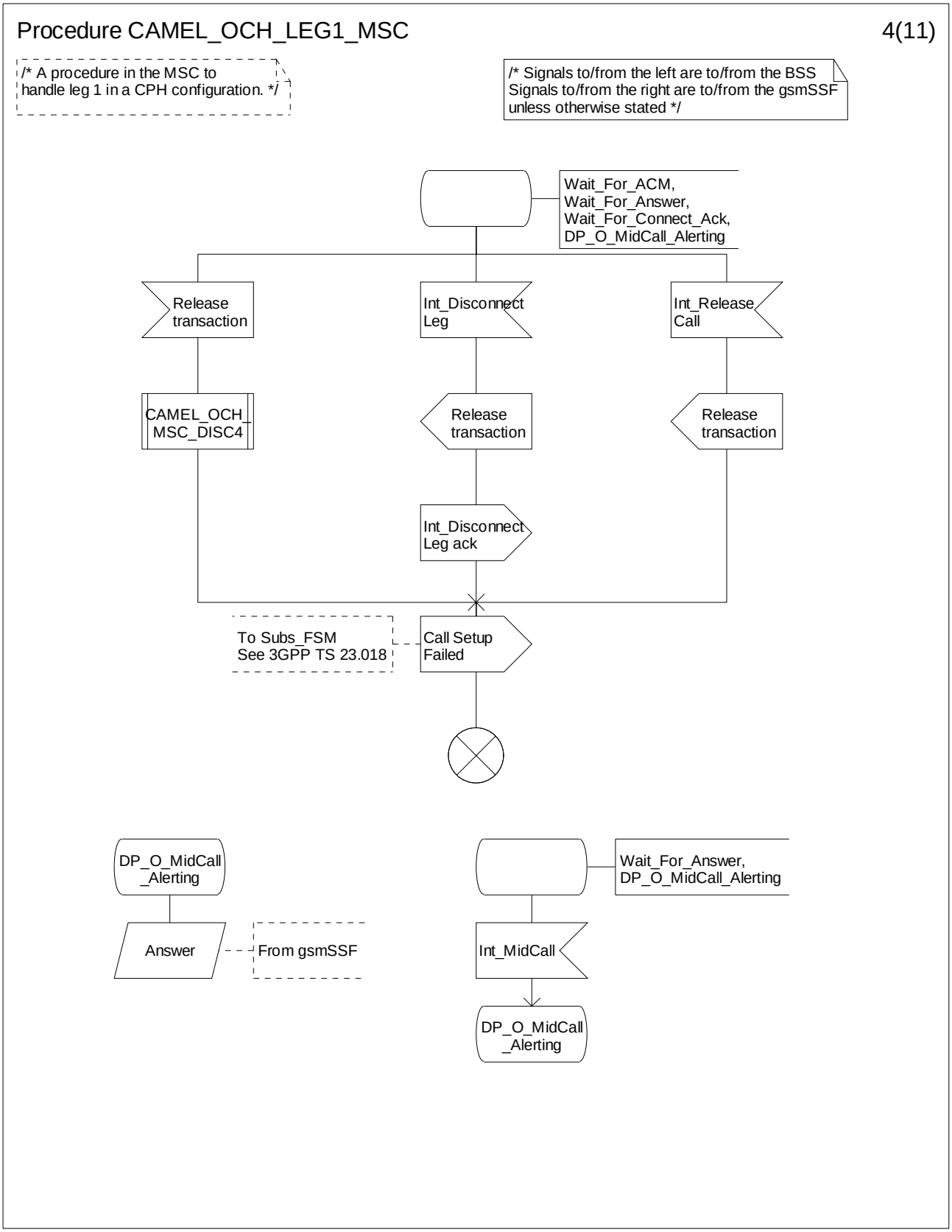


Figure Error! Reference source not found..1**-4: Procedure CAMEL_OCH_LEG1_MSC (sheet 4)**

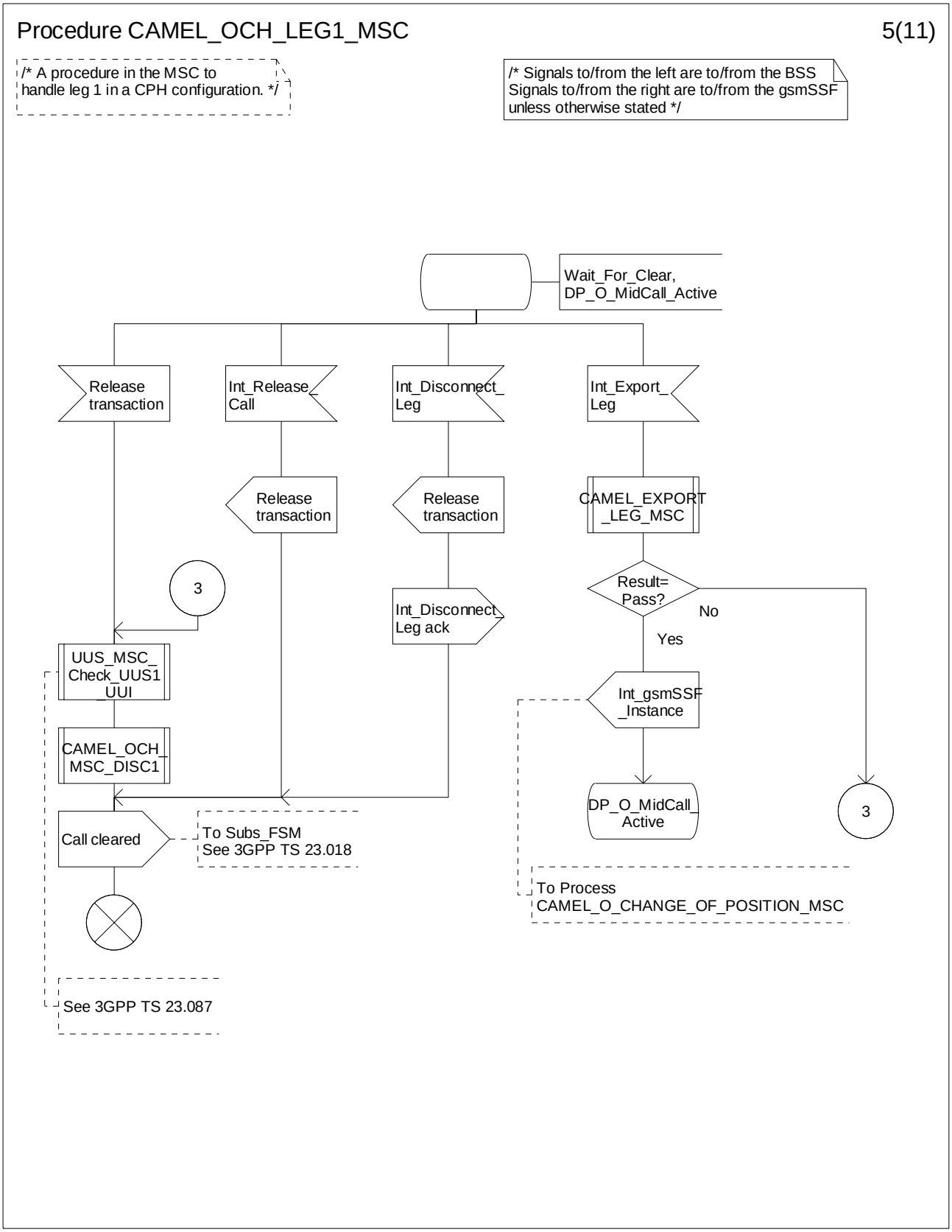


Figure Error! Reference source not found..1**-5: Procedure CAMEL_OCH_LEG1_MSC (sheet 5)**

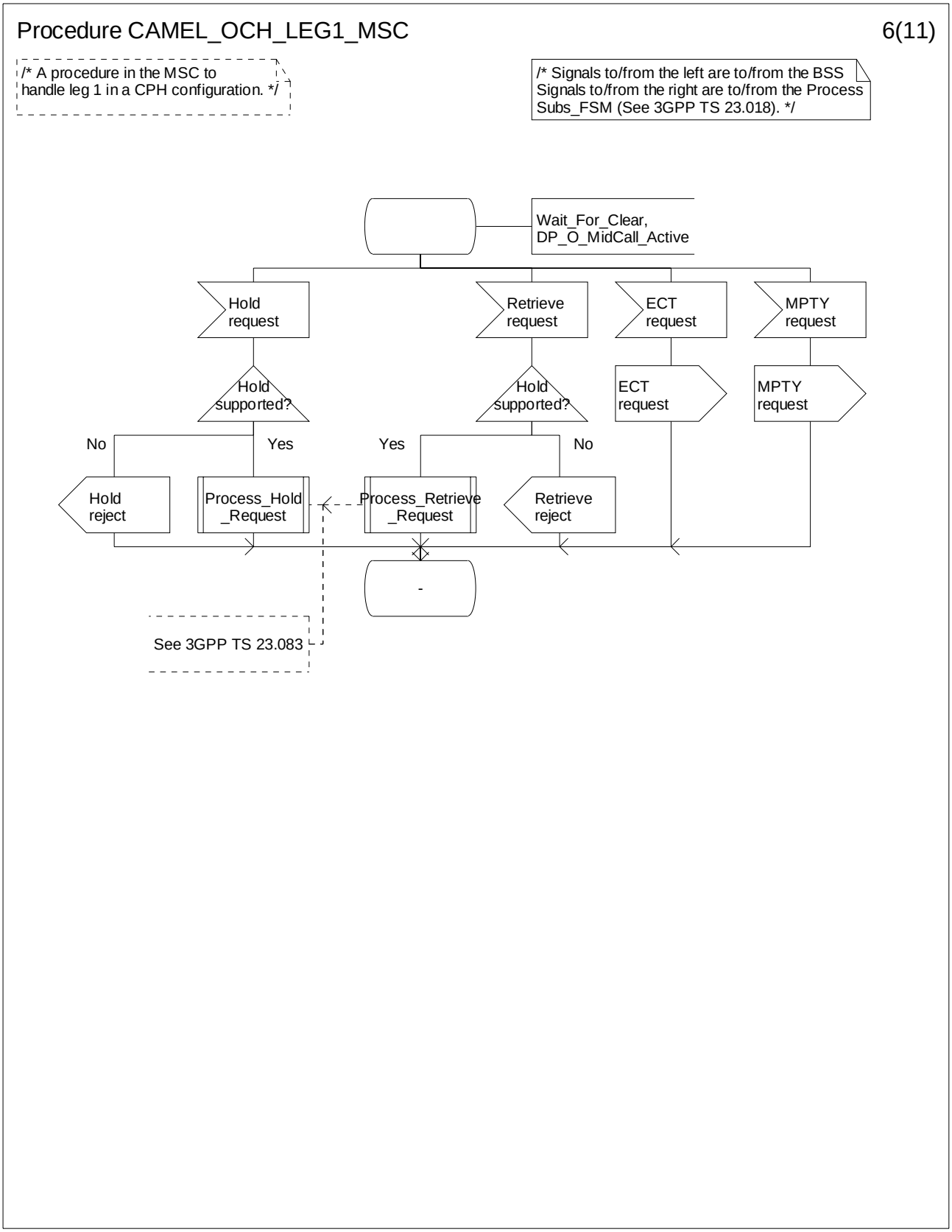


Figure Error! Reference source not found..1**-6: Procedure CAMEL_OCH_LEG1_MSC (sheet 6)**

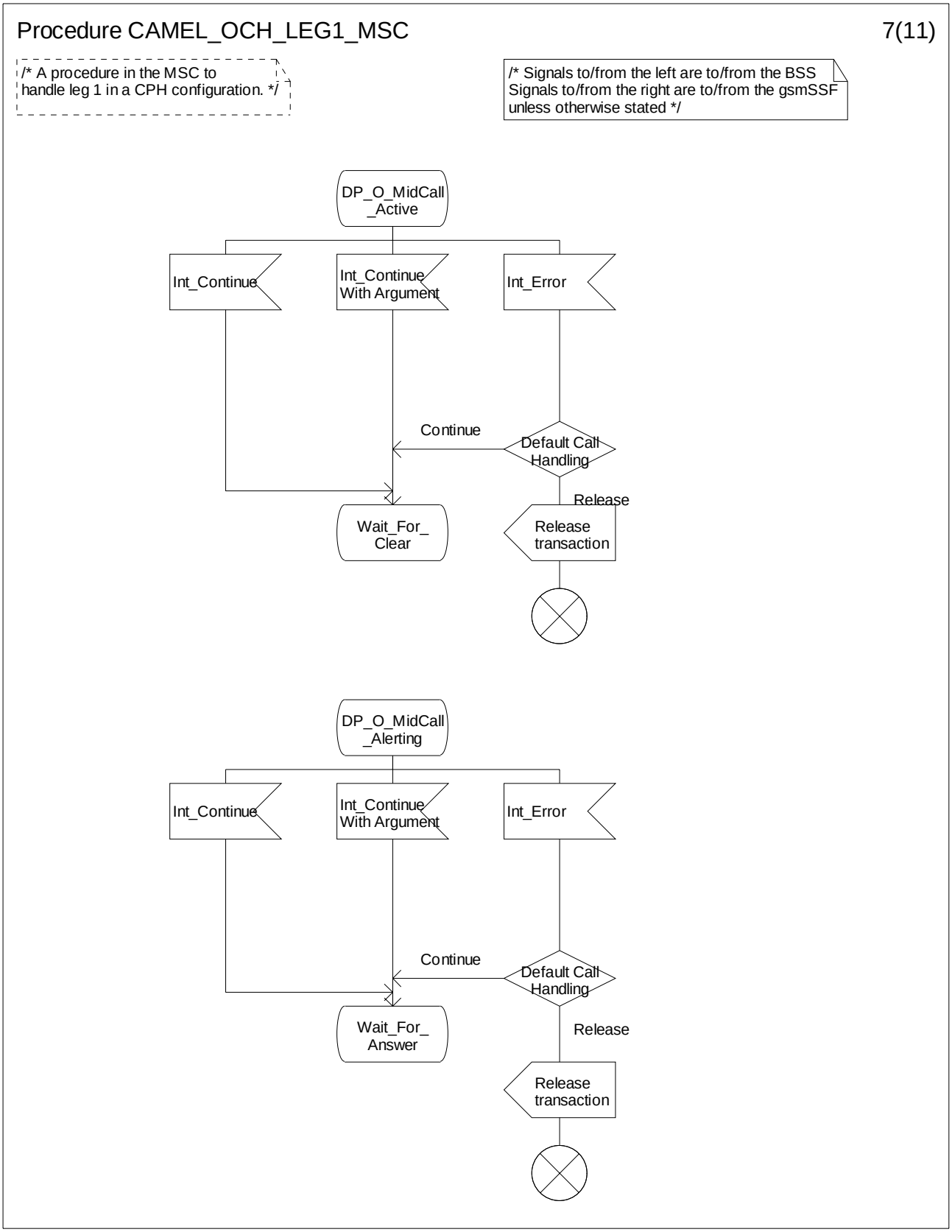


Figure Error! Reference source not found..1**-7: Procedure CAMEL_OCH_LEG1_MSC (sheet 7)**

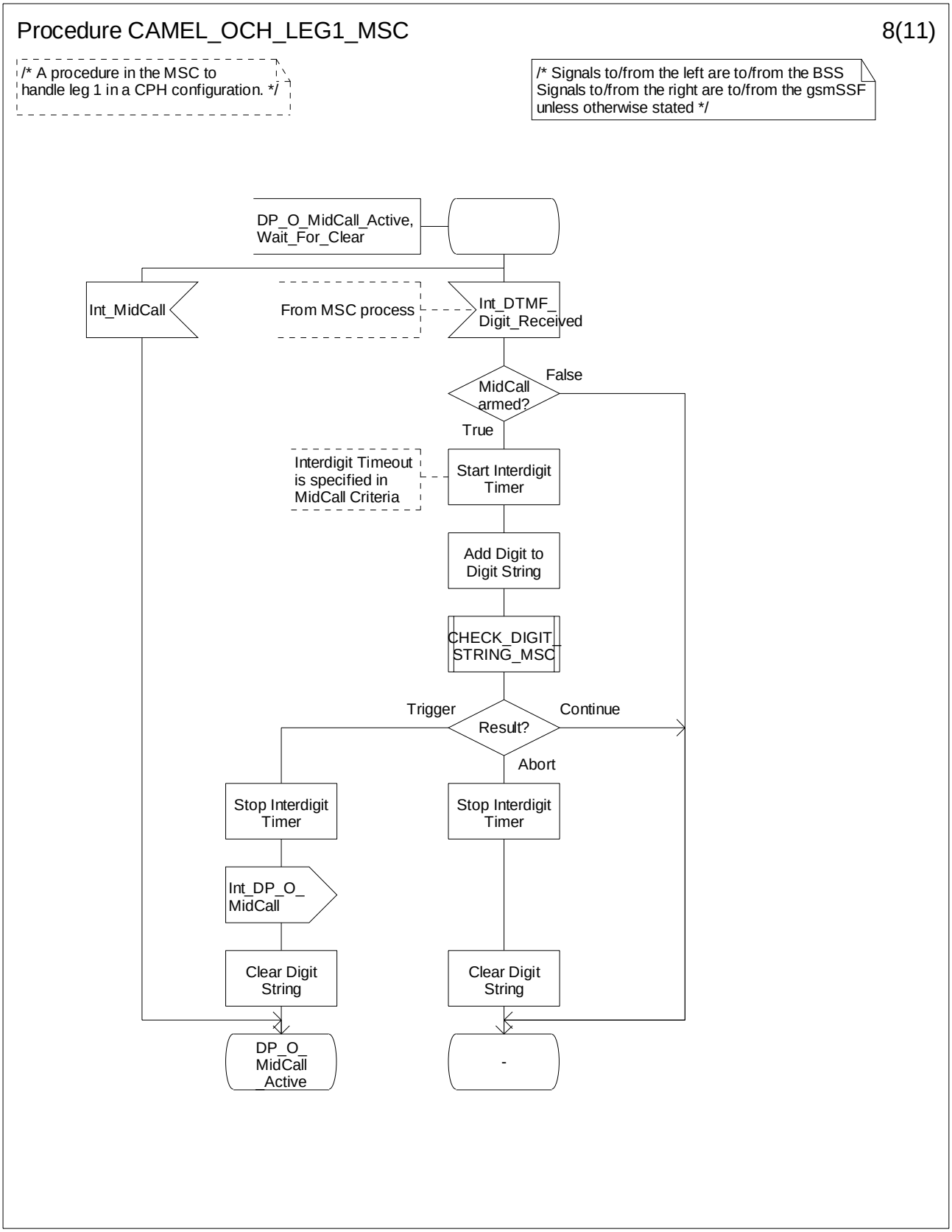


Figure Error! Reference source not found..1**-8: Procedure CAMEL_OCH_LEG1_MSC (sheet 8)**

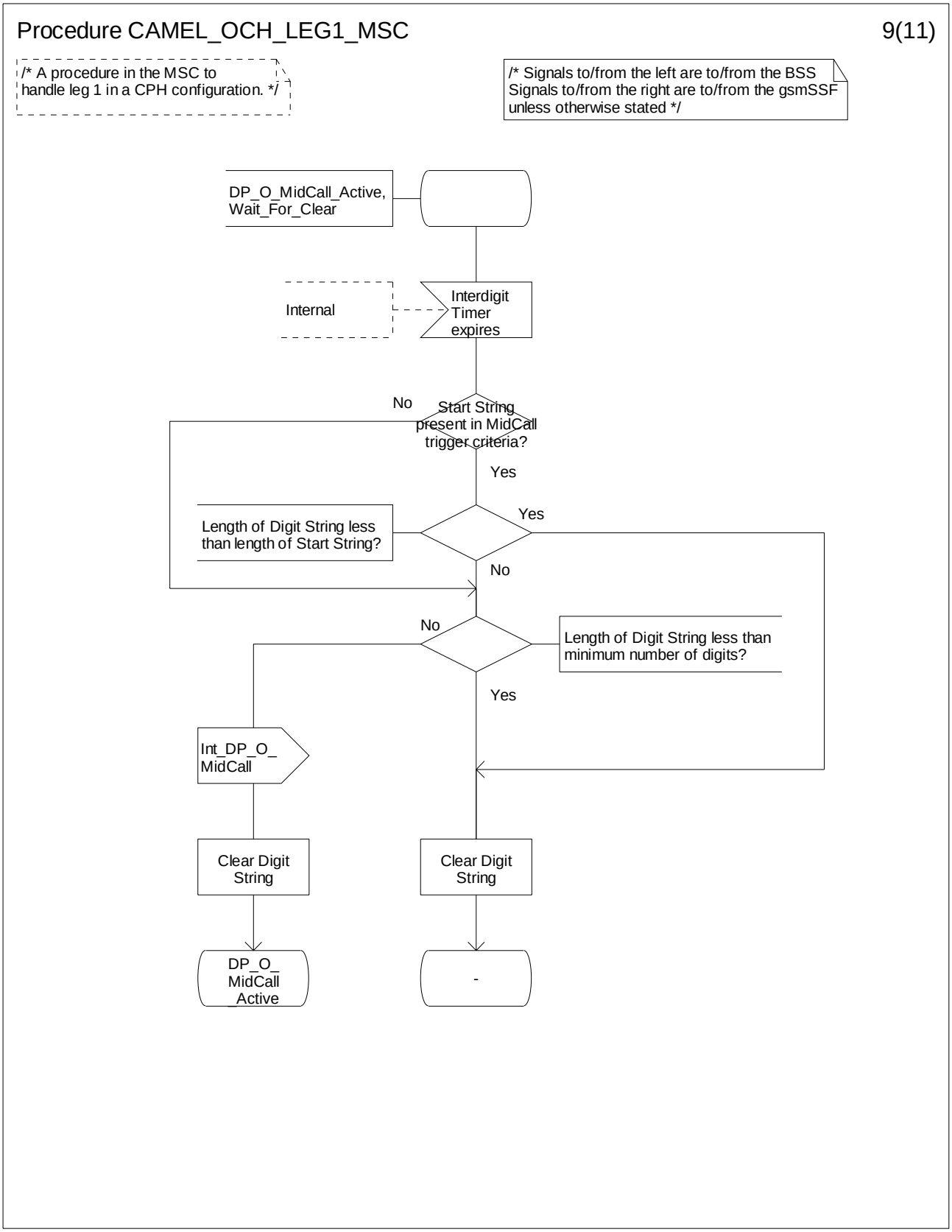


Figure Error! Reference source not found..1**-9: Procedure CAMEL_OCH_LEG1_MSC (sheet 9)**

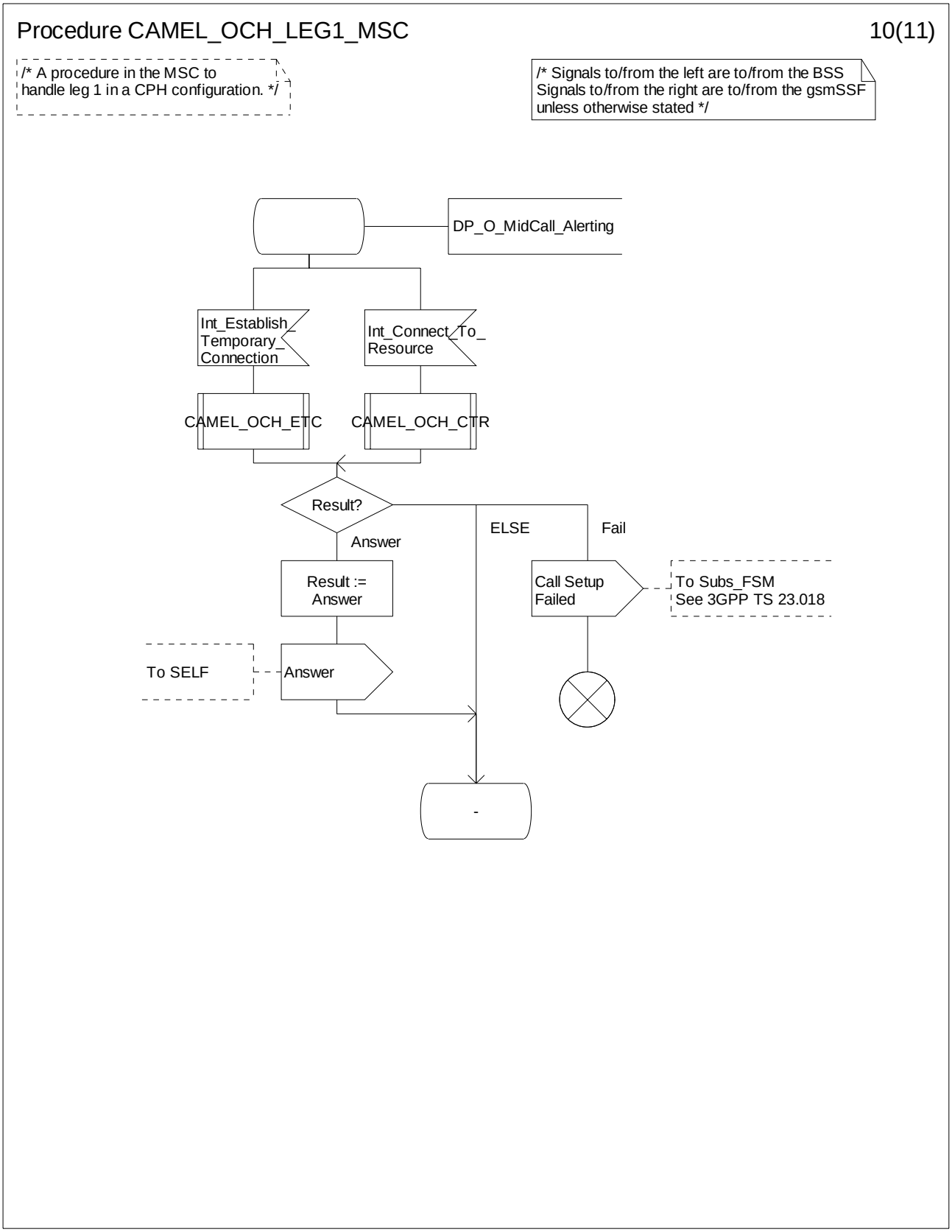
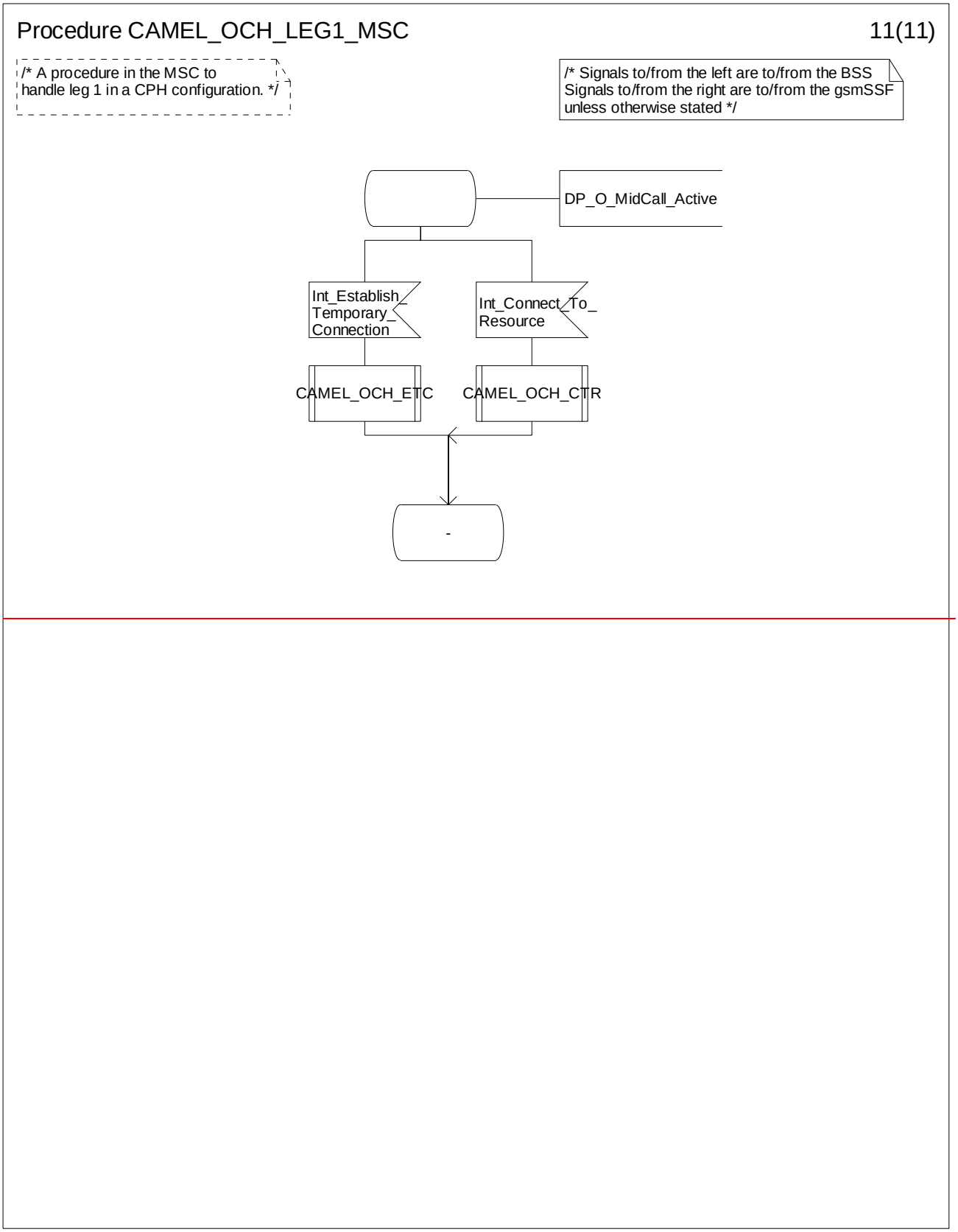


Figure Error! Reference source not found..1**-10: Procedure CAMEL_OCH_LEG1_MSC (sheet 10)**



~~Figure 4.30-11: Procedure CAMEL_OCH_LEG1_MSC (sheet 11)~~

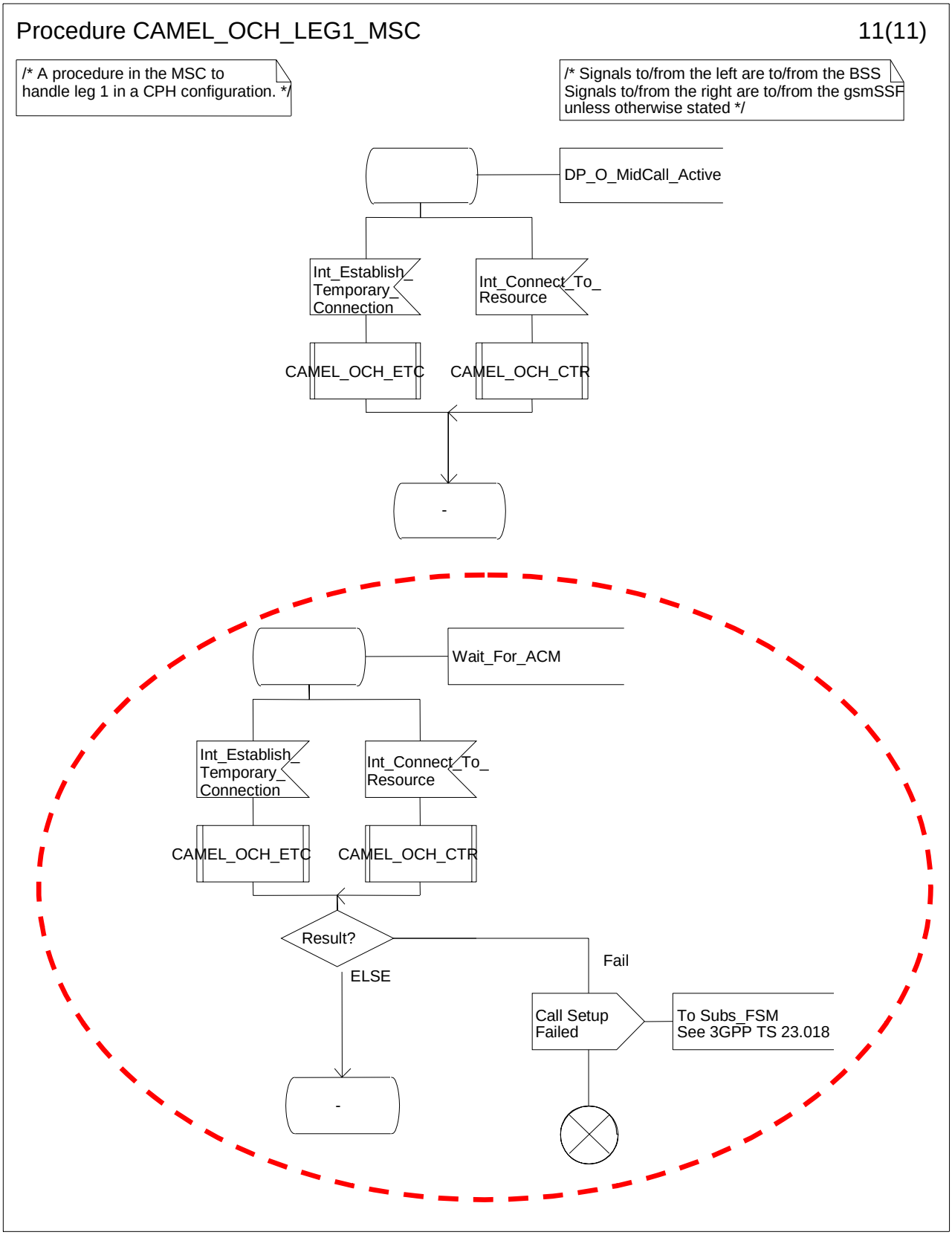


Figure Error! Reference source not found..1**-12: Procedure CAMEL_OCH_LEG1_MSC (sheet 12)**

***** *Next Modification* *****

4.5.3 Retrieval of routeing information

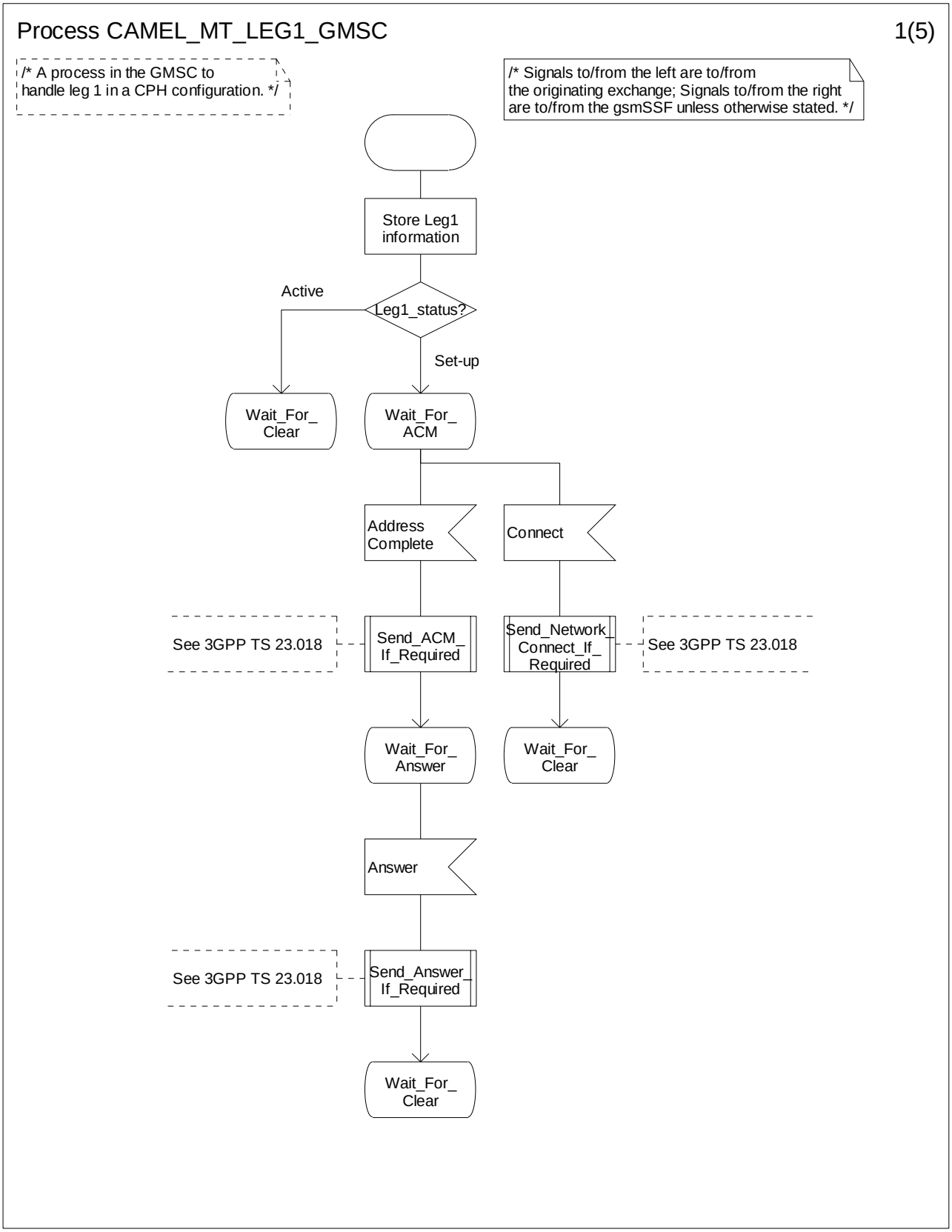


Figure Error! Reference source not found.**.2-1: Process CAMEL_MT_LEG1_GMSC (sheet 1)**

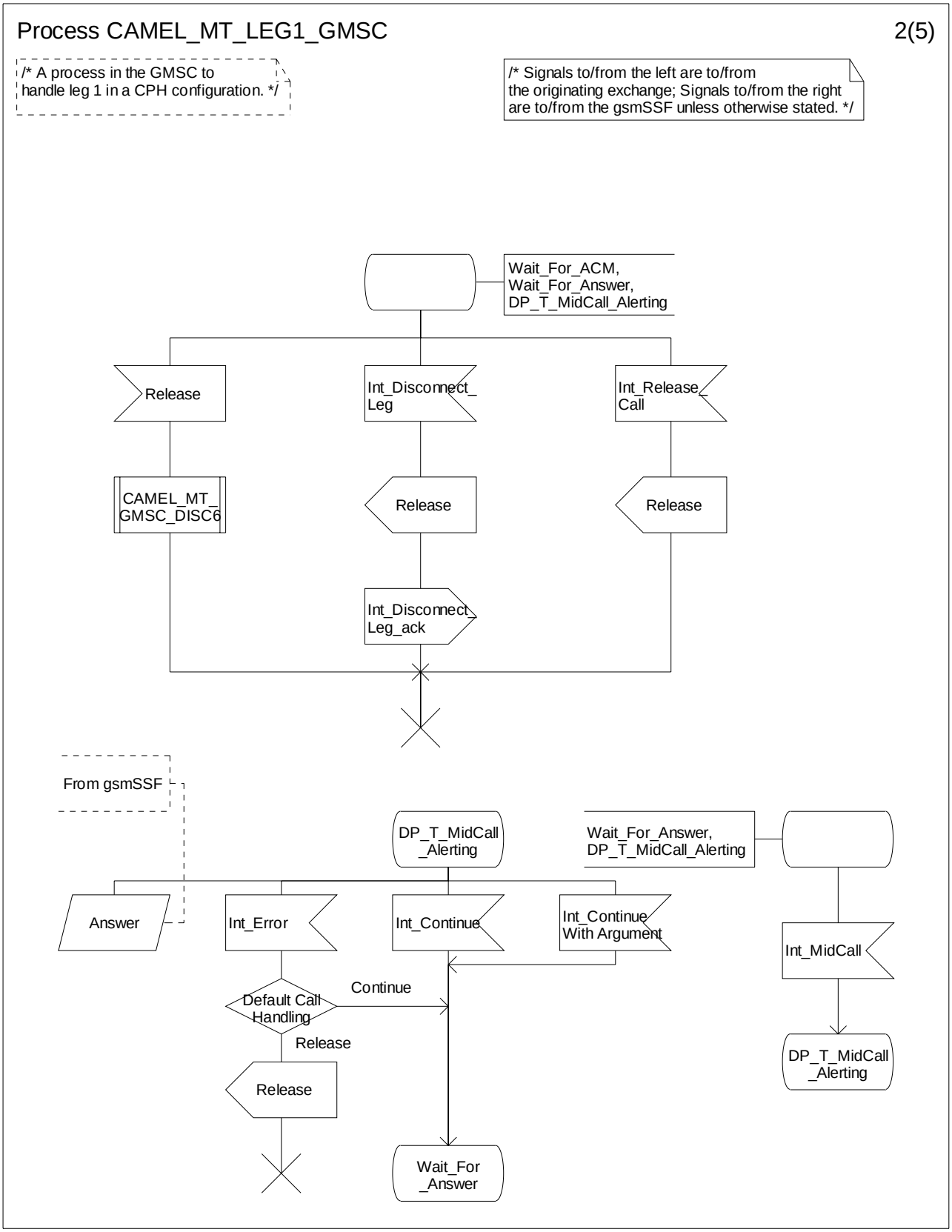


Figure Error! Reference source not found..2**-2: Process CAMEL_MT_LEG1_GMSC (sheet 2)**

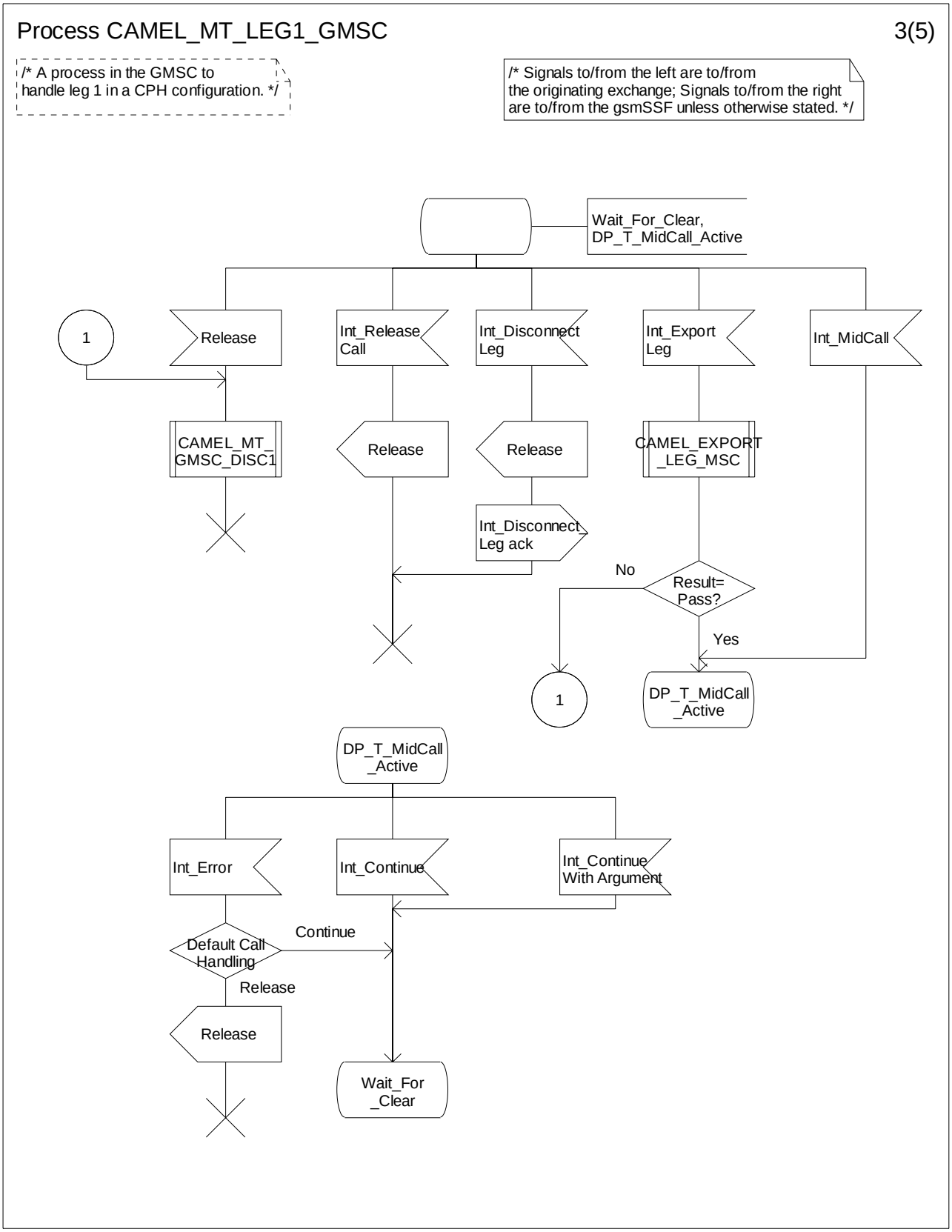


Figure Error! Reference source not found..2**-3: Process CAMEL_MT_LEG1_GMSC (sheet 3)**

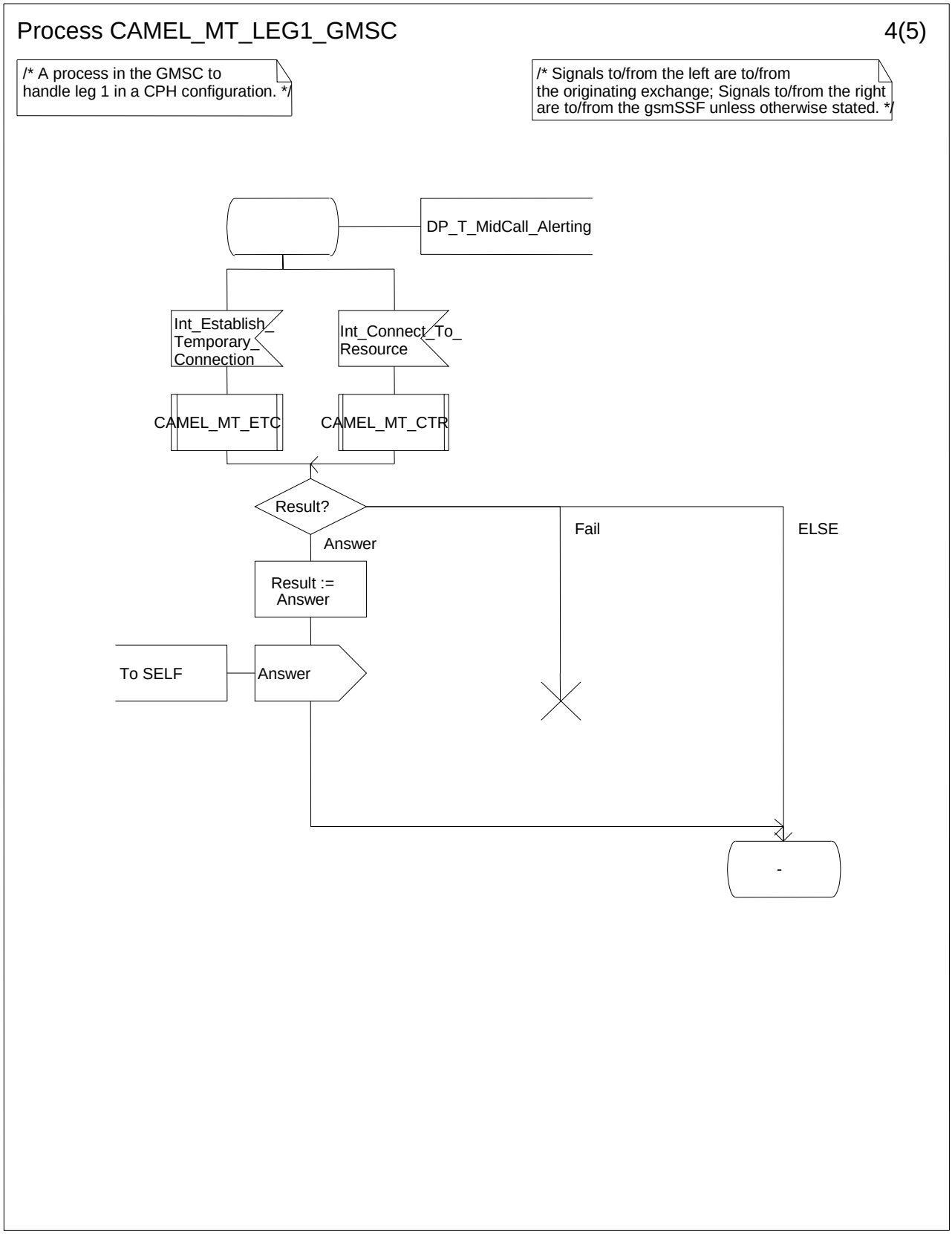
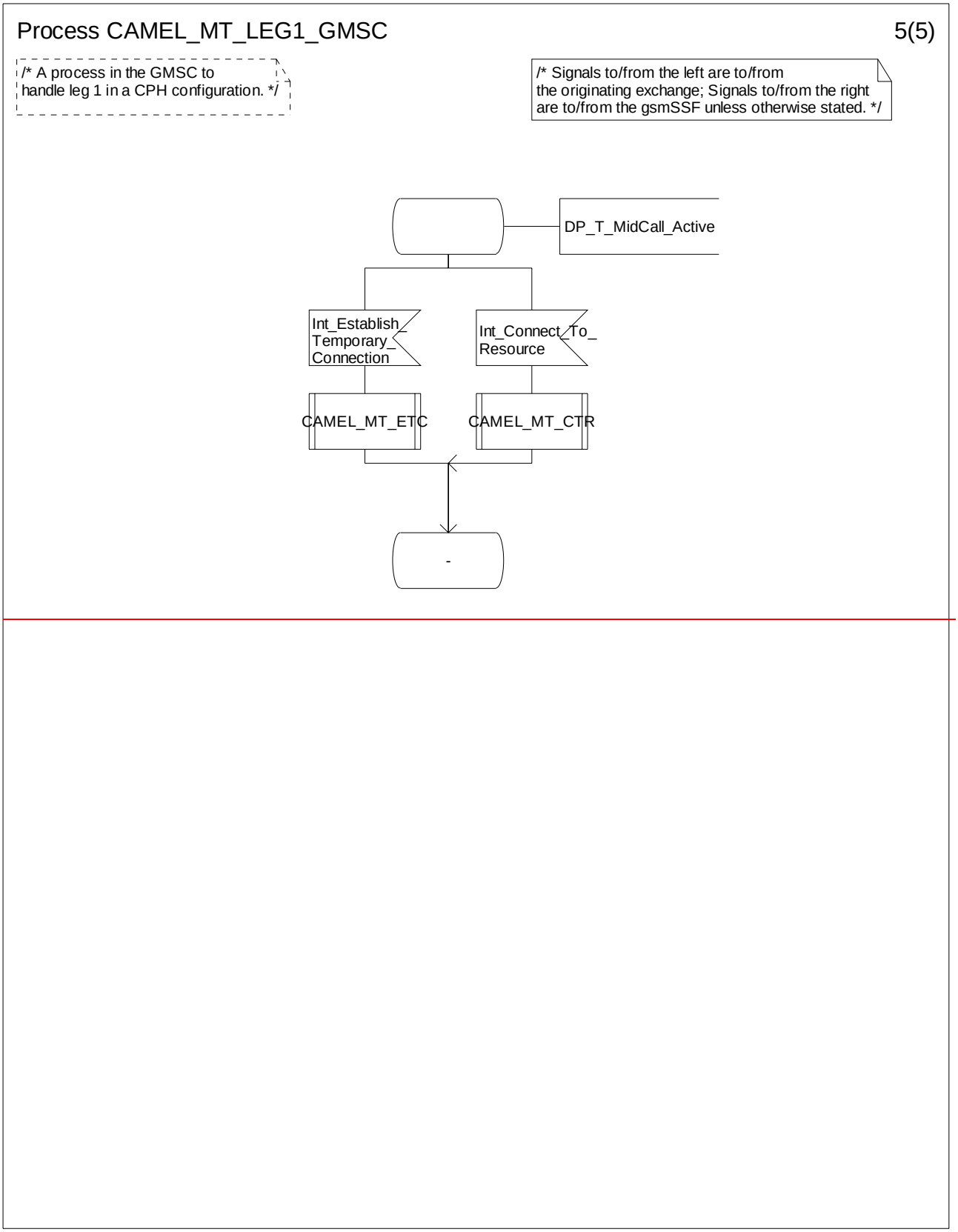


Figure Error! Reference source not found..2**-4: Process CAMEL_MT_LEG1_GMSC (sheet 4)**



~~Figure 4.53-5: Process CAMEL_MT_LEG1_GMSC (sheet 5)~~

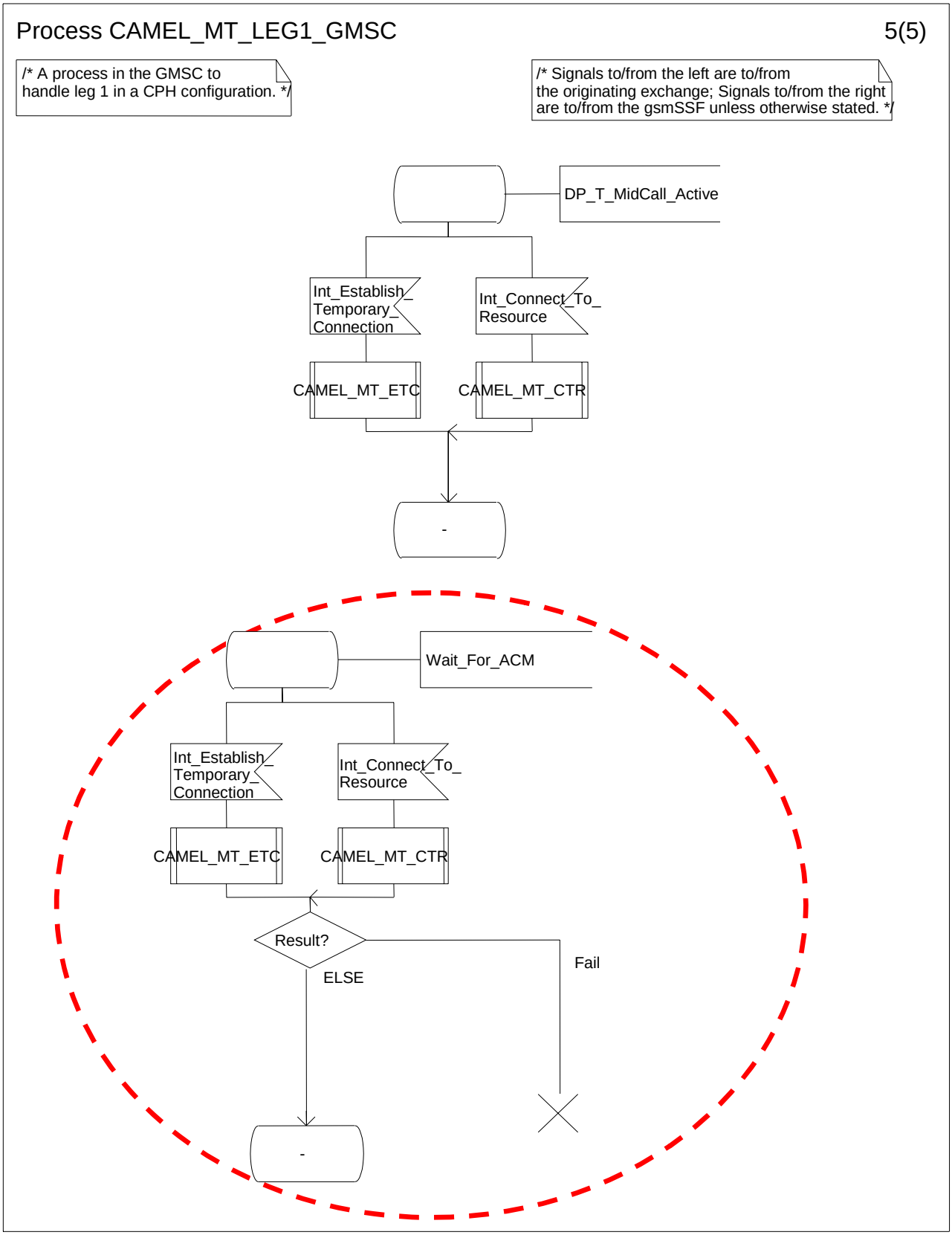


Figure Error! Reference source not found..2-6: Process CAMEL_MT_LEG1_GMSC (sheet 6)

***** *Next Modification* *****

4.5.4 Handling of mobile terminating calls

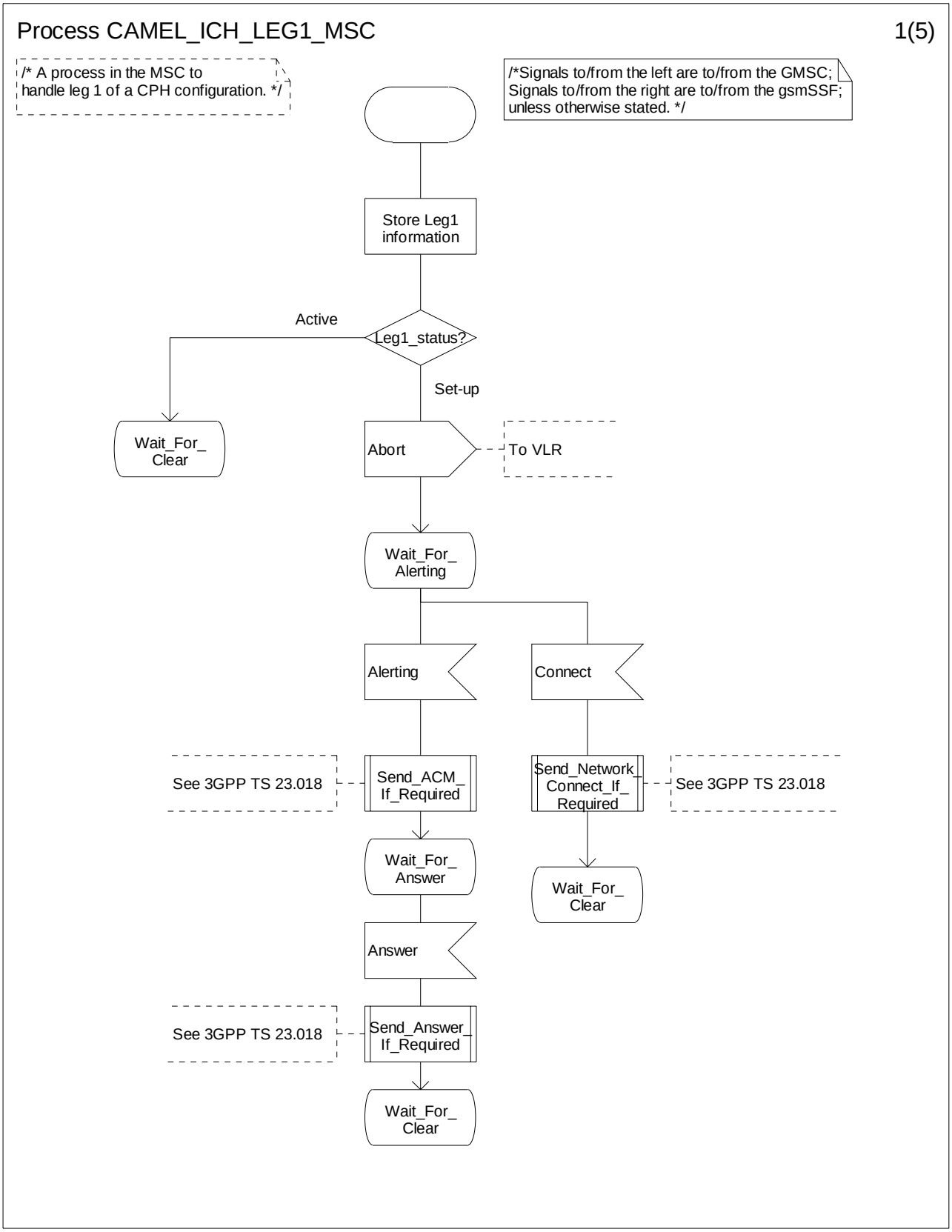


Figure Error! Reference source not found..**3-1: Process CAMEL_ICH_LEG1_MSC (sheet 1)**

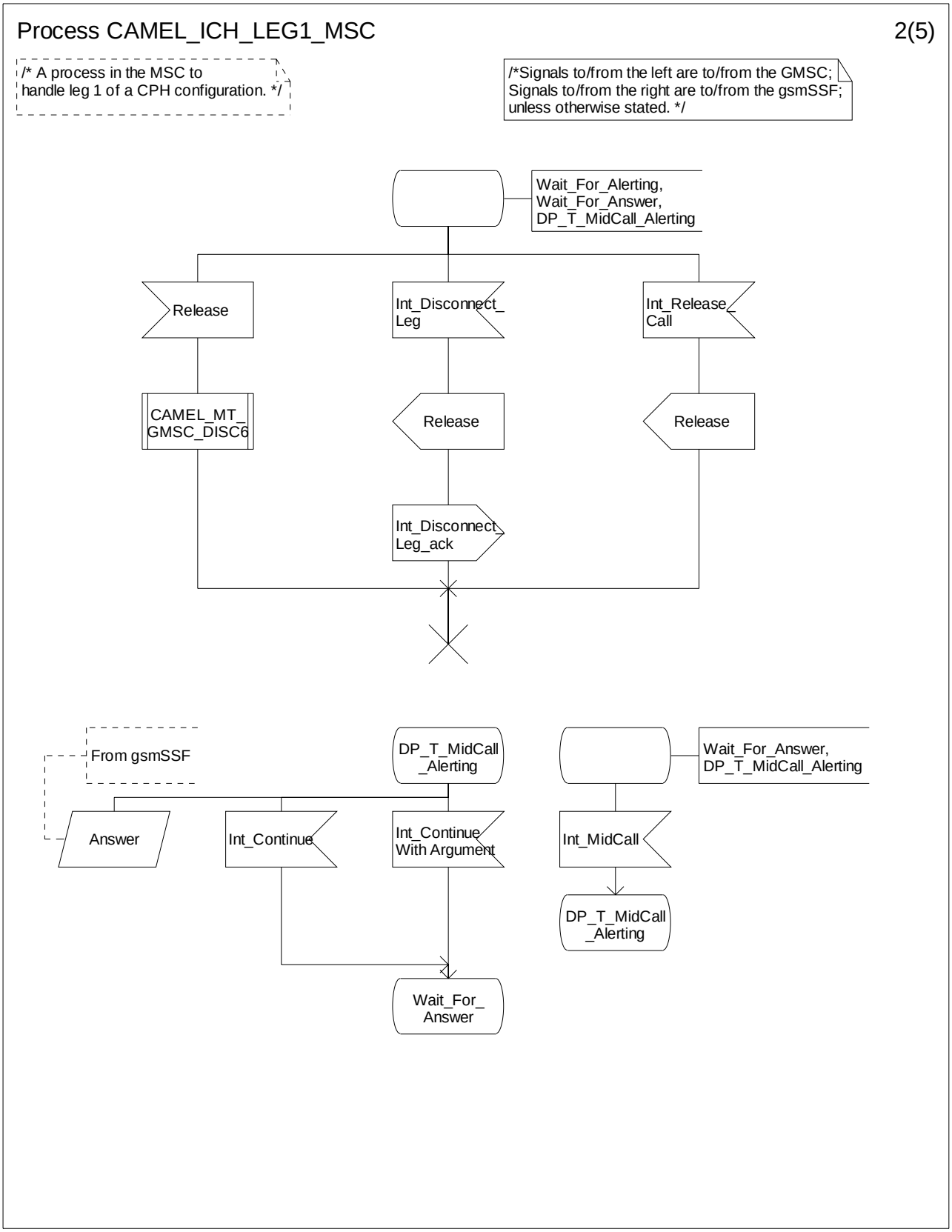


Figure Error! Reference source not found..**3-2: Process CAMEL_ICH_LEG1_MSC (sheet 2)**

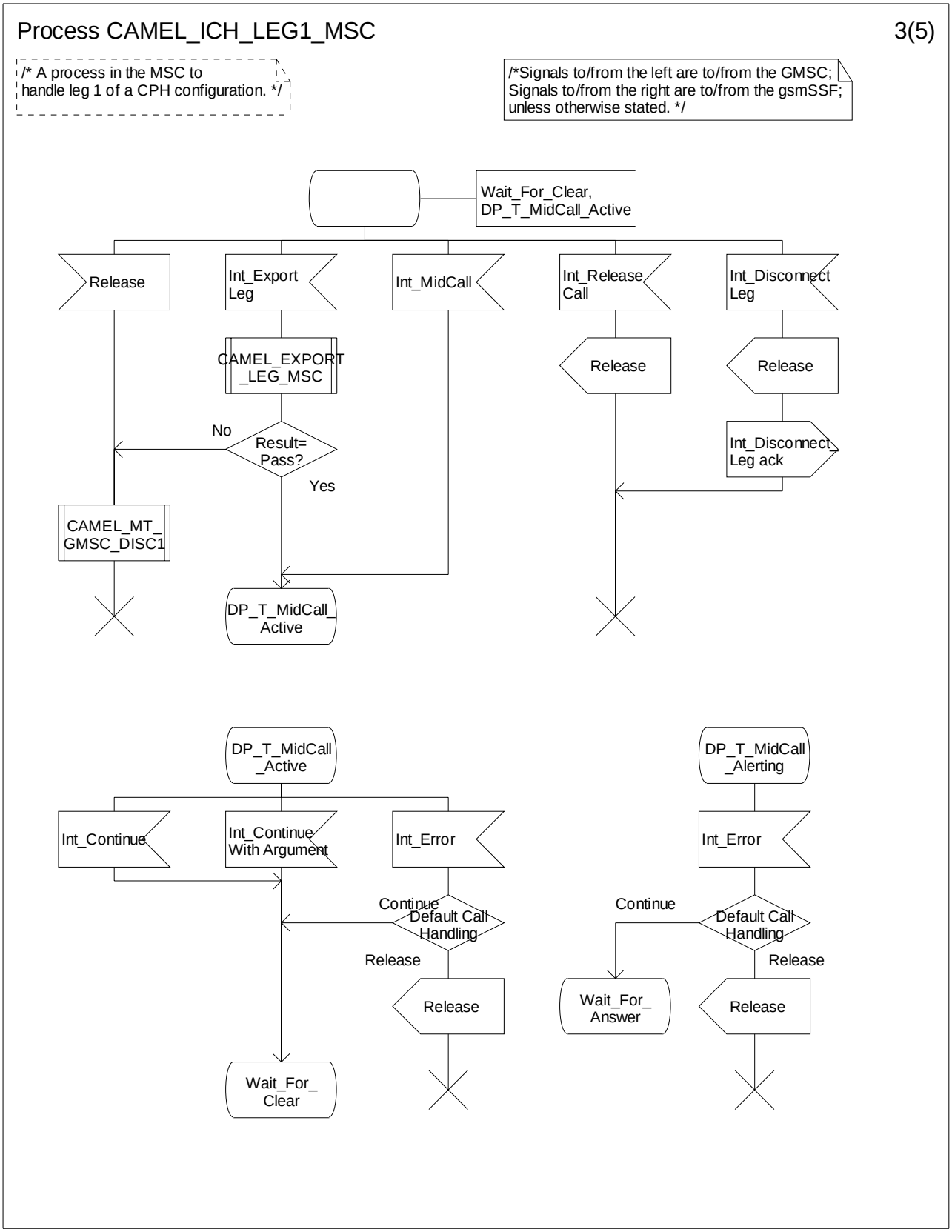


Figure Error! Reference source not found..**3-3: Process CAMEL_ICH_LEG1_MSC (sheet 3)**

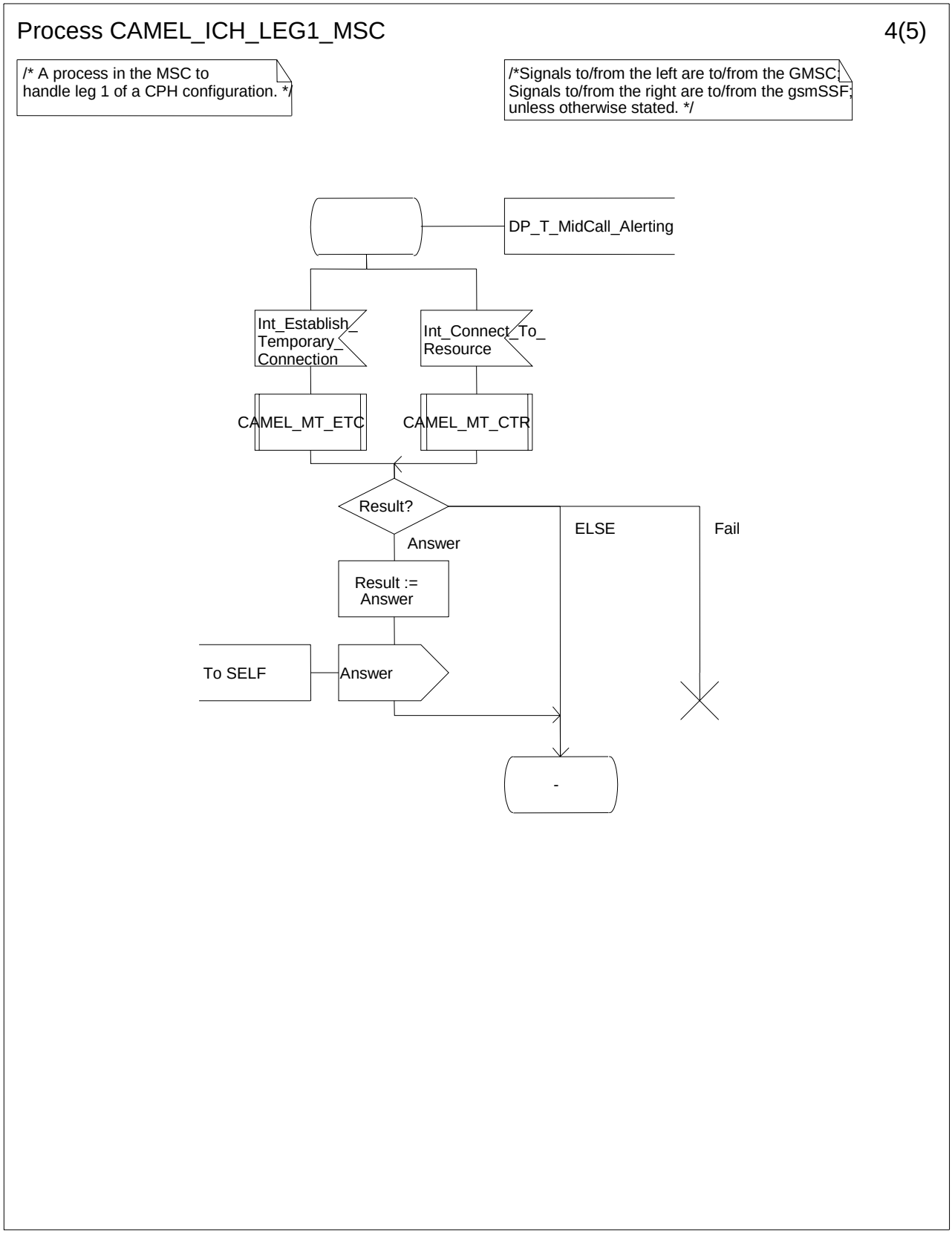
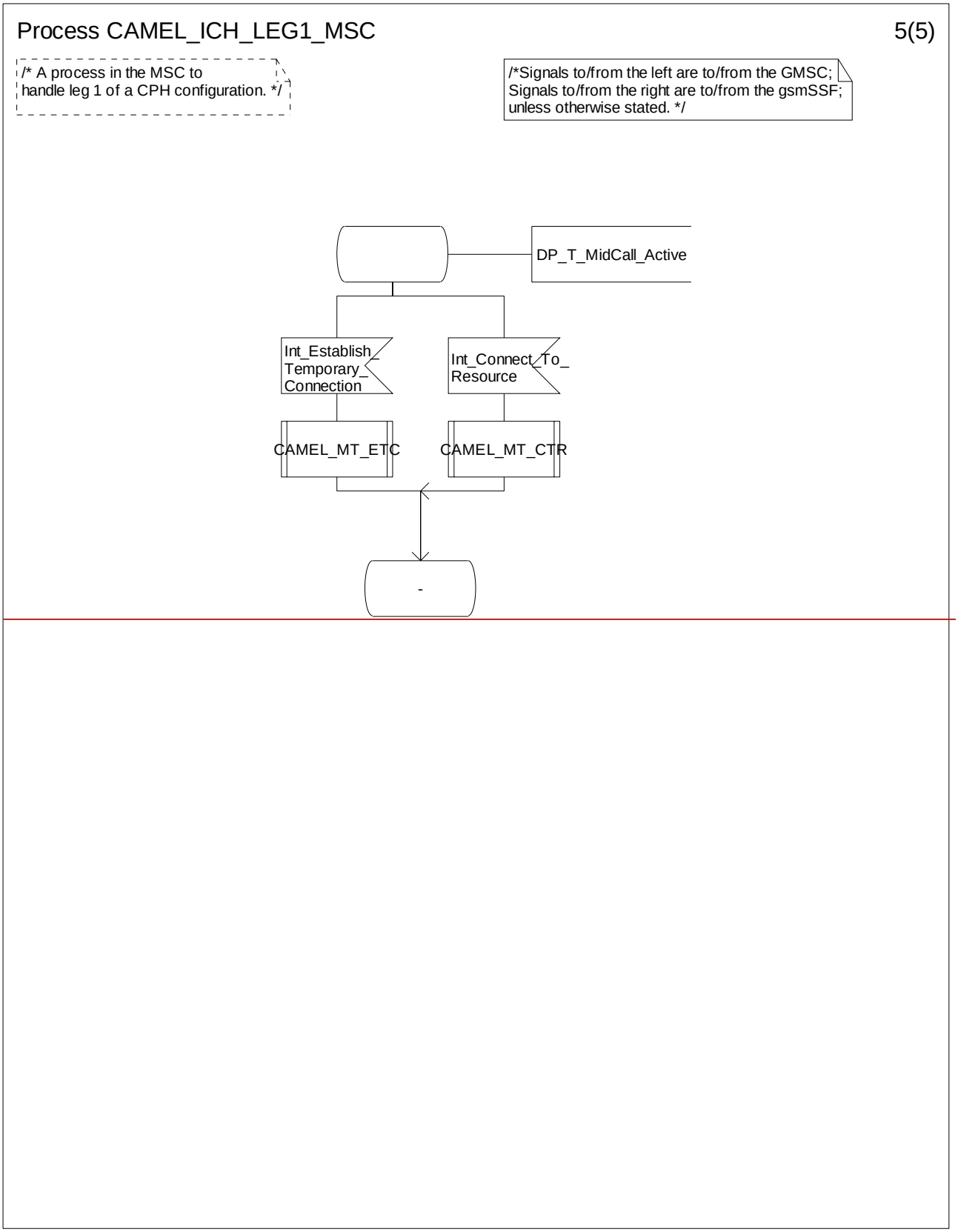


Figure Error! Reference source not found..**3-4: Process CAMEL_ICH_LEG1_MSC (sheet 4)**



~~Figure 4.70-5: Process CAMEL_ICH_LEG1_MSC (sheet 5)~~

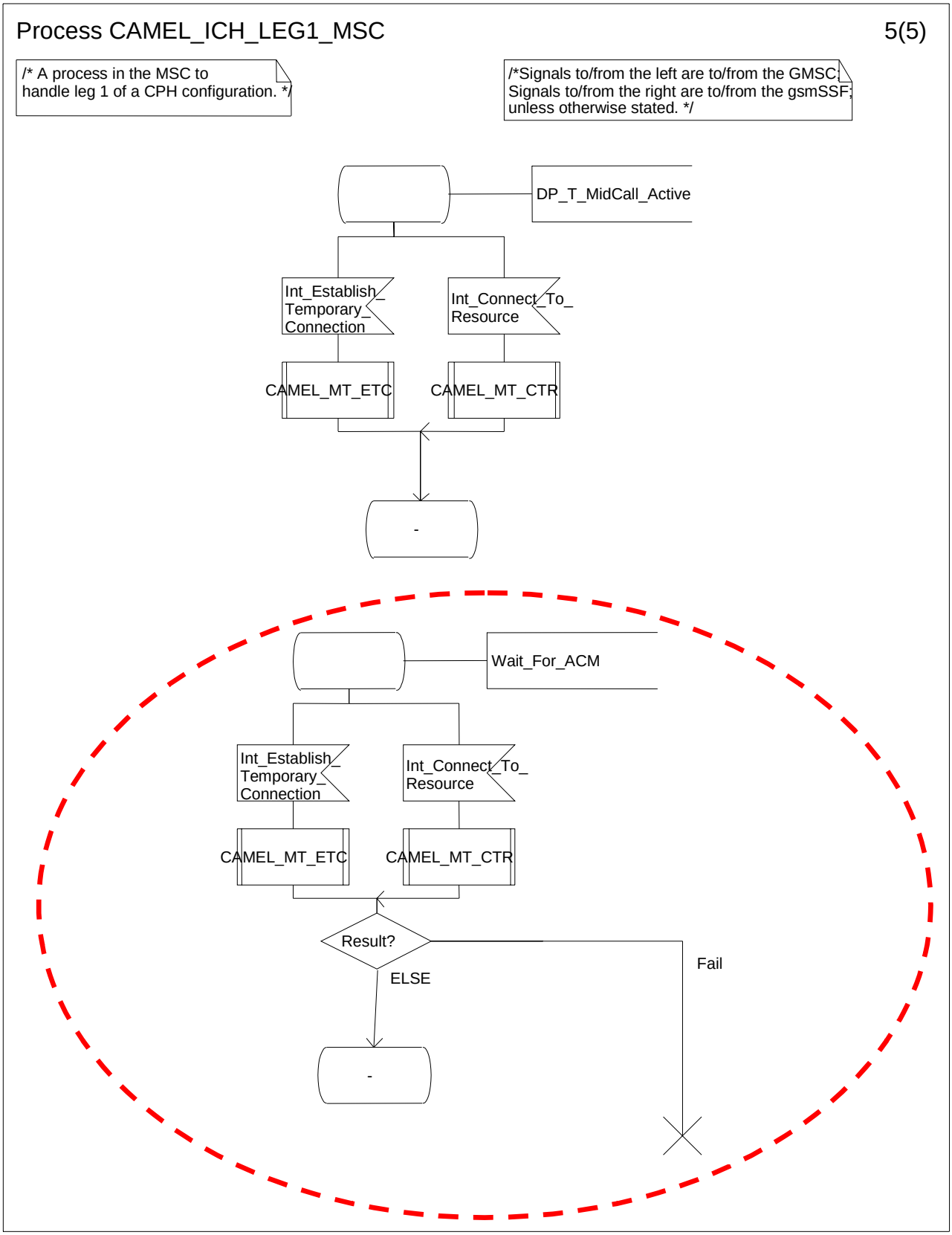


Figure Error! Reference source not found..3-**6: Process CAMEL_ICH_LEG1_MSC (sheet 6)**

***** *Next Modification* *****

4.5.5 Handling of forwarded calls

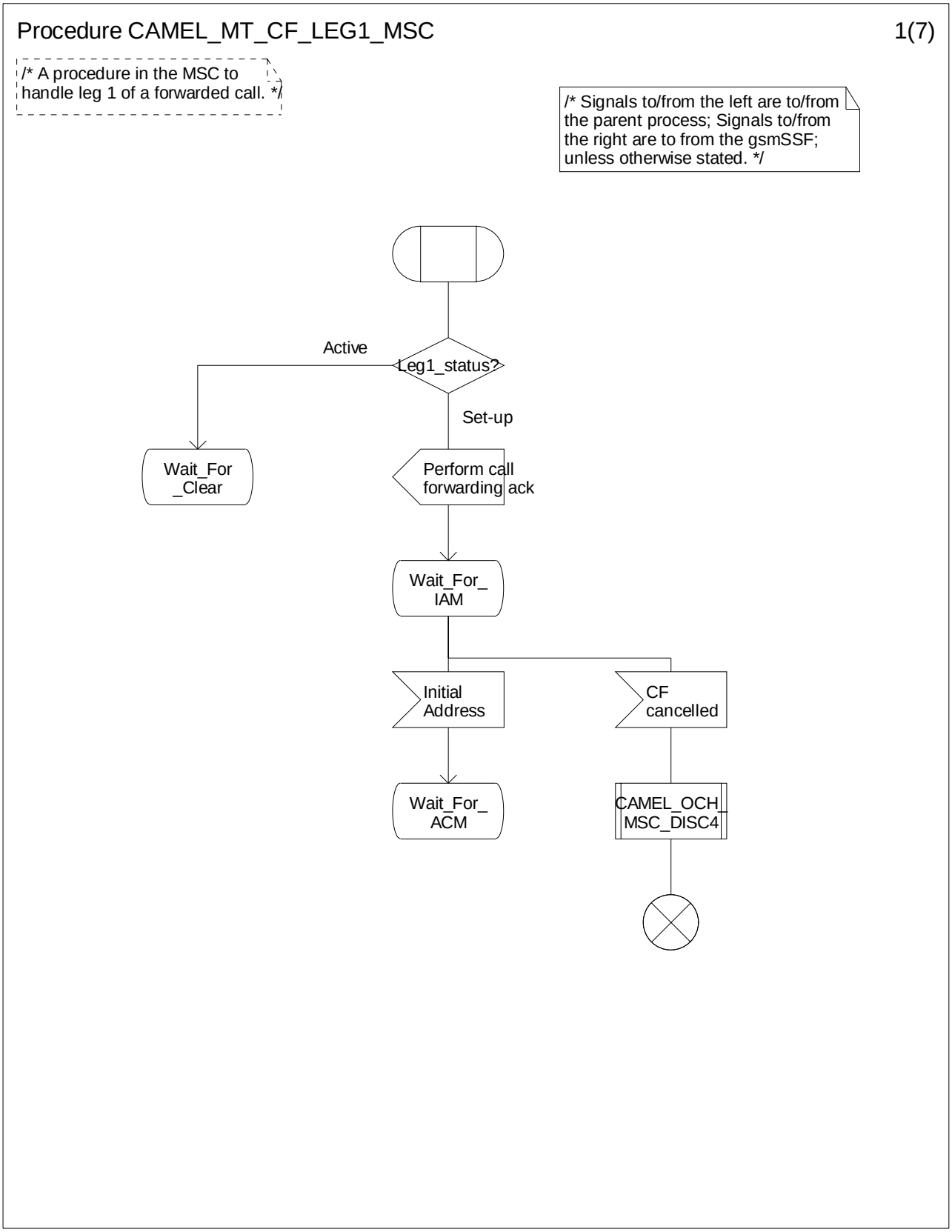


Figure 4.86-1: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 1)

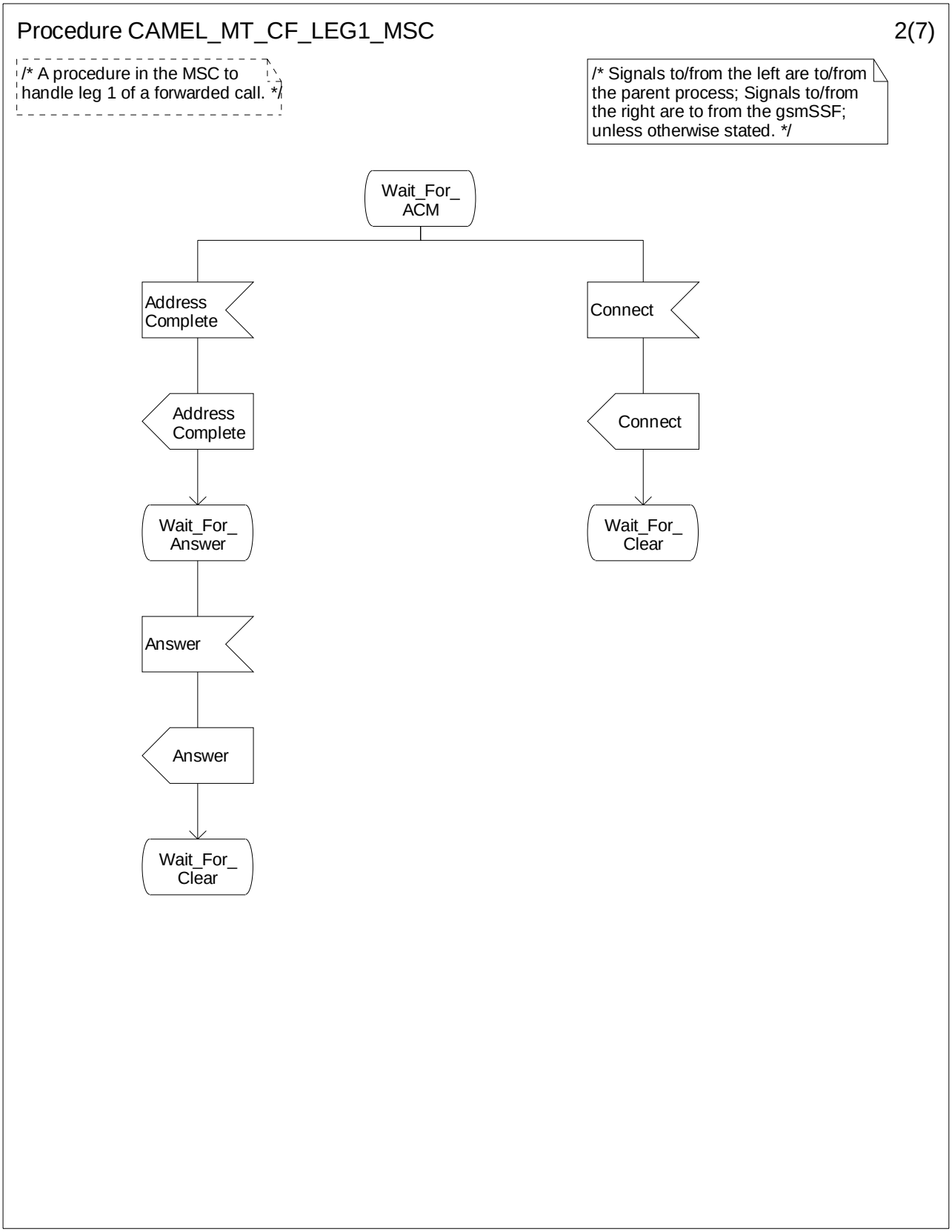


Figure 4.86-2: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 2)

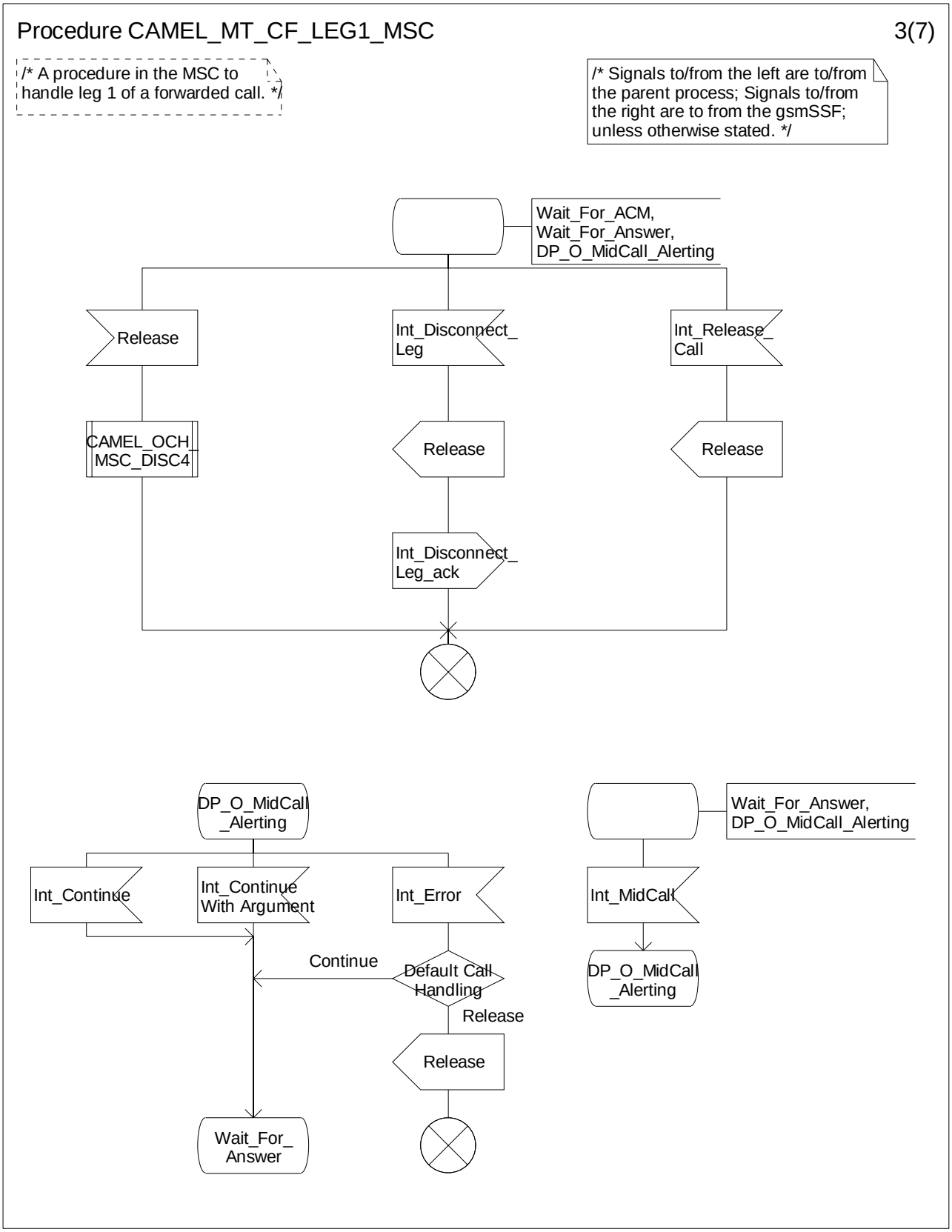


Figure 4.86-3: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 3)

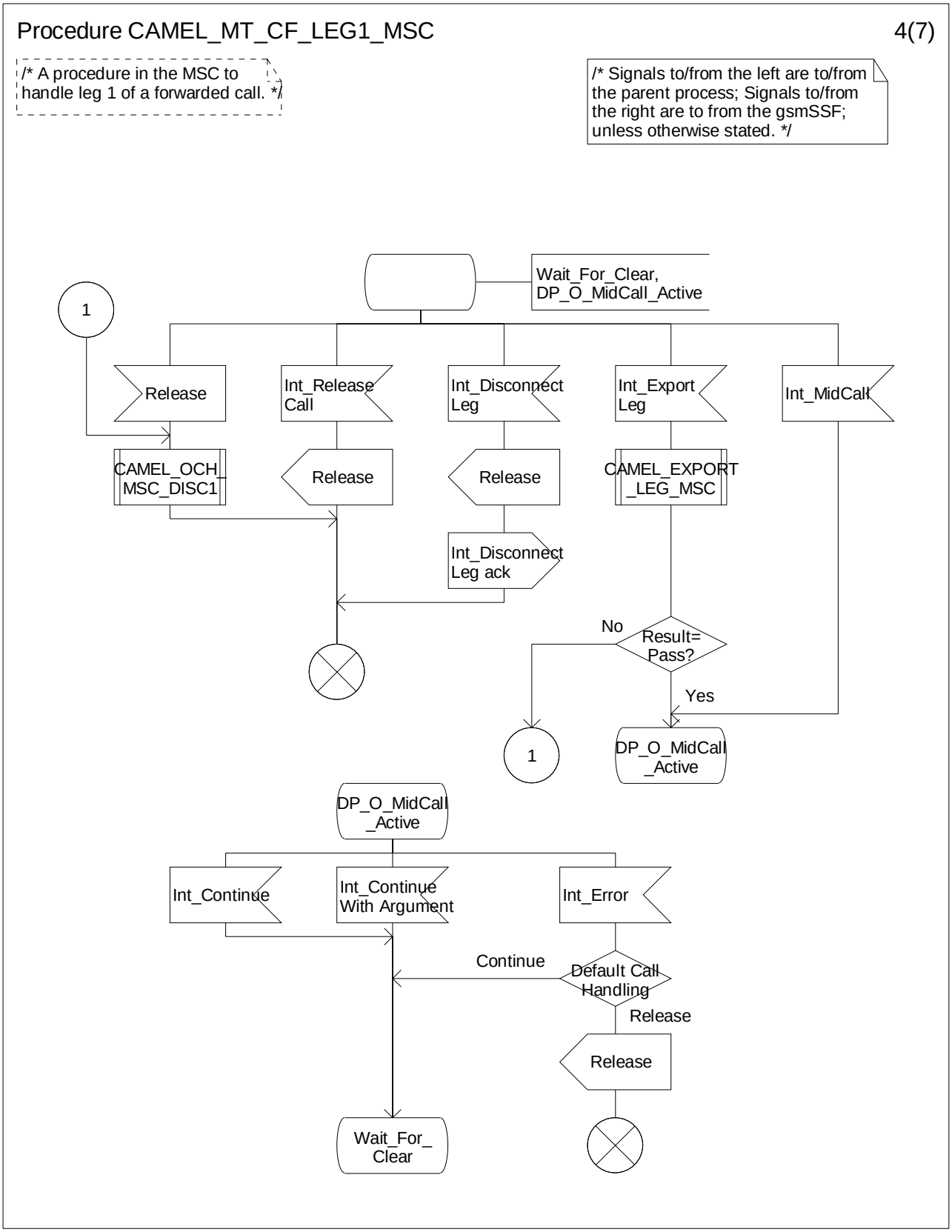


Figure 4.86-4: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 4)

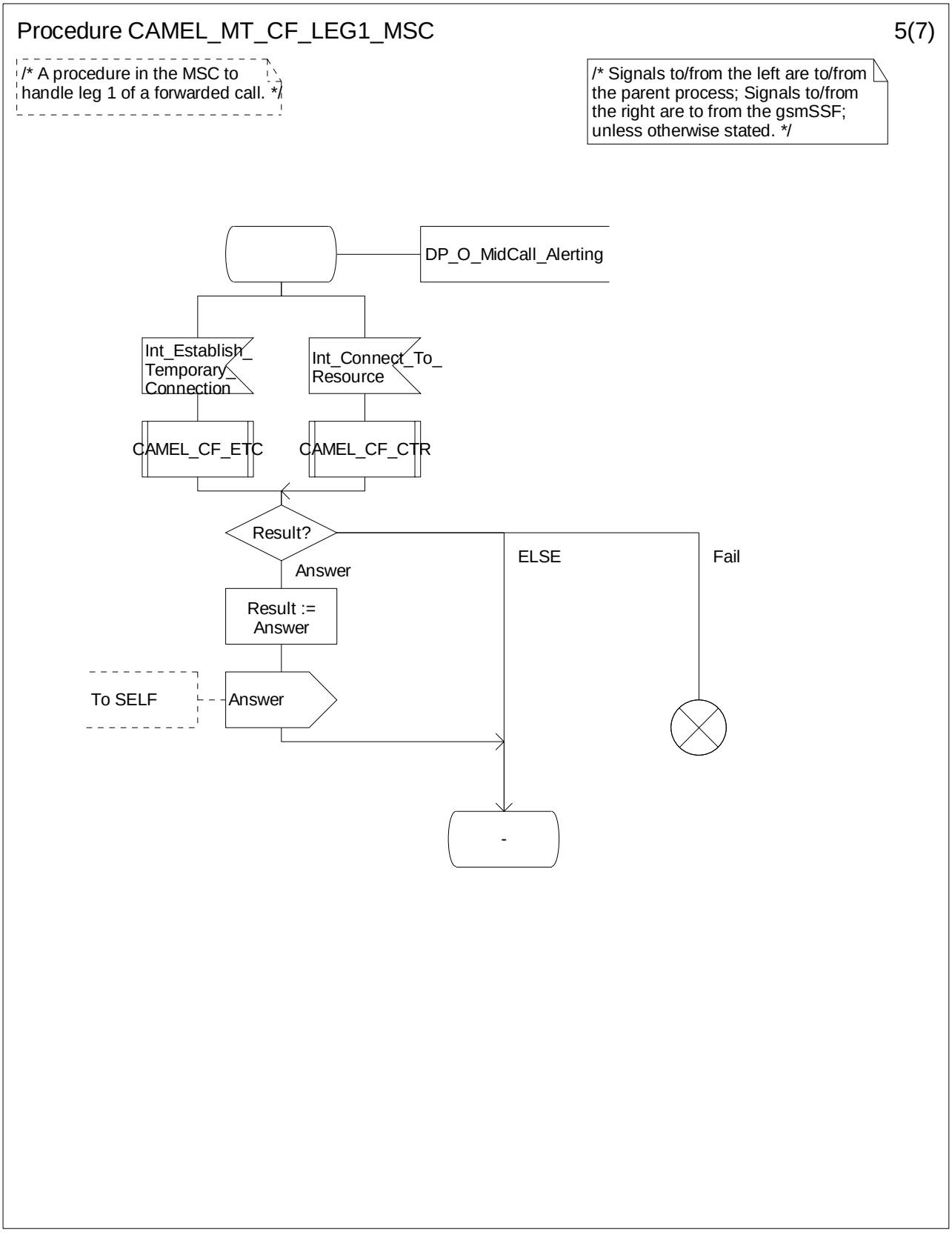
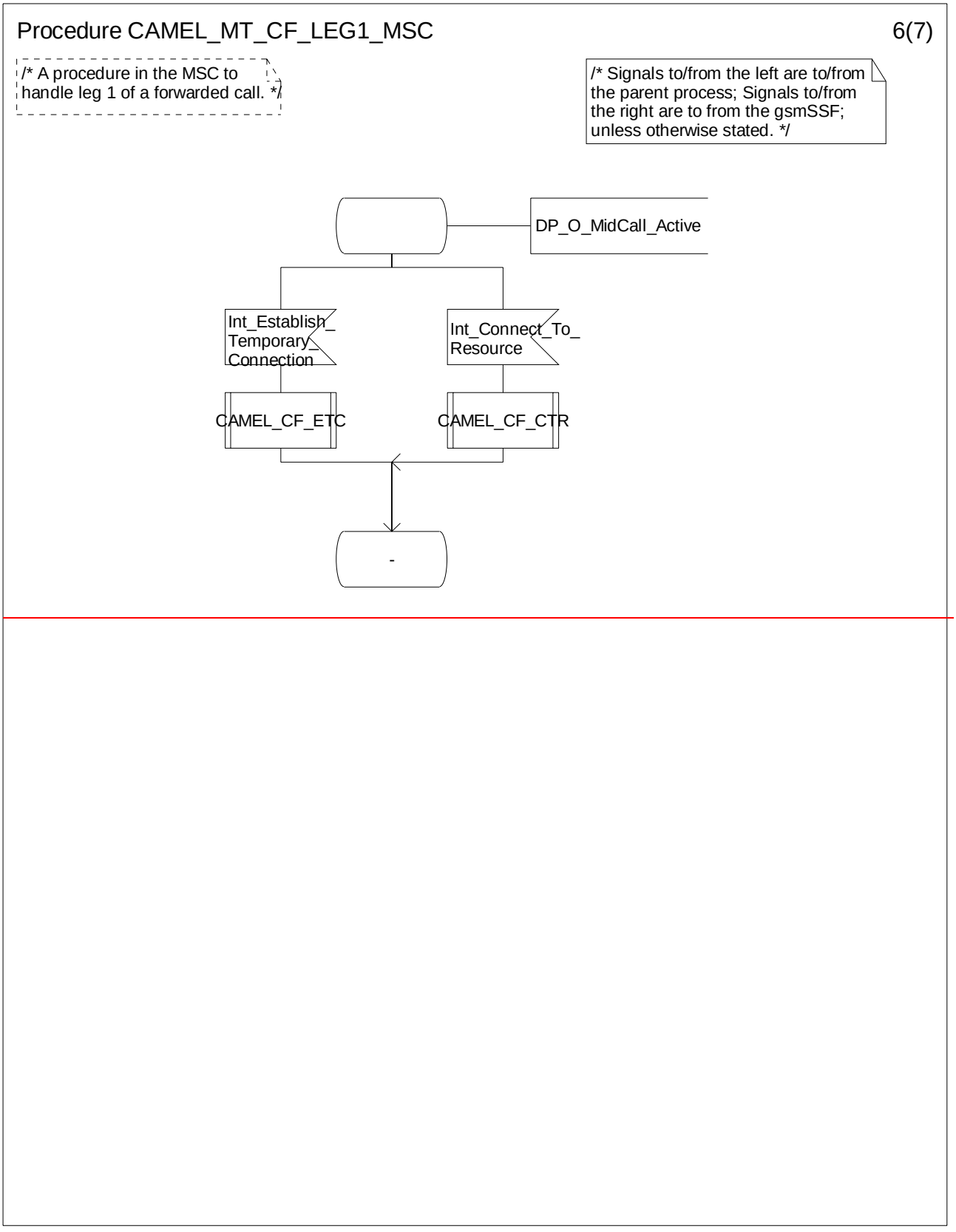


Figure 4.86-5: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 5)



~~Figure 4.86-6: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 6)~~

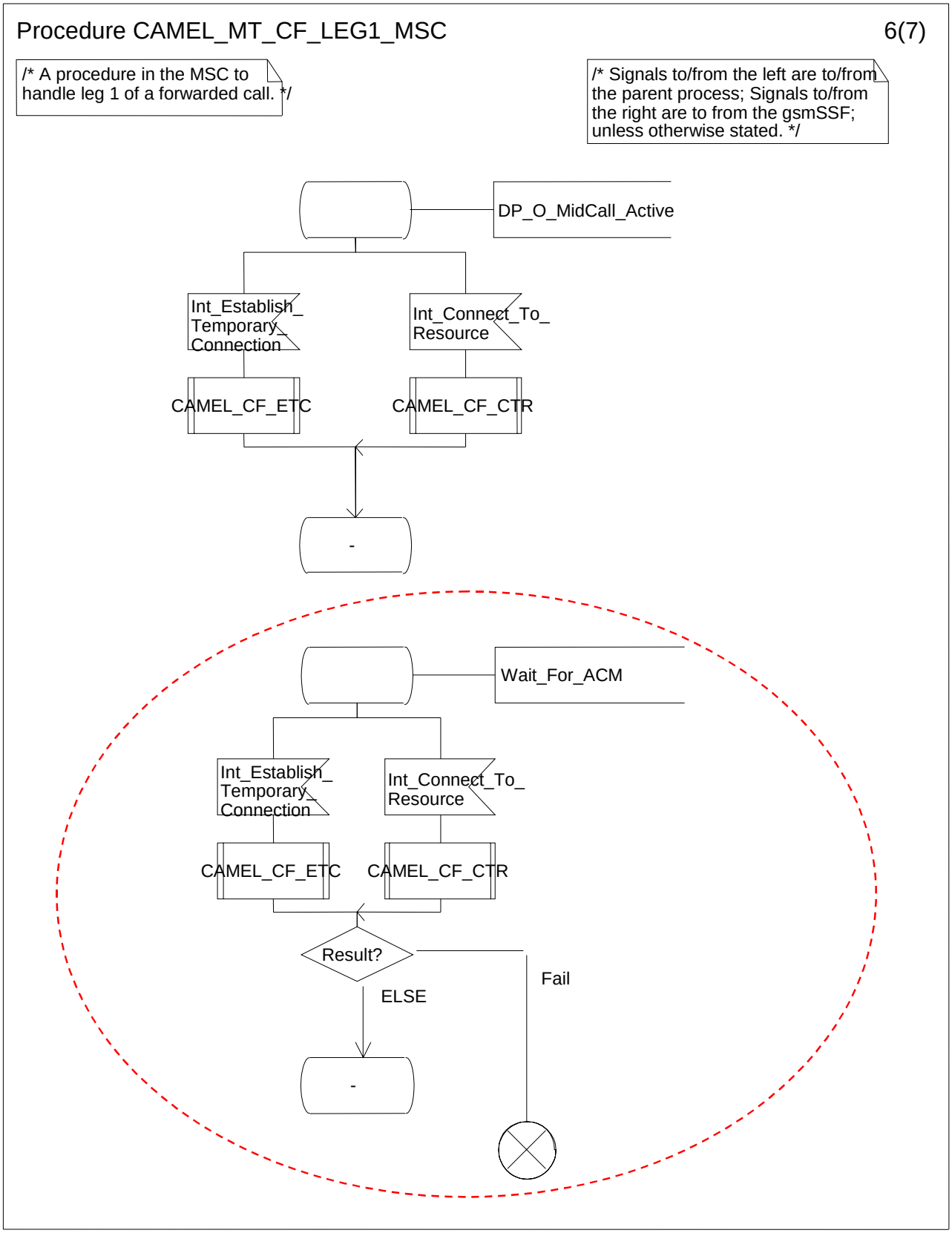


Figure 4.86-6: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 6)

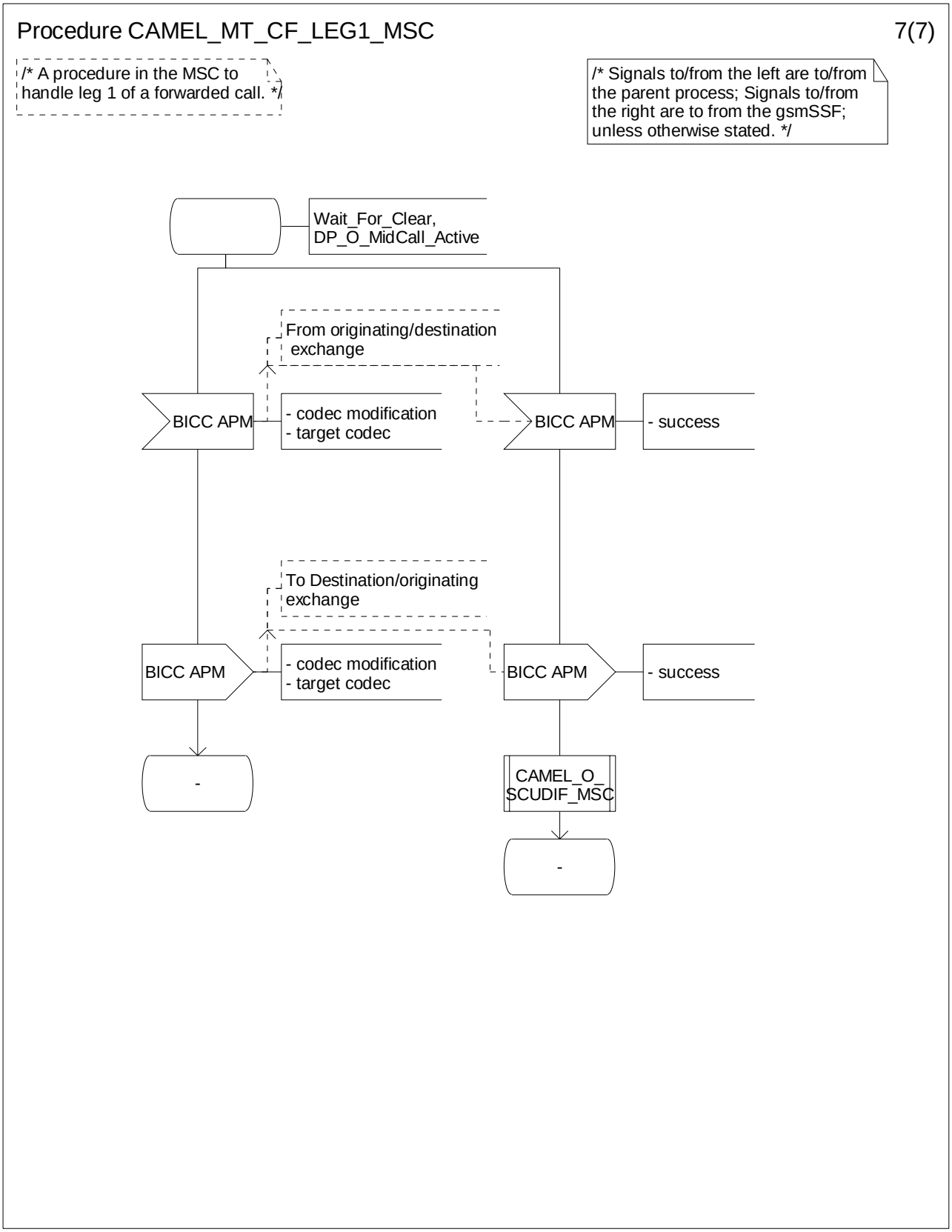


Figure 4.86-7: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 7)

****** End of Document ******

CHANGE REQUEST

⌘ **23.078** **CR** **718** ⌘**rev** **3** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to InitialDP IF for NP leg
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4 ***Date:*** ⌘ 12/05/2004
Category:	⌘	F (essential correction) ***Release:*** ⌘ Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘ The description of MSC Address in Initial DP (IDP) specifies the following conditions for the NP leg:

> For the NP case, the MSC address carries the international E.164 address of the serving VMSC (the NP case in the GMSC will not cause an Initial DP IF).

That description implies that an NP leg that is created in the GMSC will not lead to D-CSI triggering or N-CSI triggering. However, D-CSI may also be sent to GMSC. Hence, an NP leg created in the GMSC may result in D-CSI triggering. Furthermore, the NP leg created in the GMSC may also result in N-CSI triggering.

Therefore, the description of the MSC Address for the NP call case shall not preclude NP call leg triggering from GMSC.

The Call Reference Number shall also a have a description for the NP case.

Summary of change: ⌘
1. Correct the description of MSC Address in IDP for NP calls.
2. Correct the description of Call Reference Number in IDP for NP calls.
3. Editorial correction to description of GMSC Address.

Consequences if not approved: ⌘
1. Wrong MSC address and/or Call Reference Number may be sent to gsmSCF. As a result there would be prepay charging problems in a NP call case.
2. Potential incompatibility. The gsmSCF may reject Initial DP from a GMSC if the triggering is done for a NP leg.
3. Missing CAP dialogue. The MSC/SSP may not trigger in a NP call in the GMSC. This may lead to poor service or prepay charging fraud.

Clauses affected: ⌘ 4.6.1.8

		Y	N			
Other specs affected:	⌘		X	Other core specifications	⌘	
			X	Test specifications		
			X	O&M Specifications		

Other comments:	⌘	"NP" means New Party which is created by gsmSCF with a Initial Call Attempt operation.

***** First Modification *****

4.6.1.8 Initial DP

4.6.1.8.1 Description

This IF is generated by the gsmSSF when a trigger is detected at a DP in the BCSM, to request instructions from the gsmSCF.

4.6.1.8.2 Information Elements

(Note: IEs in the NC columns in this IF may need further study.)

Information element name	MO	MF	MT	VT	NC	NP	Description
…							
Call Reference Number	M	M	M	M	-	M	This IE may be used by the gsmSCF for inclusion in a network optional gsmSCF call record. It has to be coupled with the identity of the MSC which allocated it in order to define unambiguously the identity of the call. For MO calls, the call reference number is set by the serving VMSC and included in the MO call record. For MT calls, the call reference number is set by the GMSC and included in the RCF call record in the GMSC and in the MT call record in the terminating MSC. For VT calls, the call reference number is set by the GMSC and included in the RCF call record in the GMSC and in the MT call record in the terminating MSC. For ~~CF~~MF calls, the call reference number is set by the GMSC and included in the CF record in the forwarding MSC. For the setting of the Call Reference Number for NP calls, see the corresponding call case above (MO, MT, VT or MF).
…							
MSC Address	M	M	M	M	-	M	For MO calls, the MSC Address carries the international E.164 address of the serving VMSC. For MT calls, the MSC Address carries the international E.164 address of the GMSC. For VT calls, the MSC Address carries the international E.164 address of the serving VMSC. For MF calls, the MSC Address carries the international E.164 address of the forwarding MSC. For ~~the~~ NP ~~case~~calls, see the corresponding call case above (MO, MT, VT or MF) ~~the MSC Address carries the international E.164 address of the serving VMSC (the NP case in the GMSC will not cause an Initial DP IF)~~.
GMSC Address	-	M	-	M	-	S	For ~~CF~~MF calls, the GMSC Address carries the international E.164 address of the GMSC. For VT calls, the GMSC Address carries the international E.164 address of the GMSC. For NP ~~case~~calls, the GMSC Address is mandatory if the new party is initiated in an MF call or in a VT call, otherwise it shall be absent. The GMSC Address carries the international E.164 address of the GMSC.
…							

…

****** End of Document ******

CHANGE REQUEST

⌘ **23.078** **CR** **713** ⌘**rev** **2** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to Tssf timer
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	12/05/2004
Category:	⌘	F (agreed by consensus)
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘ The usage of Tssf in process CS_gsmSSF is incomplete. The following corrections are needed:

Sheet 11: When gsmSSF FSM transits to state WFI, as a result of processing Int_Initiate_Call_Attempt, Tssf shall be started with default non-user interaction value.

When gsmSSF receives Int_Import_Leg in the state Wait_For_ICA_Or_Import_Leg on sheet 11, then that is the result of the instantiation of a new CS_gsmSSF process. In that case, CS_gsmSSF had received Int_Invoke_gsmSSF on sheet 4 and the CS_gsmSSF FSM had transited to Wait_For_ICA_Or_Import_Leg.

Once CS_gsmSSF FSM has reached state Wait_For_ICA_Or_Import_Leg, it continues on sheet 11. The receiving of the Int_Import_Leg results in FSM transition to the state Wait_For_Import_Leg_Ack on sheet 11. This state is defined also on sheet 42.

When the CS_gsmSSF FSM subsequently transits to the state Waiting_For_Instructions (currently on sheet 42), Tssf shall be set to the default non-user interaction Tssf value.

This functionality is best reflected by copying the SDL branch from sheet 42 onto sheet 11.

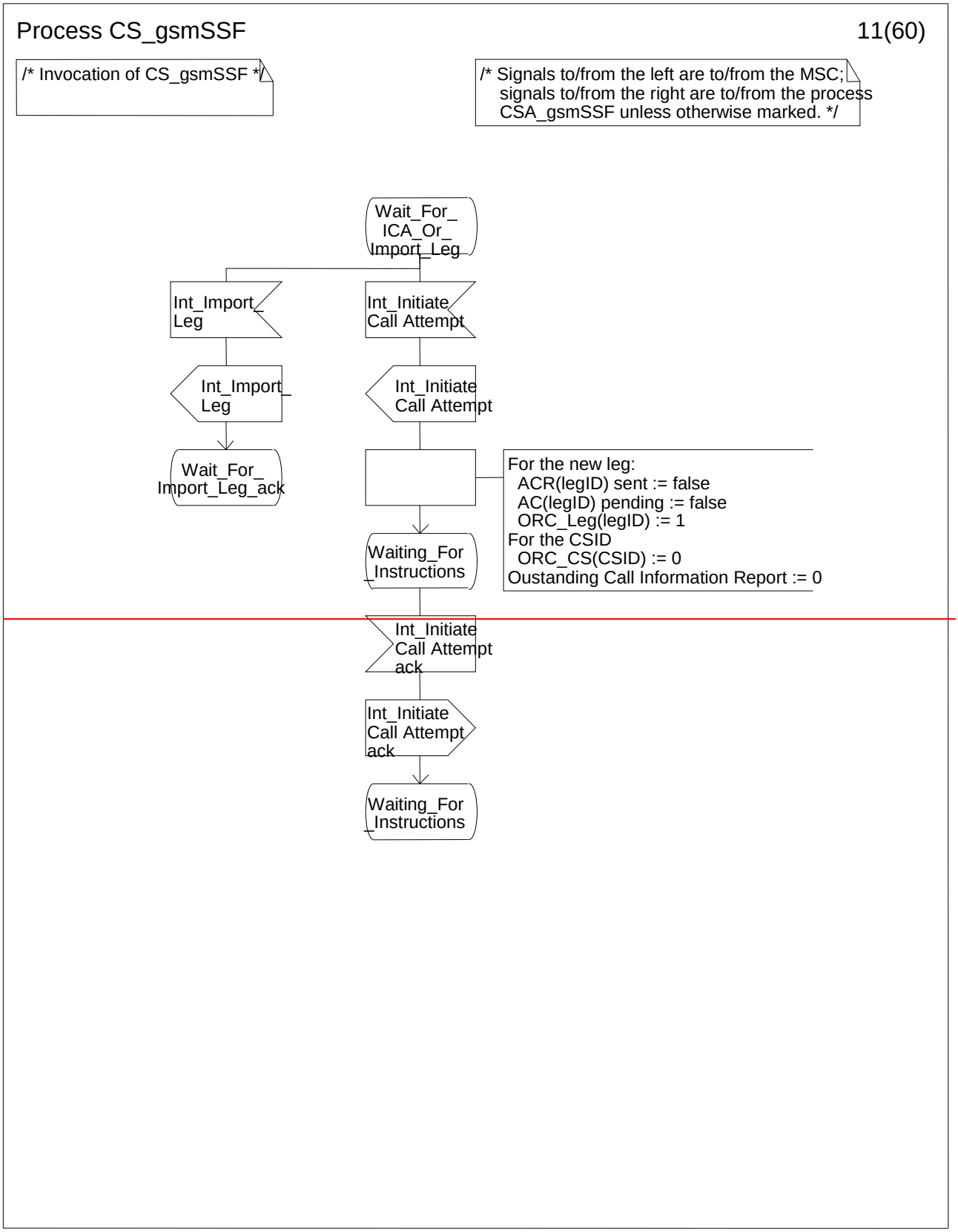
The two branches on sheet 11 shall have be distinctive intermediate states.

Sheet 38: (leftmost branch) The gsmSSF FSM transits from UI state to WFI. The “last used timer interval” would normally be the “default User Interaction interval”. However, since gsmSSF FSM transits from a UI state to WFI, Tssf shall be set to default non-User Interaction

		timer value. See also sheet 39. After Handle_AC has been executed, Tssf shall be restarted. The handling of Int_DFC and Int_DFCWA shall be aligned. These two input signals are placed on a separate sheet (38b). Sheet 42: When gsmSSF has processed the CPH Operation and transits to state WFI, it shall load Tssf. If the CPH Operation is received and processed in WFI state, then Tssf shall be set to last used value. If the CPH Operation is receieved in Monitoring state, then Tssf shall be set to default non-user interaction Tssf value. Sheet 49: When gsmSSF receives Int_PlayTone in state WFI, the Tssf shall be loaded with last used value. Sheet 58: When gsmSSF transits from the UI state (WfEoTCfDS) back to non-UI state (WFI_for_DS), the Tssf shall be loaded with default non-user interaction value.
Summary of change: ⌘		Correct process CS_gsmSSF, as specified above.
Consequences if not approved: ⌘		Process gsmSSF may be waiting indefinitely for instructions from gsmSCF, since no Tssf timer is running.

Clauses affected:	⌘	4.5.7.5 (process CS_gsmSSF)				
		Y	**N**			
Other specs affected:	⌘	**X**		Other core specifications	⌘	29078-CR368
			X	Test specifications		
			X	O&M Specifications		
Other comments:	⌘					

***** First Modification *****



~~Figure 4.96-11: Process CS_gsmSSF (sheet 11)~~

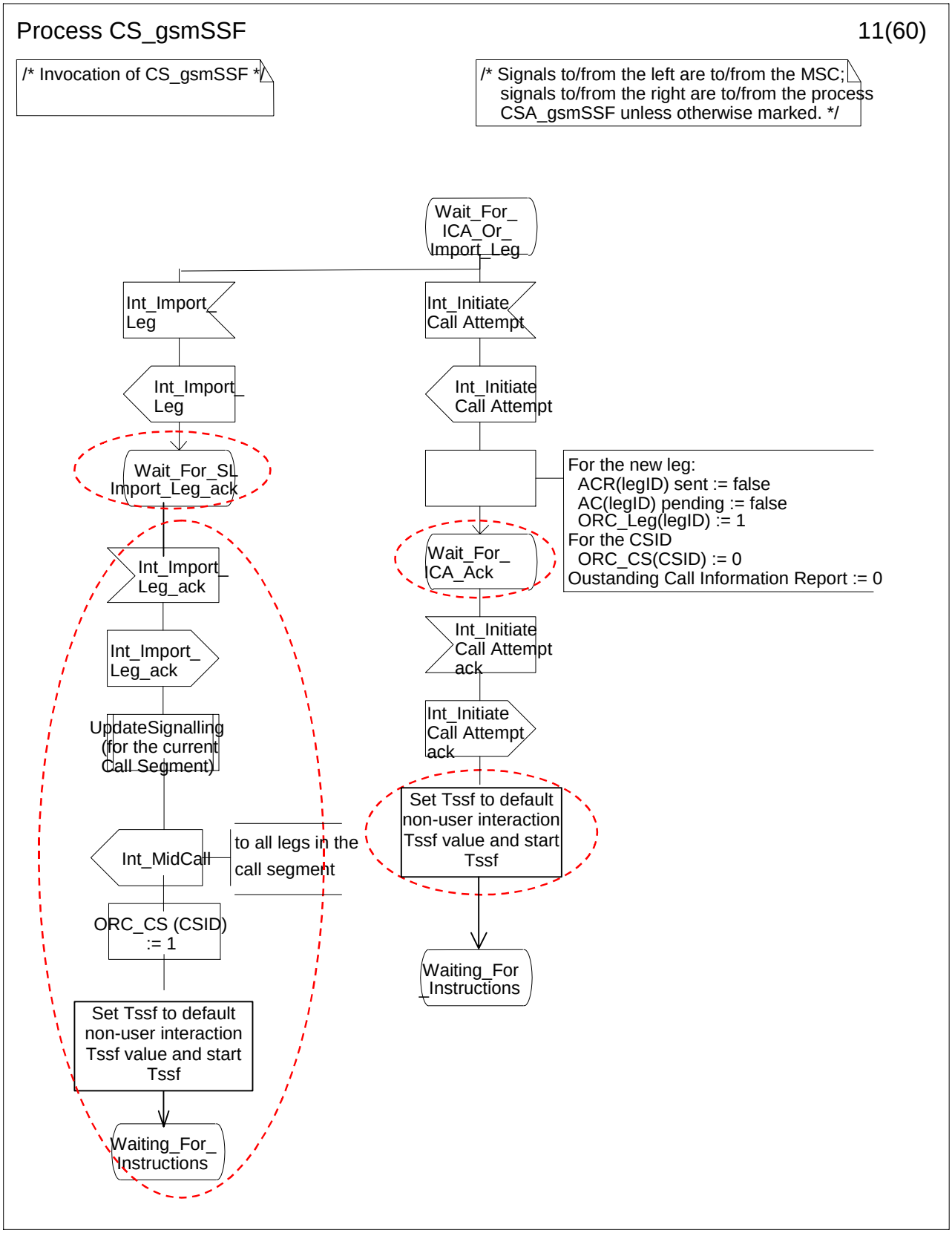


Figure 4.96-11: Process CS_gsmSSF (sheet 11)

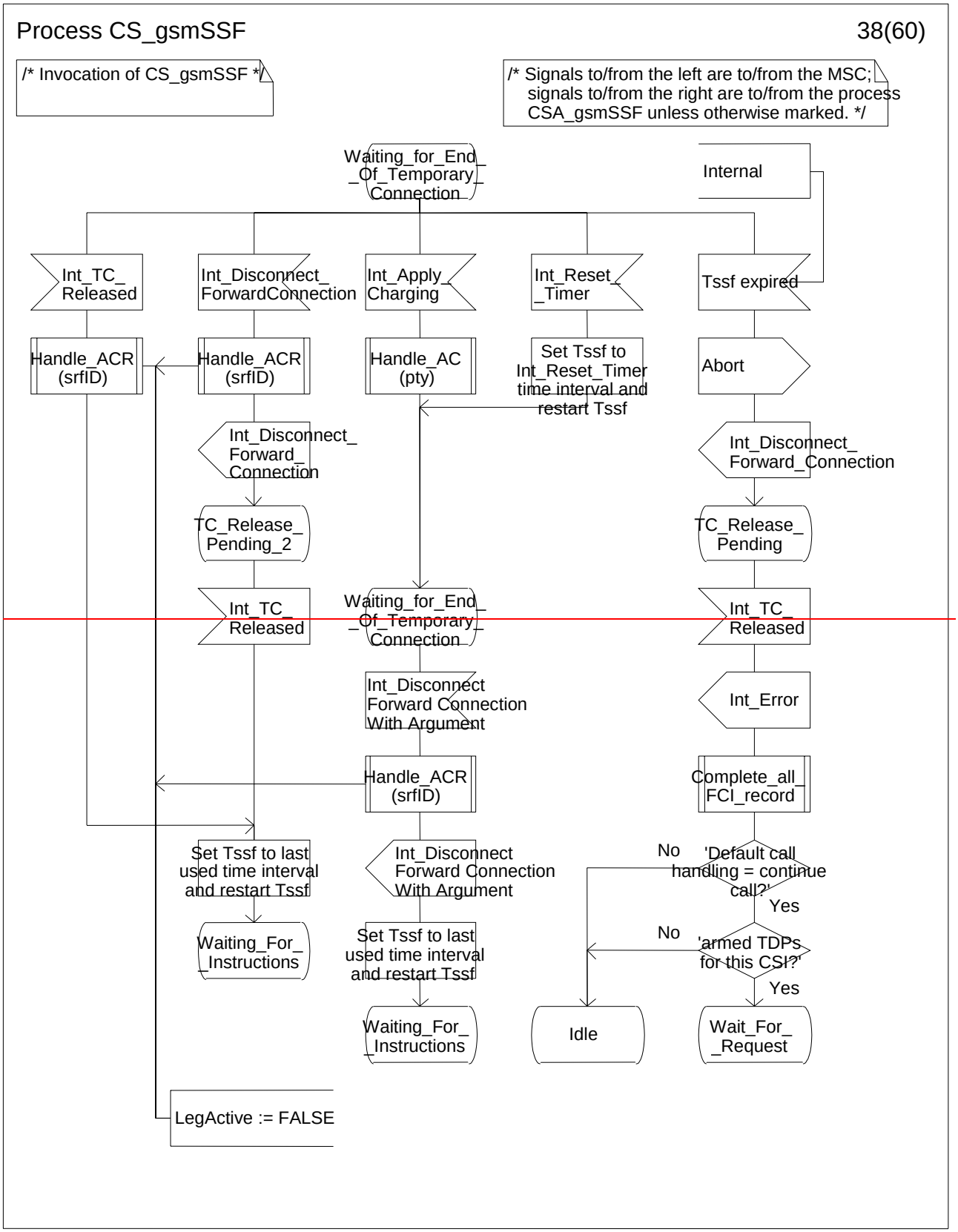


Figure 4.96-38: Process CS_gsmSSF (sheet 38)

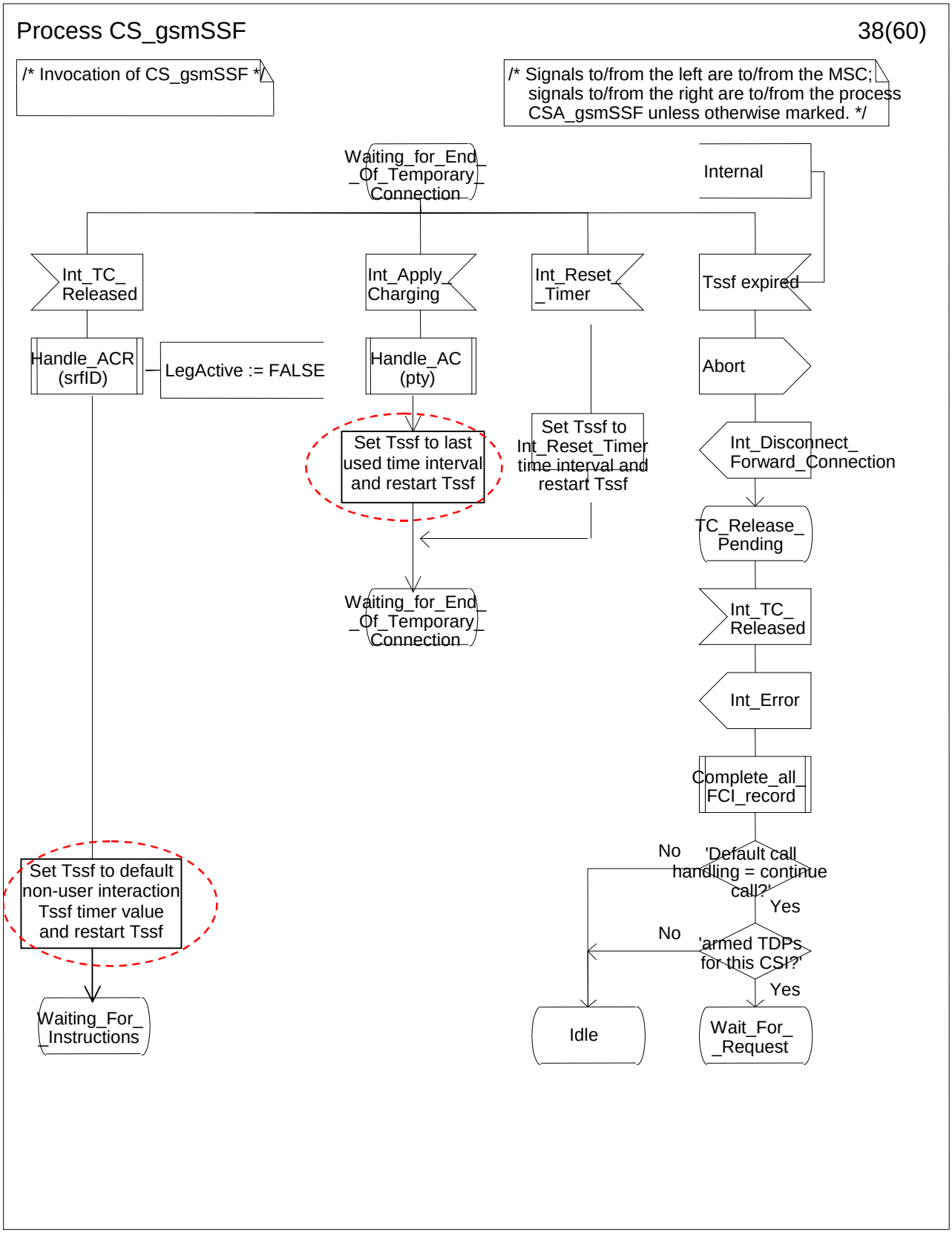


Figure 4.96-38: Process CS_gsmSSF (sheet 38)

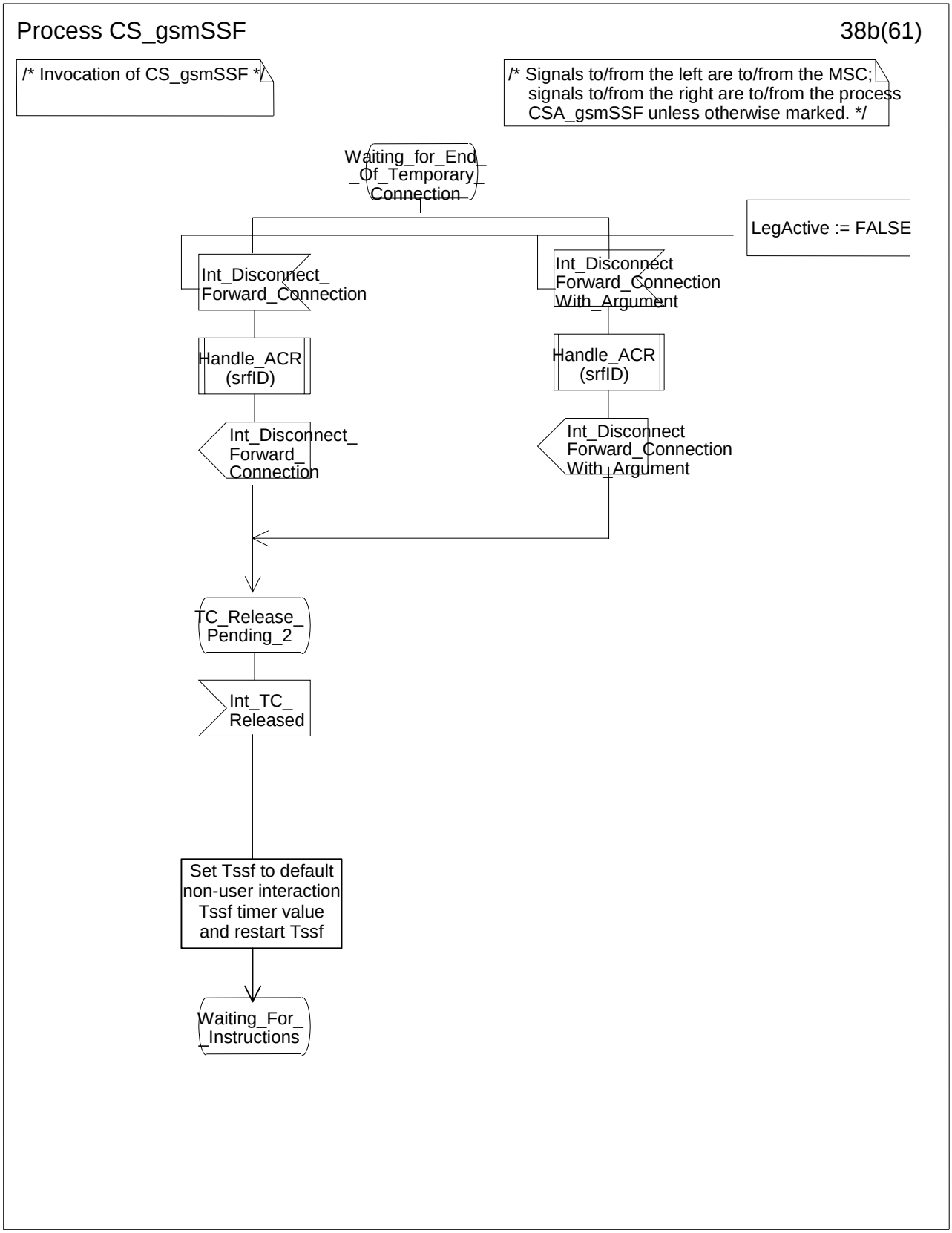
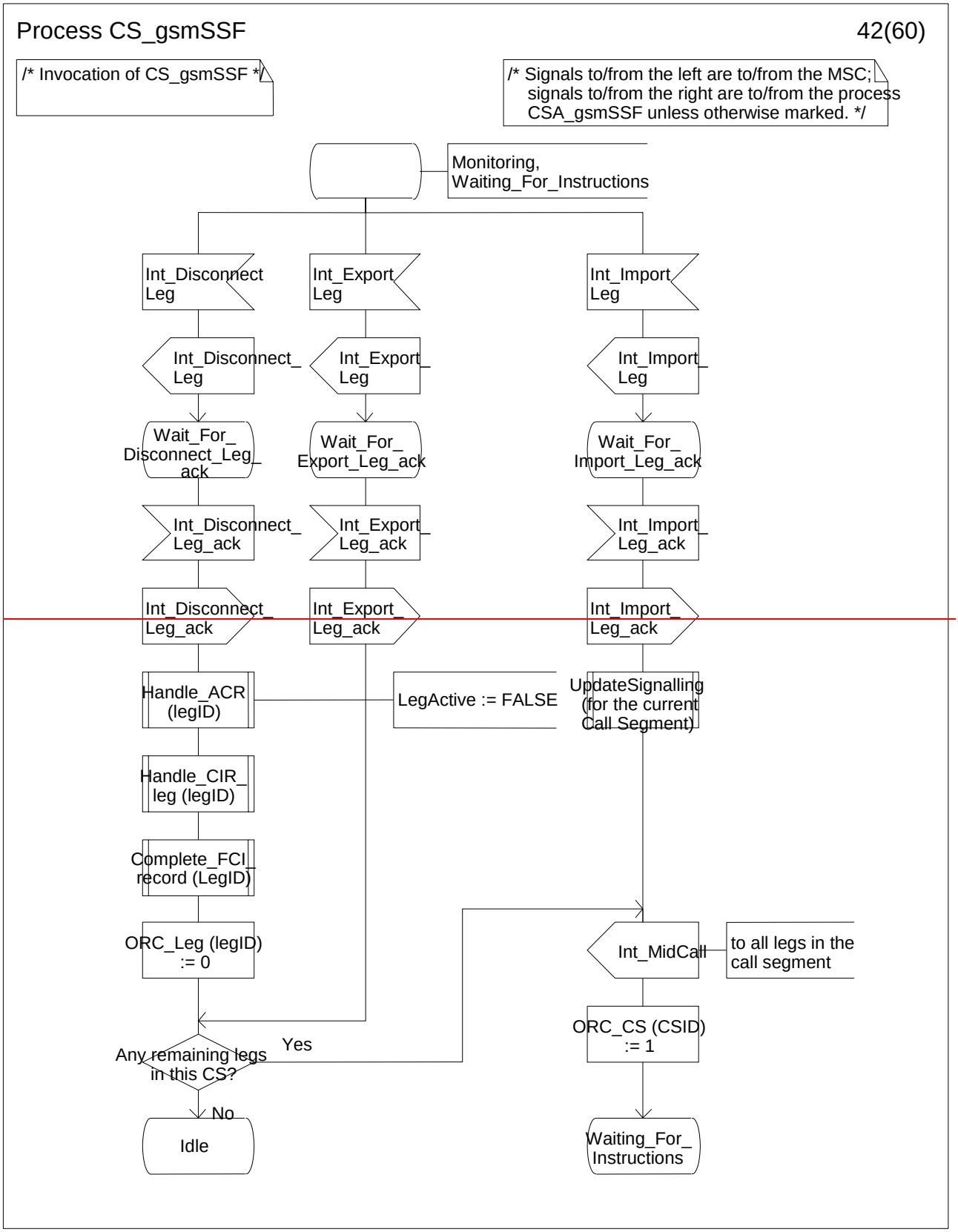


Figure 4.96-38b: Process CS_gsmSSF (sheet 38b)



~~Figure 4.96-42: Process CS_gsmSSF (sheet 42)~~

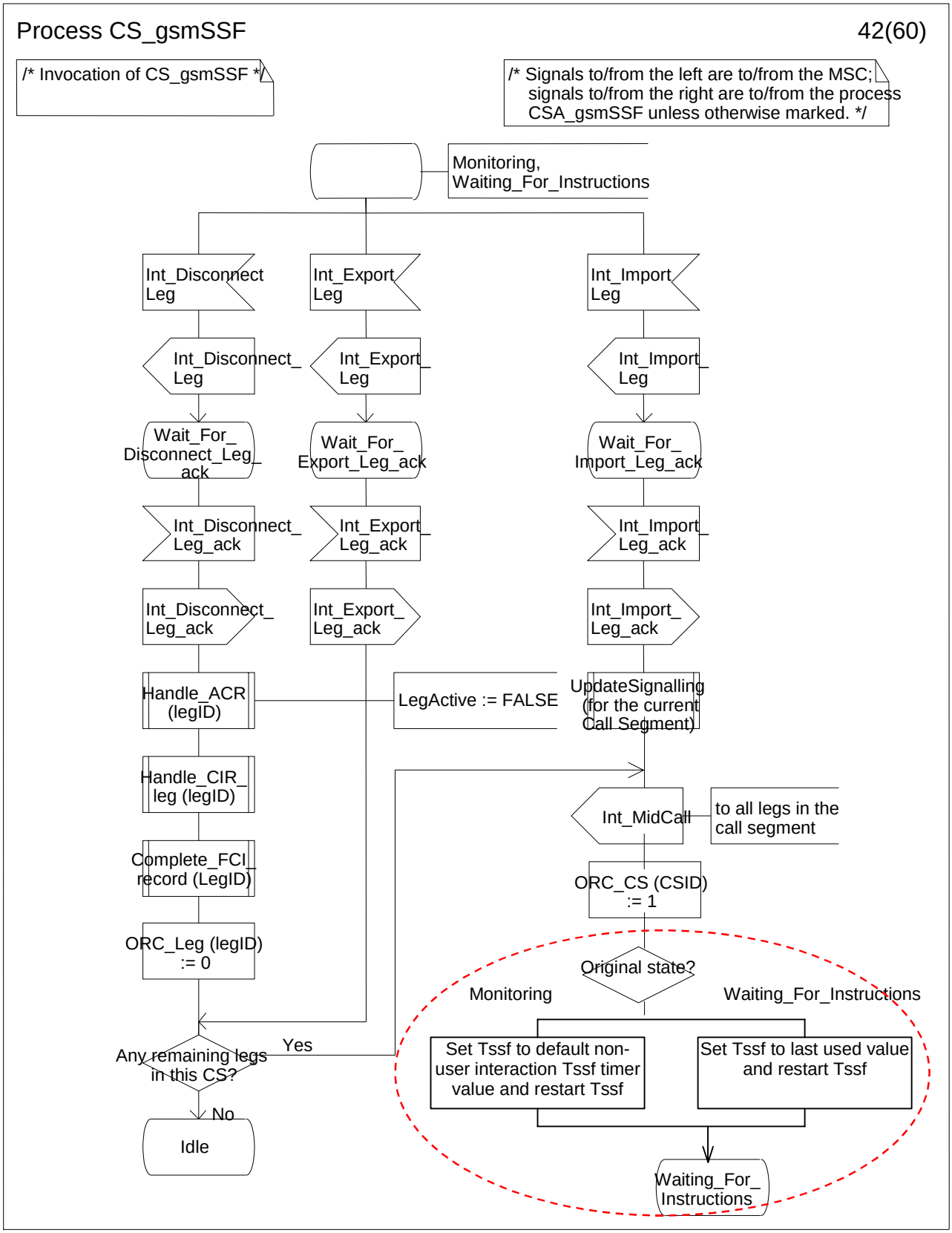
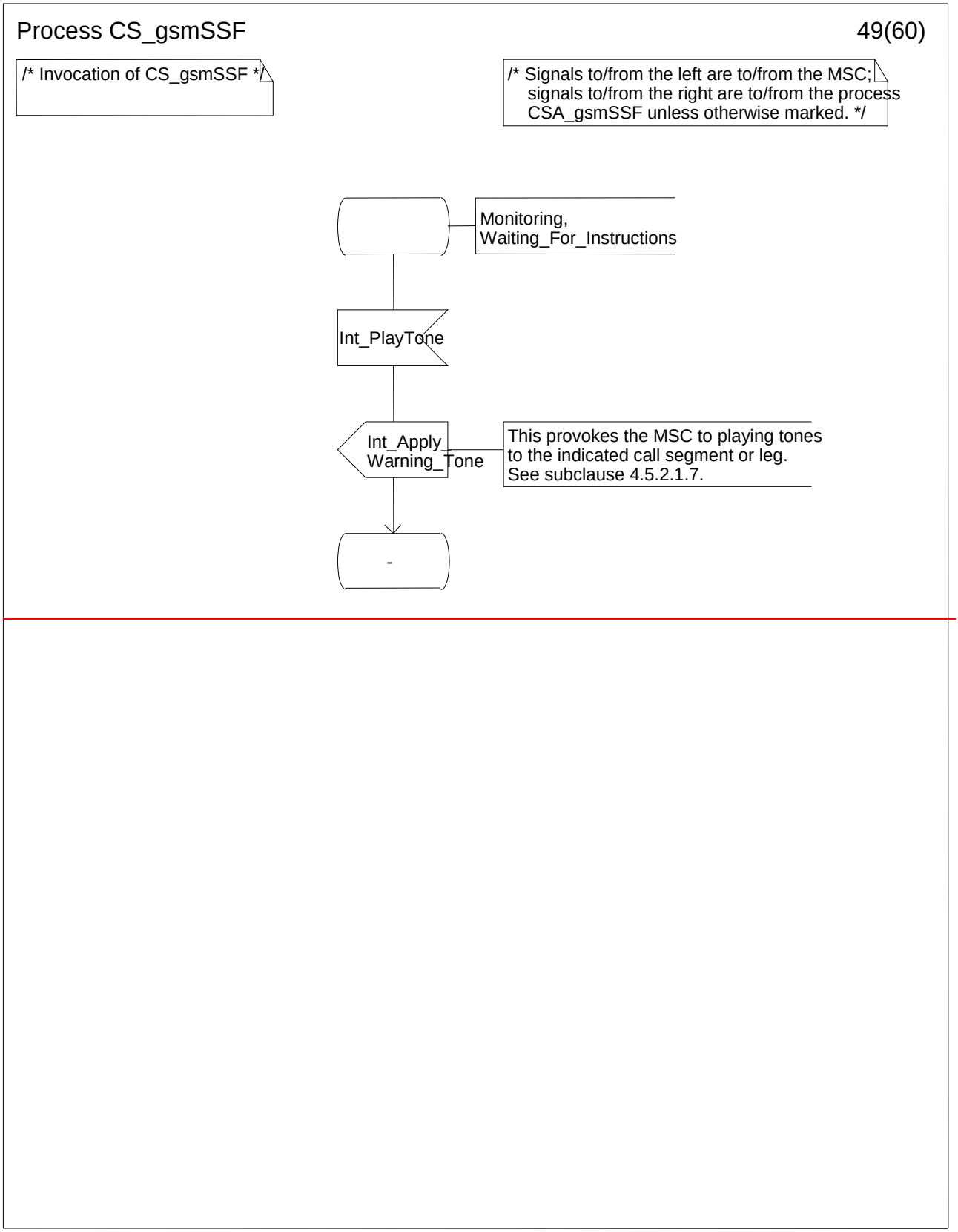


Figure 4.96-42: Process CS_gsmSSF (sheet 42)



~~Figure 4.96-49: Process CS_gsmSSF (sheet 49)~~

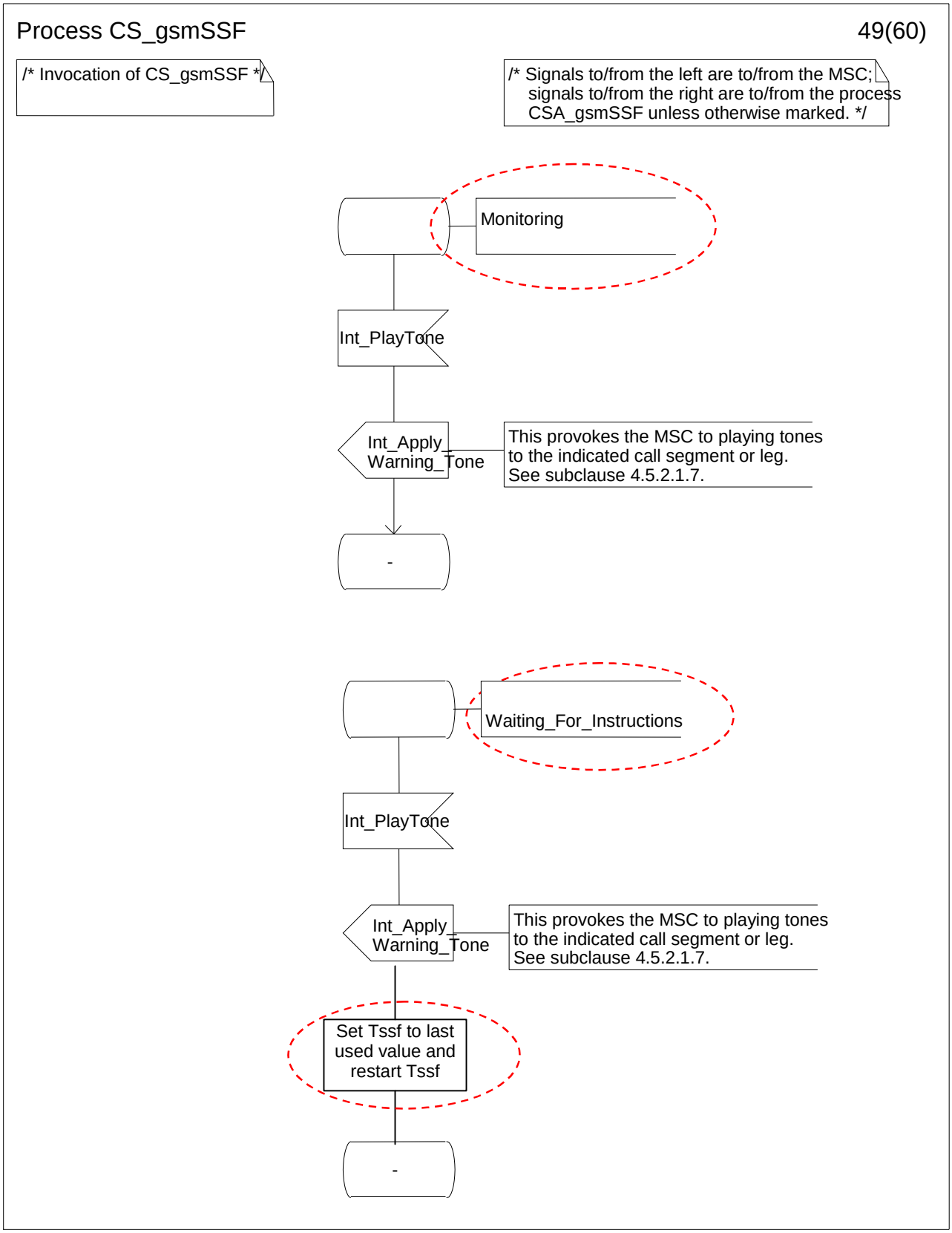
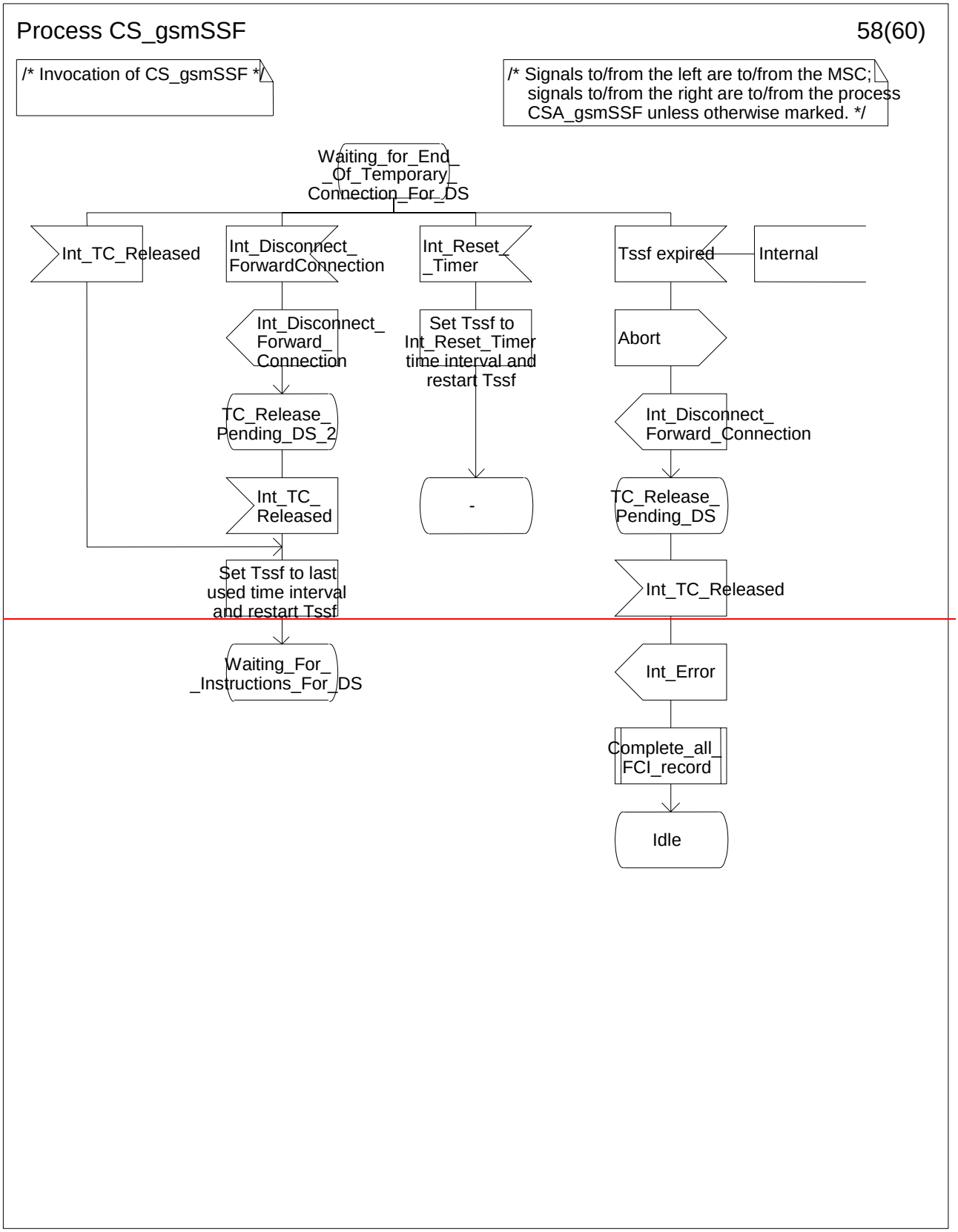


Figure 4.96-49: Process CS_gsmSSF (sheet 49)



~~Figure 4.96-58: Process CS_gsmSSF (sheet 58)~~

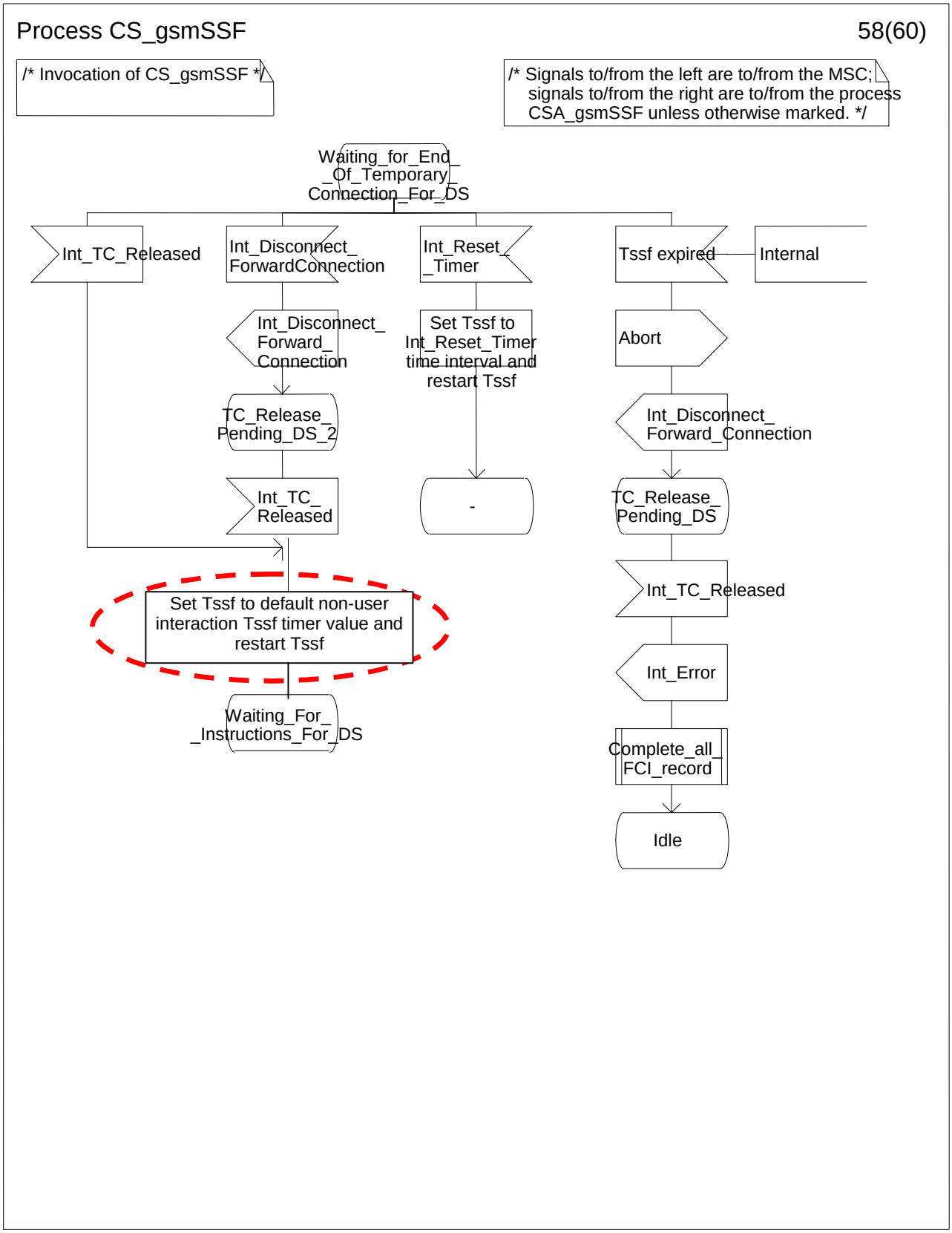


Figure 4.96-58: Process CS_gsmSSF (sheet 58)

*** End of Document ***

N2-040234

CHANGE REQUEST

⌘ **23.078** **CR** **721** ⌘**rev** **1** ⌘ Current version: **6.1.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Correction to Tssf timer
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	12/05/2004
Category:	⌘	A
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘ The usage of Tssf in process CS_gsmSSF is incomplete. The following corrections are needed:

Sheet 11: When gsmSSF FSM transits to state WFI, as a result of processing Int_Initiate_Call_Attempt, Tssf shall be started with default non-user interaction value.

When gsmSSF receives Int_Import_Leg in the state Wait_For_ICA_Or_Import_Leg on sheet 11, then that is the result of the instantiation of a new CS_gsmSSF process. In that case, CS_gsmSSF had received Int_Invoke_gsmSSF on sheet 4 and the CS_gsmSSF FSM had transited to Wait_For_ICA_Or_Import_Leg.

Once CS_gsmSSF FSM has reached state Wait_For_ICA_Or_Import_Leg, it continues on sheet 11. The receiving of the Int_Import_Leg results in FSM transition to the state Wait_For_Import_Leg_Ack on sheet 11. This state is defined also on sheet 42.

When the CS_gsmSSF FSM subsequently transits to the state Waiting_For_Instructions (currently on sheet 42), Tssf shall be set to the default non-user interaction Tssf value.

This functionality is best reflected by copying the SDL branch from sheet 42 onto sheet 11.

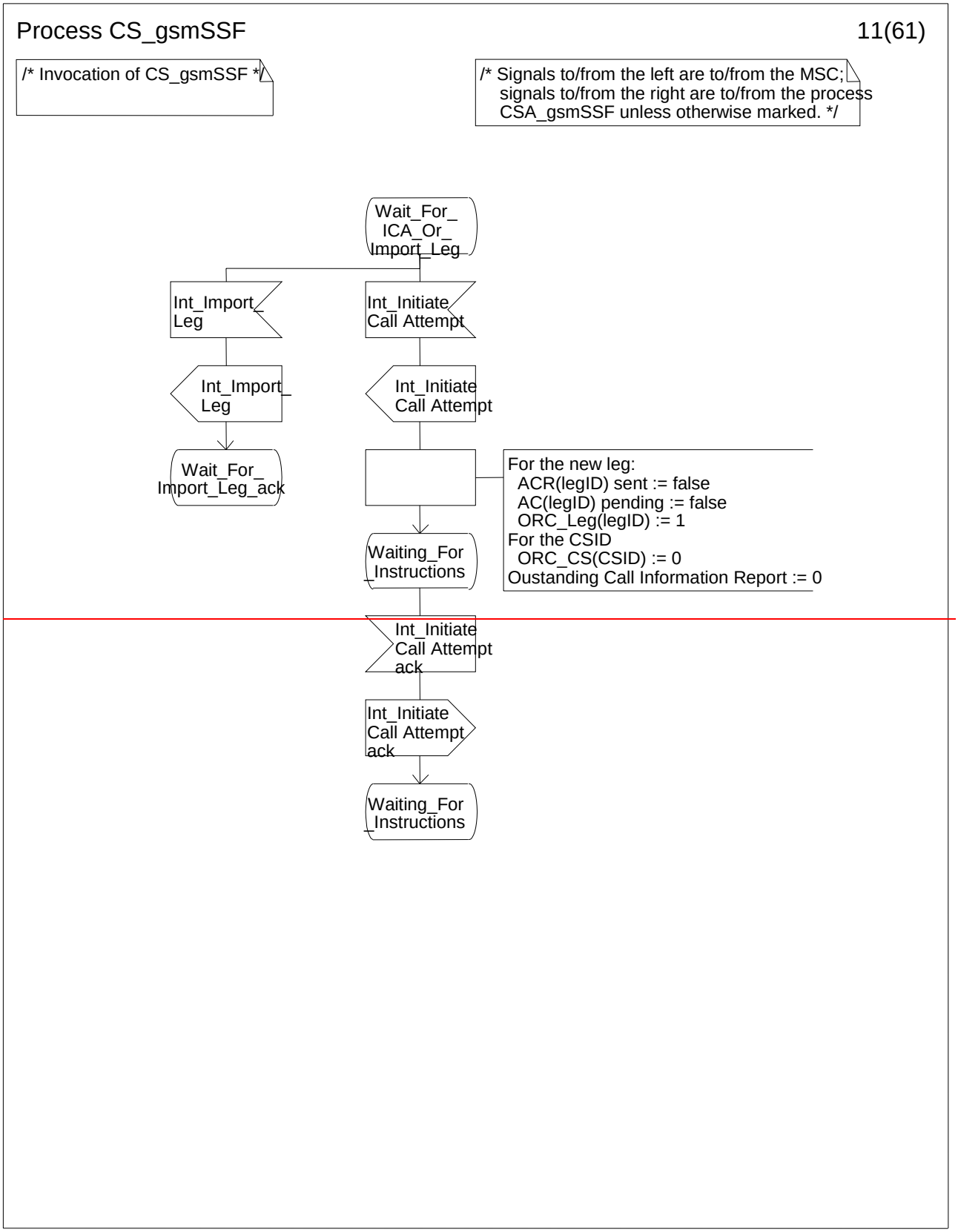
The two branches on sheet 11 shall have distinctive intermediate states.

Sheet 38: (leftmost branch) The gsmSSF FSM transits from UI state to WFI. The “last used timer interval” would normally be the “default User Interaction interval”. However, since gsmSSF FSM transits from a UI state to WFI, Tssf shall be set to default non-User Interaction

		timer value. See also sheet 39. After Handle_AC has been executed, Tssf shall be restarted. The handling of Int_DFC and Int_DFCWA shall be aligned. These two input signals are placed on a separate sheet (38b). Sheet 42: When gsmSSF has processed the CPH Operation and transits to state WFI, it shall load Tssf. If the CPH Operation is received and processed in WFI state, then Tssf shall be set to last used value. If the CPH Operation is received in Monitoring state, then Tssf shall be set to default non-user interaction Tssf value. Sheet 49: When gsmSSF receives Int_PlayTone in state WFI, the Tssf shall be loaded with last used value. Sheet 58: When gsmSSF transits from the UI state (WfEoTCfDS) back to non-UI state (WFI_for_DS), the Tssf shall be loaded with default non-user interaction value.
Summary of change: ⌘		Correct process CS_gsmSSF, as specified above.
Consequences if not approved: ⌘		Process gsmSSF may be waiting indefinitely for instructions from gsmSCF, since no Tssf timer is running.

Clauses affected: ⌘			4.5.7.5 (process CS_gsmSSF)		
	Y	**N**			
Other specs affected: ⌘	**X**		Other core specifications	⌘	29078-CR368
		X	Test specifications		
		X	O&M Specifications		
Other comments: ⌘					

***** First Modification *****



~~Figure 4.99-11: Process CS_gsmSSF (sheet 11)~~

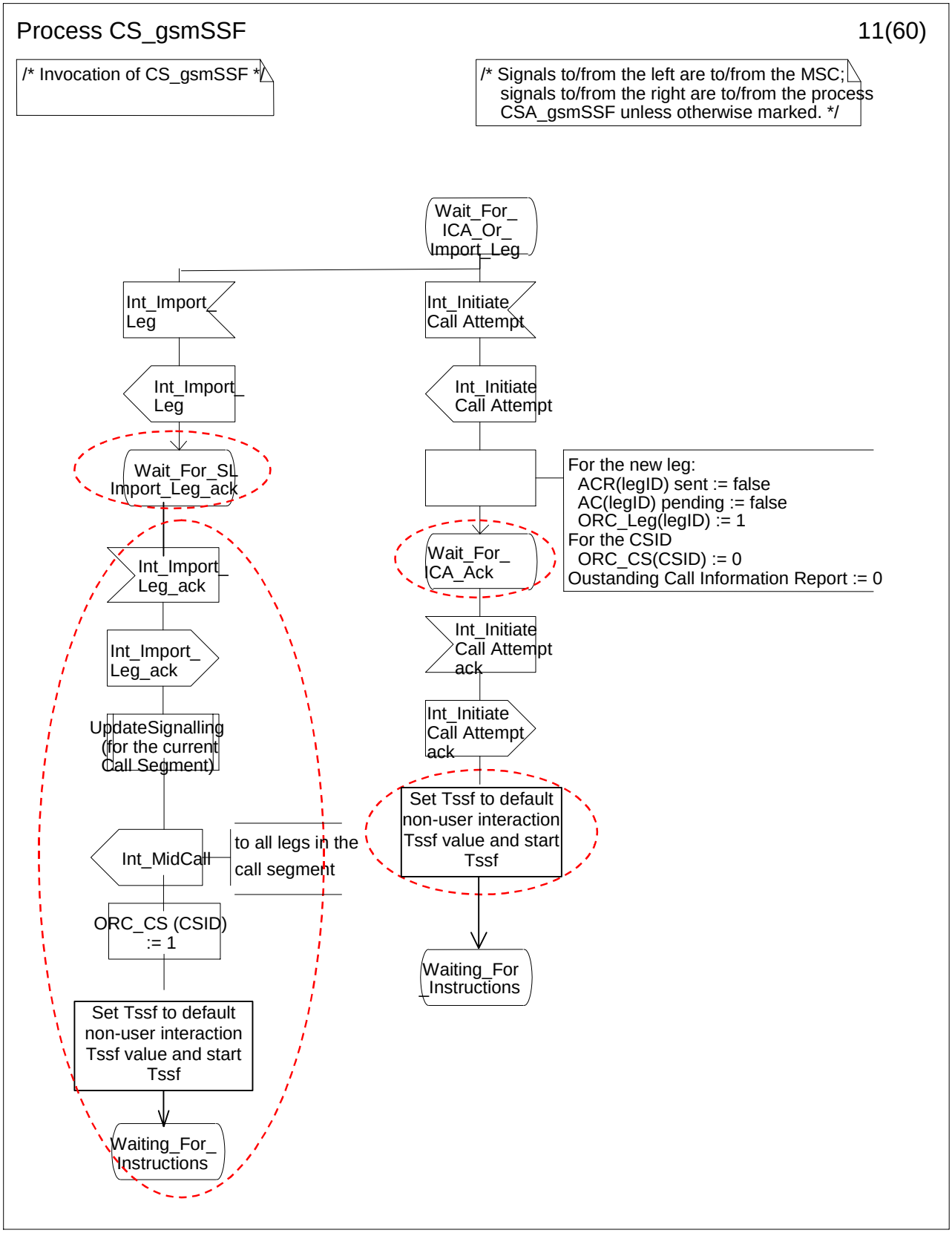
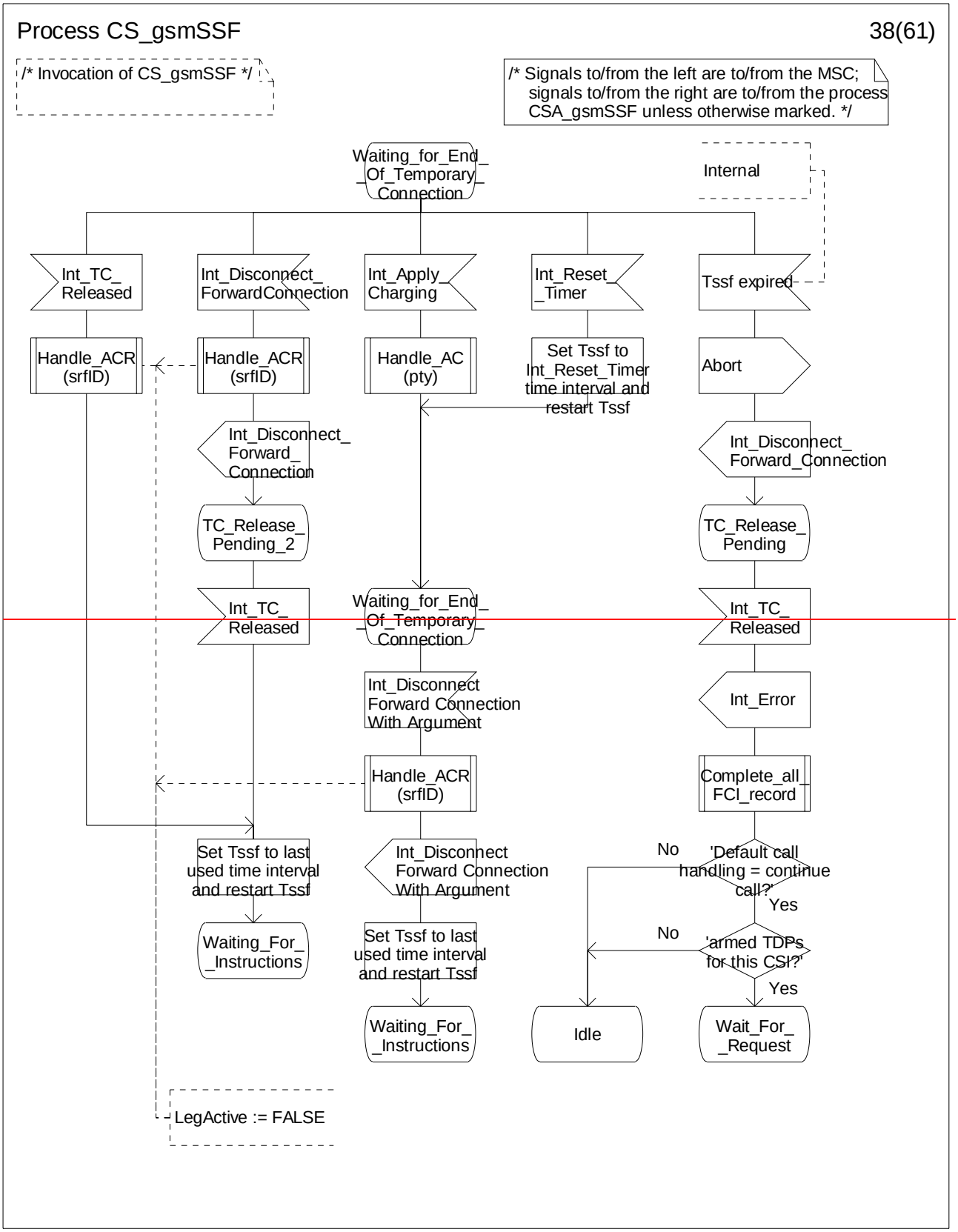


Figure 4.99-11: Process CS_gsmSSF (sheet 11)



~~Figure 4.99-38: Process CS_gsmSSF (sheet 38)~~

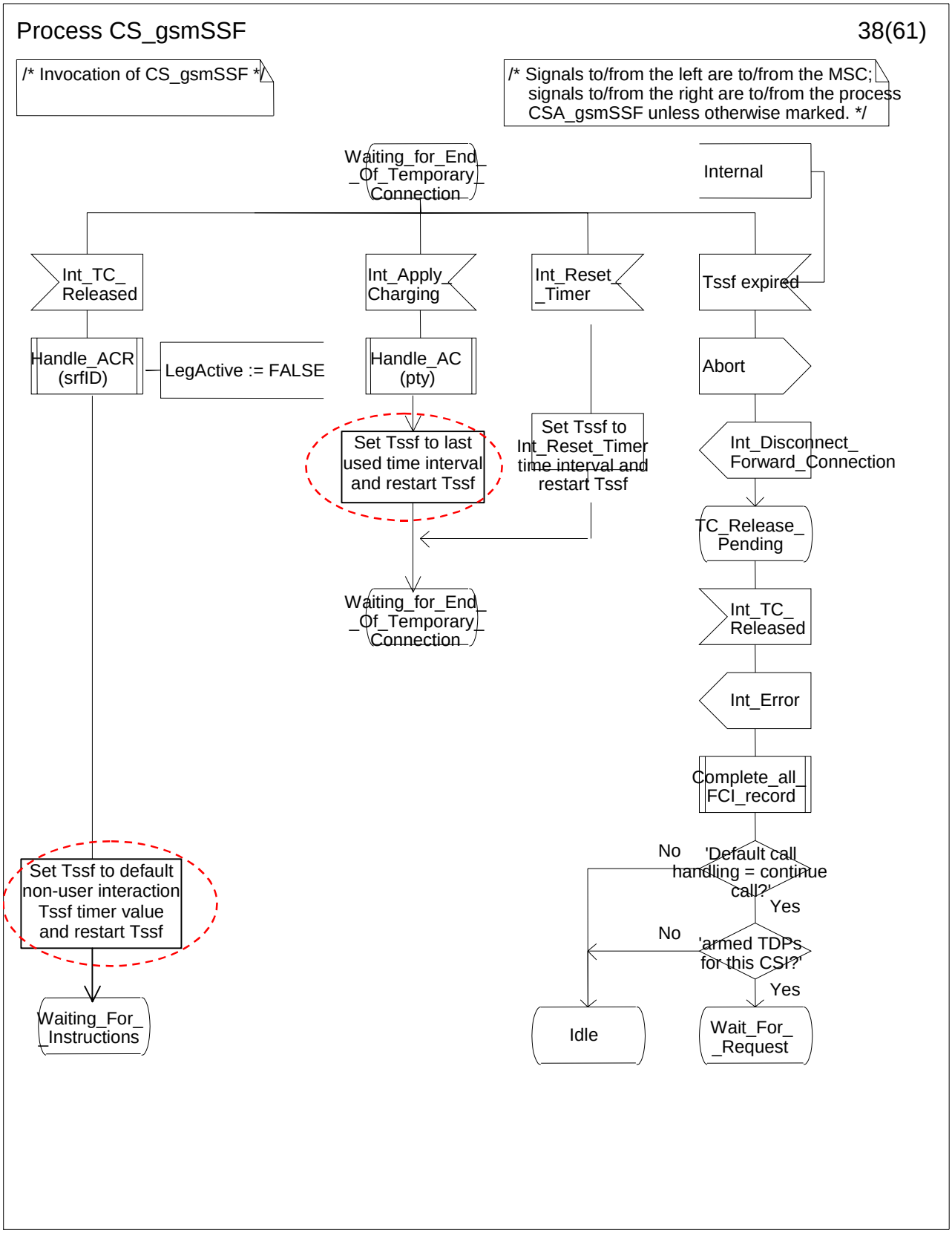


Figure 4.99-38: Process CS_gsmSSF (sheet 38)

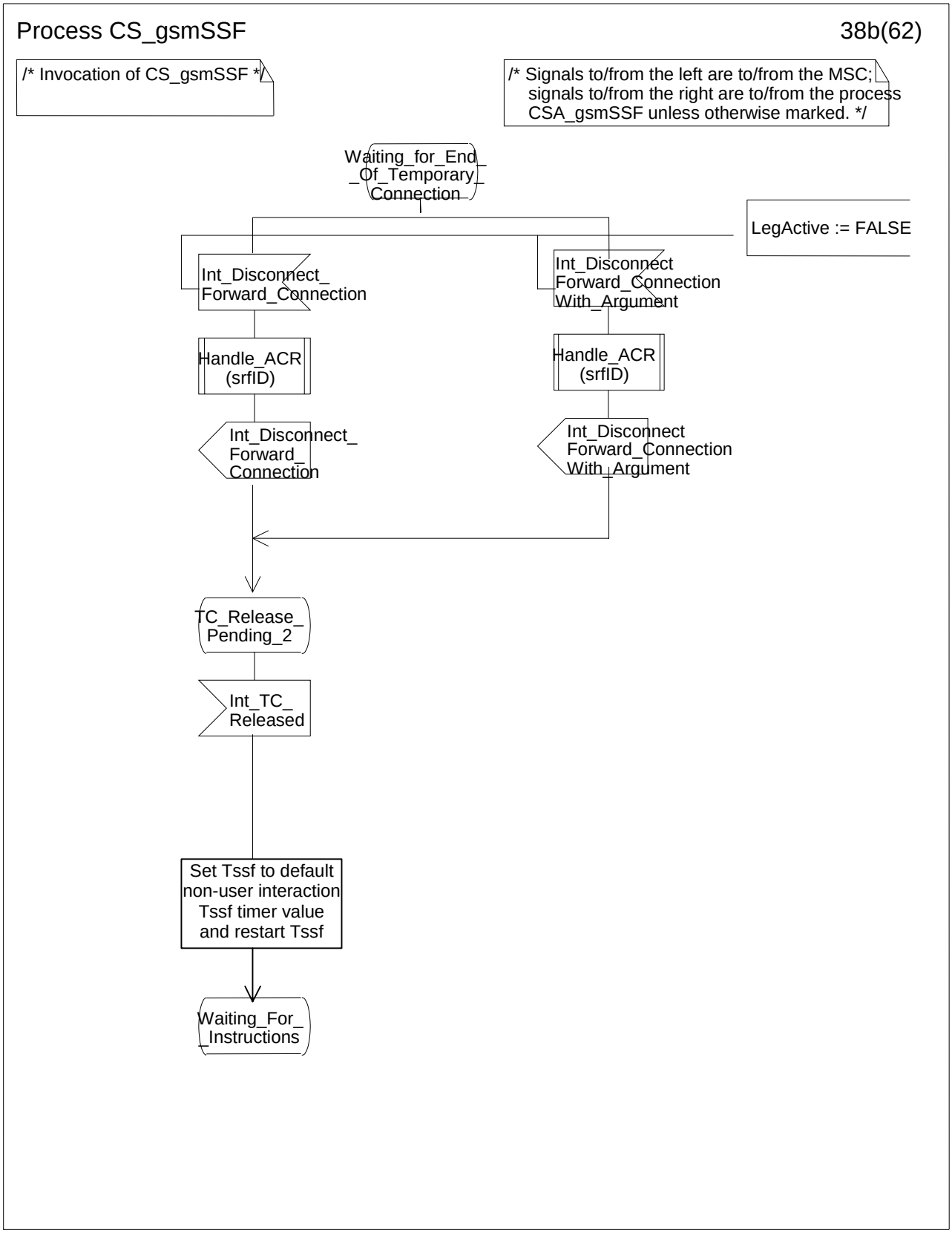
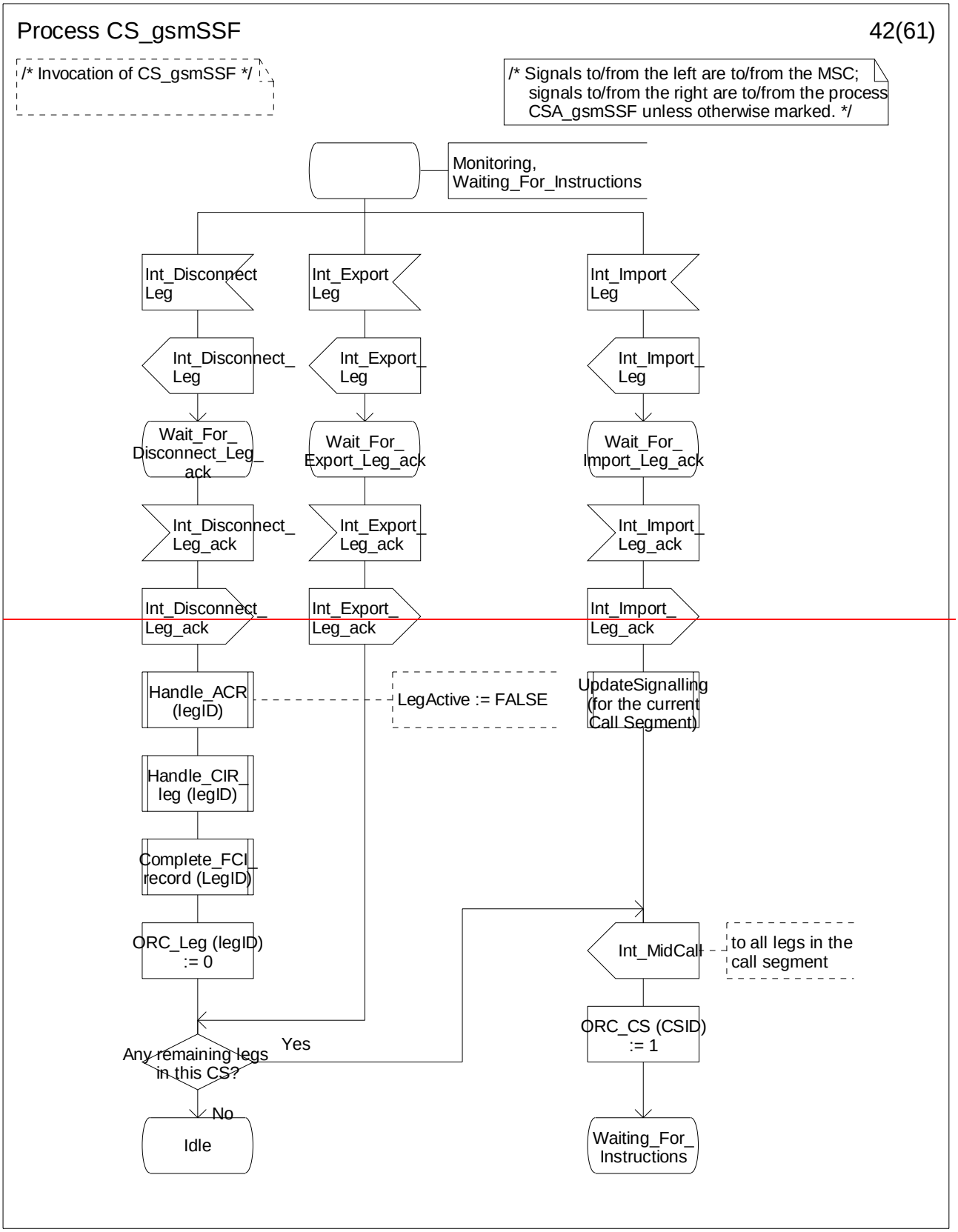


Figure 4.99-38b: Process CS_gsmSSF (sheet 38b)



~~Figure 4.99-42: Process CS_gsmSSF (sheet 42)~~

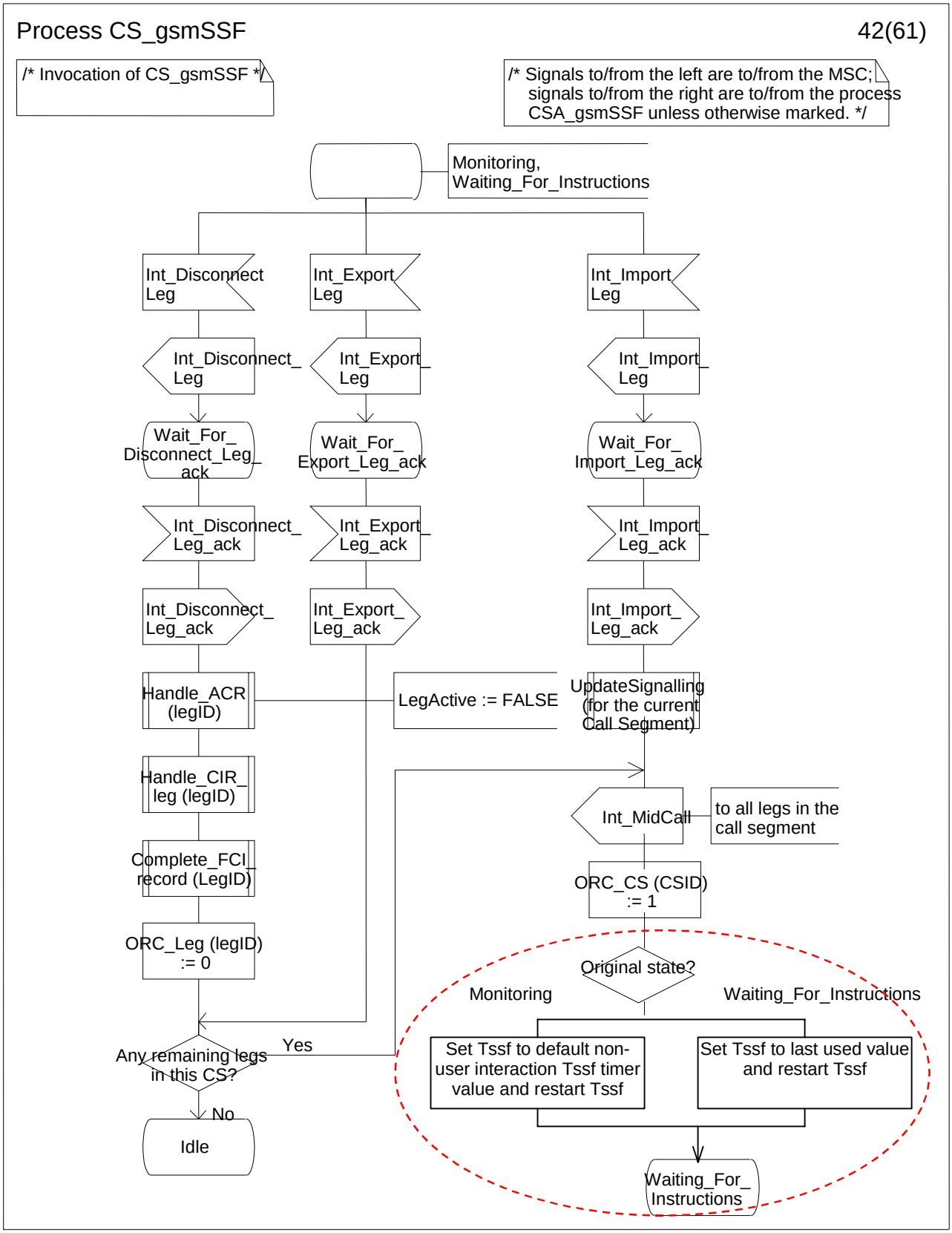
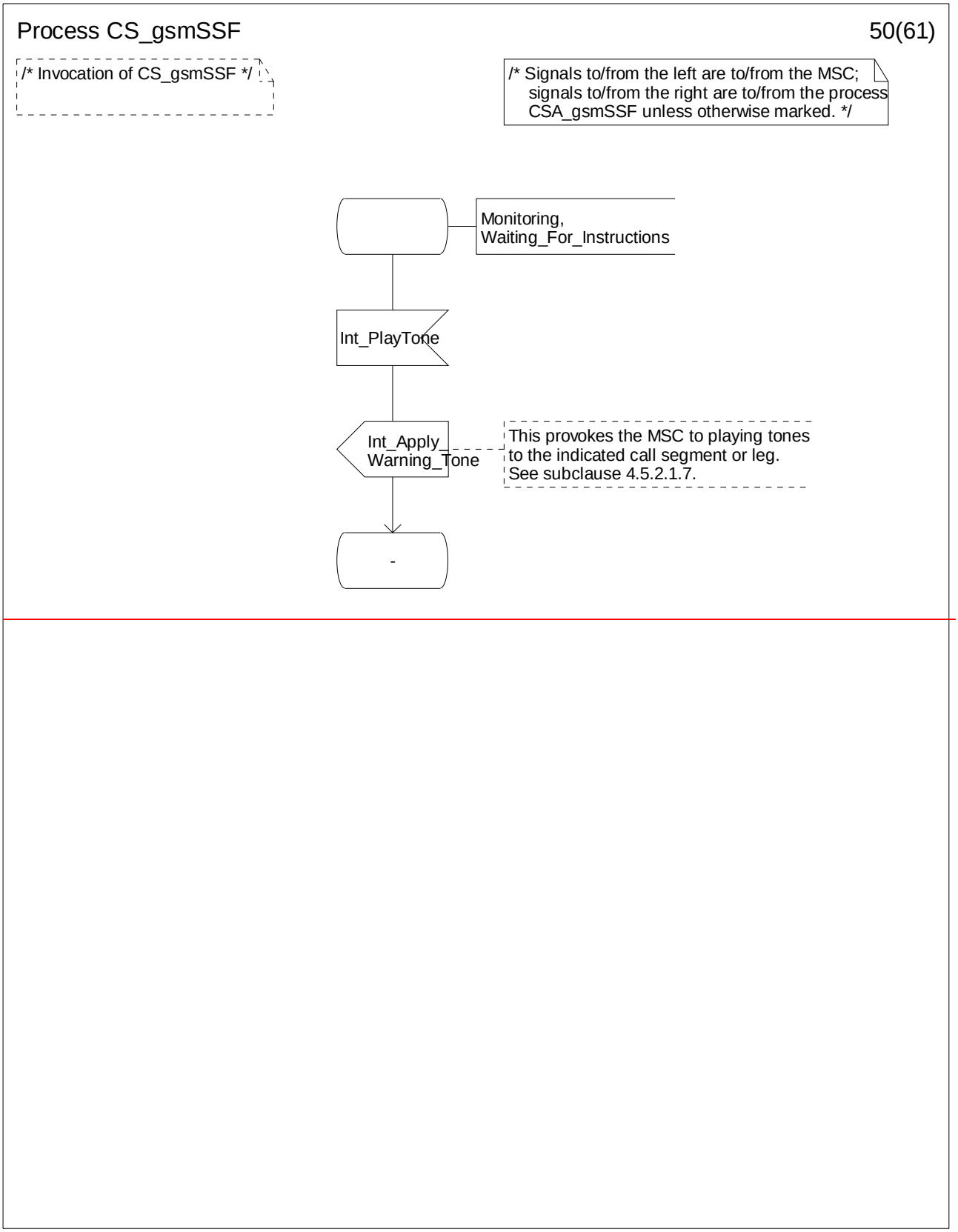


Figure 4.99-42: Process CS_gsmSSF (sheet 42)



~~Figure 4.99-50: Process CS_gsmSSF (sheet 50)~~

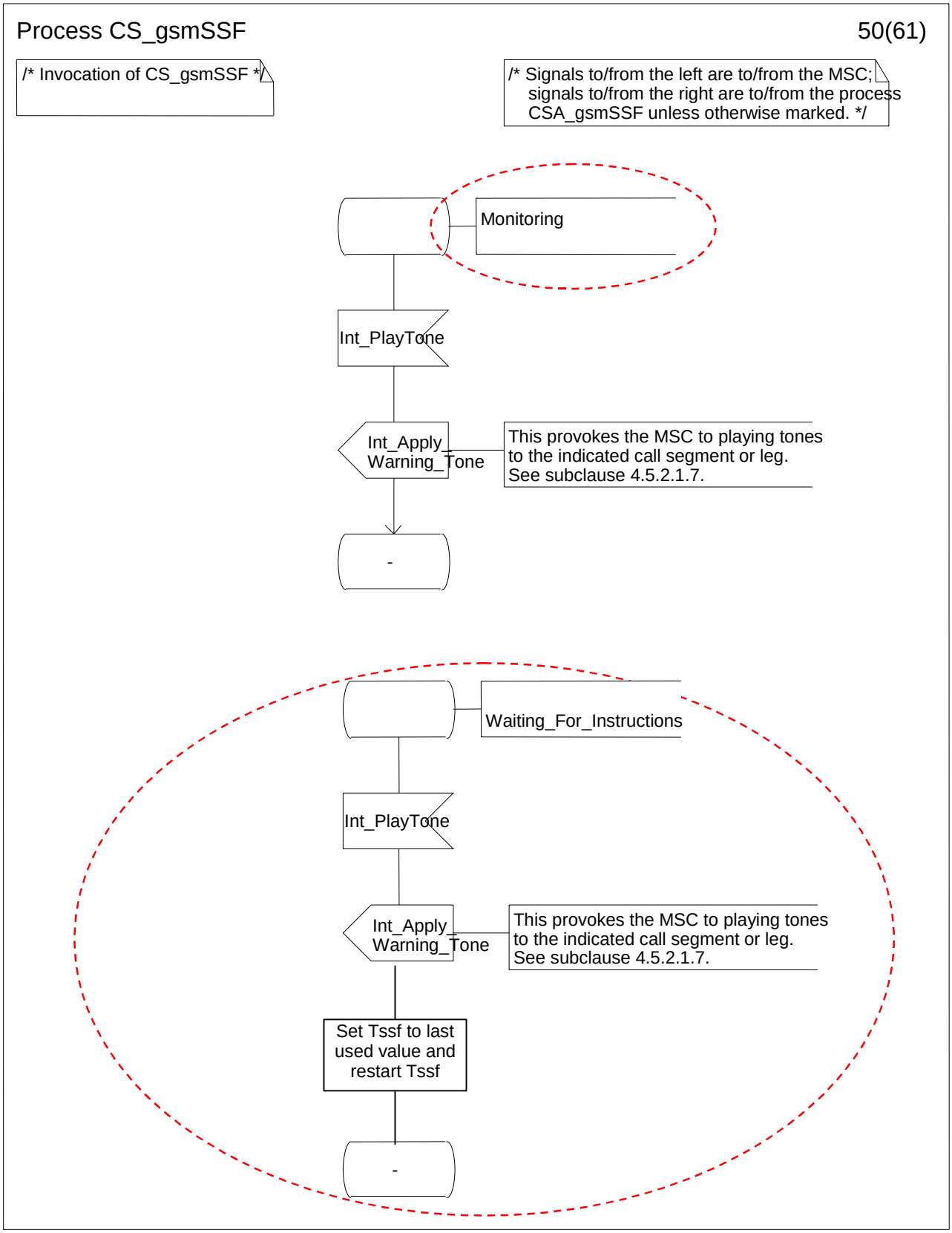
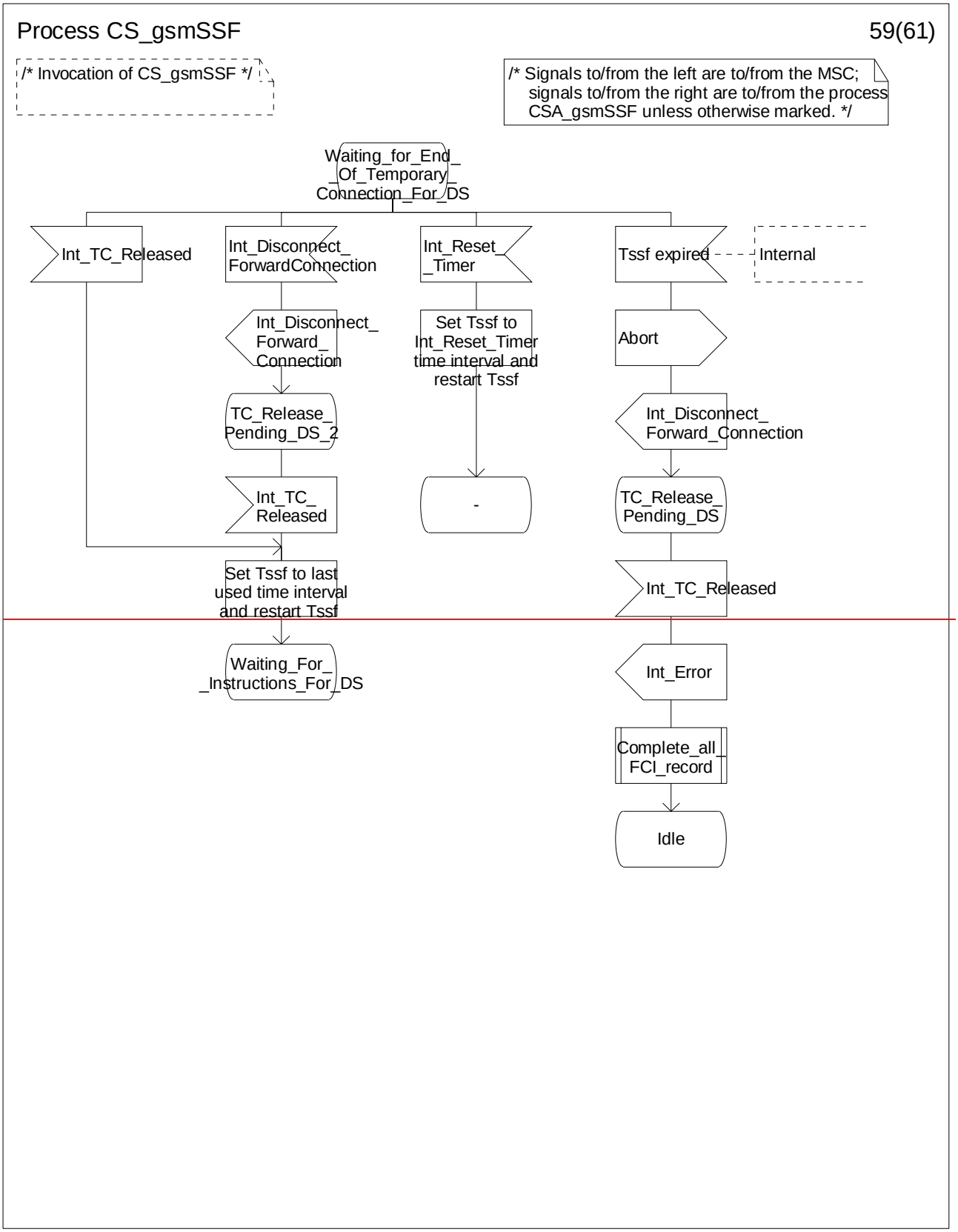


Figure 4.99-50: Process CS_gsmSSF (sheet 50)



~~Figure 4.99-59: Process CS_gsmSSF (sheet 59)~~

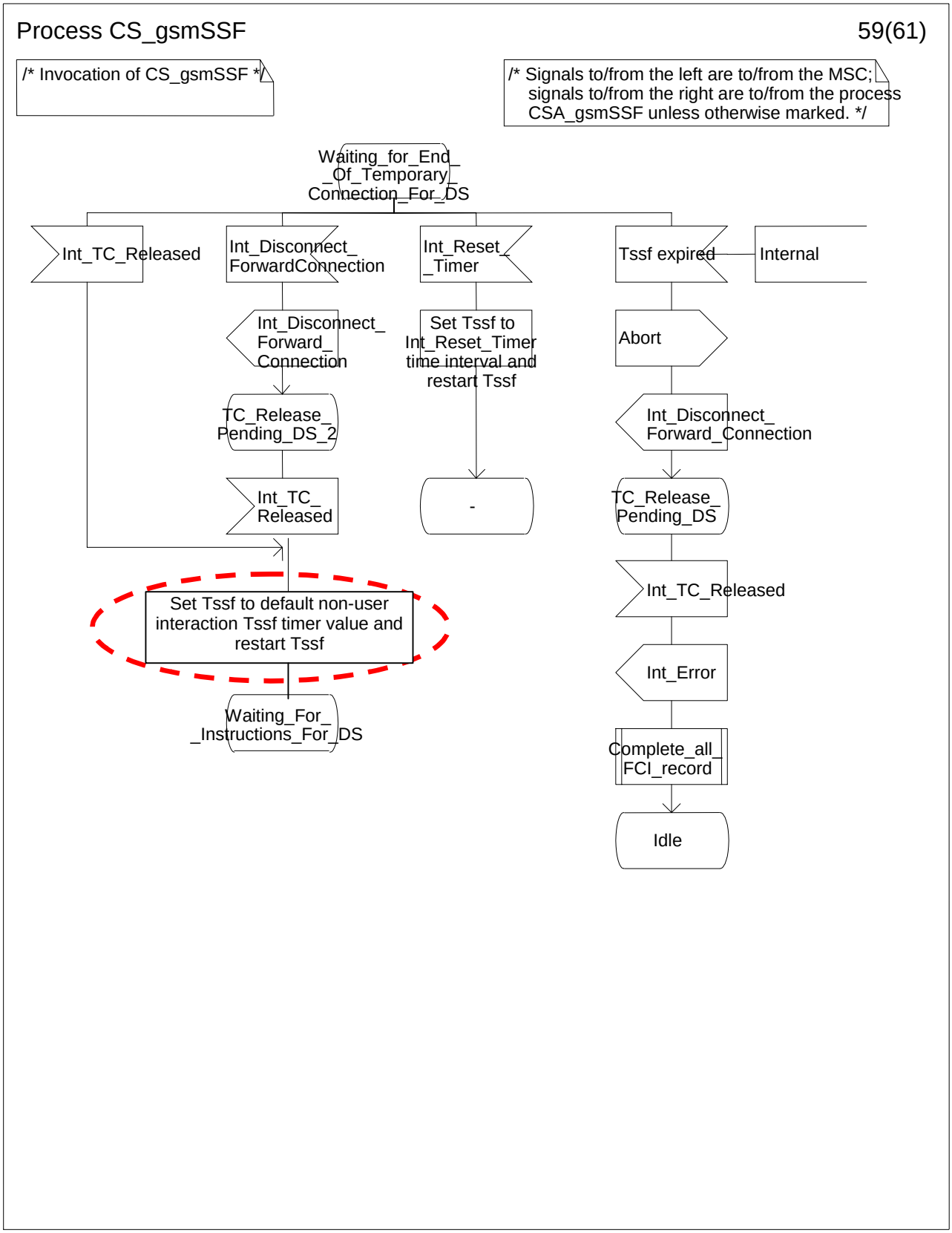


Figure 4.99-59: Process CS_gsmSSF (sheet 59)

*** End of Document ***

CHANGE REQUEST

⌘ **23.078** **CR** **725** ⌘**rev** ⌘ Current version: **6.1.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to Move Leg pre-condition
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	12 May 2004
Category:	⌘	A
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘

One of the pre-conditions of the ***Move Leg*** Operation is that "At least one leg in the target Call Segment is in the active phase" (refer to TS 22.078). For ***Move Leg***, the target Call Segment is always Call Segment 1 (CS1).

The Move_Leg_Allowed variable in process CSA_gsmSSF is used as an indication that the above-referred condition is fulfilled. Hereto, sheet 18 of process CSA_gsmSSF specifies that Move_Leg_Allowed shall be set TRUE when a leg in CS1 has reached the active state.

Sheet 19 of CSA_gsmSSF uses the Move_Leg_Allowed variable to verify whether above-referred pre-condition for using Move Leg is fulfilled. Sheet 19 does, however, not verify whether Move Leg is allowed w.r.t. the existence of CS1. When CS1 does not exist, then Move Leg shall not be used, but that is not verified by CSA_gsmSSF, even though the check for Move_Leg_Allowed may give this impression.

Example: the gsmSCF establishes a call (by sending the ***Initiate Call Attempt*** Operation) and Move_Leg_Allowed is set to TRUE; refer CSA_gsmSSF, sheet 2. The gsmSCF creates this leg in a Call Segment other than CS1. To place this leg into CS1, when that leg has reached the alerting state, the gsmSCF shall use ***Split Leg***; CS1 does not exist at this moment, so the gsmSCF is not allowed to use ***Move Leg***.

However, should gsmSCF use Move Leg at this moment, then all checks in CSA_gsmSSF, sheet 19 will pass and CSA_gsmSSF will attempt to "***move***" a leg into a non-existing CS1. This is an erroneous situation.

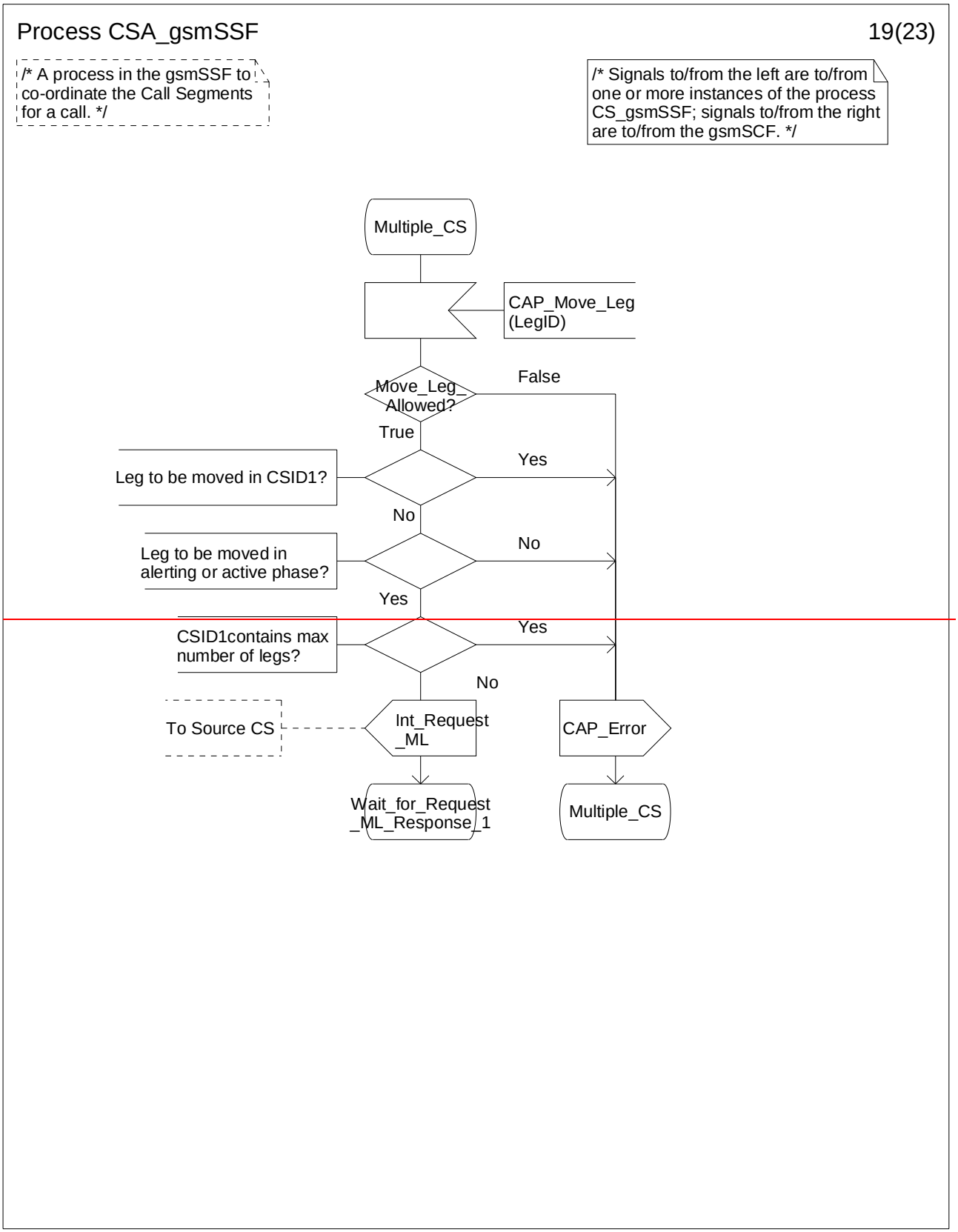
The present CR proposes therefore that CSA_gsmSSF, sheet 19, contain a check for the existence of CS1. If CS1 does not exist when Move Leg is used,

		then CSA_gsmSSF shall return error to gsmSCF.
Summary of change:	⌘	Correct CSA_gsmSSF, sheet 19
Consequences if not approved:	⌘	Service Logic may fail; the gsmSCF may attempt to use Move Leg at a moment that this is not allowed; further behaviour of the gsmSSF is unpredictable.

Clauses affected:	⌘	4.5.7.7				
		Y	**N**			
Other specs affected:	⌘	**X**		Other core specifications	⌘	29.078-CR373
			X	Test specifications		
			X	O&M Specifications		
Other comments:	⌘					

***** First Modification *****

4.5.7.7 Process CSA_gsmSSF and procedures



~~Figure 4.116-19: Process CSA_gsmSSF (sheet 19)~~

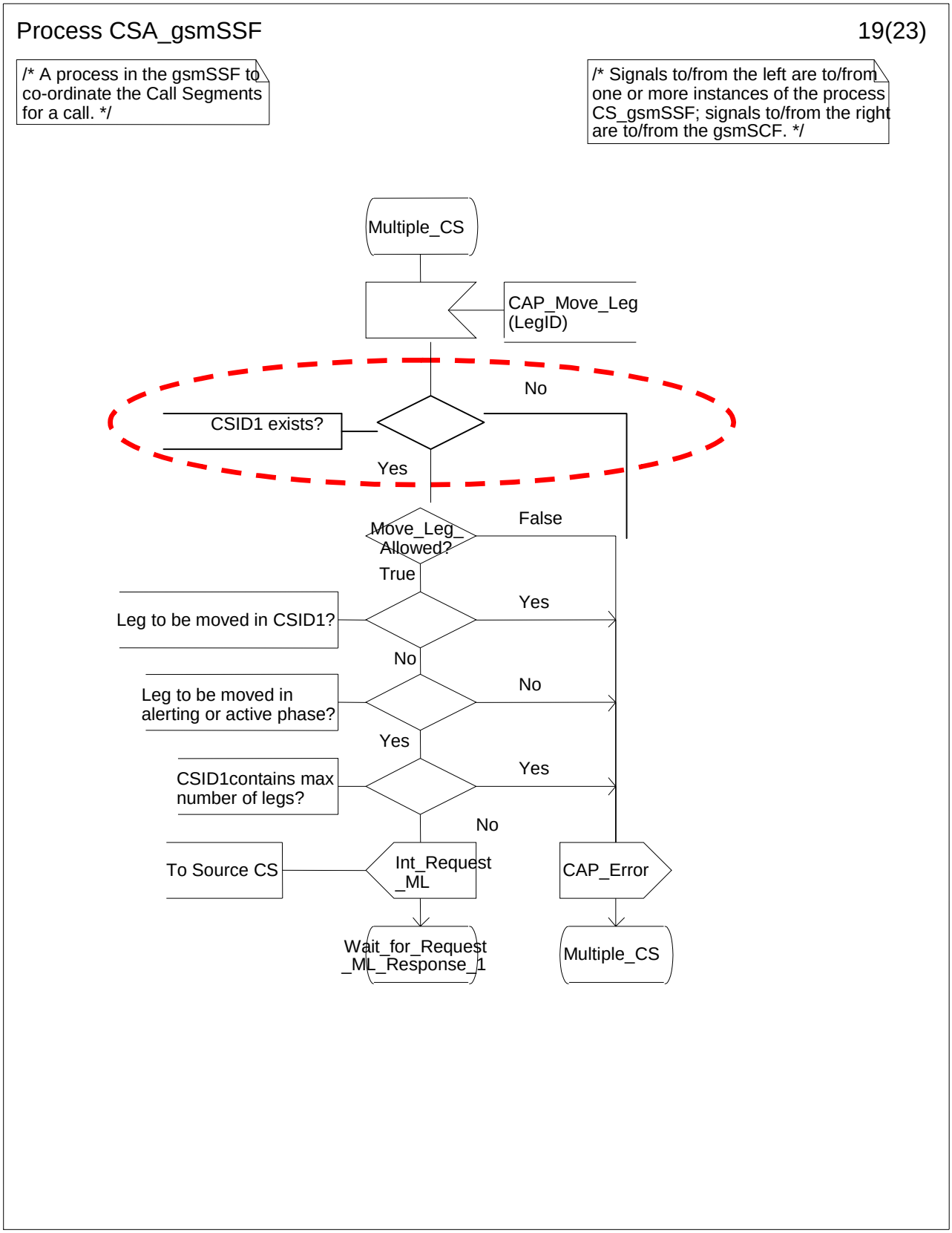


Figure 4.116-19: Process CSA_gsmSSF (sheet 19)

*** End of Document ***

CHANGE REQUEST

⌘ **23.078** **CR** **726** ⌘**rev** ⌘ Current version: **6.1.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to InitialDP IF for NP leg
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	12 May 2004
Category:	⌘	A
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘ The description of MSC Address in Initial DP (IDP) specifies the following conditions for the NP leg:

> For the NP case, the MSC address carries the international E.164 address of the serving VMSC (the NP case in the GMSC will not cause an Initial DP IF).

That description implies that an NP leg that is created in the GMSC will not lead to D-CSI triggering or N-CSI triggering. However, D-CSI may also be sent to GMSC. Hence, an NP leg created in the GMSC may result in D-CSI triggering. Furthermore, the NP leg created in the GMSC may also result in N-CSI triggering.

Therefore, the description of the MSC Address for the NP call case shall not preclude NP call leg triggering from GMSC.

The Call Reference Number shall also a have a description for the NP case.

Summary of change: ⌘
1. Correct the description of MSC Address in IDP for NP calls.
2. Correct the description of Call Reference Number in IDP for NP calls.
3. Editorial correction to description of GMSC Address.

Consequences if not approved: ⌘
1. Wrong MSC address and/or Call Reference Number may be sent to gsmSCF. As a result there would be prepay charging problems in a NP call case.
2. Potential incompatibility. The gsmSCF may reject Initial DP from a GMSC if the triggering is done for a NP leg.
3. Missing CAP dialogue. The MSC/SSP may not trigger in a NP call in the GMSC. This may lead to poor service or prepay charging fraud.

Clauses affected: ⌘ 4.6.1.8

		Y	N			
Other specs affected:	⌘		X	Other core specifications	⌘	
			X	Test specifications		
			X	O&M Specifications		

Other comments:	⌘	"NP" means New Party which is created by gsmSCF with a Initial Call Attempt operation.

***** First Modification *****

4.6.1.8 Initial DP

4.6.1.8.1 Description

This IF is generated by the gsmSSF when a trigger is detected at a DP in the BCSM, to request instructions from the gsmSCF.

4.6.1.8.2 Information Elements

(Note: IEs in the NC columns in this IF may need further study.)

Information element name	MO	MF	MT	VT	NC	NP	Description
…							
Call Reference Number	M	M	M	M	-	M	This IE may be used by the gsmSCF for inclusion in a network optional gsmSCF call record. It has to be coupled with the identity of the MSC which allocated it in order to define unambiguously the identity of the call. For MO calls, the call reference number is set by the serving VMSC and included in the MO call record. For MT calls, the call reference number is set by the GMSC and included in the RCF call record in the GMSC and in the MT call record in the terminating MSC. For VT calls, the call reference number is set by the GMSC and included in the RCF call record in the GMSC and in the MT call record in the terminating MSC. For ~~CF~~MF calls, the call reference number is set by the GMSC and included in the CF record in the forwarding MSC. For the setting of the Call Reference Number for NP calls, see the corresponding call case above (MO, MT, VT or MF).
…							
MSC Address	M	M	M	M	-	M	For MO calls, the MSC Address carries the international E.164 address of the serving VMSC. For MT calls, the MSC Address carries the international E.164 address of the GMSC. For VT calls, the MSC Address carries the international E.164 address of the serving VMSC. For MF calls, the MSC Address carries the international E.164 address of the forwarding MSC. For ~~the~~ NP ~~case~~calls, see the corresponding call case above (MO, MT, VT or MF) ~~the MSC Address carries the international E.164 address of the serving VMSC (the NP case in the GMSC will not cause an Initial DP IF)~~.
GMSC Address	-	M	-	M	-	S	For ~~CF~~MF calls, the GMSC Address carries the international E.164 address of the GMSC. For VT calls, the GMSC Address carries the international E.164 address of the GMSC. For NP ~~case~~calls, the GMSC Address is mandatory if the new party is initiated in an MF call or in a VT call, otherwise it shall be absent. The GMSC Address carries the international E.164 address of the GMSC.
…							

…

****** End of Document ******

CHANGE REQUEST

⌘ **23.078** **CR** **727** ⌘**rev** ⌘ Current version: **6.1.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to User Interaction before Answer
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	13 May 2004
Category:	⌘	A
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘

Call Party Handling allows for the Disconnecting of leg2 (with Disconnect Leg) during IDP processing. The SCP may use DL at IDP in order to “replace” leg2 by an NP leg. The NP leg is created in a separate Call Segment and may be moved into Call Segment 1 as soon as the NP leg has reached the Alerting state, provided that other conditions are fulfilled.

If this mechanism is used, then the MSC starts leg 1 handling when leg 1 is not yet active.

While the NP leg is being established, the CAMEL Service may want to apply User Interaction to the calling party. Service examples include (list is not exhaustive):

- Personal Greeting Service;
- Call Hunting Announcement.

Mobile Originating call

When leg2 is disconnected at IDP for an MO call, then procedure OG_Call_Setup_MSC in TS 23.018 calls procedure CAMEL_OCH_LEG1_MSC[Leg1_status = Set-up] in TS 23.078. Procedure CAMEL_OCH_LEG1_MSC then enters the state Wait_For_ACM.

CAMEL_OCH_LEG1_MSC remains in this state, until ACM or Connect is received. The ACM or Connect would in this scenario originate from an outgoing leg, when this leg is moved into Call Segment 1.

However, until the moment that an outgoing leg is moved into Call Segment 1, it is not possible to apply User Interaction to the calling party. Reason is that there is no User Interaction input in the state Wait_For_ACM in procedure CAMEL_OCH_LEG1_MSC.

Mobile Terminating call in GMSC

When leg2 is disconnected at IDP for an MT call, then process MT_GMSC in TS 23.018 starts process CAMEL_MT_LEG1_GMSC[Leg1_status = Set-up] in TS 23.078. Process CAMEL_MT_LEG1_GMSC enters the state Wait_For_ACM.

CAMEL_MT_LEG1_GMSC remains in this state, until ACM or Connect is received. The ACM or Connect would in this scenario originate from an outgoing leg, when this leg is moved into Call Segment 1.

However, until the moment that an outgoing leg is moved into Call Segment 1, it is not possible to apply User Interaction to the calling party. Reason is that there is no User Interaction input in the state Wait_For_ACM in process CAMEL_MT_LEG1_GMSC.

Mobile Terminating call in VMSC

A similar problem exists with process CAMEL_ICH_LEG1_MSC, which is started from process ICH_MSC in TS 23.018 with Leg1_Status = Set-up.

Mobile Forwarded call

A similar problem exists with procedure CAMEL_MT_CF_LEG1_MSC, which is started from process MT_CF_MSC in TS 23.018 with Leg1_Status = Set-up.

To overcome the dilemma presented above, the present CR proposes that the MSC should allow for User Interaction in the state Wait_For_ACM in above-referred leg1 handling procedures and processes. The state Wait_For_ACM for those procedures and processes can't be compared with a ***regular*** Wait_For_ACM state, that is entered when an ISUP is generated and the process is waiting for ACM (or Connect). In above-referred leg1 handling procedures and processes, the MSC state machine has in fact no outgoing leg-in-establishment connected to it. Instead, the state machine is dependent on a CPH Operation, like MoveLeg.

When the CAMEL Service intends to move the NP leg into Call Segment 1 and User Interaction is ongoing for leg1 at that moment, then the CAMEL Service has to stop the User Interction before it can apply the Move Leg.

Summary of change: ⌘

- Correct procedure CAMEL_OCH_LEG1_MSC; include entries for User Interaction in the state Wait_For_ACM;
- Correct process CAMEL_MT_LEG1_GMSC; include entries for User Interaction in the state Wait_For_ACM;
- Correct process CAMEL_ICH_LEG1_MSC; include entries for User Interaction in the state Wait_For_ACM;
- Correct procedure CAMEL_MT_CF_LEG1_MSC; include entries for User Interaction in the state Wait_For_ACM.

When the leg1 procedure or process is in the state Wait_For_ACM and User Interaction is applied, then it is not possible that Answer is received from an outgoing leg, since there is no outgoing leg at that moment. Hence, the output of CAMEL_OCH_ETC etc. is checked for ***Fail*** and ***Else*** only.

Correct the description for process MT_GMSC in the table in section 4.5.1: CAMEL_MT_LEG1_**G**MSC and CAMEL_MT_LEG2_**G**MSC.

Consequences if not approved: ⌘

It will not be possible to play an announcement to the calling party for services that terminate the outgoing leg at call establishment. This would be a serious lack of functionality.

Clauses affected: ⌘ 4.5.1, 4.5.2, 4.5.3, 4.5.4, 4.5.5

Y N

Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

***** *First Modification* *****

4.5.1 Overall SDL architecture

The following mapping from the SDL procedures to the Intelligent Network concepts apply:

SDL process	Description	SDL process specification
CSA_gsmSSF	Call Segment Association (CSA). The CSA SDL process distributes the CAP operations to the appropriate Call Segment(s).	3GPP TS 23.078
CS_gsmSSF	Call Segment (CS). Controls one or more BCSMs.	3GPP TS 23.078
OCH_MSC	O-BCSM in VMSC for Mobile Originating call controlling both Leg 1 and Leg 2. If CAP Disconnect Leg (leg 2) is received at the initial detection point (Collected_Info), then the call is not routed to the destination and the process calls the procedure CAMEL_OCH_LEG1_MSC to control Leg 1. If Answer is received, the process spawns the child process CAMEL_OCH_LEG2_MSC to control Leg 2 and calls the procedure CAMEL_OCH_LEG1_MSC to control Leg 1. The handling of the legs after answer is completely separate.	3GPP TS 23.018
MT_GMSC	T-BCSM in the GMSC controlling both Leg 1 and Leg 2. If CAP Disconnect Leg (leg 2) is received at the initial detection point (Terminating_Attempt_Authorised), then the call is not routed to the destination and the process spawns the child process CAMEL_MT_LEG1_MSC to control Leg 1. The process MT_GMSC terminates. If Answer is received, the process spawns the child process CAMEL_MT_LEG1_GMSC to control Leg 1 and calls the procedure CAMEL_MT_LEG2_GMSC to control Leg 2. The handling of the legs after answer is completely separate.	3GPP TS 23.018
MT_CF_MSC	O-BCSM in the redirecting MSC for Call Forwarding supplementary service, or Call Deflection supplementary service, or for CAMEL-based call forwarding. This process controls both Leg 1 and Leg 2. If CAP Disconnect Leg (leg 2) is received at the initial detection point (Collected_Info), then the call is not routed to the destination and the process calls the procedure CAMEL_MT_CF_LEG1_MSC to control Leg 1. If Answer is received, the process spawns the child process CAMEL_MT_CF_LEG2_MSC to control Leg 2 and calls the procedure CAMEL_MT_CF_LEG1_MSC to control Leg 1. The handling of the legs after answer is completely separate.	3GPP TS 23.018
ICH_MSC	T-BCSM in the VMSC controlling both Leg 1 and Leg 2. If CAP Disconnect Leg (leg 2) is received at the initial detection point (Terminating_Attempt_Authorised), then the call is not routed to the destination and the process spawns the child process CAMEL_ICH_LEG1_MSC to control Leg 1. The process ICH_MSC terminates. If Answer is received, the process spawns the child process CAMEL_ICH_LEG1_MSC to control Leg 1 and calls the procedure CAMEL_ICH_LEG2_MSC to control Leg 2. The handling of the legs after answer is completely separate.	3GPP TS 23.018
Assisting_MSC	The process in the MSC to handle an assist request.	3GPP TS 23.078
CAMEL_ICA_MSC	O-BCSM for gsmSCF initiated new call, or for new party set-up. This process controls the new leg.	3GPP TS 23.078

…

***** *Next Modification* *****

4.5.2 Handling of mobile originated calls

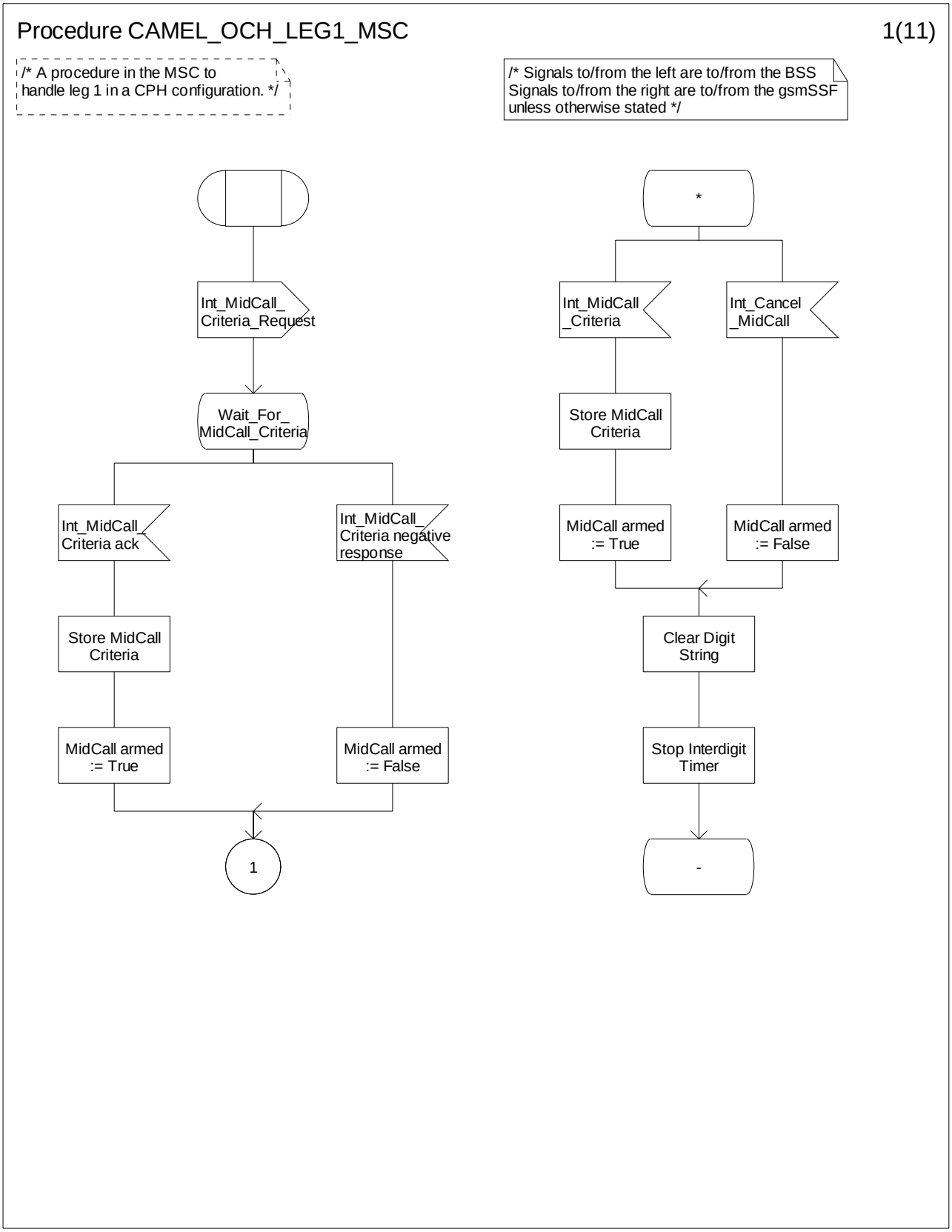


Figure Error! Reference source not found.**.1-1: Procedure CAMEL_OCH_LEG1_MSC (sheet 1)**

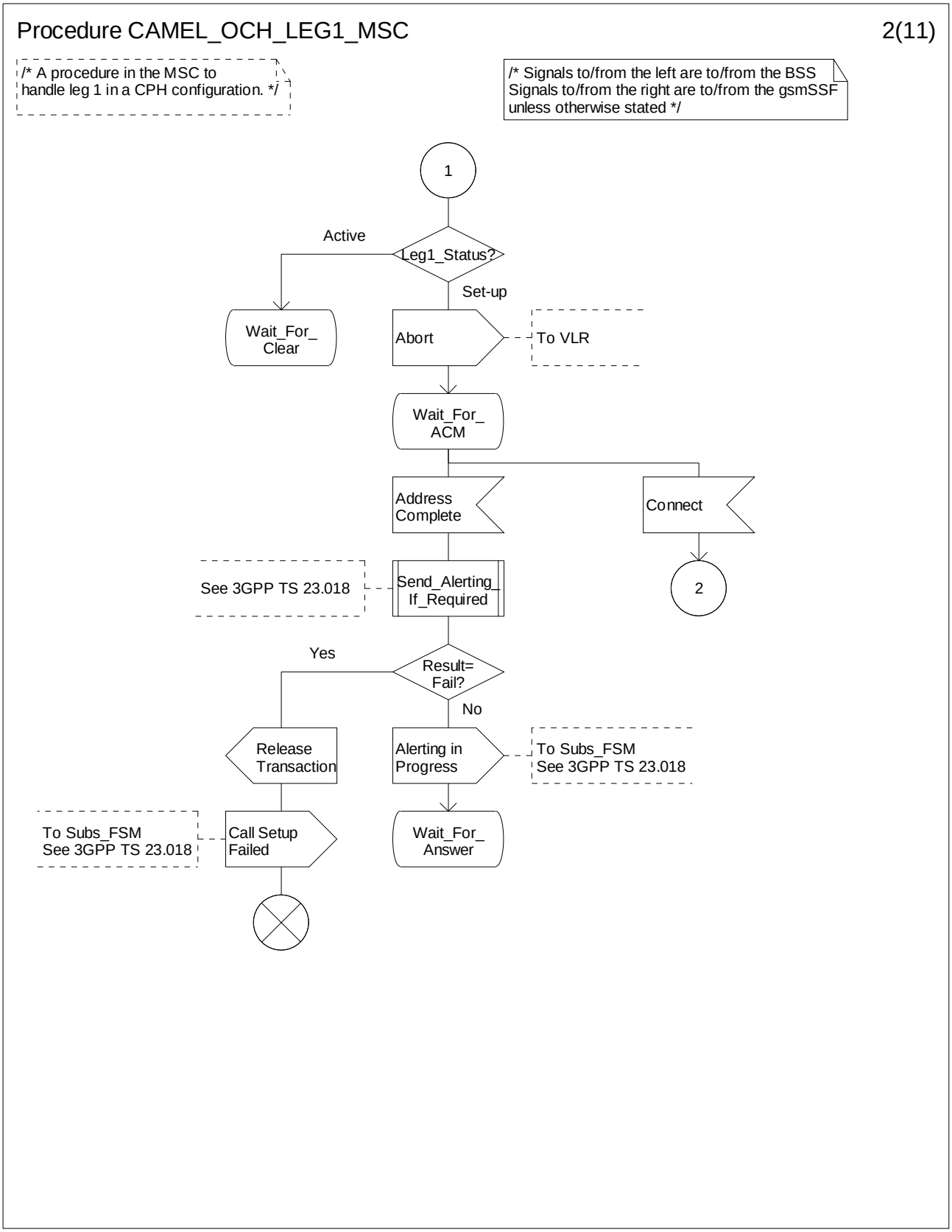


Figure Error! Reference source not found..1**-2: Procedure CAMEL_OCH_LEG1_MSC (sheet 2)**

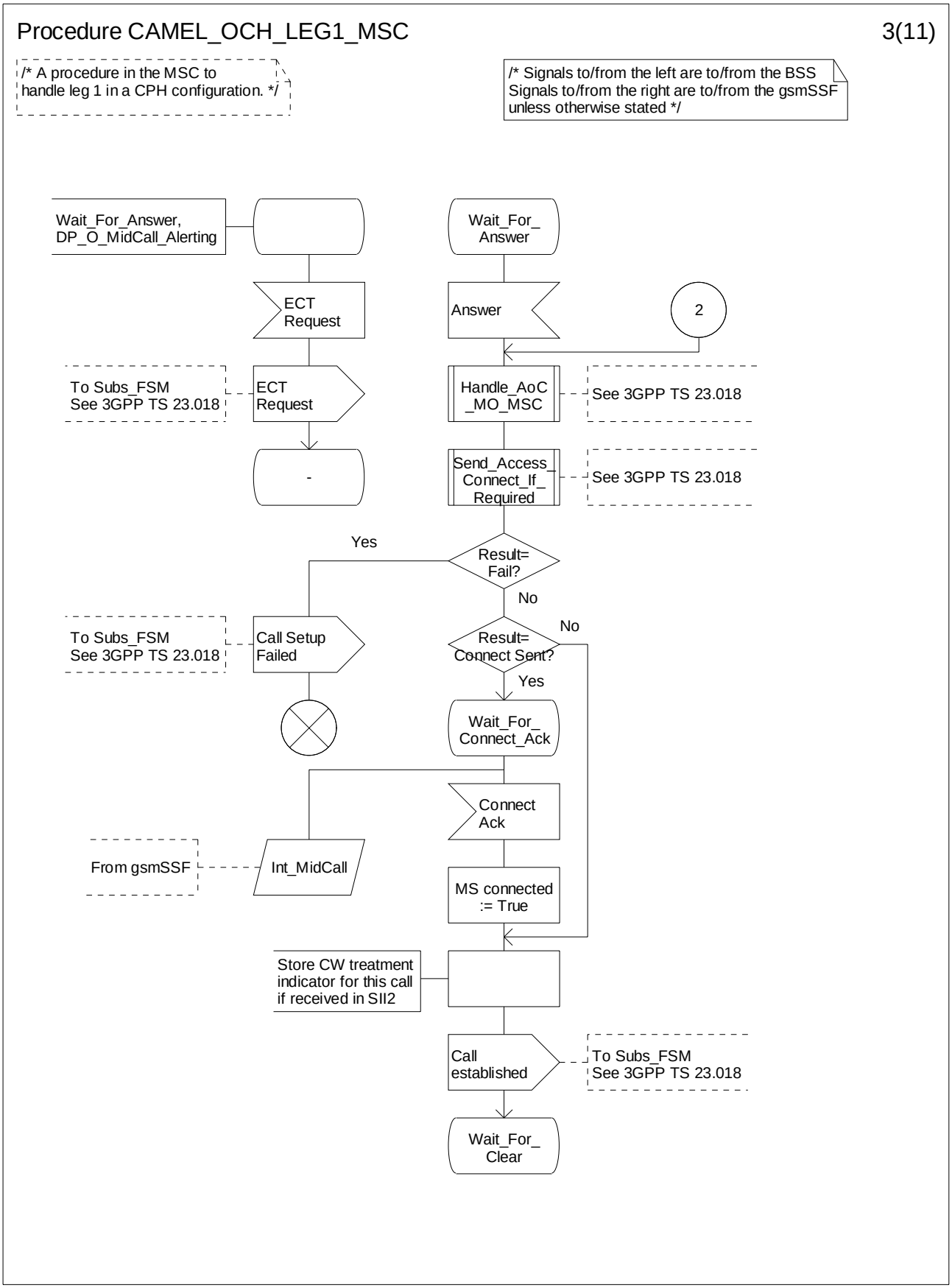


Figure Error! Reference source not found..1**-3: Procedure CAMEL_OCH_LEG1_MSC (sheet 3)**

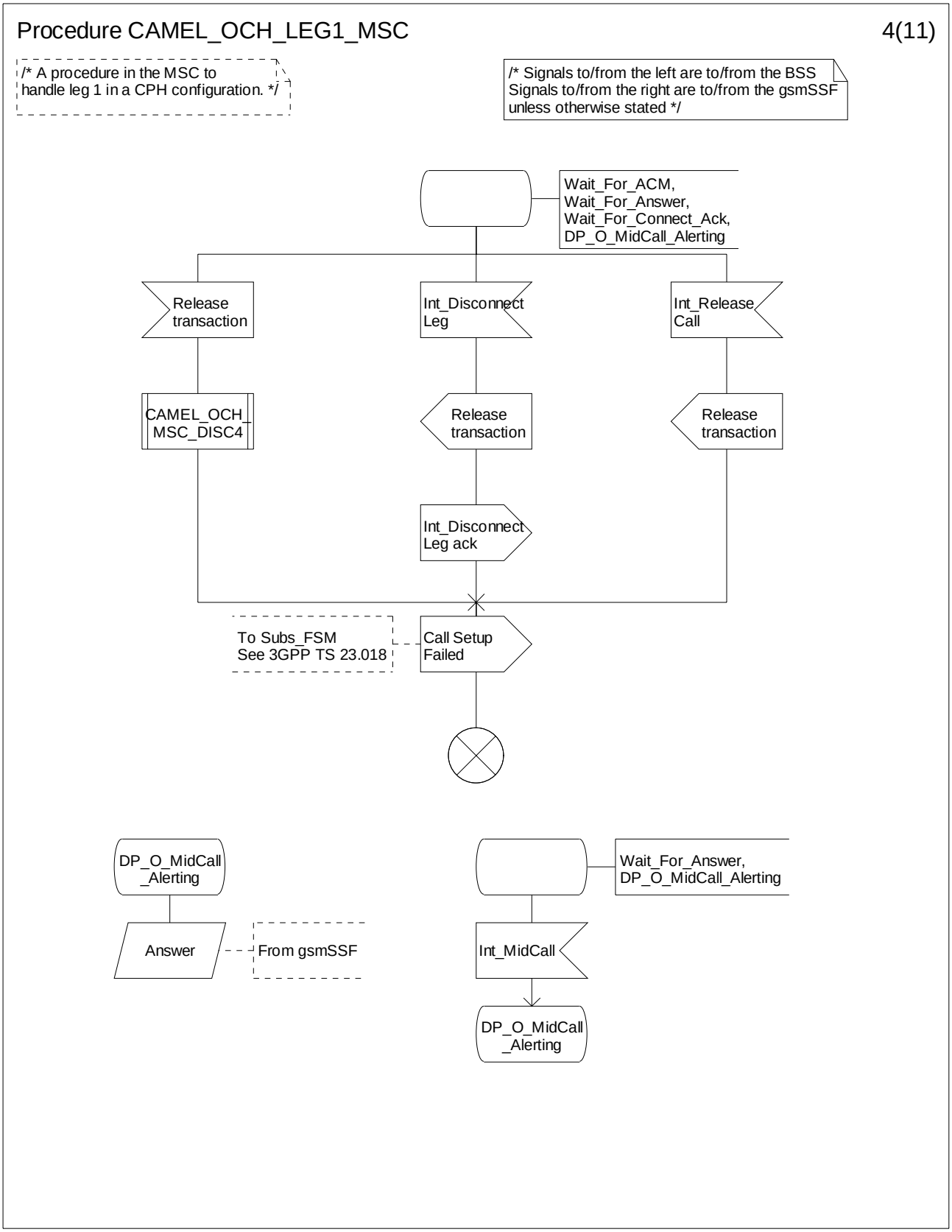


Figure Error! Reference source not found..1**-4: Procedure CAMEL_OCH_LEG1_MSC (sheet 4)**

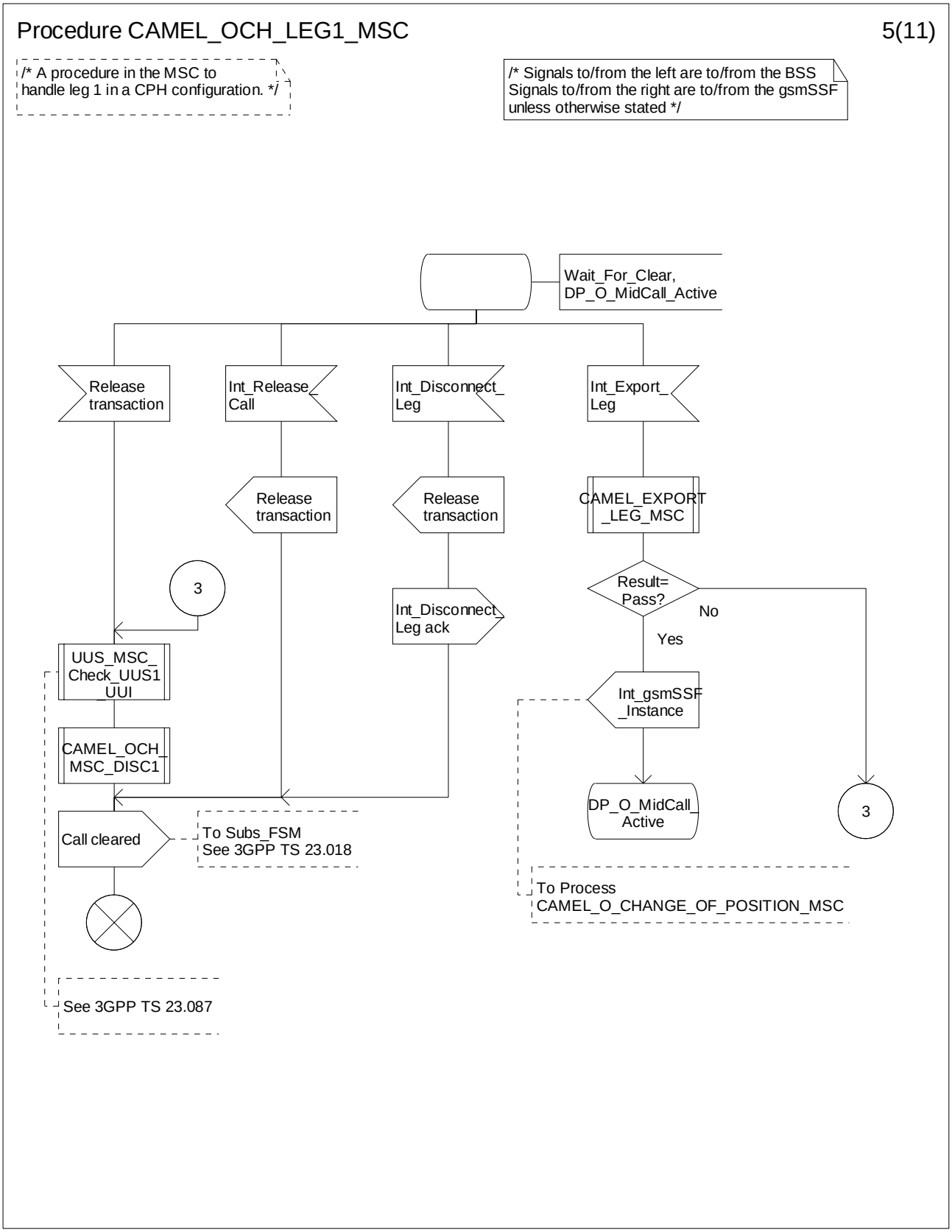


Figure Error! Reference source not found..1**-5: Procedure CAMEL_OCH_LEG1_MSC (sheet 5)**

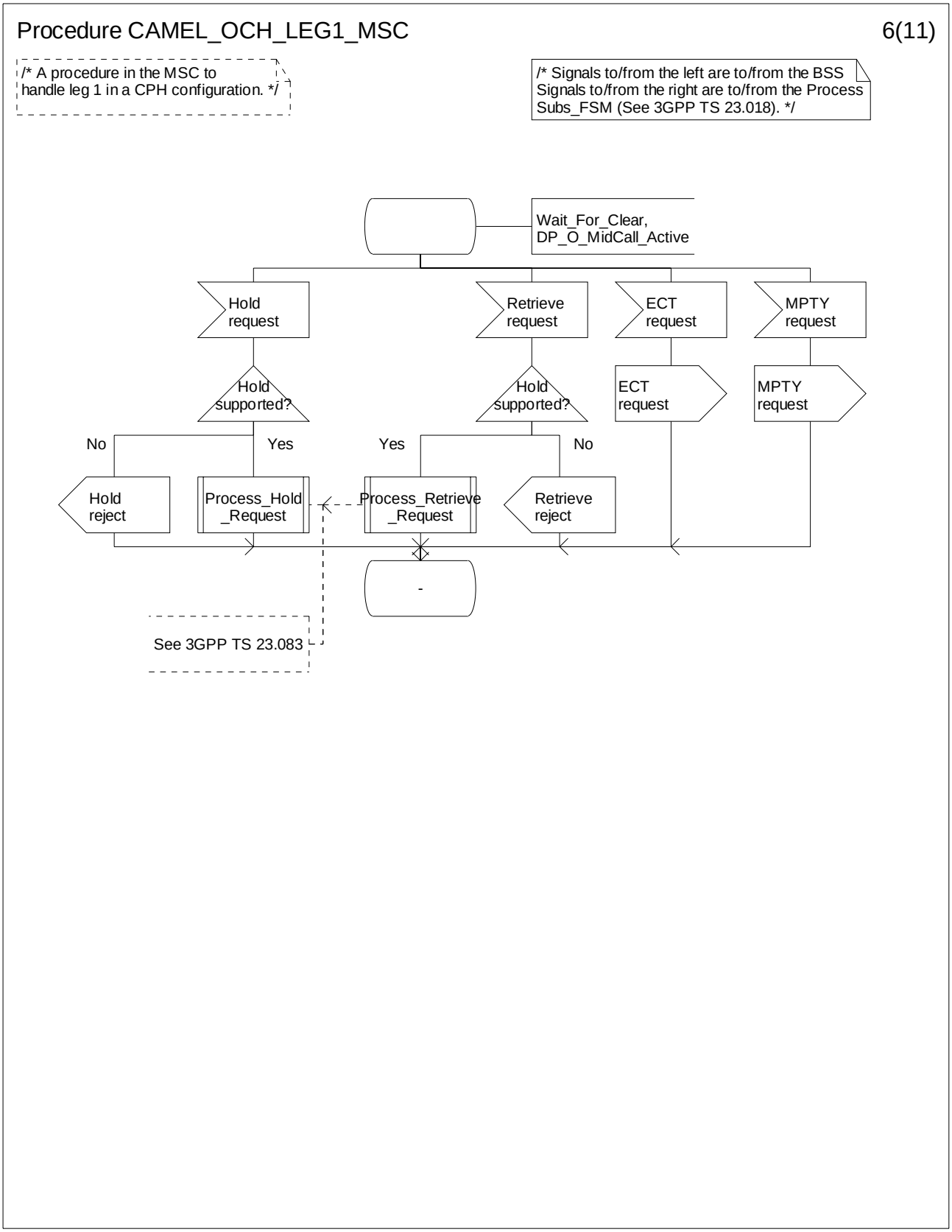


Figure Error! Reference source not found..1**-6: Procedure CAMEL_OCH_LEG1_MSC (sheet 6)**

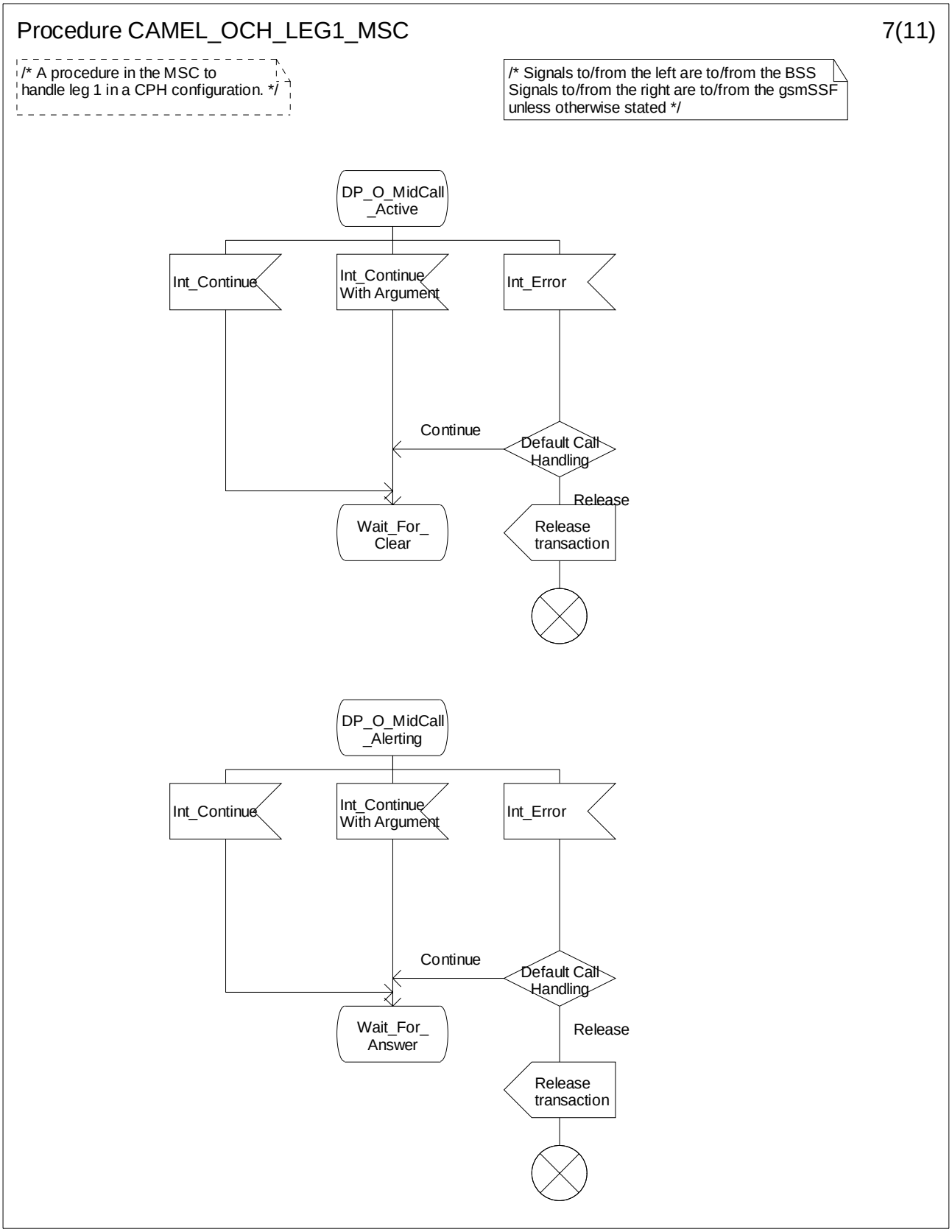


Figure Error! Reference source not found..1**-7: Procedure CAMEL_OCH_LEG1_MSC (sheet 7)**

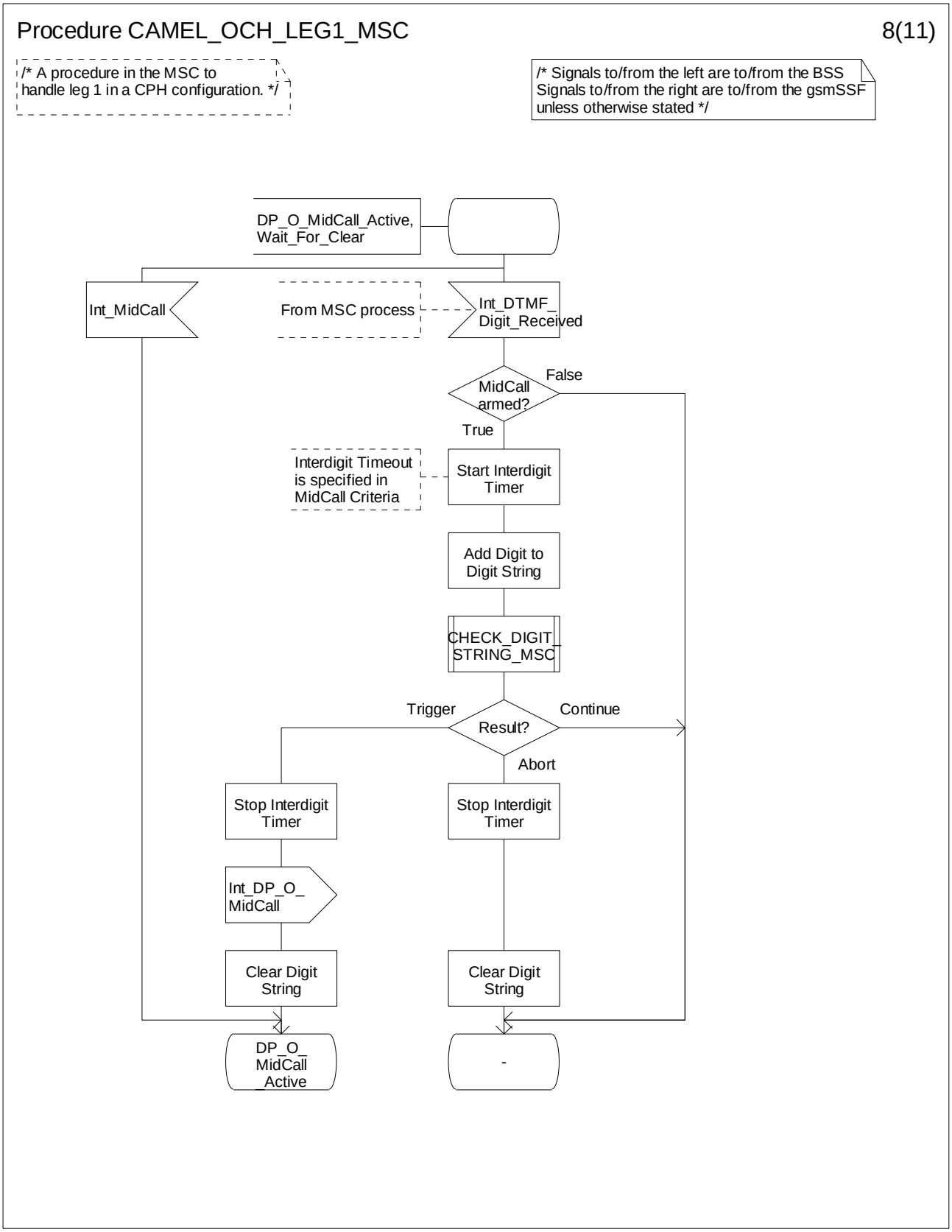


Figure Error! Reference source not found..1**-8: Procedure CAMEL_OCH_LEG1_MSC (sheet 8)**

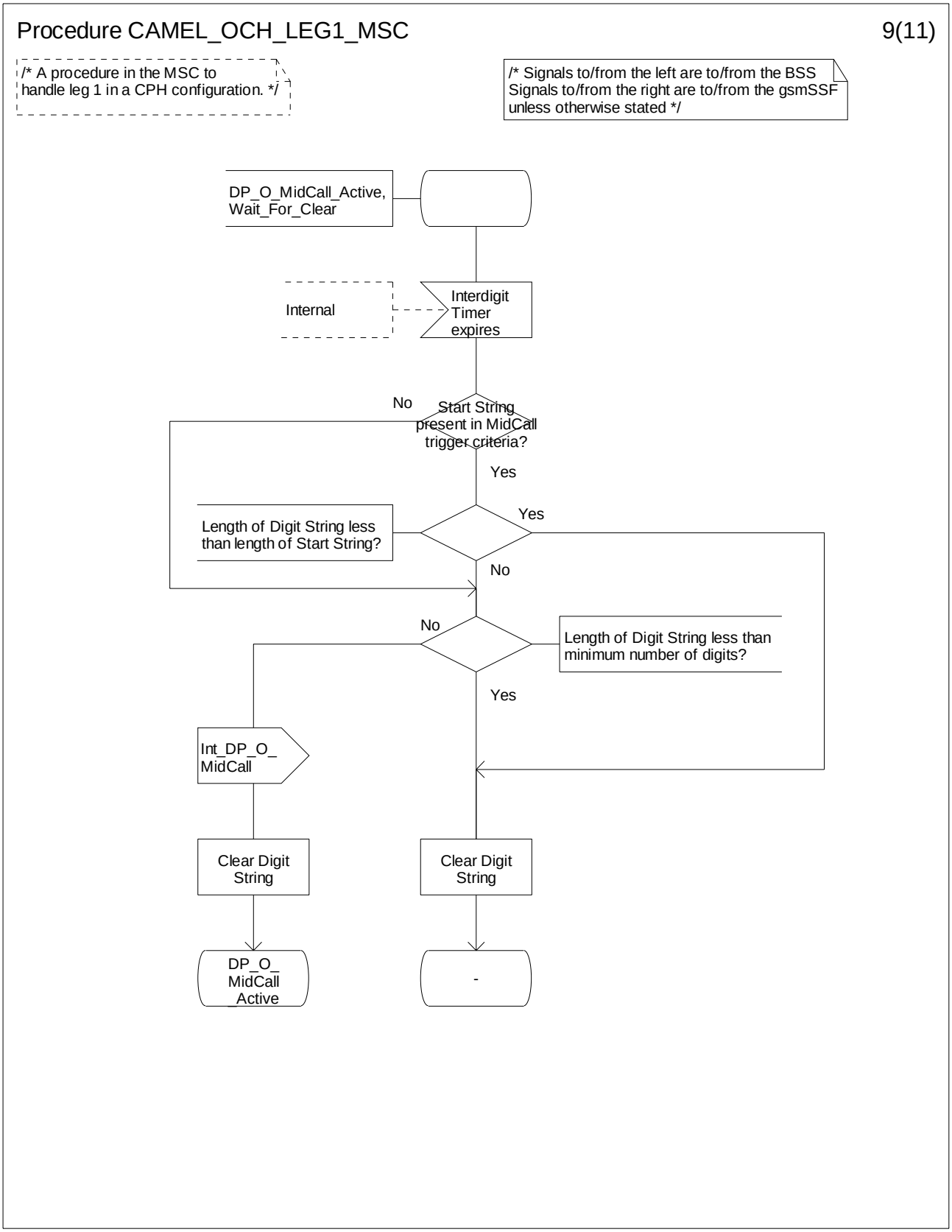


Figure Error! Reference source not found..1**-9: Procedure CAMEL_OCH_LEG1_MSC (sheet 9)**

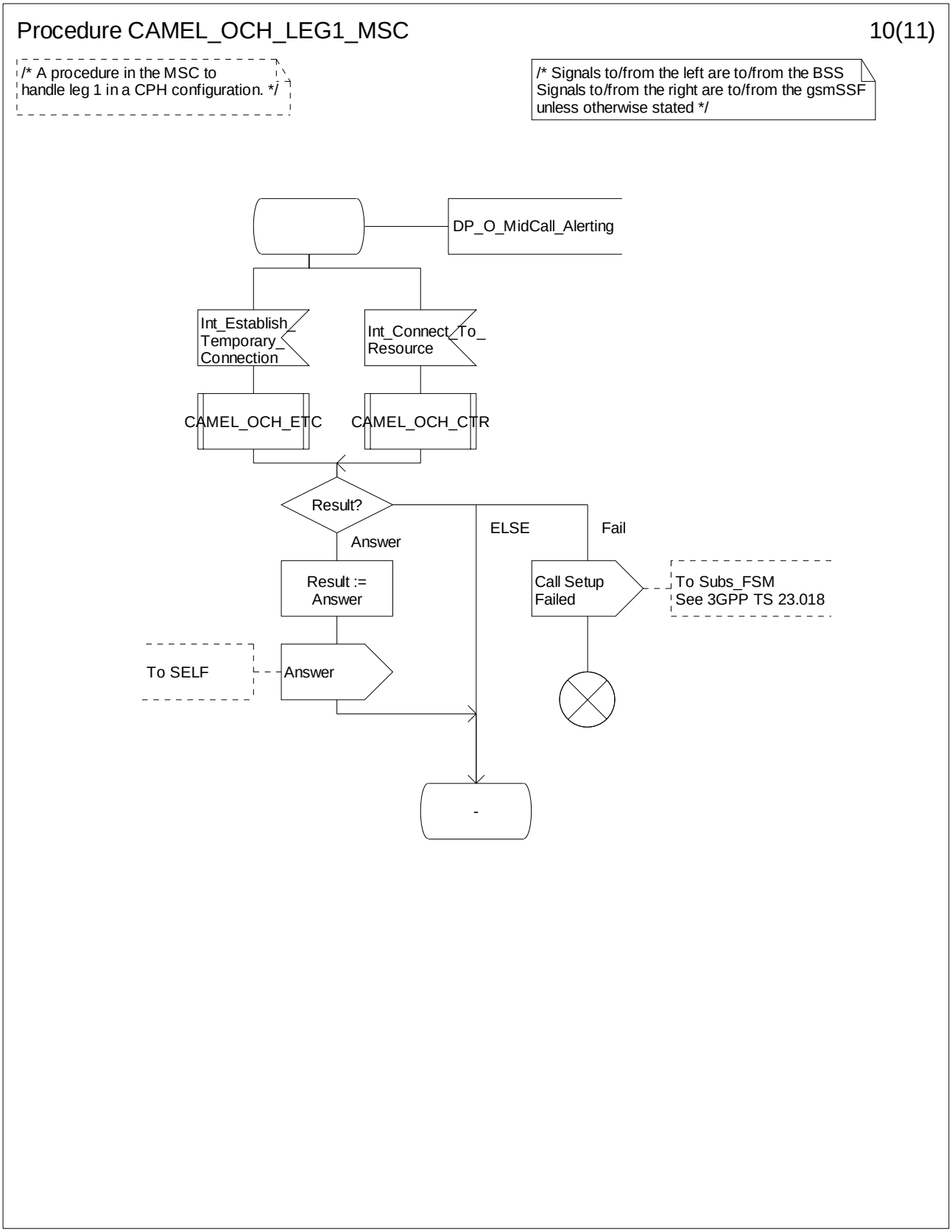
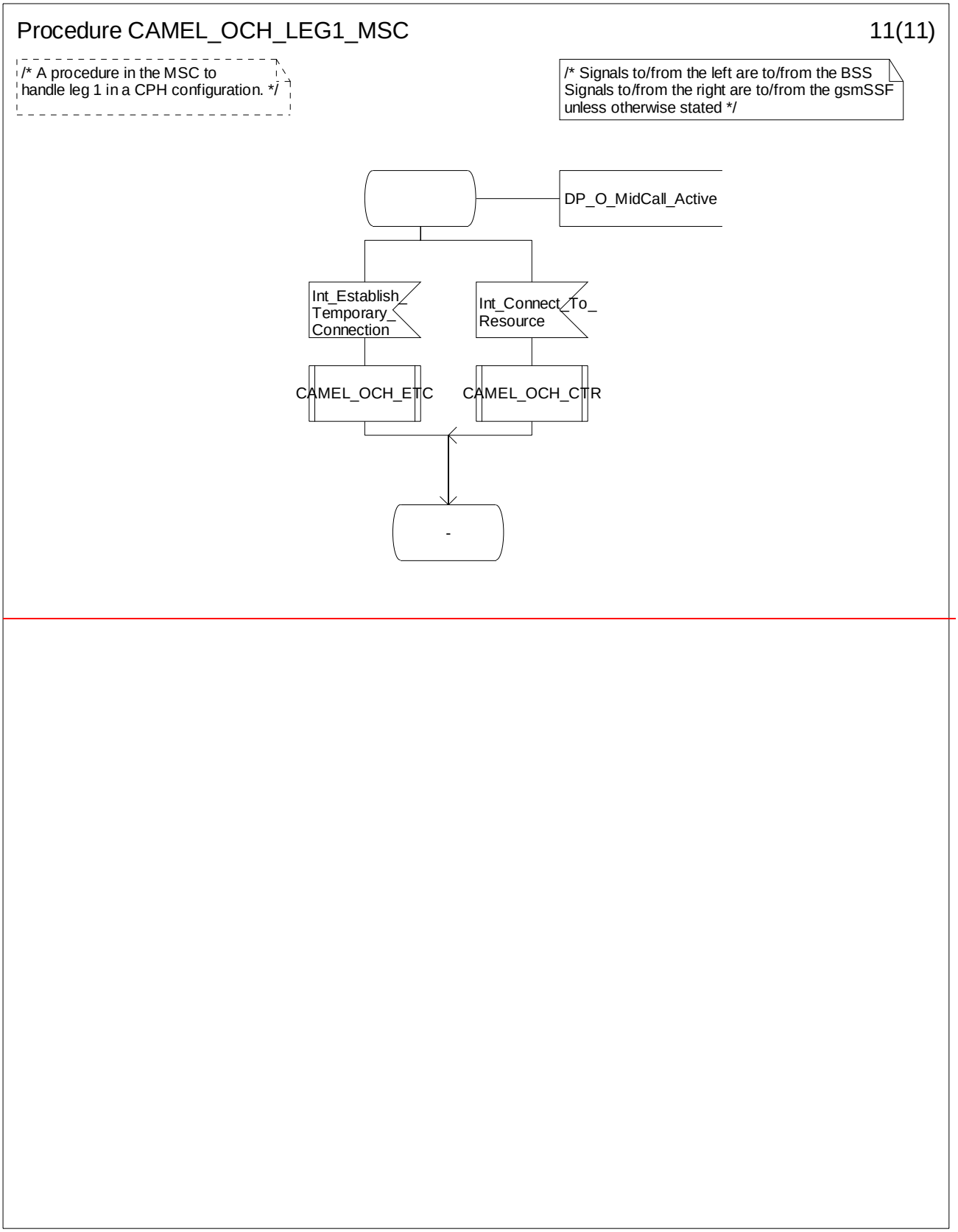


Figure Error! Reference source not found..1**-10: Procedure CAMEL_OCH_LEG1_MSC (sheet 10)**



~~Figure 4.30-11: Procedure CAMEL_OCH_LEG1_MSC (sheet 11)~~

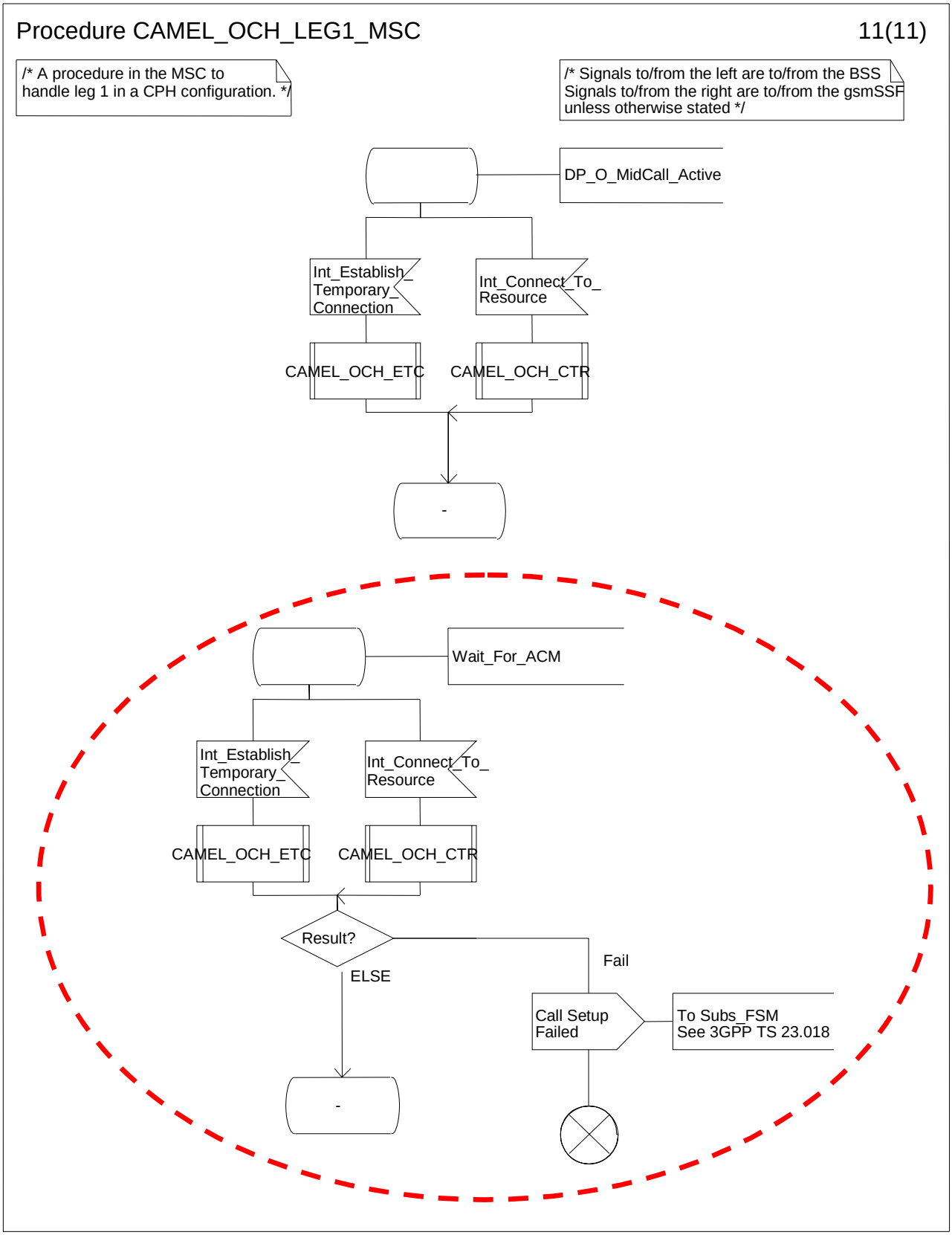


Figure Error! Reference source not found..1**-12: Procedure CAMEL_OCH_LEG1_MSC (sheet 12)**

***** *Next Modification* *****

4.5.3 Retrieval of routeing information

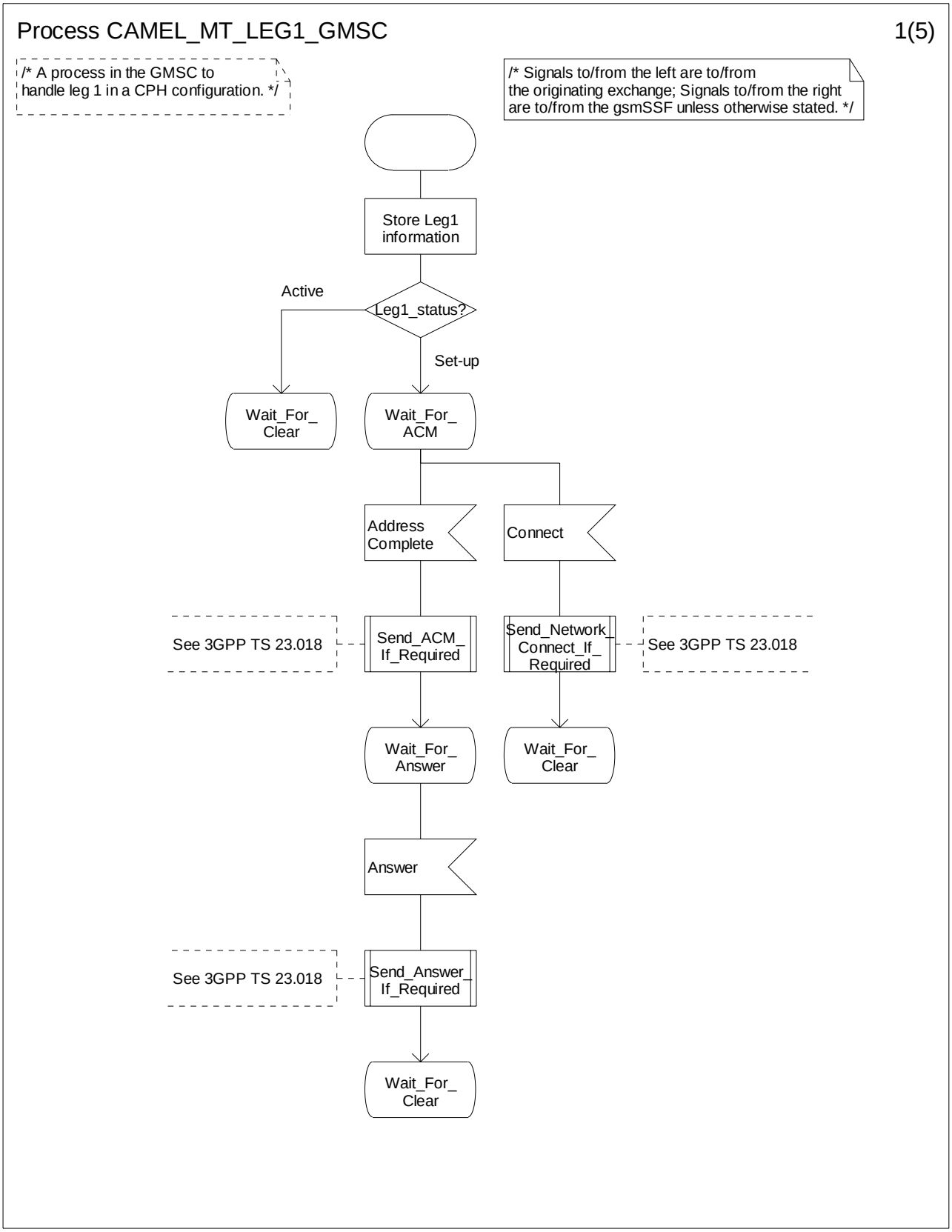


Figure Error! Reference source not found.**.2-1: Process CAMEL_MT_LEG1_GMSC (sheet 1)**

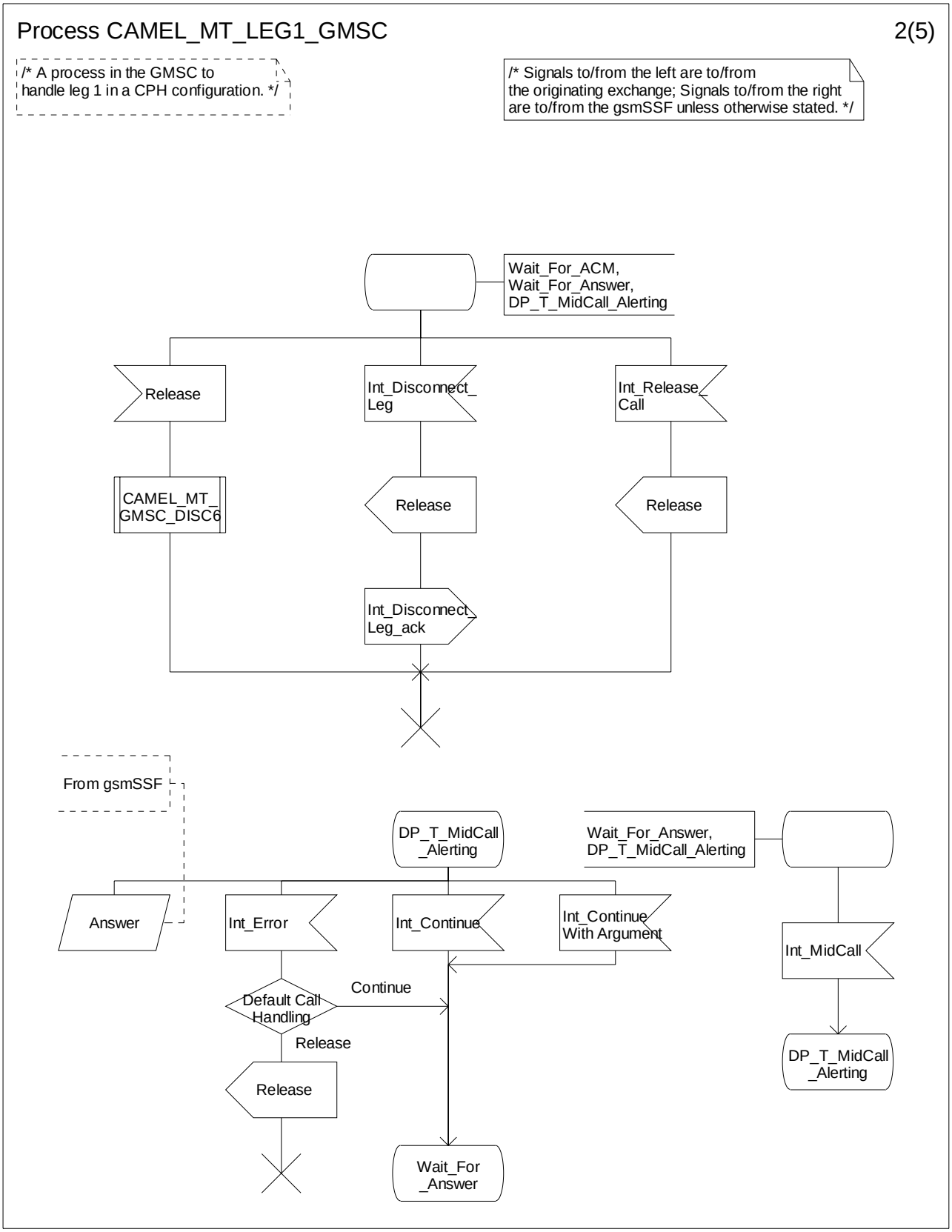


Figure Error! Reference source not found..2**-2: Process CAMEL_MT_LEG1_GMSC (sheet 2)**

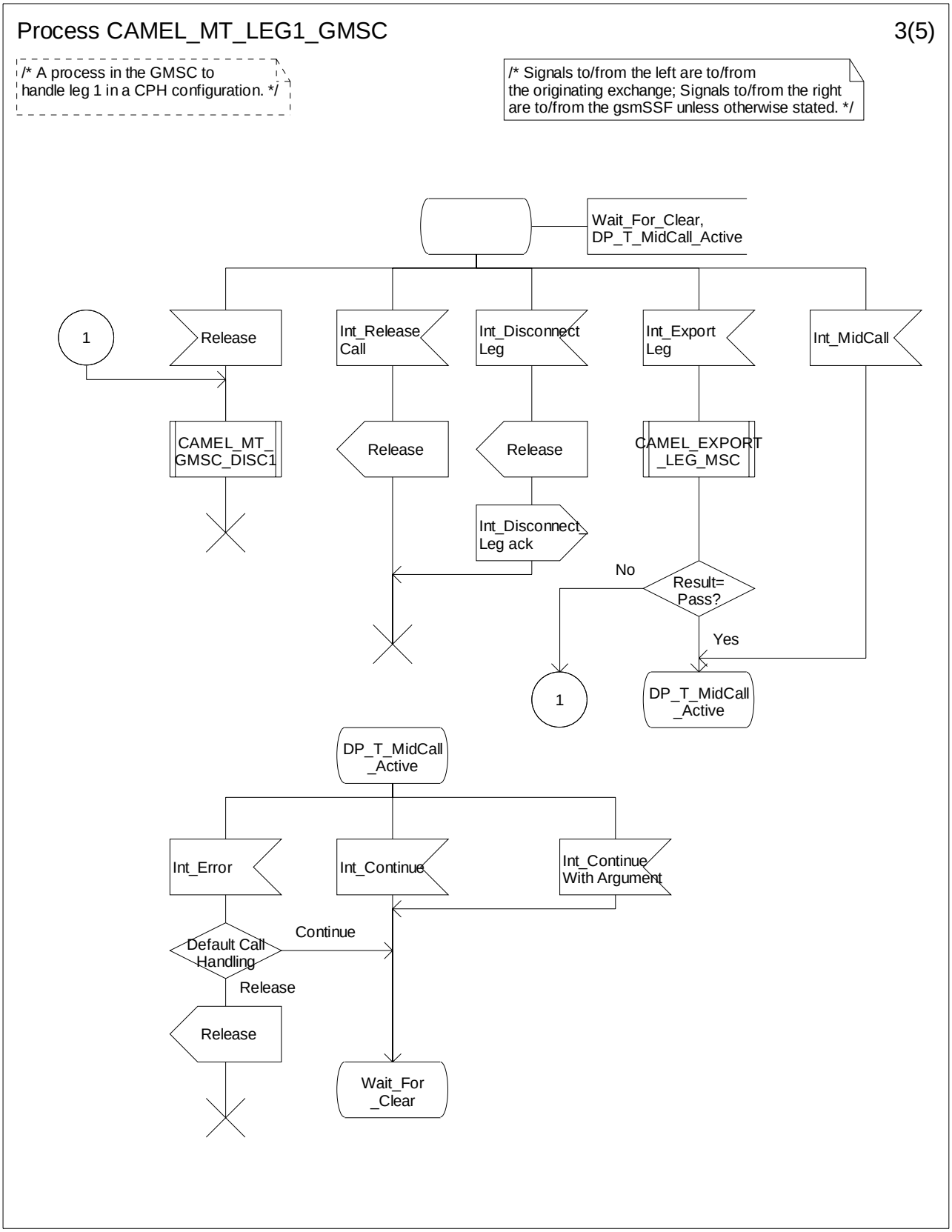


Figure Error! Reference source not found..2**-3: Process CAMEL_MT_LEG1_GMSC (sheet 3)**

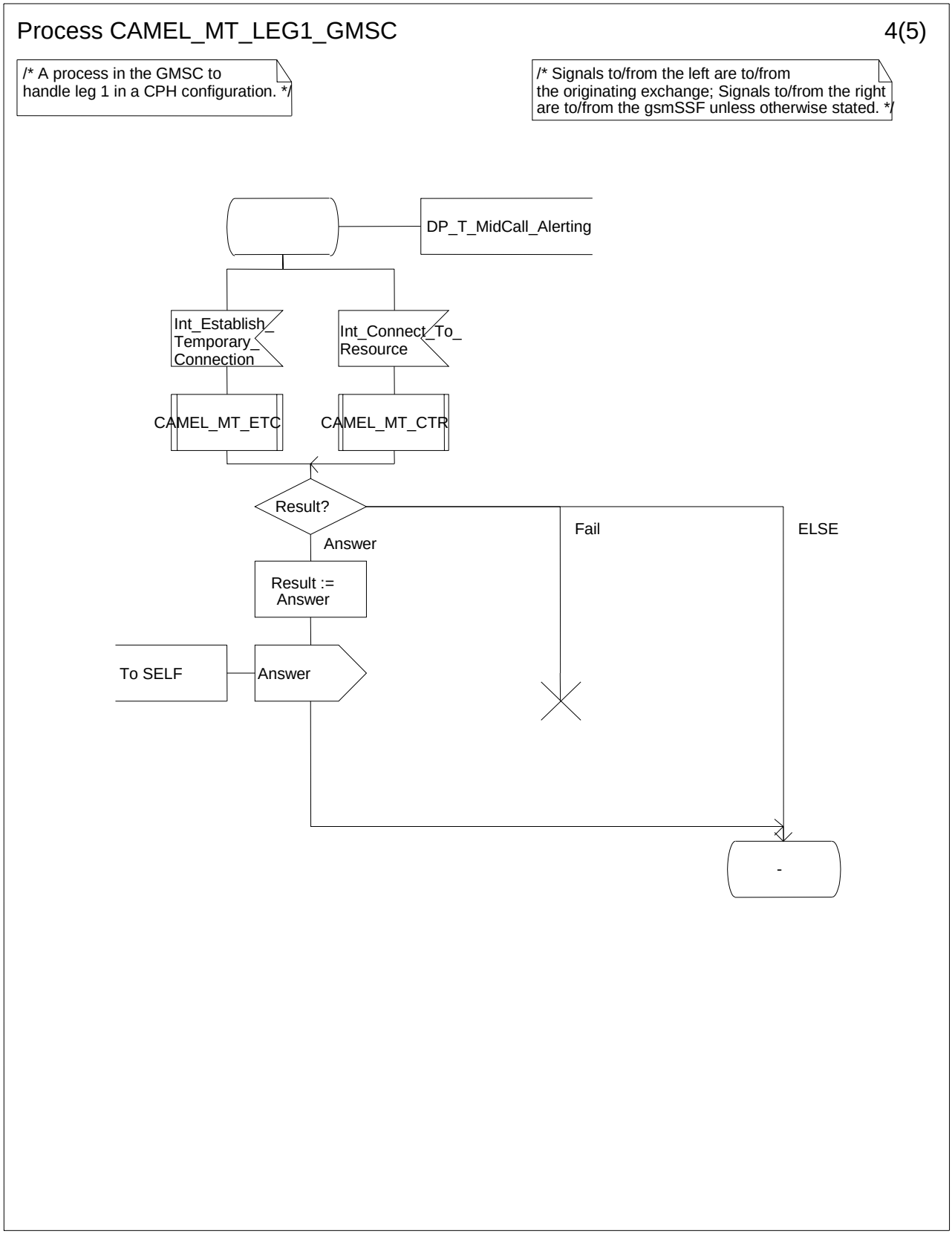
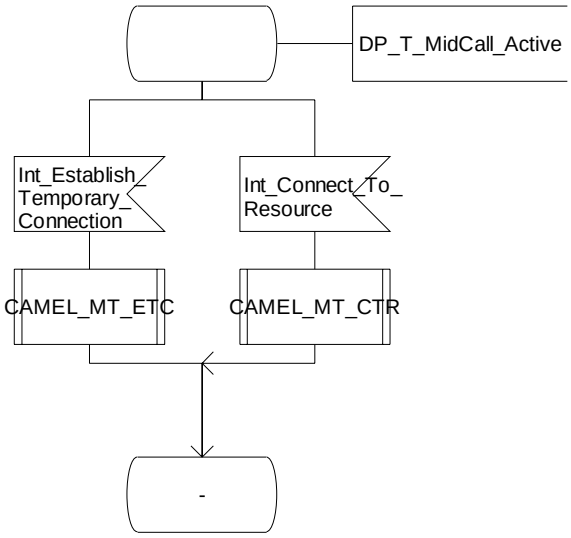


Figure Error! Reference source not found..2**-4: Process CAMEL_MT_LEG1_GMSC (sheet 4)**

Process CAMEL_MT_LEG1_GMSC 5(5)

/* A process in the GMSC to handle leg 1 in a CPH configuration. */

/* Signals to/from the left are to/from the originating exchange; Signals to/from the right are to/from the gsmSSF unless otherwise stated. */



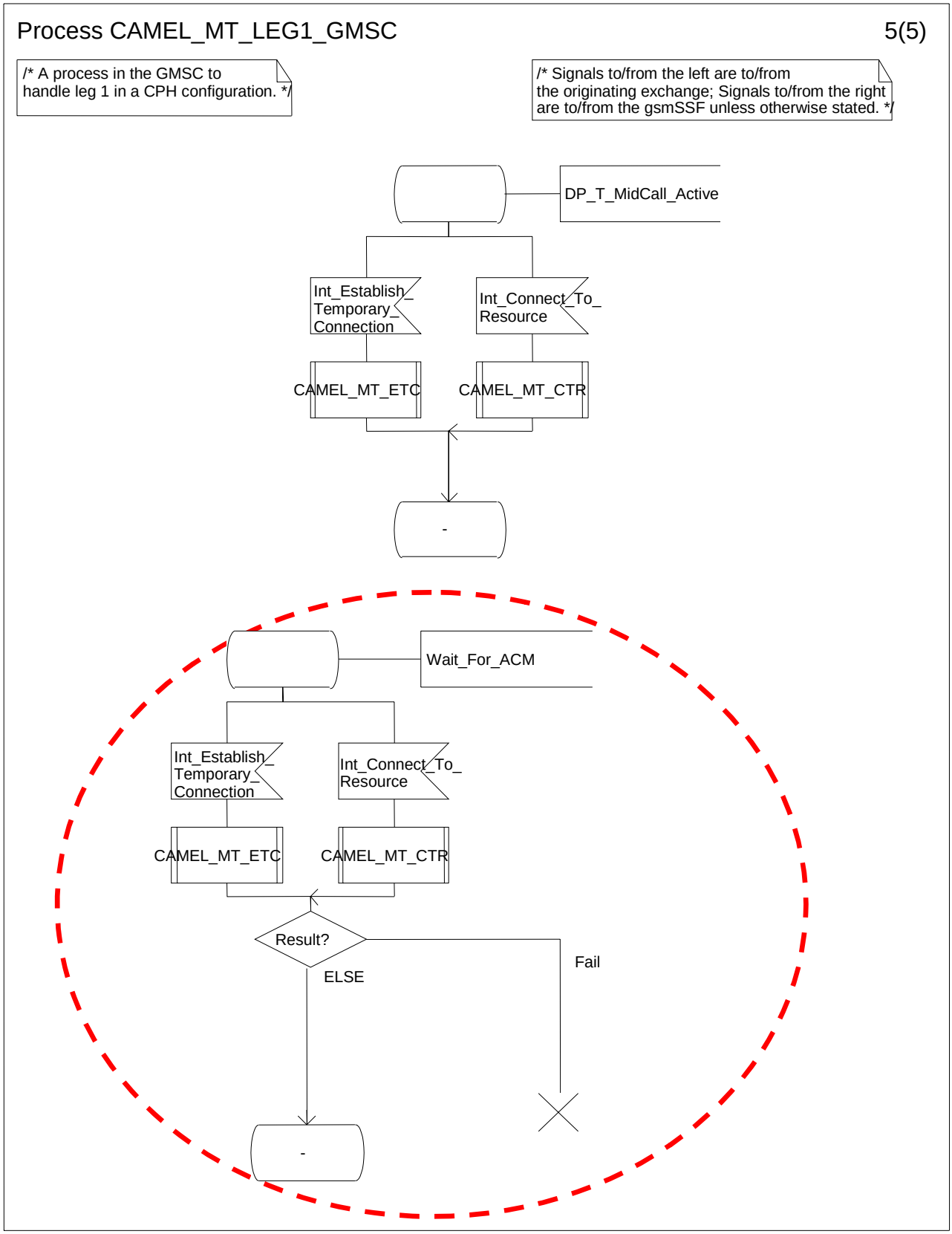


Figure 4.55-6: Process CAMEL_MT_LEG1_GMSC (sheet 6)

***** *Next Modification* *****

4.5.4 Handling of mobile terminating calls

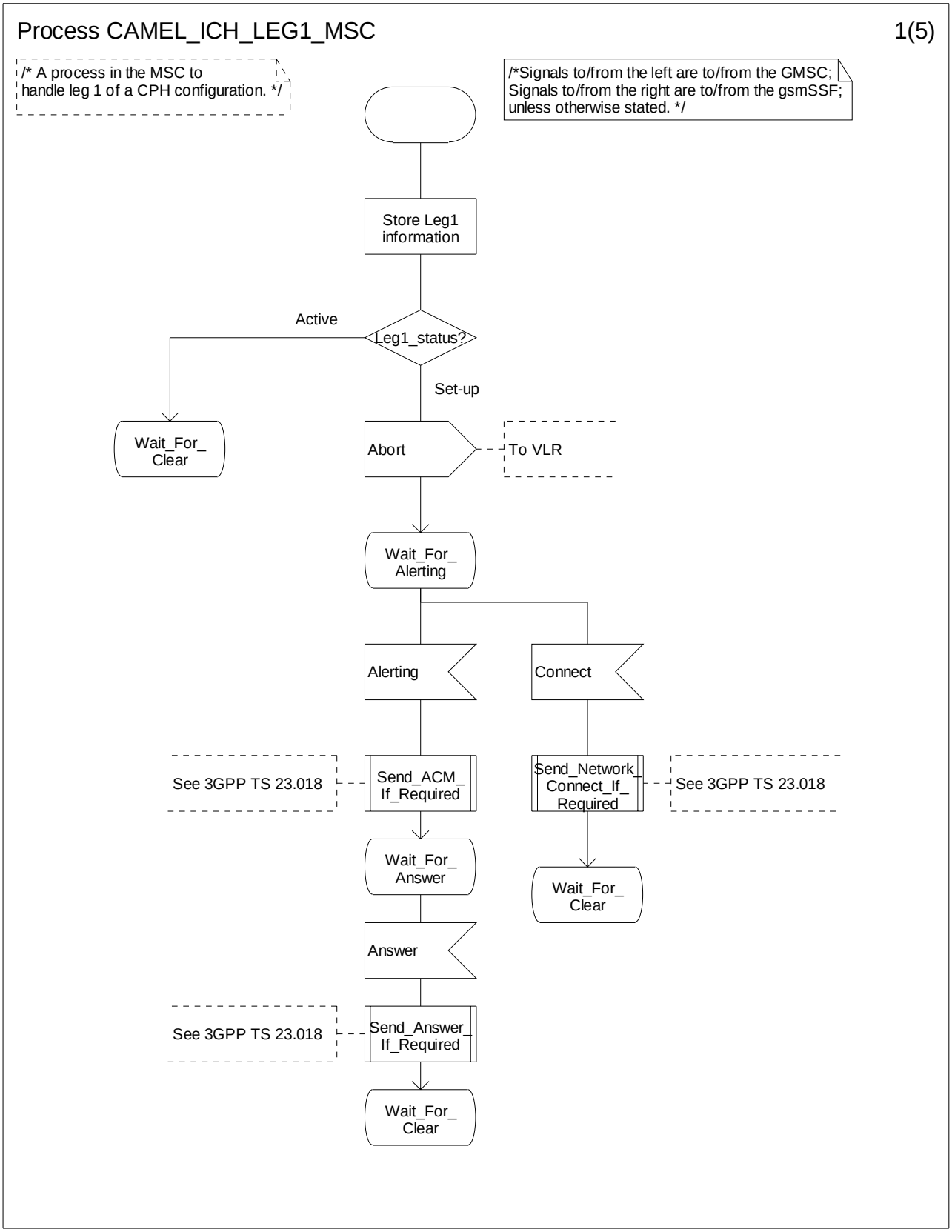


Figure Error! Reference source not found..**3-1: Process CAMEL_ICH_LEG1_MSC (sheet 1)**

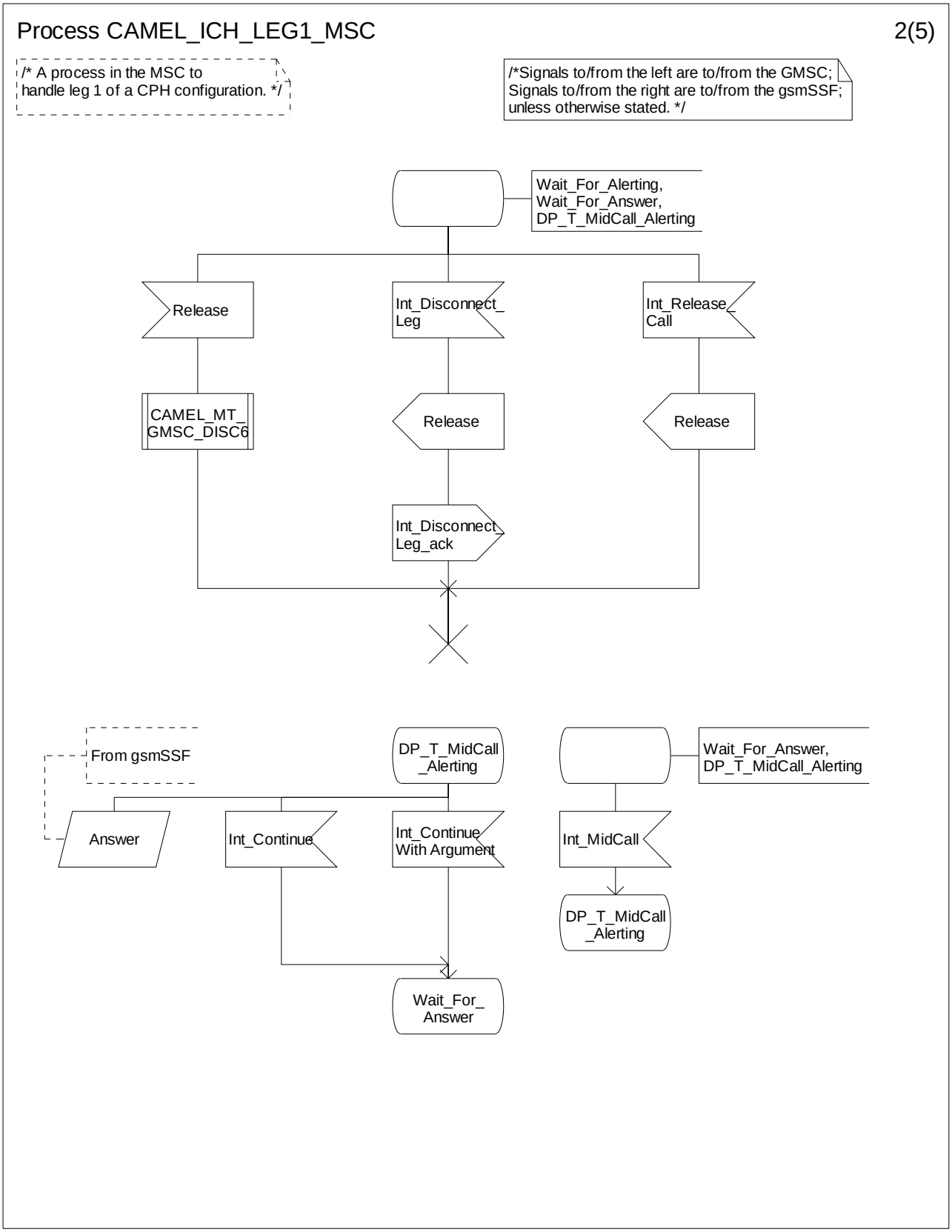


Figure Error! Reference source not found..**3-2: Process CAMEL_ICH_LEG1_MSC (sheet 2)**

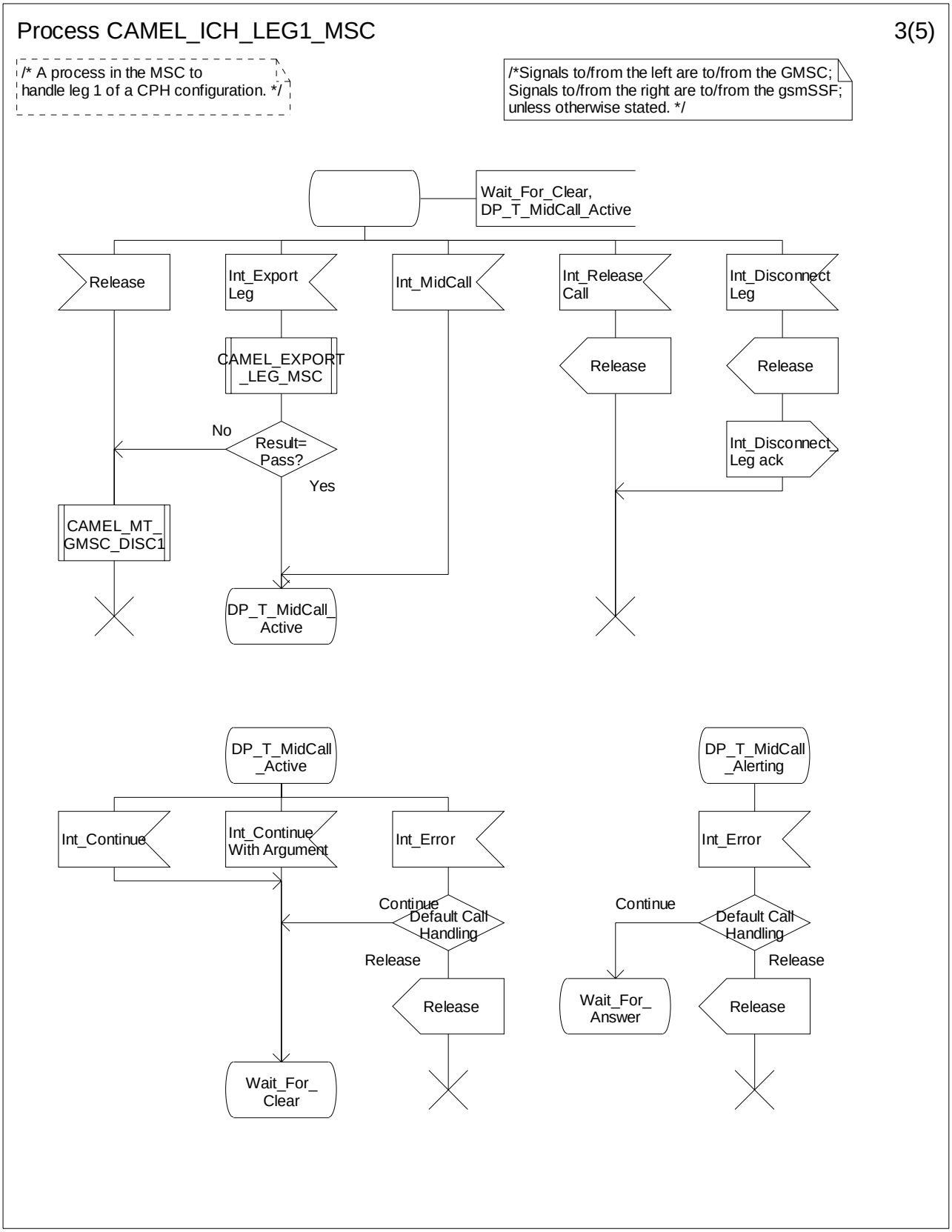


Figure Error! Reference source not found..**3-3: Process CAMEL_ICH_LEG1_MSC (sheet 3)**

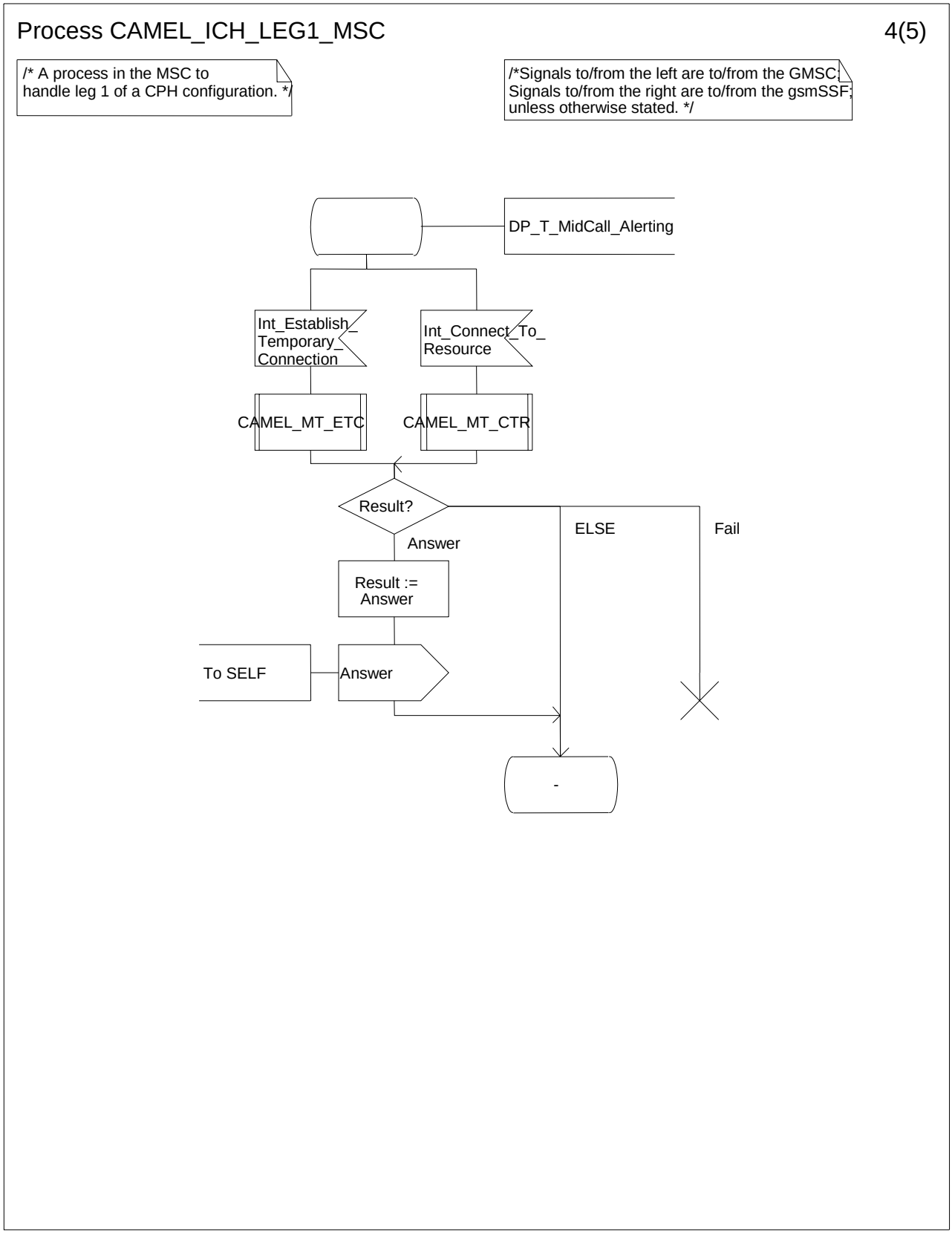
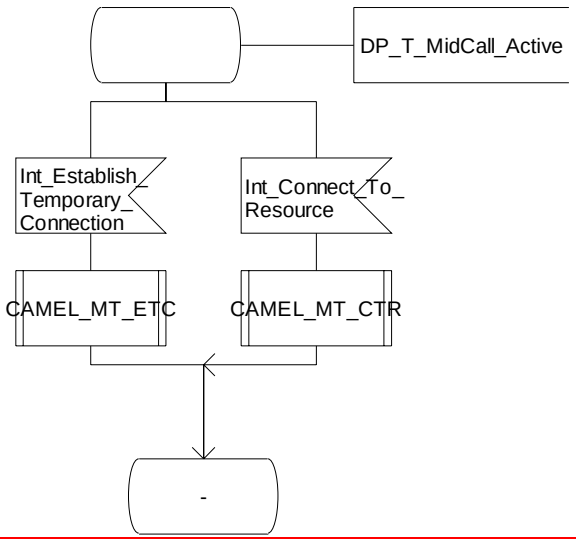


Figure Error! Reference source not found..**3-4: Process CAMEL_ICH_LEG1_MSC (sheet 4)**

Process CAMEL_ICH_LEG1_MSC 5(5)

/* A process in the MSC to handle leg 1 of a CPH configuration. */

/*Signals to/from the left are to/from the GMSC; Signals to/from the right are to/from the gsmSSF; unless otherwise stated. */



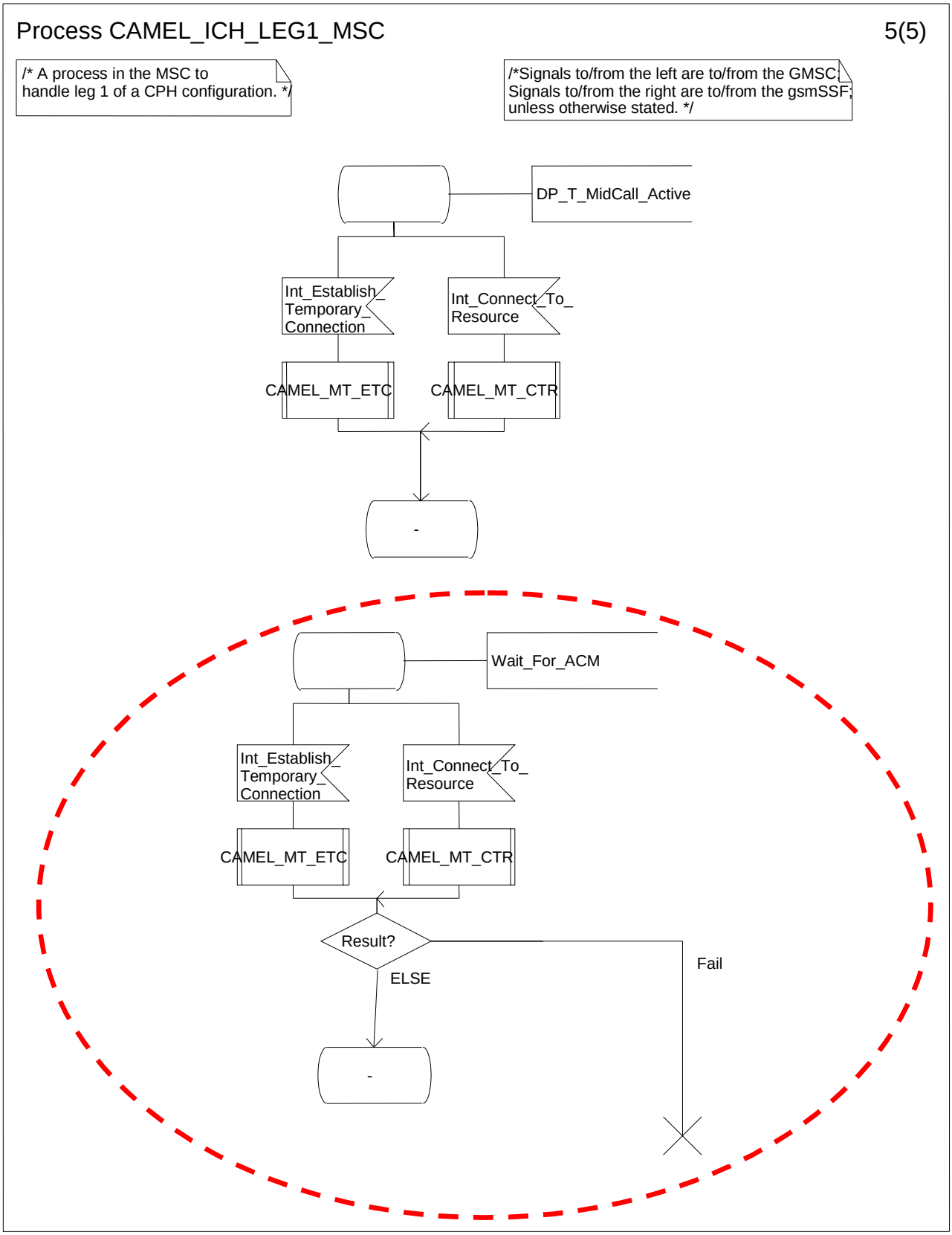


Figure 4.73-6: Process CAMEL_ICH_LEG1_MSC (sheet 6)

***** *Next Modification* *****

4.5.5 Handling of forwarded calls

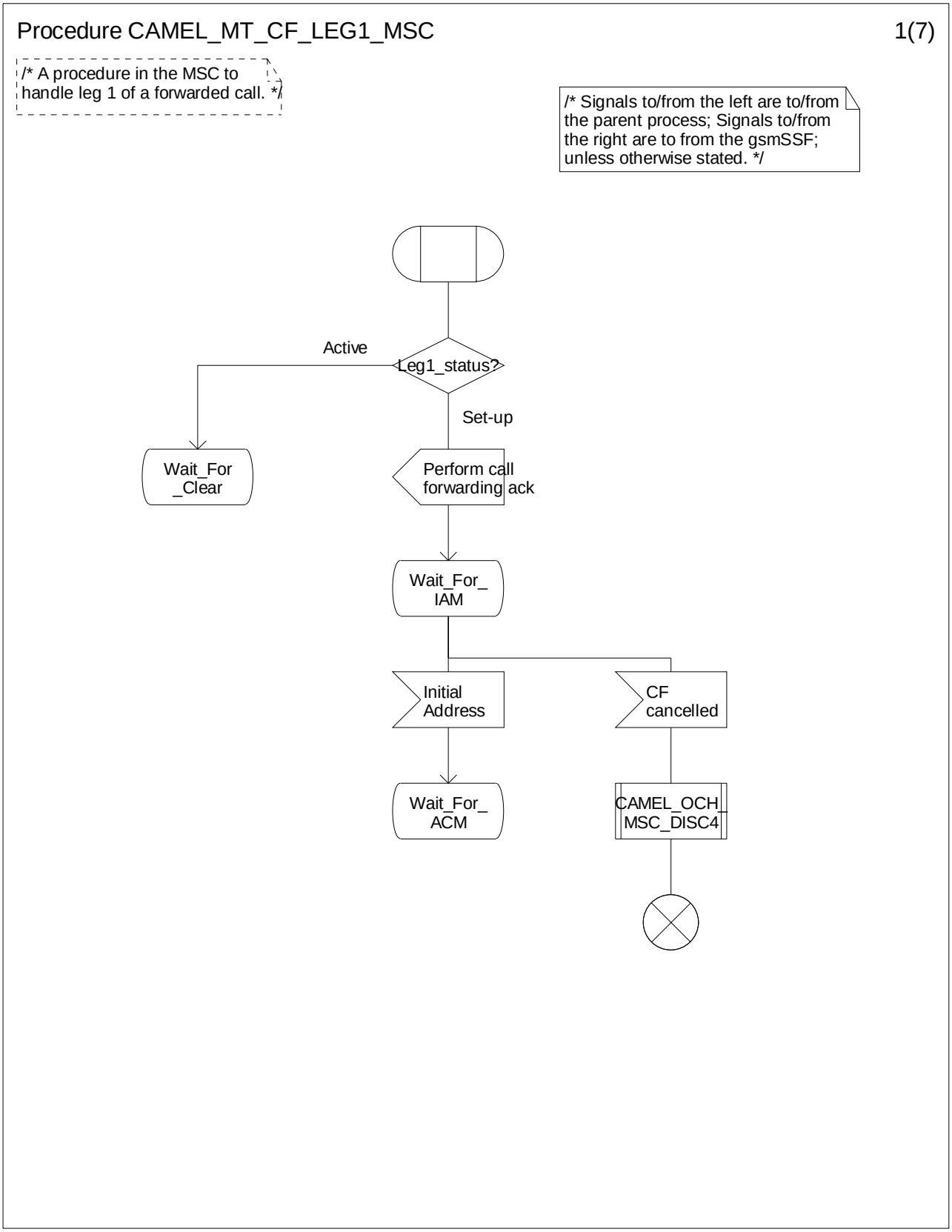


Figure 4.86-1: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 1)

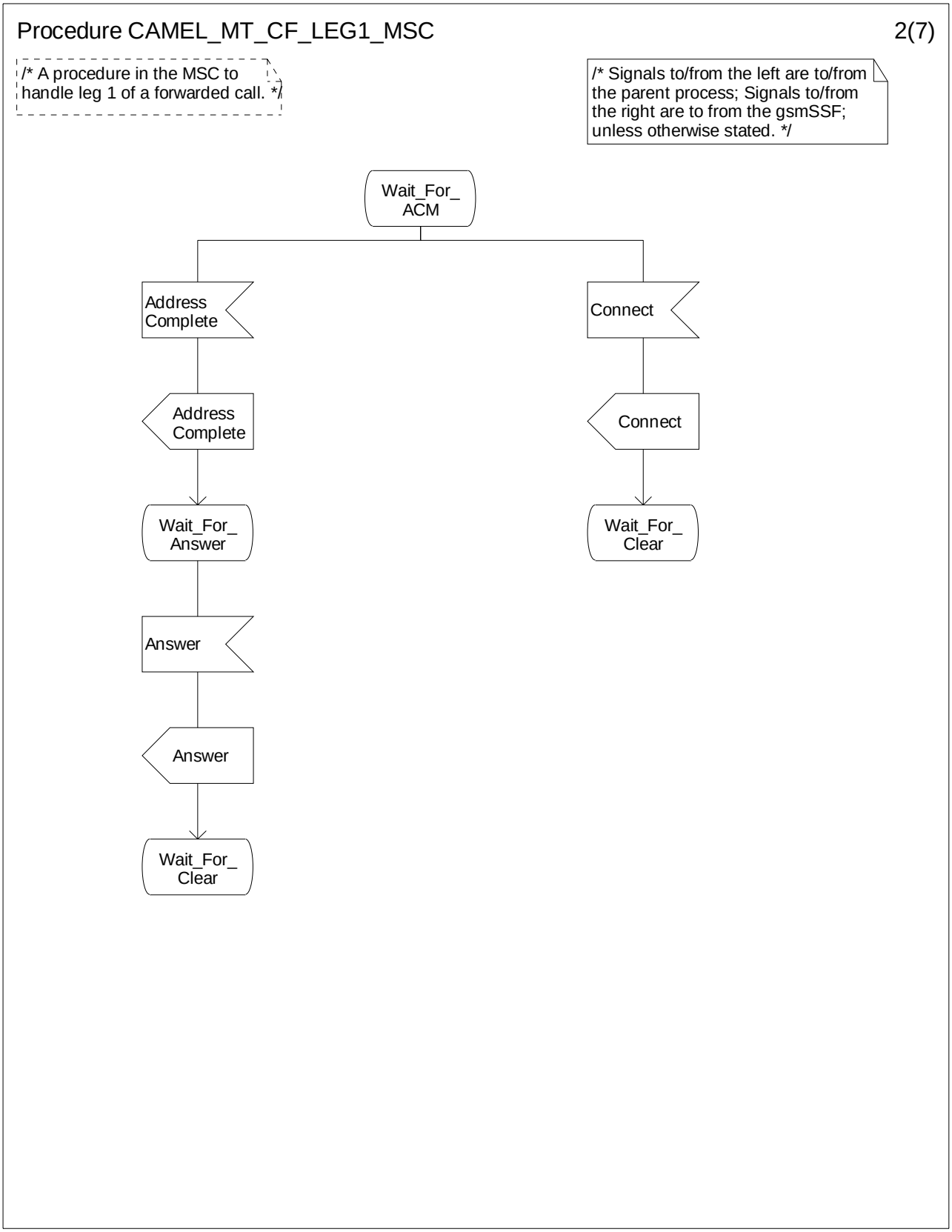


Figure 4.86-2: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 2)

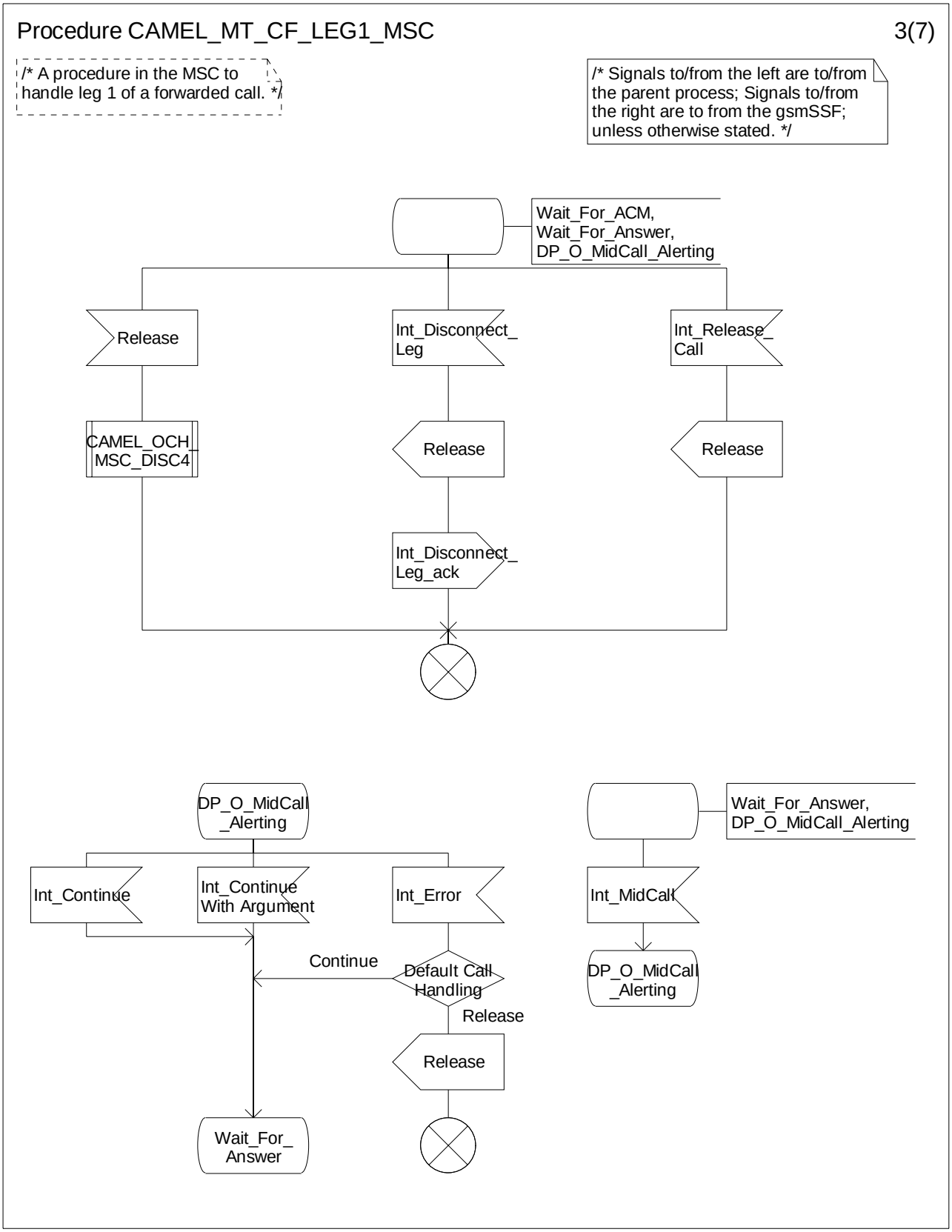


Figure 4.86-3: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 3)

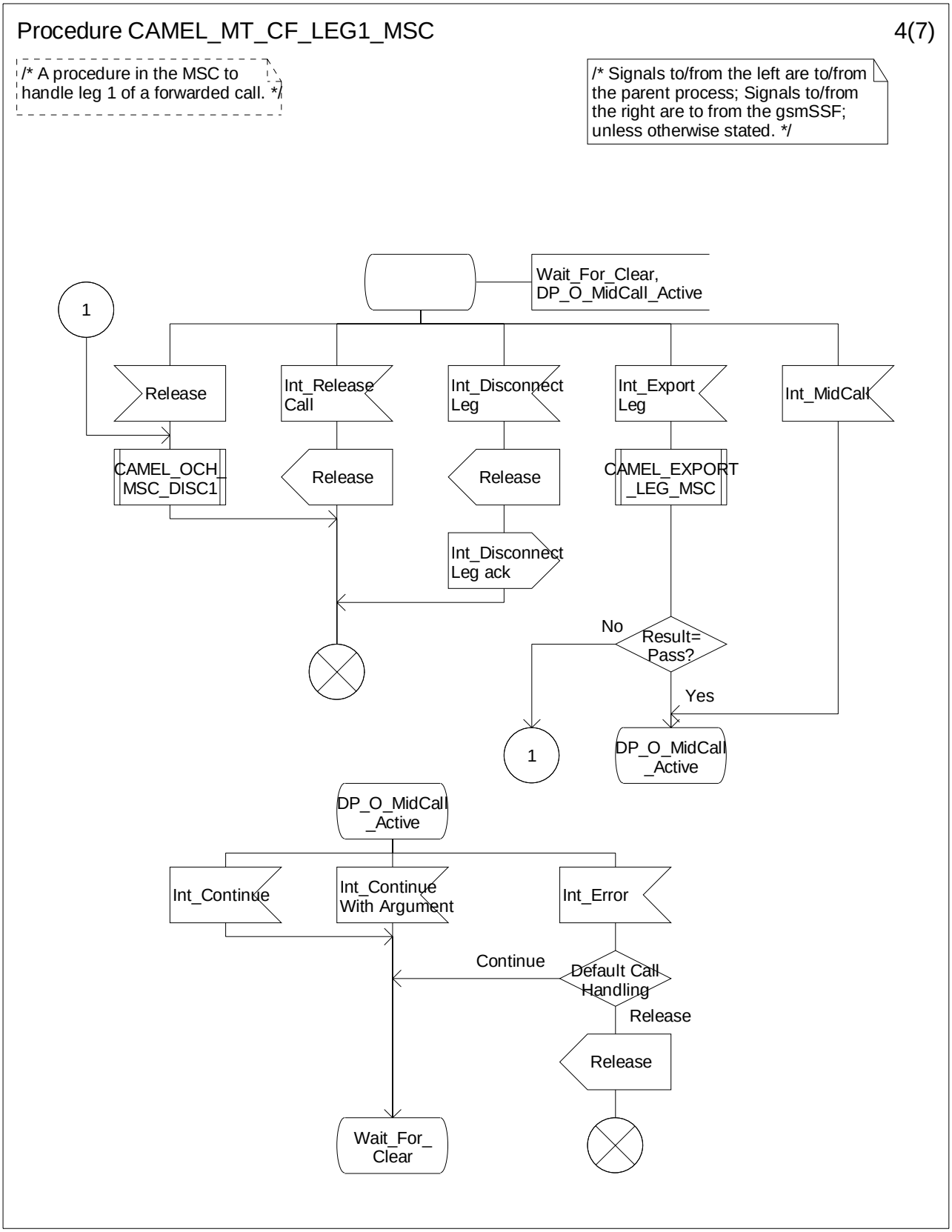


Figure 4.86-4: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 4)

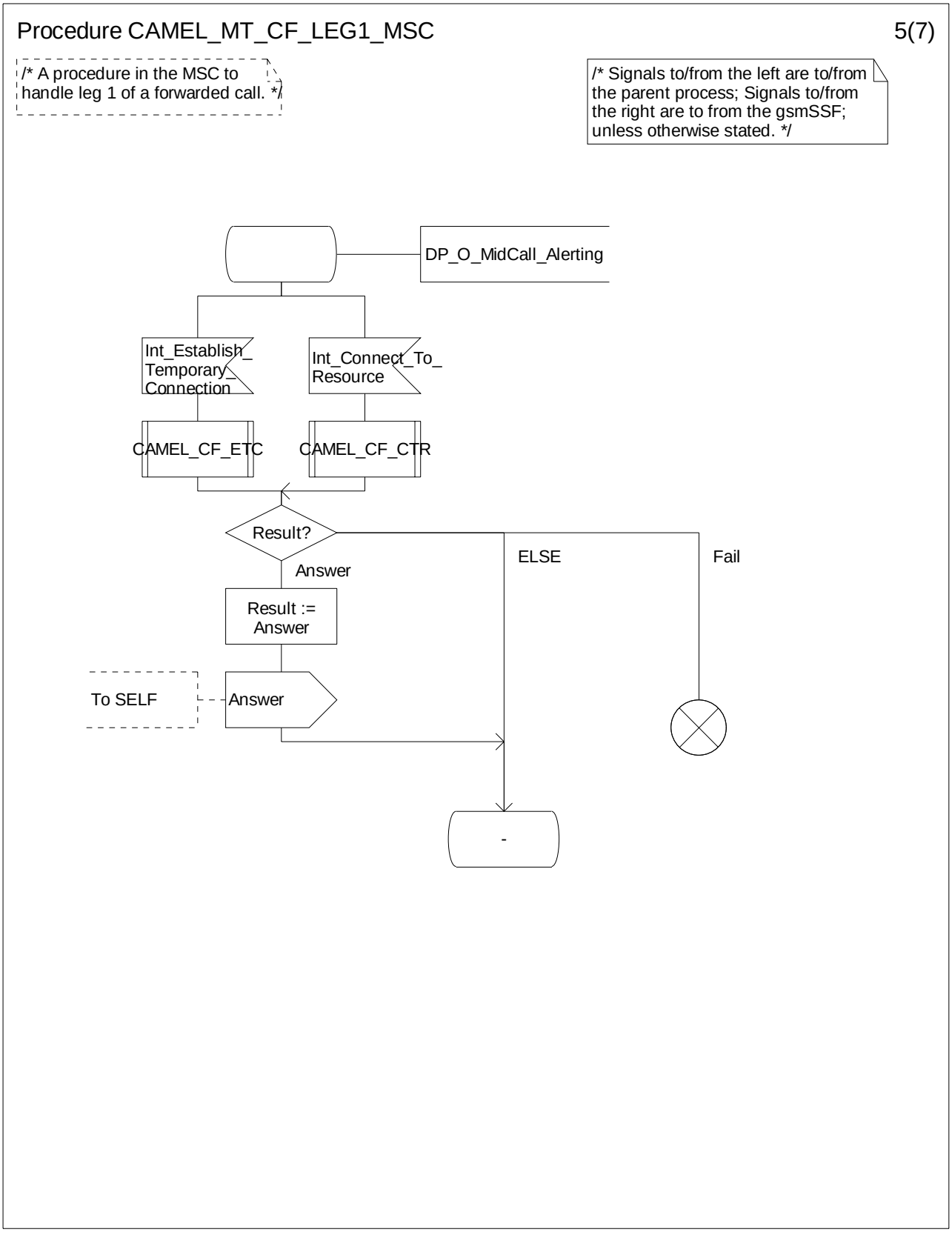
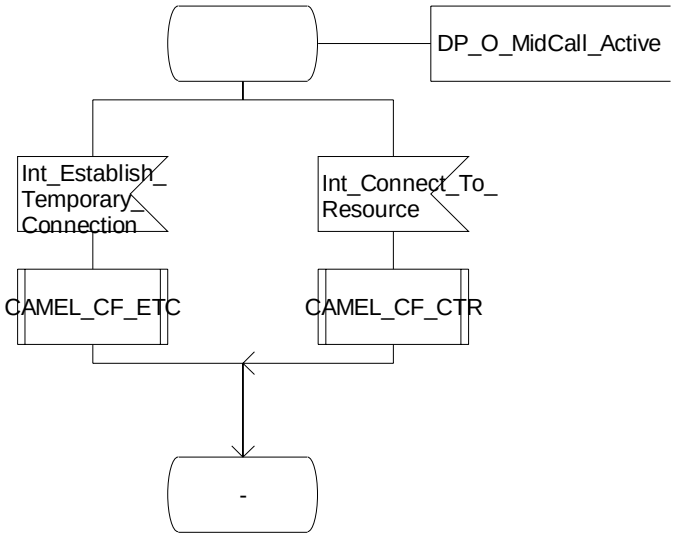


Figure 4.86-5: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 5)

Procedure CAMEL_MT_CF_LEG1_MSC 6(7)

/* A procedure in the MSC to handle leg 1 of a forwarded call. */

/* Signals to/from the left are to/from the parent process; Signals to/from the right are to from the gsmSSF; unless otherwise stated. */



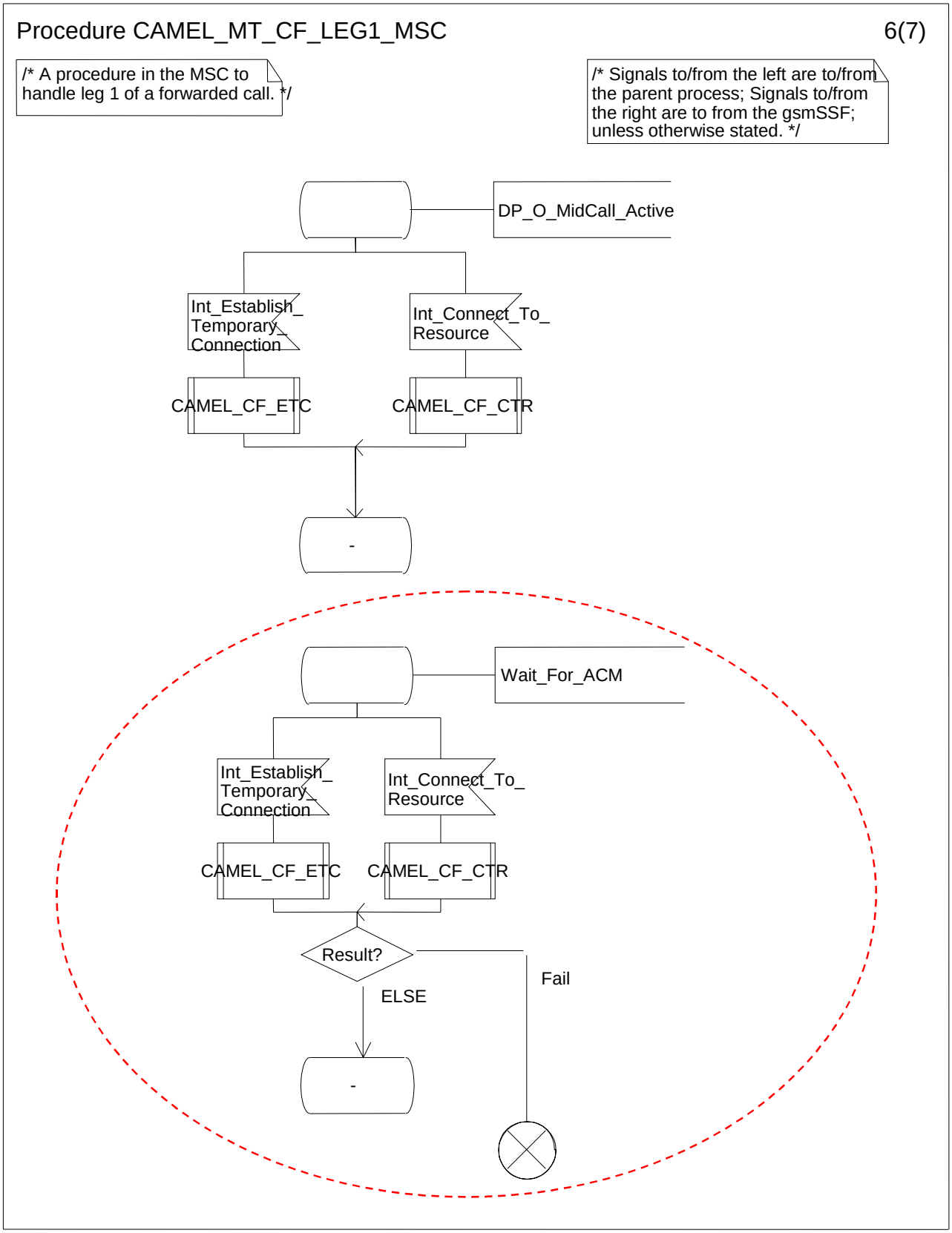


Figure 4.86-6: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 6)

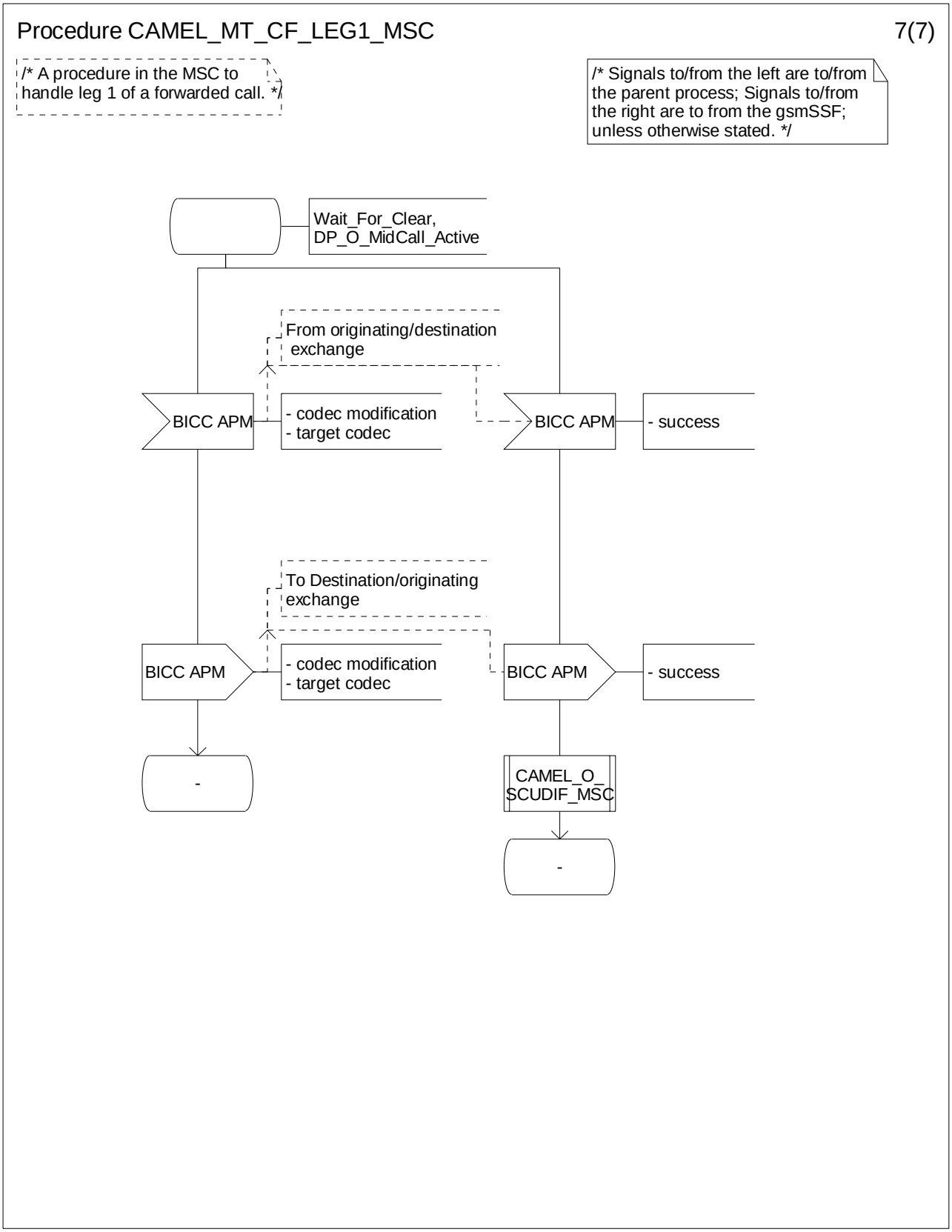


Figure 4.86-7: Procedure CAMEL_MT_CF_LEG1_MSC (sheet 7)

****** End of Document ******

CHANGE REQUEST

⌘ **29.078** **CR** **373** ⌘**rev** **2** ⌘ Current version: **5.7.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to Move Leg pre-condition
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4 ***Date:*** ⌘ 13/05/2004
Category:	⌘	F (essential correction) ***Release:*** ⌘ Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change: ⌘ One of the pre-conditions of the ***Move Leg*** Operation is that "At least one leg in the target Call Segment is in the active phase" (refer to TS 22.078). For ***Move Leg***, the target Call Segment is always Call Segment 1. Refer to the underlined sentence in the extract from 3GPP TS 22.078 V5.13.0, copied in the ***Other comments*** part of the present CR.

3GPP TS 23.078 reflects this pre-condition in process CSA_gsmSSF, sheet 18, where Move_Leg_Allowed is set TRUE as soon as a leg in Call Segment 1 reaches the Active State.

TS 29.078, however, specifies a pre-condition for Move Leg that is in contradiction with TS 22.078; TS 29.078 specifies that "***At least one leg in the target Call Segment is in the alerting phase or in the active phase***".

This misalignment shall be corrected; the pre-condition in TS 29.078 shall be aligned with stage 1 (TS 22.078) and stage 2 (TS 23.078).

In addition, the description of the precondition should reflect that once at least one leg in the target call segment has reached the active phase, the precondition remains fulfilled, even if the leg of which the transition to the active phase lead to the fulfilment of the precondition, is released from the target call segment.

It should further be mentioned in the preconditions that when the call is established by the gsmSCF, then a leg may be moved in the target call segment.

Summary of change: ⌘ Correct the pre-condition for Move Leg, to be aligned with TS 22.078 and TS 23.078.

Consequences if ⌘ Failing Move Leg procedures; the gsmSCF may attempt to use Move Leg when

not approved:	the pre-condition for Move Leg is not fulfilled. This situation may lead to Service Logic failure.

Clauses affected:	⌘	11.22			
Other specs affected:	⌘	**Y** / **N** **X** / ☐	Other core specifications	⌘	23.078-CR714
		☐ / **X**	Test specifications		
		☐ / **X**	O&M Specifications		
Other comments:	⌘	The following is an extract from 3GPP TS 22.078 V5.13.0.			

8.1.4 Connecting an individual call party to the group

The purpose of this procedure is to allow the CSE to instruct the IPLMN/VPLMN to connect an individual call party to the group.

If, at the initial service event, the CSE instructed the IPLMN/VPLMN not to route the call leg directly to the destination, then the CSE may instruct the IPLMN/VPLMN to connect a held call party to the group at any point during the alerting and active phases of the call leg if a control relationship exists. The CSE may instruct the IPLMN/VPLMN to connect a held call party to the group also if the following conditions are met;

- a control relationship exists, and
- the original call state model in the target call segment is either in the Call set-up request procedure or Incoming call request procedure, and
- the original outgoing leg of the target call segment has been disconnected.

If, at the initial service event, the CSE instructed the IPLMN/VPLMN to proceed with the call as normal then the CSE may instruct the IPLMN/VPLMN to connect a held call party to the group at any point during the alerting and active phases of the call leg if a control relationship exists and at least one call leg in the group has reached the active phase.

If the CSE has initiated the call, it may instruct the IPLMN/VPLMN to connect another held call party to the group at any point during the alerting and active phases of the call leg.

The CSE shall be able to instruct the IPLMN/VPLMN to send a notification towards the previously held party indicating that she has been connected to the group. The CSE shall be able to instruct the IPLMN/VPLMN to send a notification towards the other party or parties in the group indicating that an additional party has been connected to the group. The notification shall be a tone or an announcement.

NOTE: The CSE may use other procedures instead of, or as well as, instructing the IPLMN/VPLMN to send a tone or announcement to notify the previously held party that she has been connected to the group. The same principle applies to the notification towards the other party or parties in the group.

***** *First Modification* *****

11.22 MoveLeg procedure

11.22.1 General Description

The gsmSCF uses this operation to request the gsmSSF to move the leg from its current Call Segment to CSID1.

11.22.1.1 Parameters

- legIDToMove:
  This parameter indicates the leg that shall be moved.

11.22.2 Responding entity (gsmSSF)

11.22.2.1 Normal procedure

gsmSSF preconditions:

1) A control relationship exists between the gsmSCF and the gsmSSF.

2) The source BCSM is in the alerting phase or in the active phase.

3) The target Call Segment fulfills the following preconditions:

   - At least one leg in the target Call Segment ~~is in~~has reached the ~~alerting phase or in the~~ active phase, or

   - The original BCSM in the target Call Segment is at Terminating_Attempt_Authorised or Collected_Info detection point, and the outgoing leg of that BCSM has been disconnected by the gsmSCF~~.~~, or

   - The call was created by the gsmSCF.

4) The CS_gsmSSF FSM for each Call Segment involved is in the state "Waiting_for_Instructions" or in the state "Monitoring".

5) User Interaction is not in progress in either Call Segment.

gsmSSF postconditions:

1) The gsmSSF performs the appropriate call processing actions.

2) The CS_gsmSSF FSM for CSID1 transits to the state "Waiting_for_Instructions". The BCSM instances within CSID1transit to the O_Mid_Call DP or to the T_Mid_Call DP, if not already suspended. The Mid_Call EDP shall not be reported for this case.

3) The CS_gsmSSF process for the source Call Segment is terminated.

4) A Return Result is sent to the gsmSCF immediately after successful execution of this operation.

11.22.2.2 Error handling

Generic error handling for the operation related errors is described in clause 10, and the TC services which are used for reporting operation errors are described in clause 14.

***** *End of Document* *****

N2-040241

CHANGE REQUEST

⌘ **29.078** **CR** **374** ⌘**rev** ⌘ Current version: **6.1.0** ⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction to Move Leg pre-condition
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4
Date:	⌘	13 May 2004
Category:	⌘	A
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)

Reason for change: ⌘ One of the pre-conditions of the ***Move Leg*** Operation is that "At least one leg in the target Call Segment is in the active phase" (refer to TS 22.078). For ***Move Leg***, the target Call Segment is always Call Segment 1. Refer to the underlined sentence in the extract from 3GPP TS 22.078 V5.13.0, copied in the ***Other comments*** part of the present CR.

3GPP TS 23.078 reflects this pre-condition in process CSA_gsmSSF, sheet 18, where Move_Leg_Allowed is set TRUE as soon as a leg in Call Segment 1 reaches the Active State.

TS 29.078, however, specifies a pre-condition for Move Leg that is in contradiction with TS 22.078; TS 29.078 specifies that "***At least one leg in the target Call Segment is in the alerting phase or in the active phase***".

This misalignment shall be corrected; the pre-condition in TS 29.078 shall be aligned with stage 1 (TS 22.078) and stage 2 (TS 23.078).

In addition, the description of the precondition should reflect that once at least one leg in the target call segment has reached the active phase, the precondition remains fulfilled, even if the leg of which the transition to the active phase lead to the fulfilment of the precondition, is released from the target call segment.

It should further be mentioned in the preconditions that when the call is established by the gsmSCF, then a leg may be moved in the target call segment.

Summary of change: ⌘ Correct the pre-condition for Move Leg, to be aligned with TS 22.078 and TS 23.078.

Consequences if ⌘ Failing Move Leg procedures; the gsmSCF may attempt to use Move Leg when

not approved:	the pre-condition for Move Leg is not fulfilled. This situation may lead to Service Logic failure.

Clauses affected:	⌘	11.22			
Other specs affected:	⌘	**Y** / **N** **X** / ☐	Other core specifications	⌘	23.078-CR714
		☐ / **X**	Test specifications		
		☐ / **X**	O&M Specifications		
Other comments:	⌘	The following is an extract from 3GPP TS 22.078 V5.13.0.			

8.1.4 Connecting an individual call party to the group

The purpose of this procedure is to allow the CSE to instruct the IPLMN/VPLMN to connect an individual call party to the group.

If, at the initial service event, the CSE instructed the IPLMN/VPLMN not to route the call leg directly to the destination, then the CSE may instruct the IPLMN/VPLMN to connect a held call party to the group at any point during the alerting and active phases of the call leg if a control relationship exists. The CSE may instruct the IPLMN/VPLMN to connect a held call party to the group also if the following conditions are met;

- a control relationship exists, and
- the original call state model in the target call segment is either in the Call set-up request procedure or Incoming call request procedure, and
- the original outgoing leg of the target call segment has been disconnected.

If, at the initial service event, the CSE instructed the IPLMN/VPLMN to proceed with the call as normal then the CSE may instruct the IPLMN/VPLMN to connect a held call party to the group at any point during the alerting and active phases of the call leg if a control relationship exists and at least one call leg in the group has reached the active phase.

If the CSE has initiated the call, it may instruct the IPLMN/VPLMN to connect another held call party to the group at any point during the alerting and active phases of the call leg.

The CSE shall be able to instruct the IPLMN/VPLMN to send a notification towards the previously held party indicating that she has been connected to the group. The CSE shall be able to instruct the IPLMN/VPLMN to send a notification towards the other party or parties in the group indicating that an additional party has been connected to the group. The notification shall be a tone or an announcement.

NOTE: The CSE may use other procedures instead of, or as well as, instructing the IPLMN/VPLMN to send a tone or announcement to notify the previously held party that she has been connected to the group. The same principle applies to the notification towards the other party or parties in the group.

***** *First Modification* *****

11.22 MoveLeg procedure

11.22.1 General Description

The gsmSCF uses this operation to request the gsmSSF to move the leg from its current Call Segment to CSID1.

11.22.1.1 Parameters

- legIDToMove:
  This parameter indicates the leg that shall be moved.

11.22.2 Responding entity (gsmSSF)

11.22.2.1 Normal procedure

gsmSSF preconditions:

1) A control relationship exists between the gsmSCF and the gsmSSF.

2) The source BCSM is in the alerting phase or in the active phase.

3) The target Call Segment fulfills the following preconditions:

   - At least one leg in the target Call Segment ~~is in~~has reached the ~~alerting phase or in the~~ active phase, or

   - The original BCSM in the target Call Segment is at Terminating_Attempt_Authorised or Collected_Info detection point, and the outgoing leg of that BCSM has been disconnected by the gsmSCF~~.~~, or

   - The call was created by the gsmSCF.

4) The CS_gsmSSF FSM for each Call Segment involved is in the state "Waiting_for_Instructions" or in the state "Monitoring".

5) User Interaction is not in progress in either Call Segment.

gsmSSF postconditions:

1) The gsmSSF performs the appropriate call processing actions.

2) The CS_gsmSSF FSM for CSID1 transits to the state "Waiting_for_Instructions". The BCSM instances within CSID1transit to the O_Mid_Call DP or to the T_Mid_Call DP, if not already suspended. The Mid_Call EDP shall not be reported for this case.

3) The CS_gsmSSF process for the source Call Segment is terminated.

4) A Return Result is sent to the gsmSCF immediately after successful execution of this operation.

11.22.2.2 Error handling

Generic error handling for the operation related errors is described in clause 10, and the TC services which are used for reporting operation errors are described in clause 14.

***** *End of Document* *****

CHANGE REQUEST

⌘	23.078	CR	728	⌘ rev		⌘	Current version:	6.1.0	⌘

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Correction to Entity Released for individual call party
Source:	⌘	Ericsson
Work item code:	⌘	CAMEL4 **Date:** ⌘ 13/05/2004
Category:	⌘	A **Release:** ⌘ Rel-6

Use one of the following categories:
- ***F*** *(correction)*
- ***A*** *(corresponds to a correction in an earlier release)*
- ***B*** *(addition of feature),*
- ***C*** *(functional modification of feature)*
- ***D*** *(editorial modification)*

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

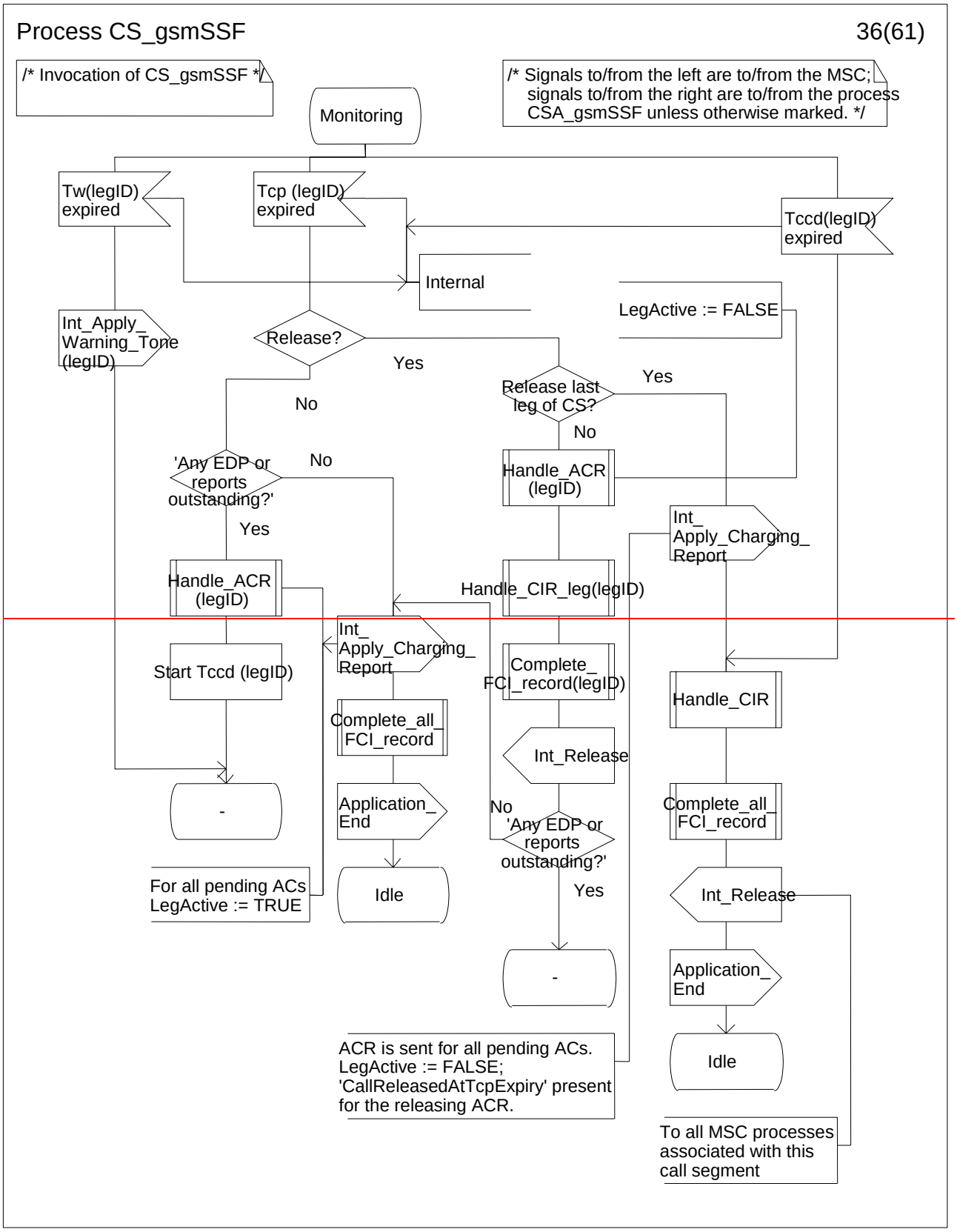
Reason for change:	⌘	When Tccd expires, then this results in signal Application_End to CSA_gsmSSF. When CSA_gsmSSF FSM is in state Multiple_CS, then the signal Application_End is currently not reported to gsmSCF. Tccd expiry leads to termination of CS_gsmSSF process and should therefore be reported to gsmSCF through Entity Released (if CSA_gsmSSF FSM is in state Multiple_CS). Therefore, CS_gsmSSF should send Application_End with a specific parameter ("CS_Failure") to CSA_gsmSSF in the case of Tccd expiry. When CSA_gsmSSF FSM is in state One_CS, an Application_End signal from CS_gsmSSF is propagated, if not already done, to gsmSCF (CSA_gsmSSF, sheet 4); when CSA_gsmSSF FSM is in state Multiple_CS, an Application_End signal with CS_Failure from CS_gsmSSF shall result in Entity Released (CallSegmentFailure).
Summary of change:	⌘	Sheet 36 and 51 of CS_gsmSSF: when Tccd expires, then CS_gsmSSF shall send Application_End with CS_Failure to CSA_gsmSSF. Sheet 21 of CSA_gsmSSF: if CSA_gsmSSF receives Application_End with CS_Failure, when CSA_gsmSSF is in state Multiple_CS, then Entity_Released (CallSegmentFailure) shall be sent to gsmSCF.
Consequences if not approved:	⌘	Release of individual call party (and associated CS) will not be signaled to gsmSCF. This may result in failure of on-line charging service.

Clauses affected:	⌘	4.5.7.5 (Process CS_gsmSSF and procedures), 4.5.7.7 (Process CSA_gsmSSF and procedures)
Other specs	⌘	Y: ☐ N: ☒ Other core specifications ⌘

affected:		X	Test specifications
		X	O&M Specifications
Other comments:	⌘ -		

***** First Modification *****

4.5.7.5 Process CS_gsmSSF and procedures



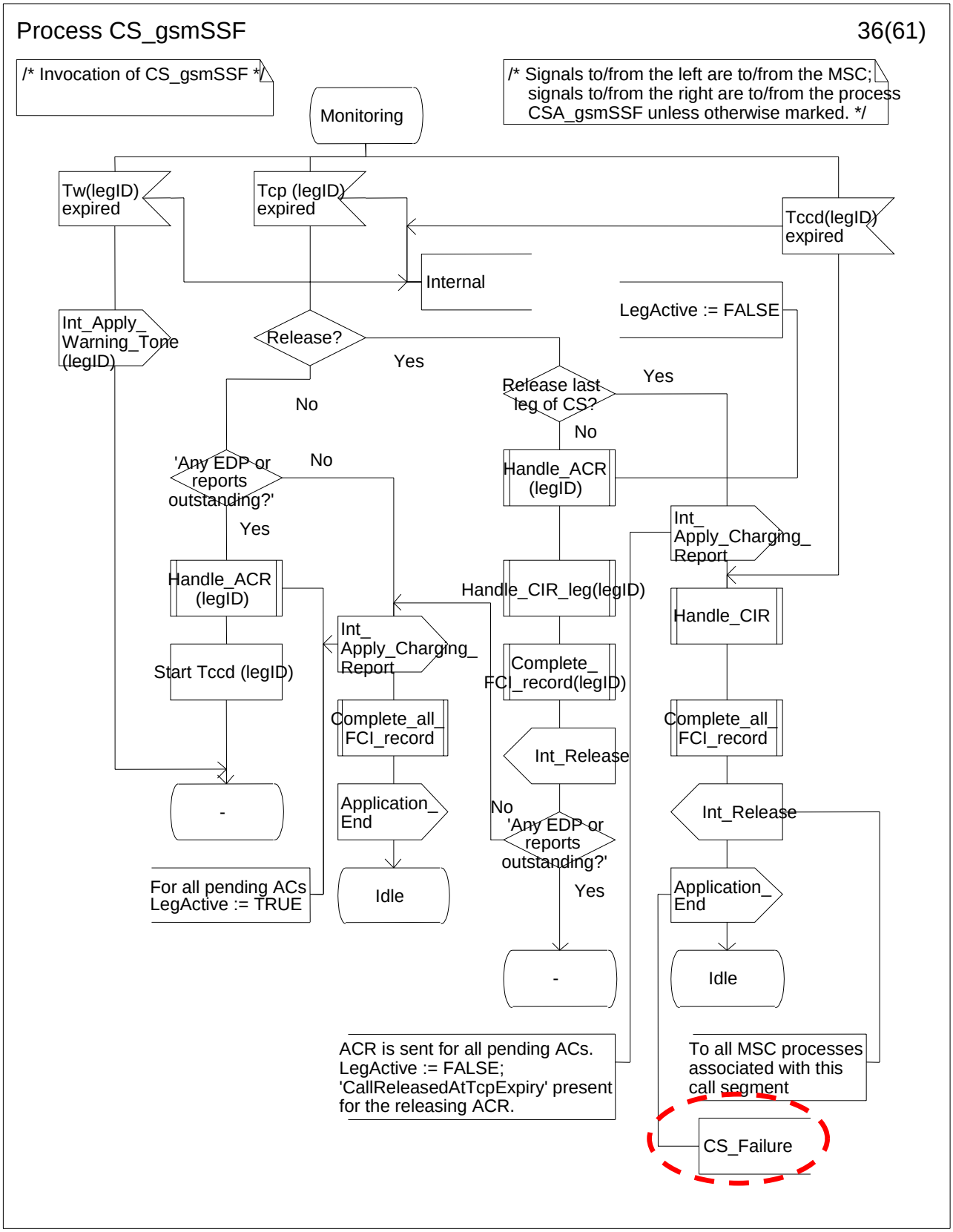
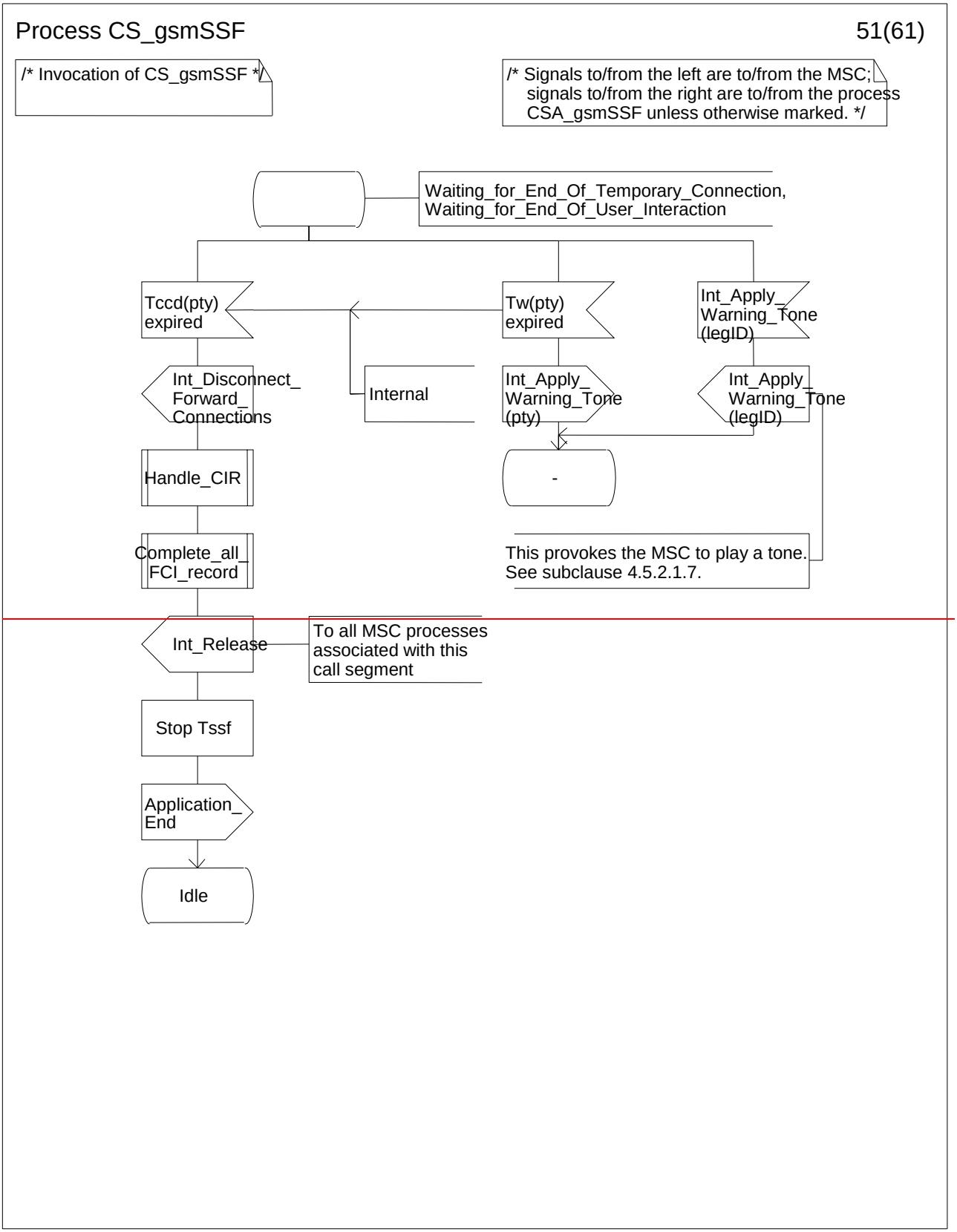


Figure 4.99-36: Process CS_gsmSSF (sheet 36)



~~Figure 4.99-51: Process CS_gsmSSF (sheet 51)~~

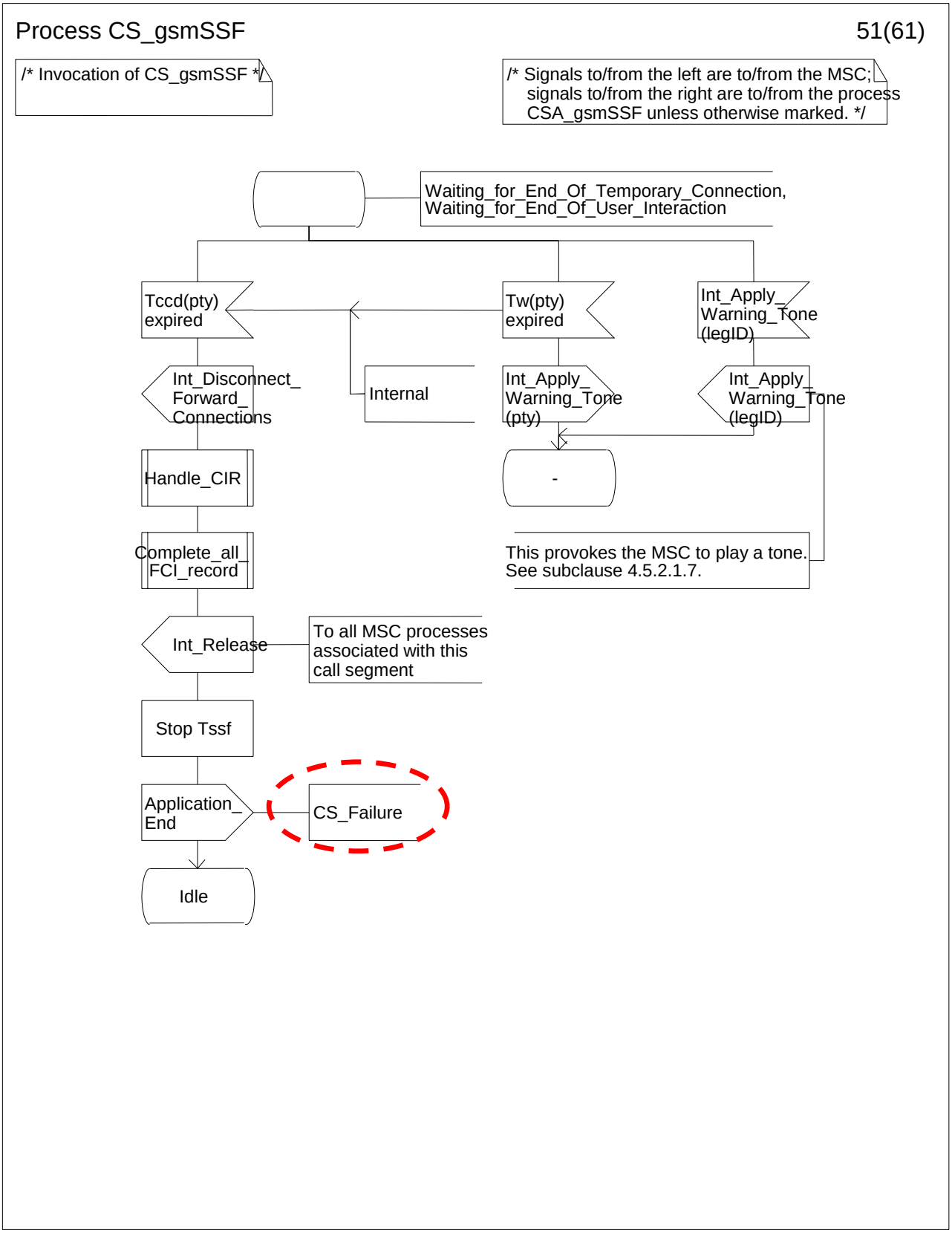
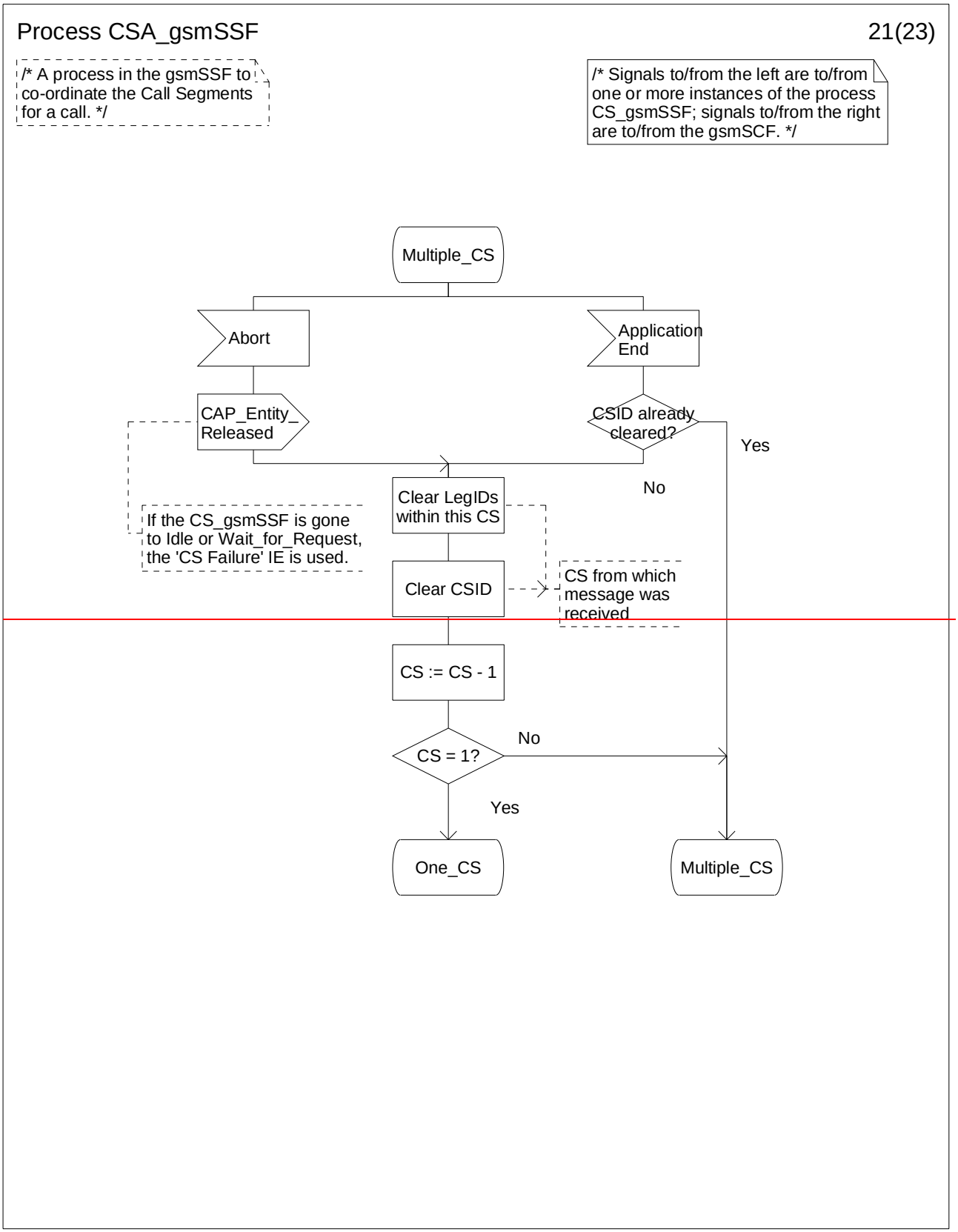


Figure 4.99-51: Process CS_gsmSSF (sheet 51)

***** Next Modification *****

4.5.7.7 Process CSA_gsmSSF and procedures



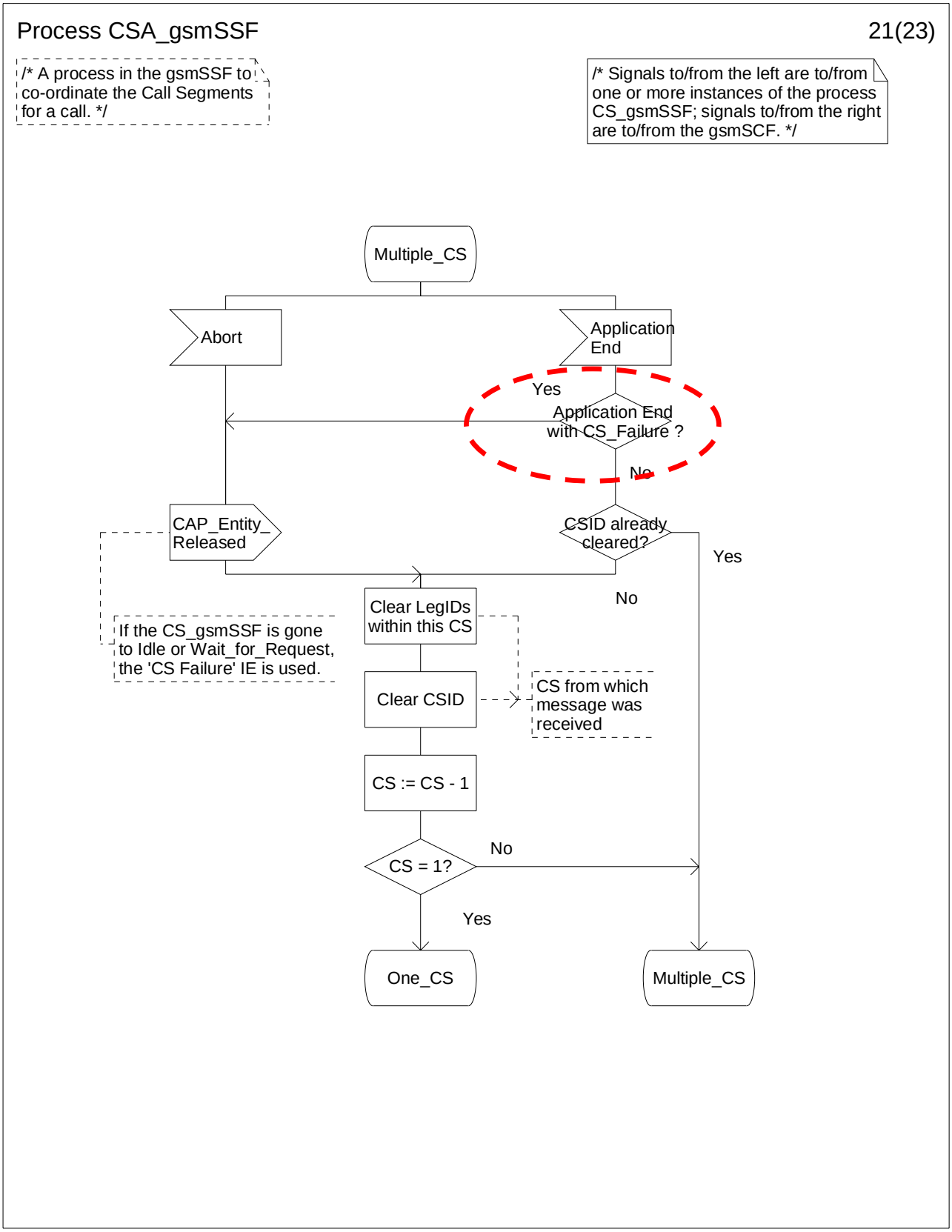


Figure 4.116-21: Process CSA_gsmSSF (sheet 21)

****** End of Document ******