

**Source:** CN2  
**Title:** CRs on Rel-5 Work Item IMS-CAMEL  
**Agenda item:** 8.1  
**Document for:** APPROVAL

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**Introduction:**

This document contains 3 CRs on Rel-5 WI IMS-CAMEL (TS 23.278). These CRs have been agreed by TSG CN WG2 and are forwarded to TSG CN Plenary meeting #20 for approval.

<b>Spec</b>	<b>CR</b>	<b>Rev</b>	<b>Doc-2nd-Level</b>	<b>Phase</b>	<b>Subject</b>	<b>Cat</b>	<b>Ver_C</b>
23.278	40	1	N2-030302	Rel-5	Incorrect list of TDPs listed for O-IM-CSI	F	5.2.0
23.278	41		N2-030261	Rel-5	Corrections to process IM_SSF	F	5.2.0
23.278	42		N2-030262	Rel-5	Redundant check for Final_Response_Received in Disconnect procedures.	F	5.2.0

3GPP TSG-CN WG2 Meeting #29  
 San Diego, USA 19<sup>th</sup> – 23<sup>rd</sup> May 2003.

Tdoc #N2-030261

CR-Form-v7
<b>CHANGE REQUEST</b>
⌘ <b>23.278 CR 041</b> ⌘ rev - ⌘ Current version: <b>5.2.0</b> ⌘

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

<b>Title:</b>	⌘ Corrections to process IM_SSF
<b>Source:</b>	⌘ Lucent Technologies
<b>Work item code:</b>	⌘ IMS-CAMEL
<b>Date:</b>	⌘ 07/05/2003
<b>Category:</b>	⌘ <b>F</b>
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .
<b>Release:</b>	⌘ Rel-5
	Use <u>one</u> 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)

<b>Reason for change:</b>	⌘ In the SDL process MO_IM_SSF, the note "signals to/from right are to/from the destination S-CSCF via S-CSCF" is found to indicate the source/destination of an input/output from the right. This is correct except for the 100 Trying input from the right, where it is a "hop-by-hop" response. This means that if the INVITE was sent from the IM-SSF to the destination S-CSCF via the originating S-CSCF, that it is the originating S-CSCF acting as a proxy which sent the 100 Trying response to the IM-SSF, and not the destination S-CSCF as the note indicates. A similar problem is found in the SDL process MT_IM_SSF.  This CR will also correct some other minor errors found the MO_IM_SSF process. I.e. sending of 200 OK as a response to the provisional response.
<b>Summary of change:</b>	⌘ The following changes are made: - Add clarifying text to explain that in Process MO_IM_SSF, the 100Trying input received in the IM-SSF is actually generated and sent by the S-CSCF acting as a proxy. Add similar text to clarify the case in MT_IM_SSF.  - Remove sending of 200 OK as response to provisional response in MO_IM_SSF(sheet 2) and MT_IM_SSF (sheet 2).
<b>Consequences if not approved:</b>	⌘ Incorrect IM-SSF process.

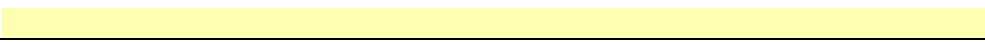
<b>Clauses affected:</b>	⌘ 4.6.1.3, 4.6.1.4				
<b>Other specs</b>	⌘ <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"> </td> </tr> </table> Other core specifications ⌘	Y	N	X	
Y	N				
X					

**affected:**

<input checked="" type="checkbox"/>	Test specifications
<input checked="" type="checkbox"/>	O&M Specifications



**Other comments:** ☞



— Modified section —

#### 4.6.1.3 Handling of Mobile Originated Calls in the IM-SSF

The functional behaviour of the S-CSCF is specified in 3GPP TS 23.218 [Error! Reference source not found.]. The process and the procedures specific to CAMEL are specified in this subclause:

...

##### 4.6.1.3.7 Handling of procedure CAMEL\_OCH\_CTR, sheet 5

The specifics on transporting information between the MRFC and the Application Server such as the IM-SSF, has not been standardised in 3GPP Rel-5 specifications for IMS. i.e. the SIP method to return the Prompt\_and\_Collect result from the MRFC to the IM-SSF, the SIP method for sending notification of play announcement completion to the IM-SSF when a request for a Specialised Resource Report was received, the SIP method to request the MRFC to play announcement and the SIP method to request the MRFC to prompt and collect user information, are not standardised.

##### 4.6.1.3.8 Receipt of 100 Trying Provisional Response (Process MO IM SSF)

The IM-SSF (acting as B2BUA) uses the S-CSCF as the next-hop server when sending the SIP INVITE to the destination S-CSCF. The 100 Trying provisional response received in the IM-SSF is actually generated and sent from the S-CSCF to indicate that the INVITE request has been received by the next-hop server (i.e. the S-CSCF) and is currently being processed.

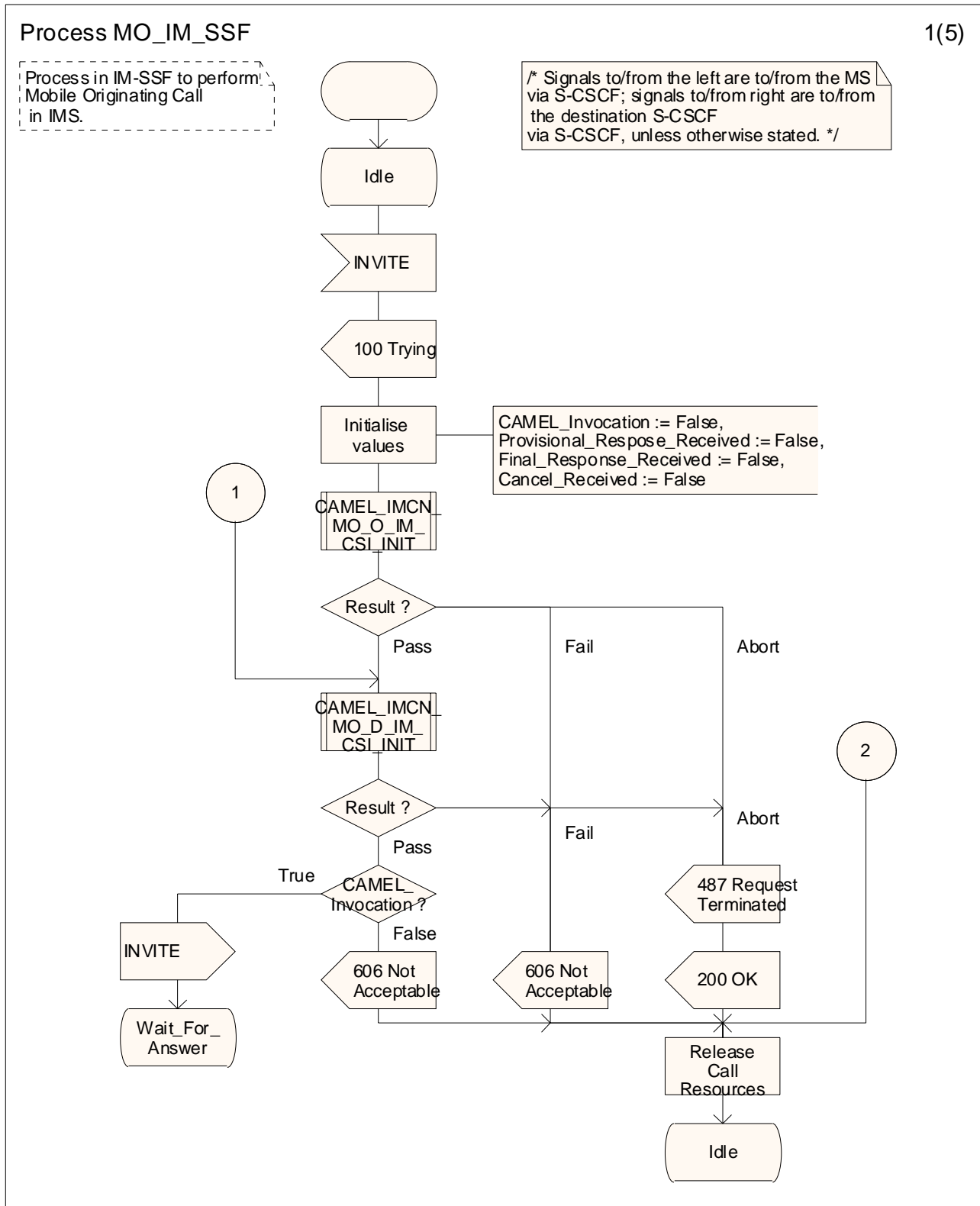


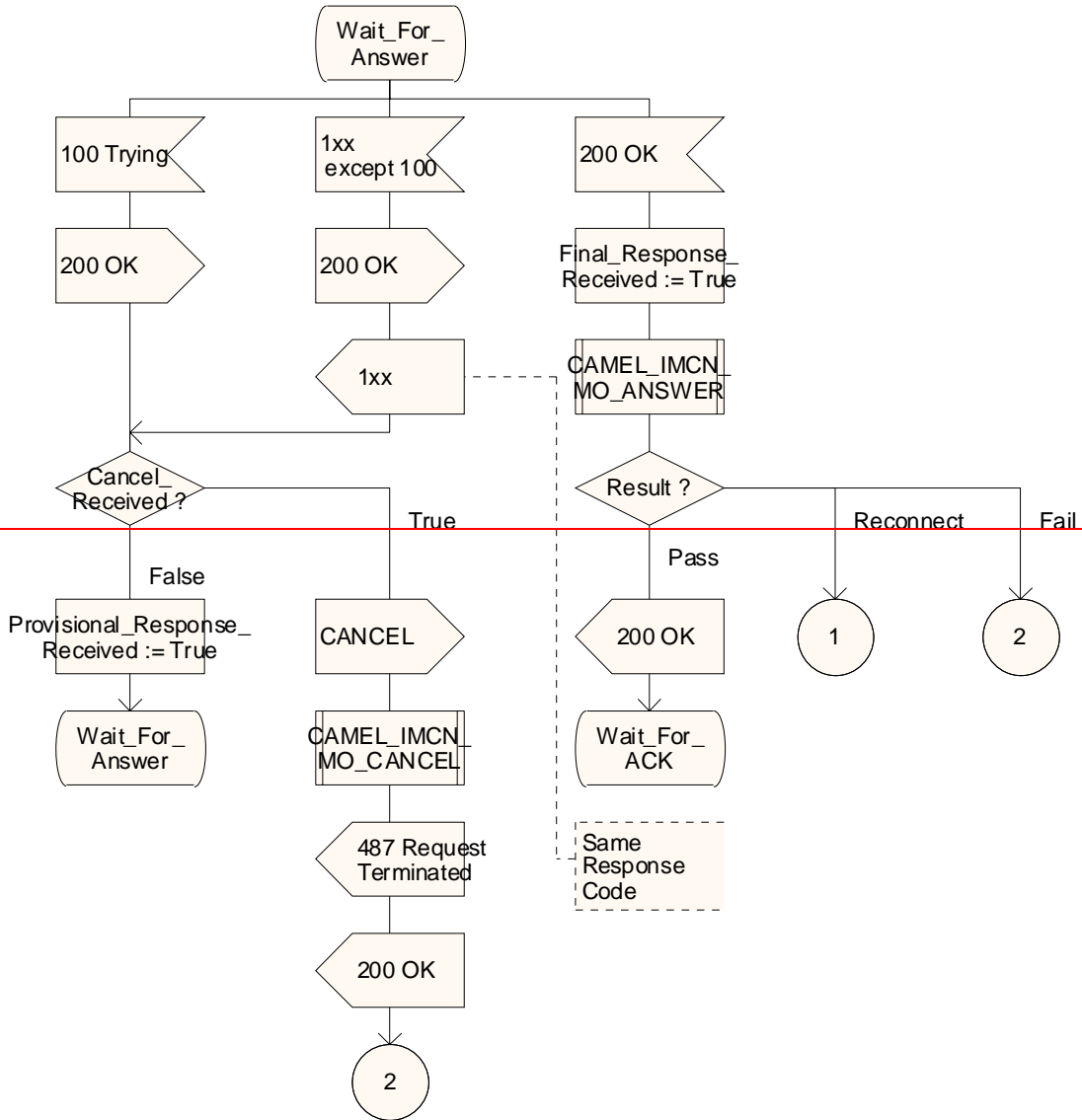
Figure 4.13-1: Process MO\_IM\_SSF (sheet 1)

Process MO\_IM\_SSF

2(5)

Process in IM-SSF to perform Mobile Originating Call in IMS.

\* Signals to/from the left are to/from the MS via S-CSCF; signals to/from right are to/from the destination S-CSCF via S-CSCF, unless otherwise stated. \*/



Process MO\_IM\_SSF

2(5)

Process in IM-SSF to perform Mobile Originating Call in IMS.

/\* Signals to/from the left are to/from the MS via S-CSCF; signals to/from right are to/from the destination S-CSCF via S-CSCF, unless otherwise stated. \*/

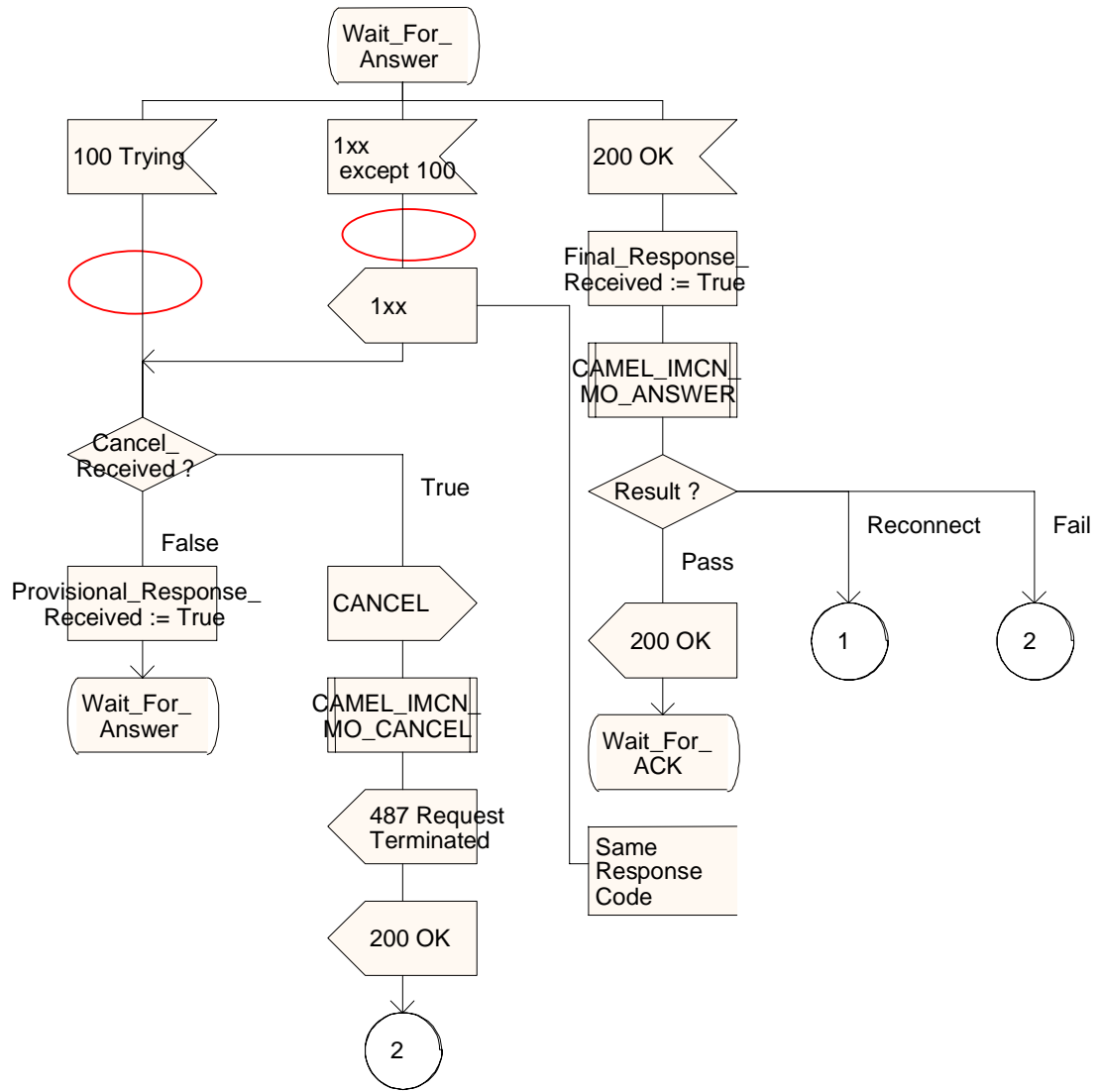


Figure 4.13-2: Process MO\_IM\_SSF (sheet 2)

— Next modified section —

#### 4.6.1.4 Handling of Mobile Terminated IP Multimedia sessions in the IM-SSF

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##### 4.6.1.4.6 Handling of procedure CAMEL\_MT\_CTR, sheet 5

The specifics on transporting information between the MRFC and the Application Server such as the IM-SSF, has not been standardised in 3GPP Rel-5 specifications for IMS. i.e. the SIP method to return Prompt\_And\_Collect result from the MRFC to the IM-SSF, the SIP method for sending notification of play announcement completion to the IM-SSF when a request for a Specialised Resource Report was received, the SIP method to request the MRFC to play announcement and the SIP method to request the MRFC to prompt and collect user information, are not standardised.

##### [4.6.1.4.7 Receipt of 100 Trying Provisional Response \(Process MT\\_IM\\_SSF\)](#)

[The IM-SSF \(acting as a B2BUA\) uses the S-CSCF as a next-hop server when sending the SIP INVITE to the terminating subscriber. The 100 Trying provisional response received in the IM-SSF is actually generated and sent from the S-CSCF to indicate that the INVITE request has been received by the next-hop server \(i.e. the S-CSCF\) and is currently being processed.](#)



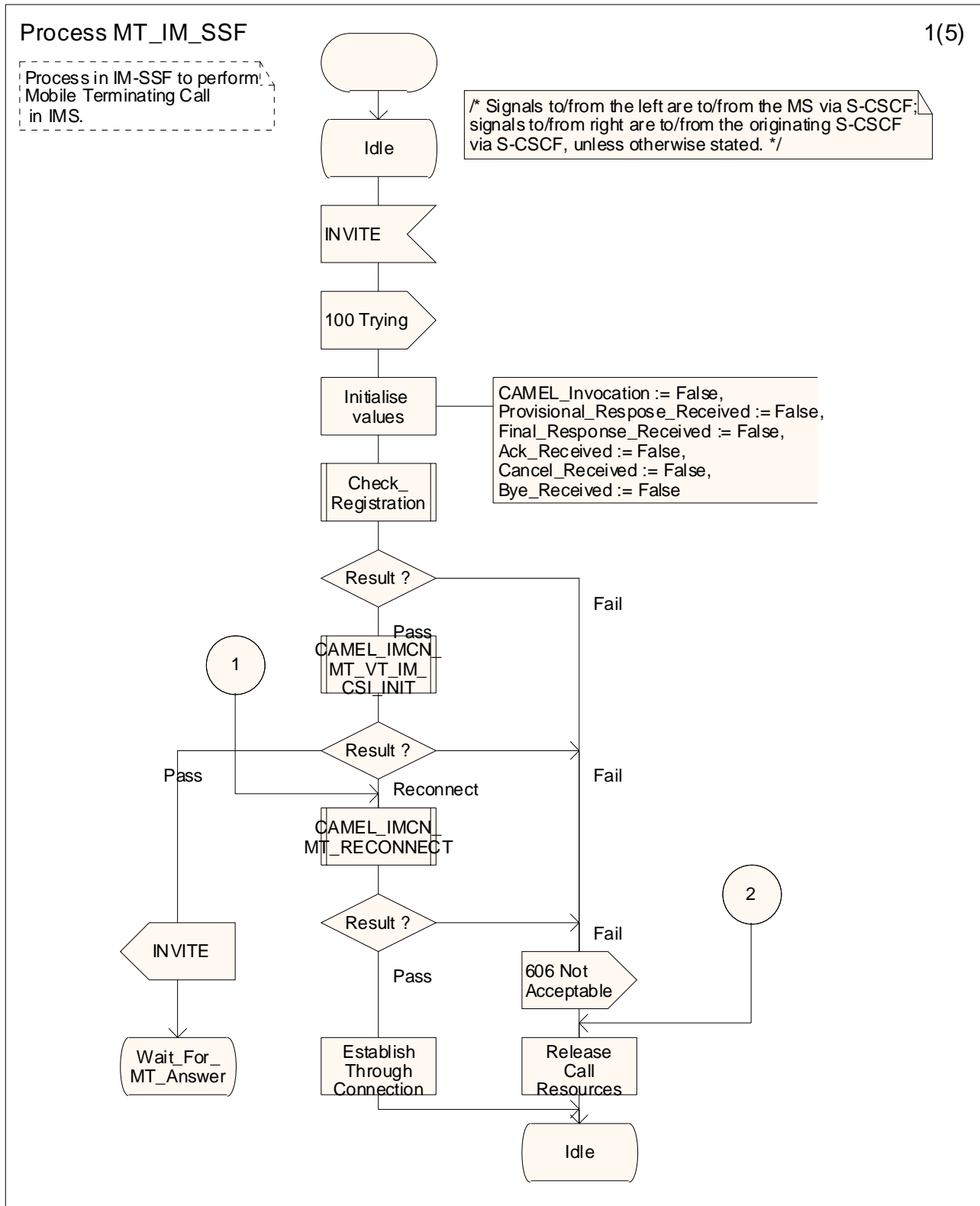


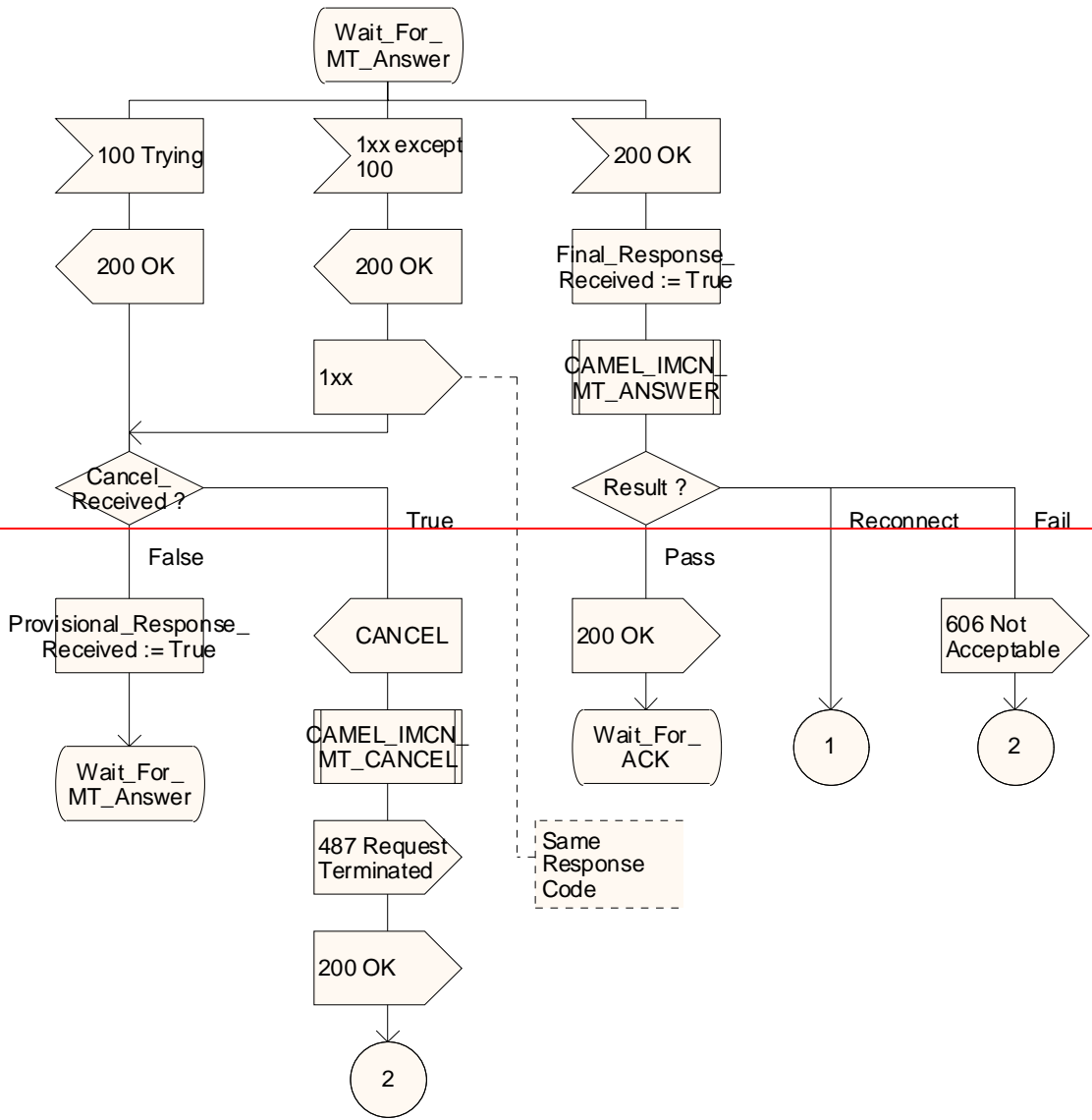
Figure 4.22-1: Process MT\_IM\_SSF (sheet 1)

Process MT\_IM\_SSF

2(5)

Process in IM-SSF to perform Mobile Terminating Call in IMS.

/\* Signals to/from the left are to/from the MS via S-CSCF; signals to/from right are to/from the originating S-CSCF via S-CSCF, unless otherwise stated. \*/



Process MT\_IM\_SSF

2(5)

Process in IM-SSF to perform Mobile Terminating Call in IMS.

/\* Signals to/from the left are to/from the MS via S-CSCF; signals to/from right are to/from the originating S-CSCF via S-CSCF, unless otherwise stated. \*/

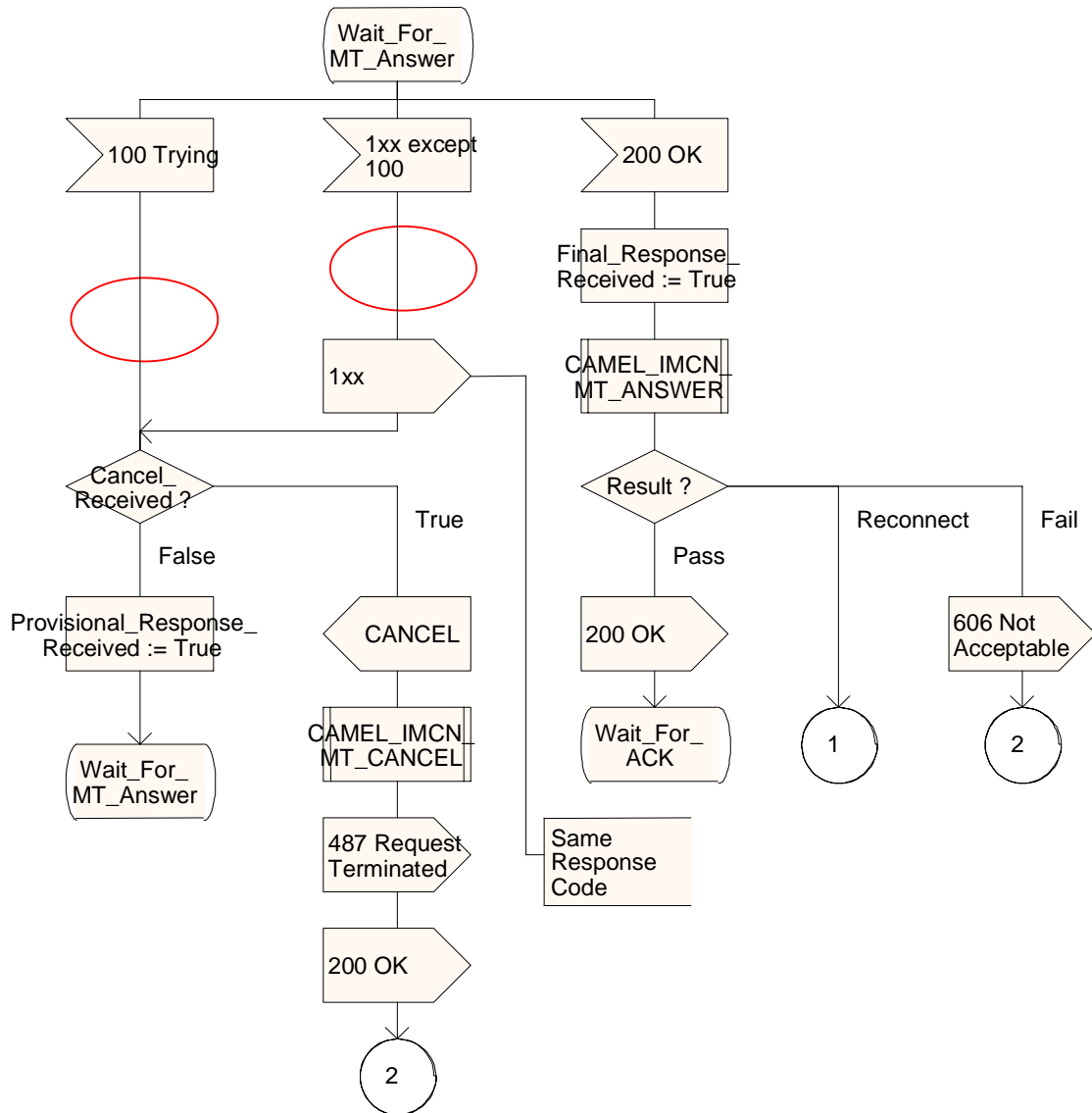


Figure 4.22-2: Process MT\_IM\_SSF (sheet 2)

**End**

## CHANGE REQUEST

⌘ **23.278 CR 042** ⌘ rev **-** ⌘ Current version: **5.2.0** ⌘

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

<b>Title:</b>	⌘ Redundant check for Final_Response_Received in Disconnect procedures		
<b>Source:</b>	⌘ Lucent Technologies		
<b>Work item code:</b>	⌘ IMS-CAMEL	<b>Date:</b>	⌘ 07/05/2003
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-5
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Use <u>one</u> 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)

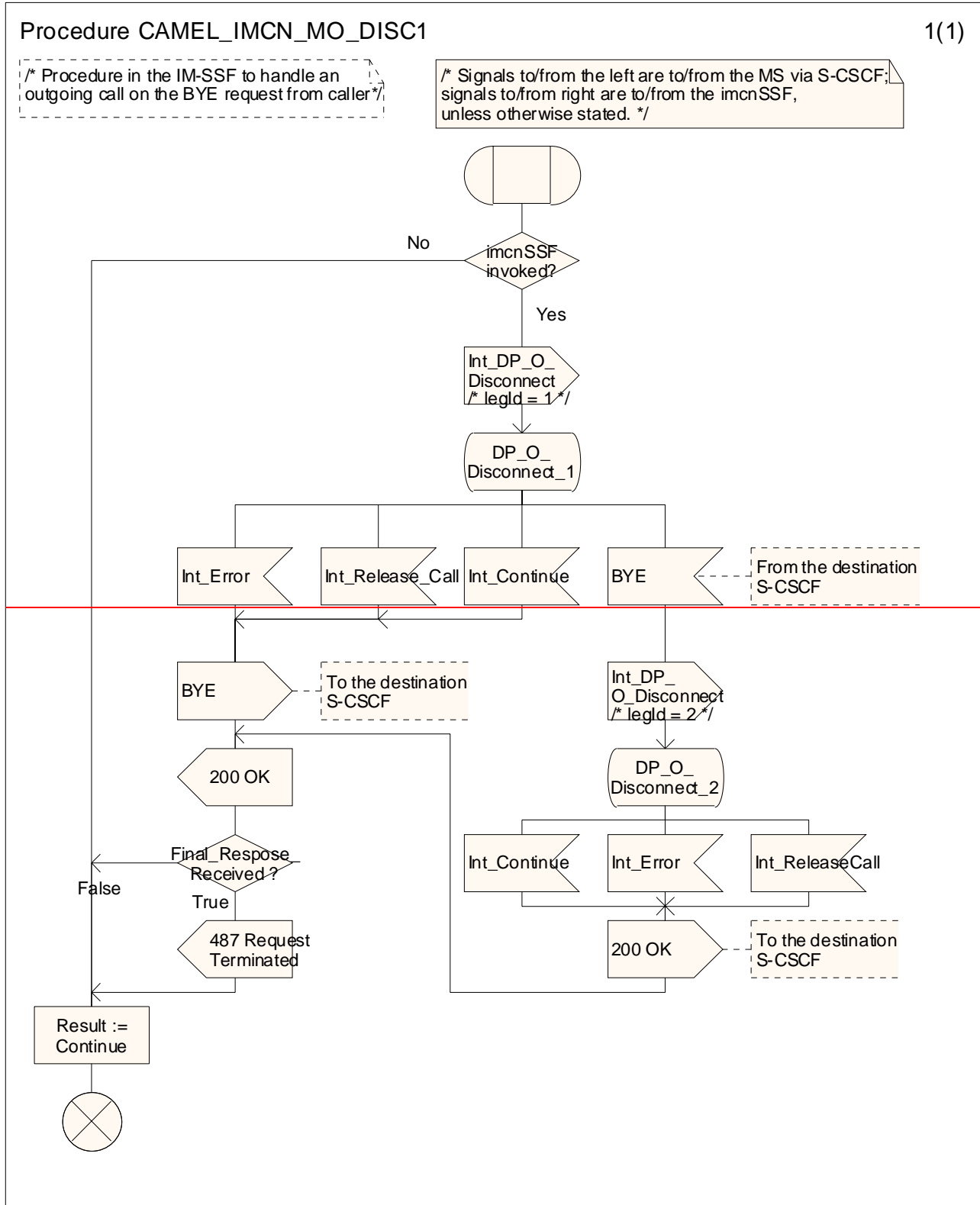
<b>Reason for change:</b>	⌘ The IM-SSF procedures for handling of disconnects from leg1 includes a check if a final SIP response has been received from the terminating party at the time the disconnect occurred. This check is unnecessary because the originating party would not disconnect (i.e. send a BYE) unless a final response has been received already for the initial INVITE message.
<b>Summary of change:</b>	⌘ Remove the decision box for Final_Response_Received from CAMEL_IMCN_MO_DISC1 and CAMEL_IMCN_MT_DISC1.
<b>Consequences if not approved:</b>	⌘ Incorrect procedure.

<b>Clauses affected:</b>	⌘ 4.6.1.3, 4.6.1.4										
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications	Y	N		X		X		X	⌘	
Y	N										
	X										
	X										
	X										
<b>Other comments:</b>	⌘										

— Modified section —

4.6.1.3 Handling of Mobile Originated Calls in the IM-SSF

...



Procedure CAMEL\_IMCN\_MO\_DISC1

1(1)

*/\* Procedure in the IM-SSF to handle an outgoing call on the BYE request from caller \*/*

*/\* Signals to/from the left are to/from the MS via S-CSCF; signals to/from right are to/from the imcnSSF, unless otherwise stated. \*/*

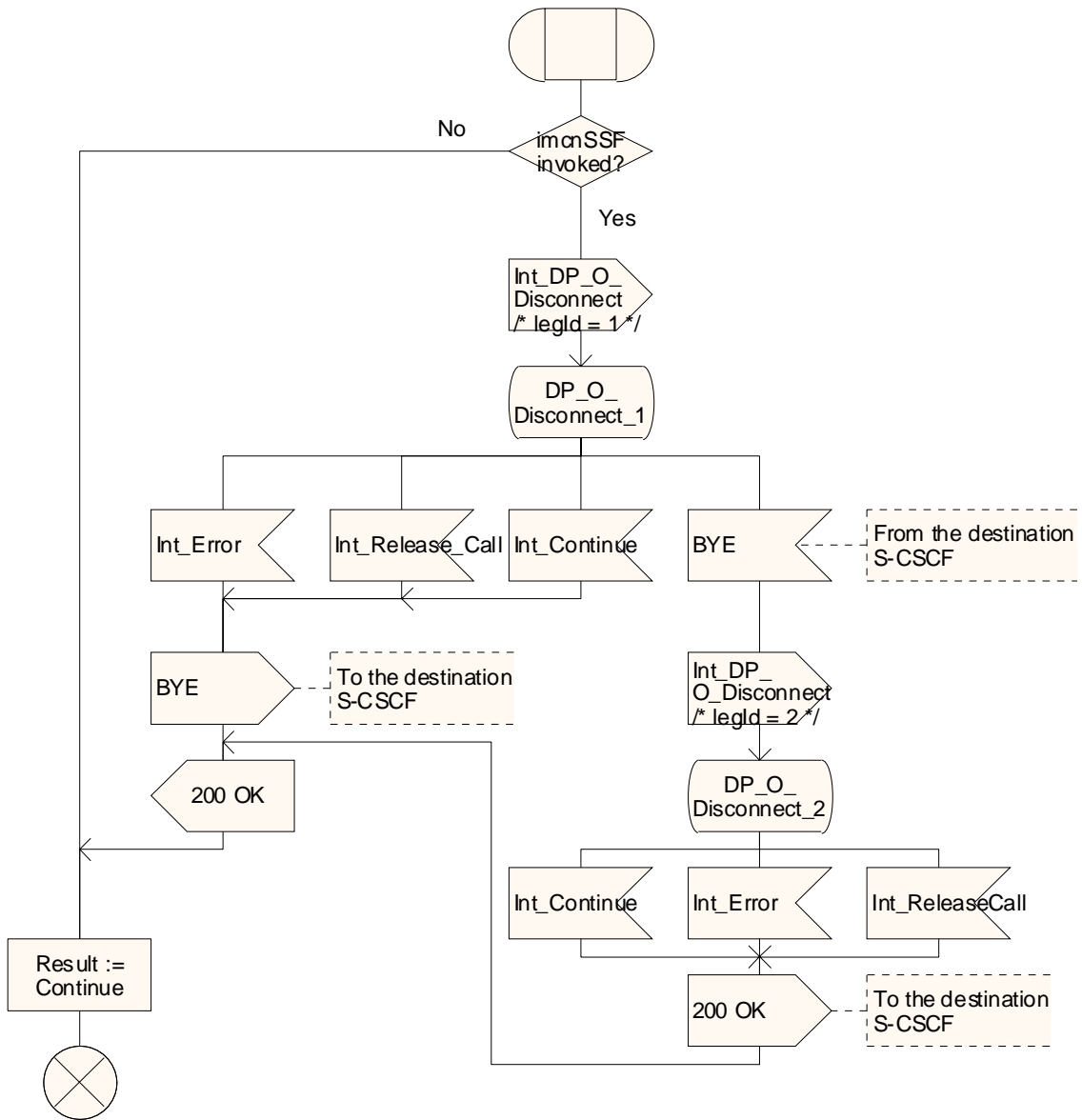


Figure 4.19: Procedure CAMEL\_IMCN\_MO\_DISC1 (sheet 1)

— Next modified section —

4.6.1.4 Handling of Mobile Terminated IP Multimedia sessions in the IM-SSF

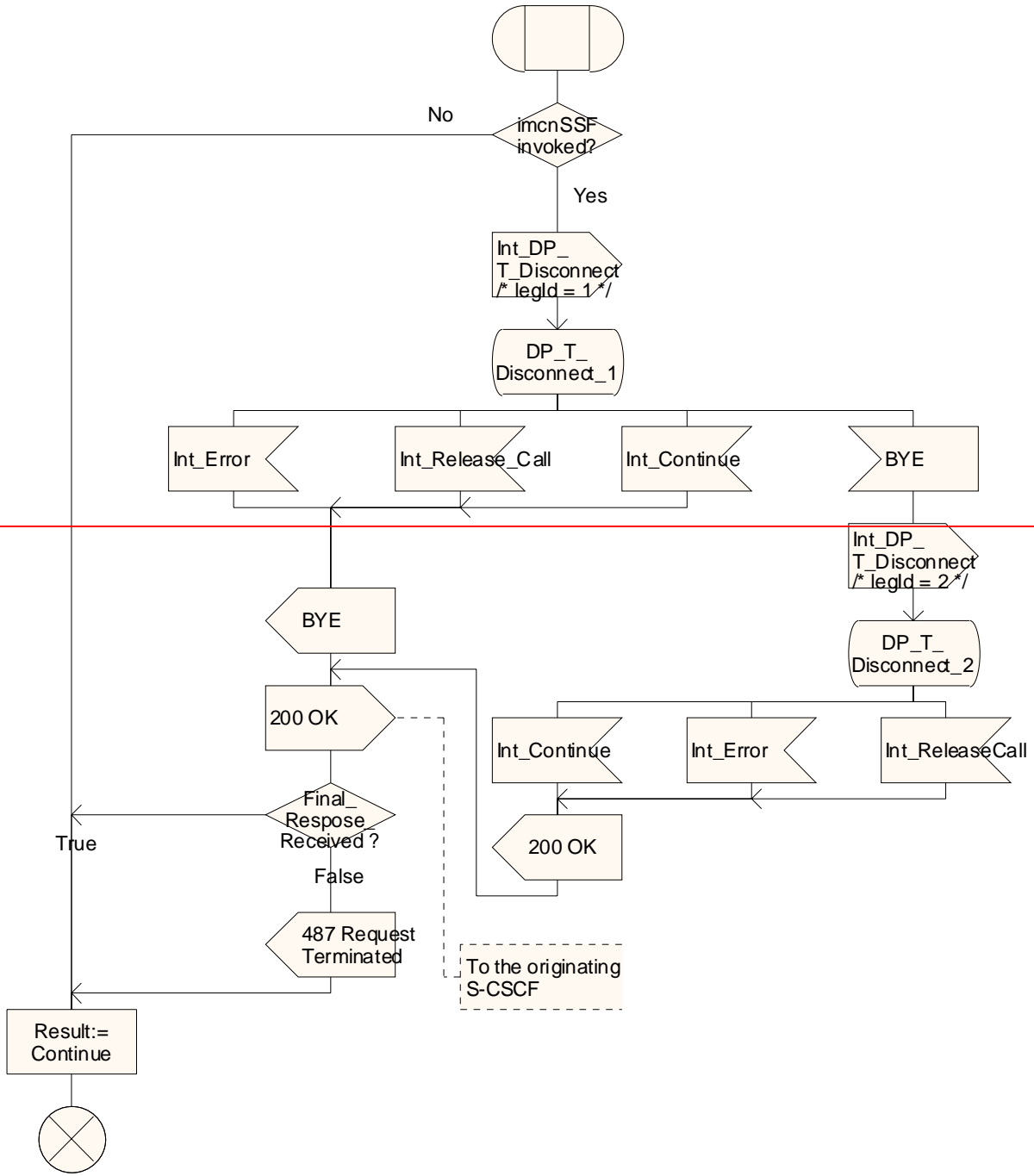
...

Procedure CAMEL\_IMCN\_MT\_DISC1

1(1)

*/\* Procedure in the IM-SSF to handle an outgoing call on the BYE request from caller \*/*

*/\* Signals to/from the left are to/from the MS via S-CSCF; signals to/from right are to/from the imcnSSF, unless otherwise stated. \*/*



Procedure CAMEL\_IMCN\_MT\_DISC1

1(1)

/\* Procedure in the IM-SSF to handle an outgoing call on the BYE request from caller \*/

/\* Signals to/from the left are to/from the MS via S-CSCF; signals to/from right are to/from the imcnSSF, unless otherwise stated. \*/

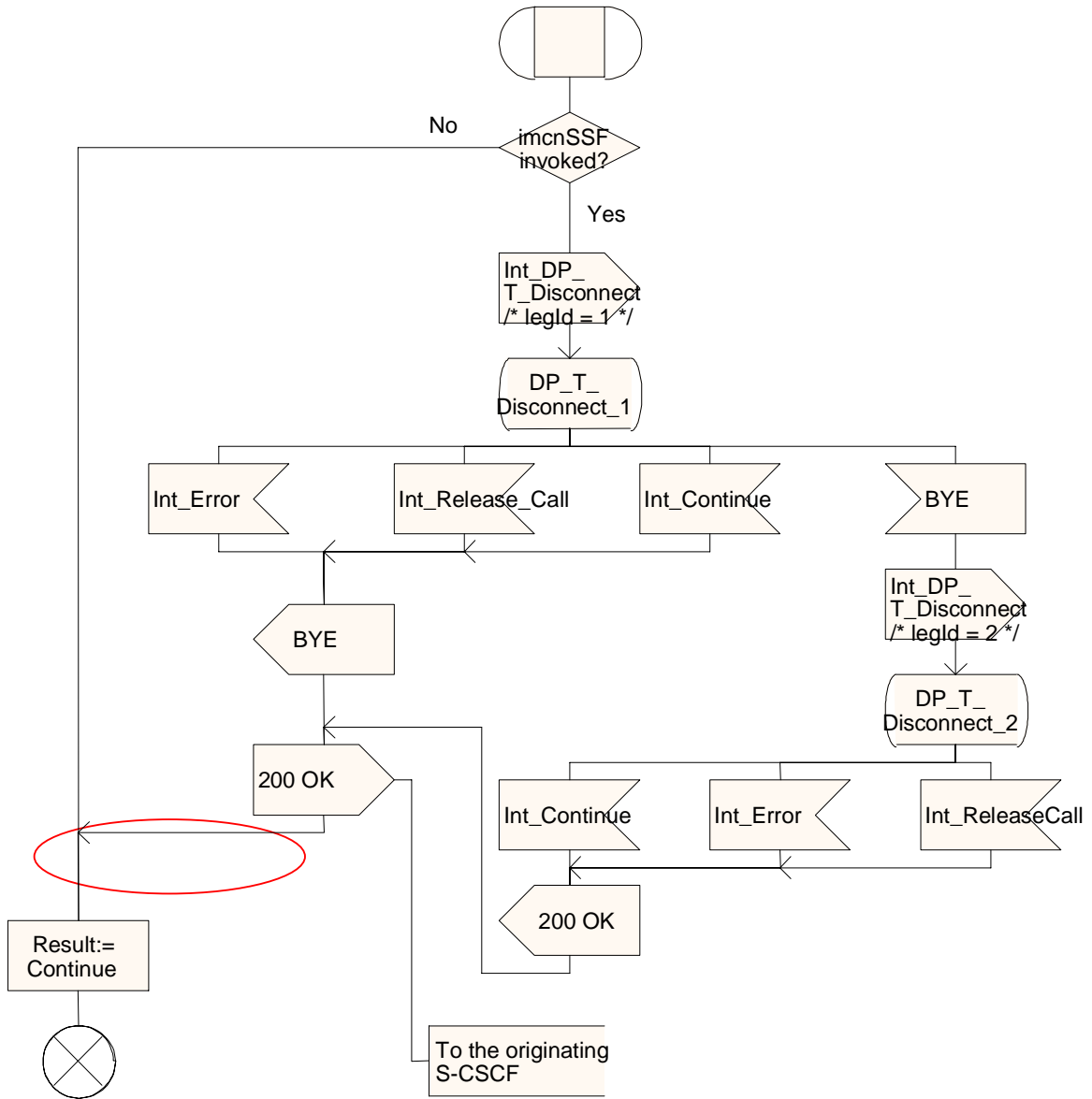


Figure 4.29: Procedure CAMEL\_IMCN\_MT\_DISC1 (sheet 1)

End



## CHANGE REQUEST

⌘ **23.278 CR 040** ⌘ rev **1** ⌘ Current version: **5.2.0** ⌘

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

<b>Title:</b>	⌘ Incorrect list of TDPs listed for O-IM-CSI		
<b>Source:</b>	⌘ Lucent Technologies		
<b>Work item code:</b>	⌘ IMS-CAMEL	<b>Date:</b>	⌘ 26/03/2003
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-5
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Use <u>one</u> 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)

<b>Reason for change:</b>	⌘ Subclause 4.4.1.1.4 in the stage 2 specification indicates a list of terminating Trigger Detection Points that may be included in the O-IM-CSI data. This is incorrect and inconsistent with the rest of the CAMEL/IMS specification on O-IM-CSI TDPs. The O-IM-CSI can only include the following originating TDPs: DP Collected_Info and DP Route_Select_Failure.
<b>Summary of change:</b>	⌘ Modify the list of TDPs that may be included for the O-IM-CSI as follows: DP Collected_Info and DP Route_Select_Failure.
<b>Consequences if not approved:</b>	⌘ Inconsistent specification that leads to confusion.

<b>Clauses affected:</b>	⌘ 4.4.1.1.4										
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications Test specifications O&M Specifications	Y	N	⌘	X	⌘	X	⌘	X	⌘	
Y	N										
⌘	X										
⌘	X										
⌘	X										
<b>Other comments:</b>	⌘										

**\*\*\* First Modification \*\*\*****4.4.1.1 Originating IP Multimedia CAMEL Subscription Information (O-IM-CSI)****4.4.1.1.1 gsmSCF Address**

Address to be used to access the gsmSCF for a particular subscriber. The address shall be an E.164 number to be used for routing.

**4.4.1.1.2 Service Key**

The Service Key identifies to the gsmSCF the service logic that shall apply.

**4.4.1.1.3 Default Call Handling**

The Default Call Handling indicates whether the IP Multimedia session shall be released or continued as requested in case of error in the IM-SSF to gsmSCF dialogue.

**4.4.1.1.4 TDP List**

The TDP List indicates on which detection point triggering shall take place. The following trigger detection points are possible: DP ~~Terminating\_Attempt\_Authorised, DP\_T\_Busy, and DP\_T\_No\_Answer~~ [Collected\\_Info](#) and [DP\\_Route\\_Select\\_Failure](#).

**4.4.1.1.5 CAMEL Capability Handling**

CAMEL Capability Handling indicates the phase of CAMEL which is asked by the gsmSCF for the service.

**4.4.1.1.6 CSI Status**

The CSI state indicates whether the O-IM-CSI is active or not.

**4.4.1.1.7 Notification Flag**

The notification flag indicates whether changes of the O-IM-CSI shall trigger the Notification on Change of Subscriber Data. In order to update the IM-SSF of IM CSI changes, this flag shall be set to yes.

**4.4.1.1.8 DP Criteria**

The DP criteria indicate whether the IM-SSF shall request the gsmSCF for instructions.

**\*\*\* End of Modification \*\*\***