

**3GPP TSG CN Plenary Meeting #21**  
**17th - 19th September 2003. Frankfurt, Germany.**

**NP-030368**

**Source:** TSG CN WG2  
**Title:** CRs on Rel-5 Work Item CAMEL4  
**Agenda item:** 8.3  
**Document for:** APPROVAL

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**Introduction:**

This document contains 4 CRs on **Rel-5 Work Item CAMEL4**. These CRs have been agreed by TSG CN WG2 and are forwarded to TSG CN Plenary meeting for approval.

WG_tdoc	Title	Spec	CR	Rev	Cat	Rel	C_Ver
N2-030366	Correction to Change of position processes	23.078	614		F	Rel-5	5.4.0
N2-030367	Correction on MG-CSI sending to the SGSN	23.078	615		F	Rel-5	5.4.0
N2-030334	Correction to partial implementation of CAMEL4	23.078	558		F	Rel-5	5.4.0
N2-030441	Alignment of Offered CAMEL4 functionalities	23.078	602	1	F	Rel-5	5.4.0

## CHANGE REQUEST

⌘ **23.078 CR 558** ⌘ rev  ⌘ Current version: **5.4.0** ⌘

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

**Title:** ⌘ Correction to partial implementation of CAMEL4

**Source:** ⌘ Ericsson

**Work item code:** ⌘ CAMEL4

**Date:** ⌘

**Category:** ⌘ **F** (essential correction)

**Release:** ⌘ Rel-5

Use one of the following categories:

Use one of the following releases:

**F** (correction)

2 (GSM Phase 2)

**A** (corresponds to a correction in an earlier release)

R96 (Release 1996)

**B** (addition of feature),

R97 (Release 1997)

**C** (functional modification of feature)

R98 (Release 1998)

**D** (editorial modification)

R99 (Release 1999)

Rel-4 (Release 4)

Rel-5 (Release 5)

Rel-6 (Release 6)

**Reason for change:** ⌘ Insert Subscriber Data ack

The following error corrections are needed:

- in the first table in section 4.6.8.1.2, the description of "Offered CAMEL4 CSIs" requires the condition that it shall be present if **the "Supported CAMEL Phases" IE indicates support of CAMEL phase 4.**
- In the second table in section 4.6.8.1.2, the condition "It shall be present if a CSI has been included in the Insert Subscriber Data IF" shall be removed. For the elements in that table, the condition of presence is already covered by the first table in section 4.6.8.1.2.

### Update Location

The following error corrections are needed:

- the sentence "**It shall be present when a CSI has been included in the Insert Subscriber Data IF.**" in section 4.6.8.3.1 shall be removed. This sentence is not relevant in this context. The information to be reported in Update Location is not related to Insert Subscriber Data.
- In the second table in section 4.6.8.3.2, the conditions "**It shall be present when a CSI has been included in the Insert Subscriber Data IF.**" shall be removed. Those sentences are not relevant in this context. The information to be reported in Location Update is not related to Insert Subscriber Data.

Refer to section 4.6.8.4 (Restore Data). The handling of the IEs "Supported CAMEL Phases" and "Offered CAMEL4 CSIs" in MAP Update Location should

	be the same as the handling of those IEs in MAP Restore Data.									
<b>Summary of change:</b>	⌘	Correct sections 4.6.8.1 and 4.6.8.3 as described in the Reason for Change.								
<b>Consequences if not approved:</b>	⌘	Incorrect specifications; partial CAMEL Phase 4 implementation will be difficult to implement,; unexpected/inconsistent behaviour of MSC/VLR.								
<b>Clauses affected:</b>	⌘	4.6.8.1, 4.6.8.3								
<b>Other specs affected:</b>	⌘	<table border="1"> <thead> <tr> <th>Y</th> <th>N</th> </tr> </thead> <tbody> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </tbody> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N		X		X		X
Y	N									
	X									
	X									
	X									
<b>Other comments:</b>	⌘									

— **First modified section** —

#### 4.6.8.1 Insert Subscriber Data ack

##### 4.6.8.1.1 Description

This IF is used by the VLR to indicate to the HLR the result of the Insert Subscriber Data IF. It is specified in 3GPP TS 29.002 [**Error! Reference source not found.**].

##### 4.6.8.1.2 Information Elements

Insert Subscriber Data ack contains the following CAMEL specific information elements:

Information element name	Status	Description
Supported CAMEL Phases	S	This IE identifies which CAMEL phases are supported by the VMSC/VLR. It shall be present when a CSI has been included in the Insert Subscriber Data IF.
Offered CAMEL4 CSIs	S	This IE indicates the CAMEL phase 4 CSIs offered in the VMSC/VLR. It shall be present if a CSI has been included in the Insert Subscriber Data IF <a href="#">and the "Supported CAMEL Phases" IE indicates support of CAMEL phase 4.</a>

Offered CAMEL4 CSIs contains the following information elements:

Information element name	Status	Description
O-CSI	S	This IE indicates the offer of CAMEL phase 4 O-CSI. <del>It shall be present if a CSI has been included in the Insert Subscriber Data IF.</del>
D-CSI	S	This IE indicates the offer of CAMEL phase 4 D-CSI. <del>It shall be present if a CSI has been included in the Insert Subscriber Data IF.</del>
VT-CSI	S	This IE indicates the offer of CAMEL phase 4 VT-CSI. <del>It shall be present if a CSI has been included in the Insert Subscriber Data IF.</del>
MT-SMS-CSI	S	This IE indicates the offer of CAMEL phase 4 MT-SMS-CSI. <del>It shall be present if a CSI has been included in the Insert Subscriber Data IF.</del>

— Next modified section —

### 4.6.8.3 Update Location

#### 4.6.8.3.1 Description

This IF is used by the VLR to provide information about supported CAMEL phases to the HLR. ~~It shall be present when a CSI has been included in the Insert Subscriber Data IF.~~

#### 4.6.8.3.2 Information Elements

Update Location contains the following CAMEL specific information element:

Information element name	Status	Description
Supported CAMEL Phases	S	This IE indicates which phases of CAMEL are supported. It shall be present if a CAMEL phase higher than phase 1 is supported. Otherwise may be absent.
Offered CAMEL4 CSIs	S	This IE indicates the CAMEL phase 4 CSIs offered in the VMSC/VLR. It shall be present if the "Supported CAMEL Phases" IE indicates support of CAMEL phase 4.

Offered CAMEL4 CSIs contains the following information elements:

Information element name	Status	Description
O-CSI	S	This IE indicates the offer of CAMEL phase 4 O-CSI. <del>It shall be present if a CSI has been included in the Insert Subscriber Data.</del>
D-CSI	S	This IE indicates the offer of CAMEL phase 4 D-CSI. <del>It shall be present if a CSI has been included in the Insert Subscriber Data.</del>
VT-CSI	S	This IE indicates the offer of CAMEL phase 4 VT-CSI. <del>It shall be present if a CSI has been included in the Insert Subscriber Data.</del>
MT-SMS-CSI	S	This IE indicates the offer of CAMEL phase 4 MT-SMS-CSI. <del>It shall be present if a CSI has been included in the Insert Subscriber Data.</del>

— End of CR —

## CHANGE REQUEST

⌘ **23.078 CR** 614 ⌘ rev - ⌘ Current version: **5.4.0** ⌘

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

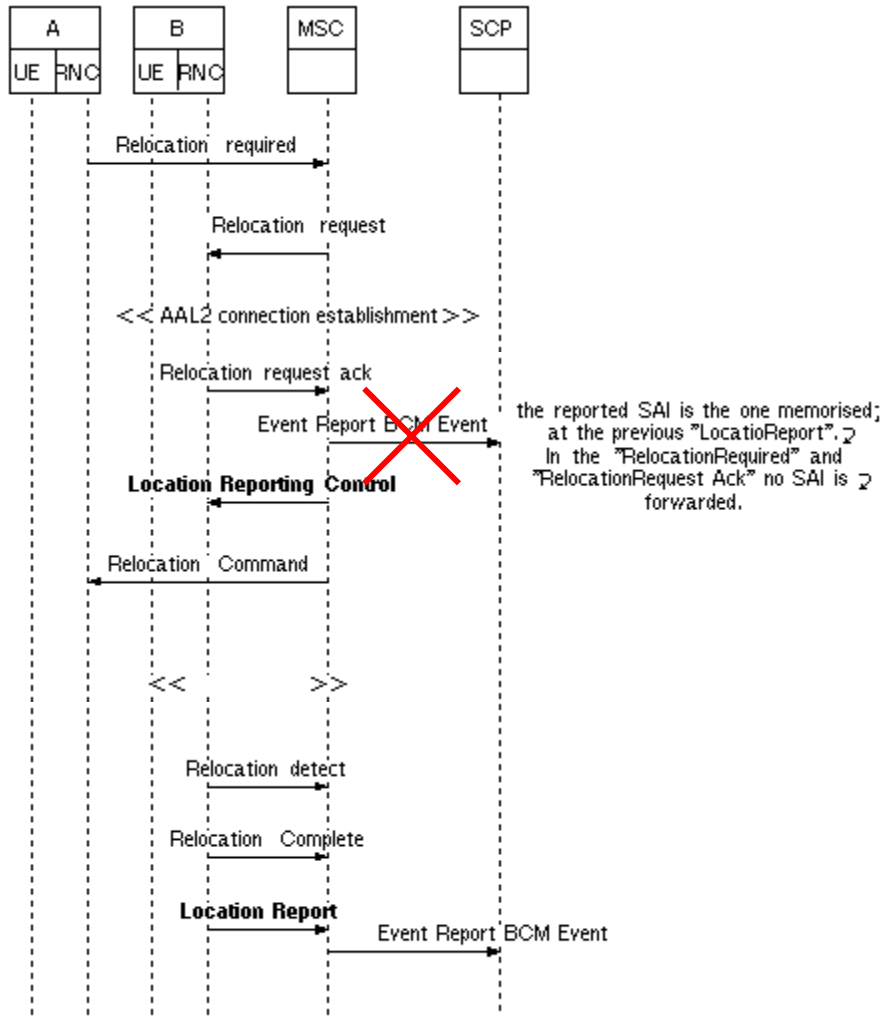
<b>Title:</b>	⌘ Correction to Change of position processes		
<b>Source:</b>	⌘ Alcatel		
<b>Work item code:</b>	⌘ CAMEL4	<b>Date:</b>	⌘ 12/08/2003
<b>Category:</b>	⌘ <b>F</b> (essential correction) Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction 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 23.078 event "Int_O/T_Change_Of_Position" is reported on receipt of RELOCATION_REQUEST_ACKNOWLEDGE" signal. But at this point the MSC does not know the new SAI. So the SAI reported at this point is the old one.
<b>Summary of change:</b>	⌘ Correction to Process CAMEL_O_CHANGE_OF_POSITION_MSC and Process CAMEL_T_CHANGE_OF_POSITION_MSC : remove sending signal "Int_O/T_Change_Of_Position" while receiving "RELOCATION_REQUEST_ACKNOWLEDGE" signal.
<b>Consequences if not approved:</b>	⌘ Notification to the SCP : the information report to the SCP on receipt of RELOCATION_REQUEST_ACKNOWLEDGE" is not the current location.

<b>Clauses affected:</b>	⌘ § 4.5.2.1 ; 4.5.4.1						
<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;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
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	<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;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> O&M Specifications	Y	N	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
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<b>Other comments:</b>	⌘						

- For Information -

The proposal is the following :



- First Modification -

4.5.2 Handling of mobile originated calls

4.5.2.1 Handling of mobile originated calls in the originating MSC

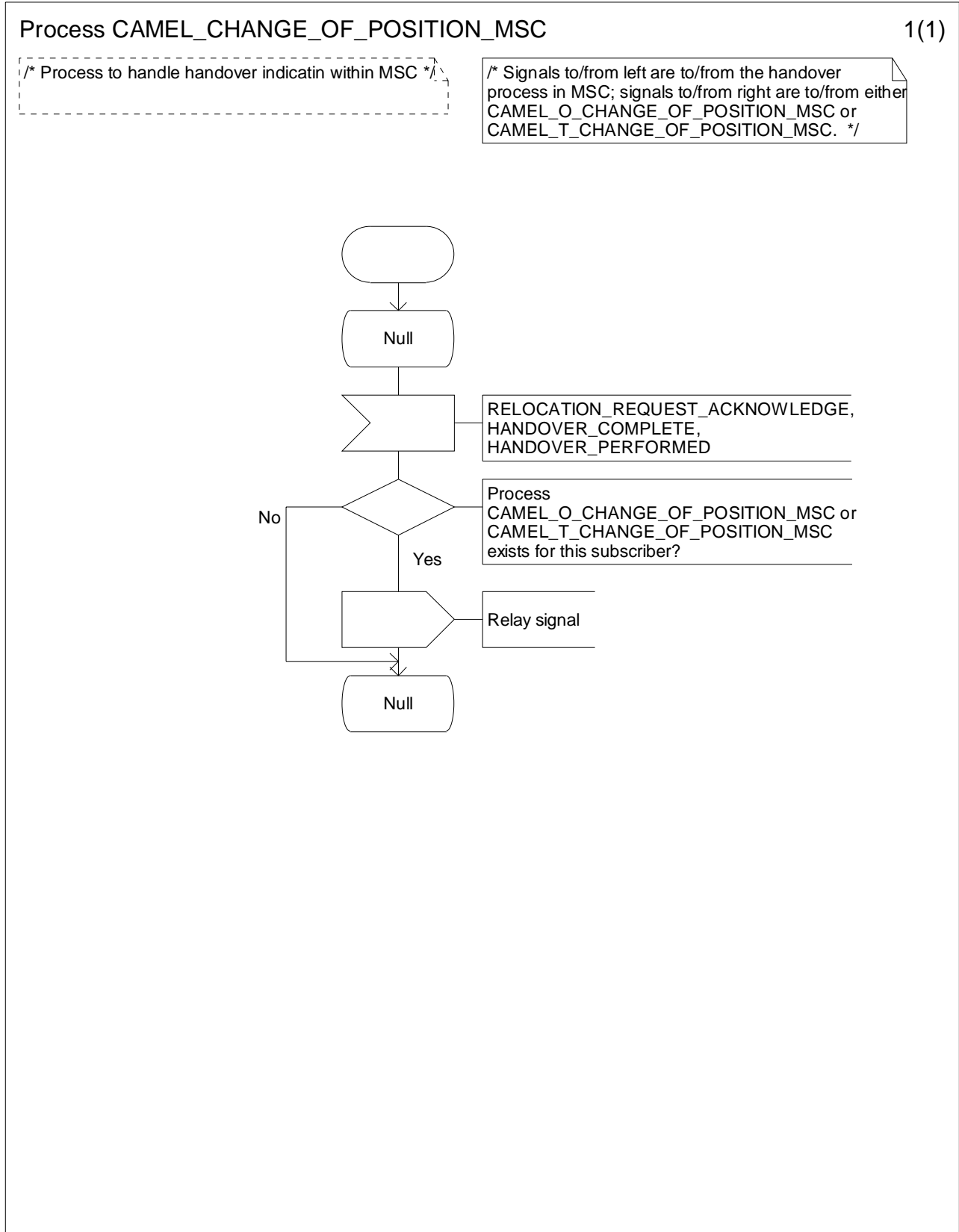




Figure 4.34-1: Process CAMEL\_CHANGE\_OF\_POSITION\_MSC (sheet 1)

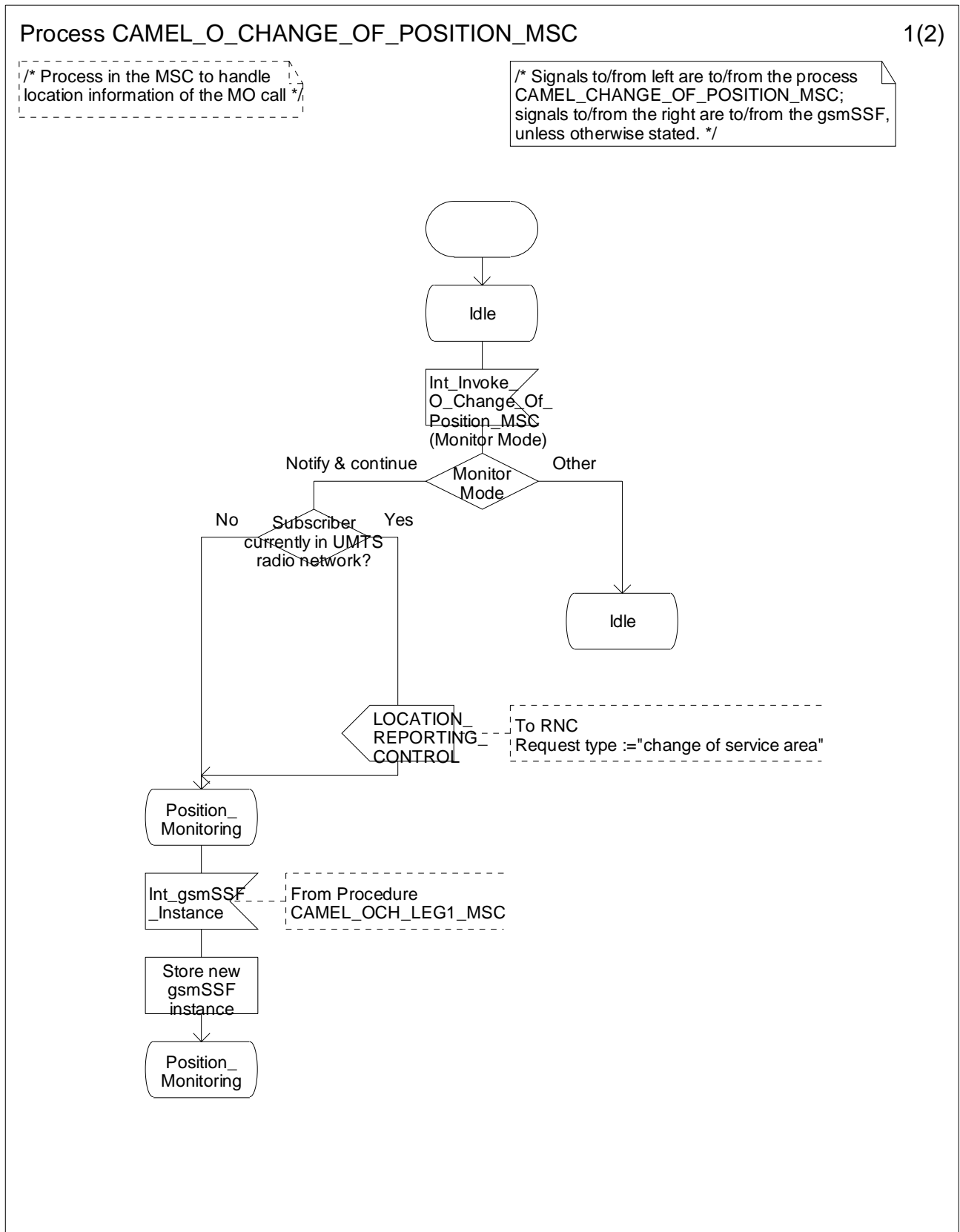


Figure 4.35-1: Process CAMEL\_O\_CHANGE\_OF\_POSITION\_MSC (sheet 1)

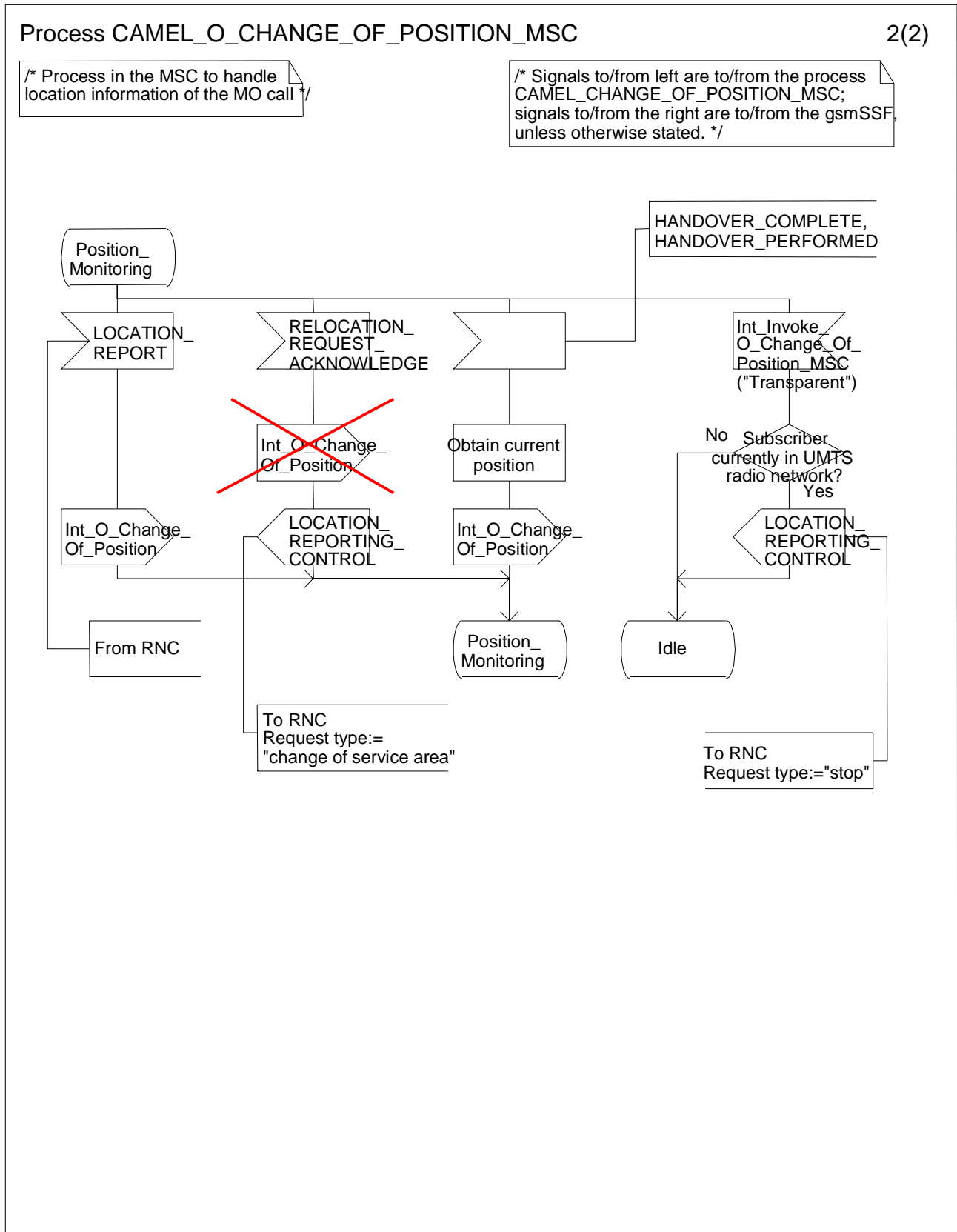


Figure 4.35-2: Process CAMEL\_O\_CHANGE\_OF\_POSITION\_MSC (sheet 2)

- Next modification -

### 4.5.4 Handling of mobile terminating calls

#### 4.5.4.1 Handling of mobile terminating calls in the terminating VMSC

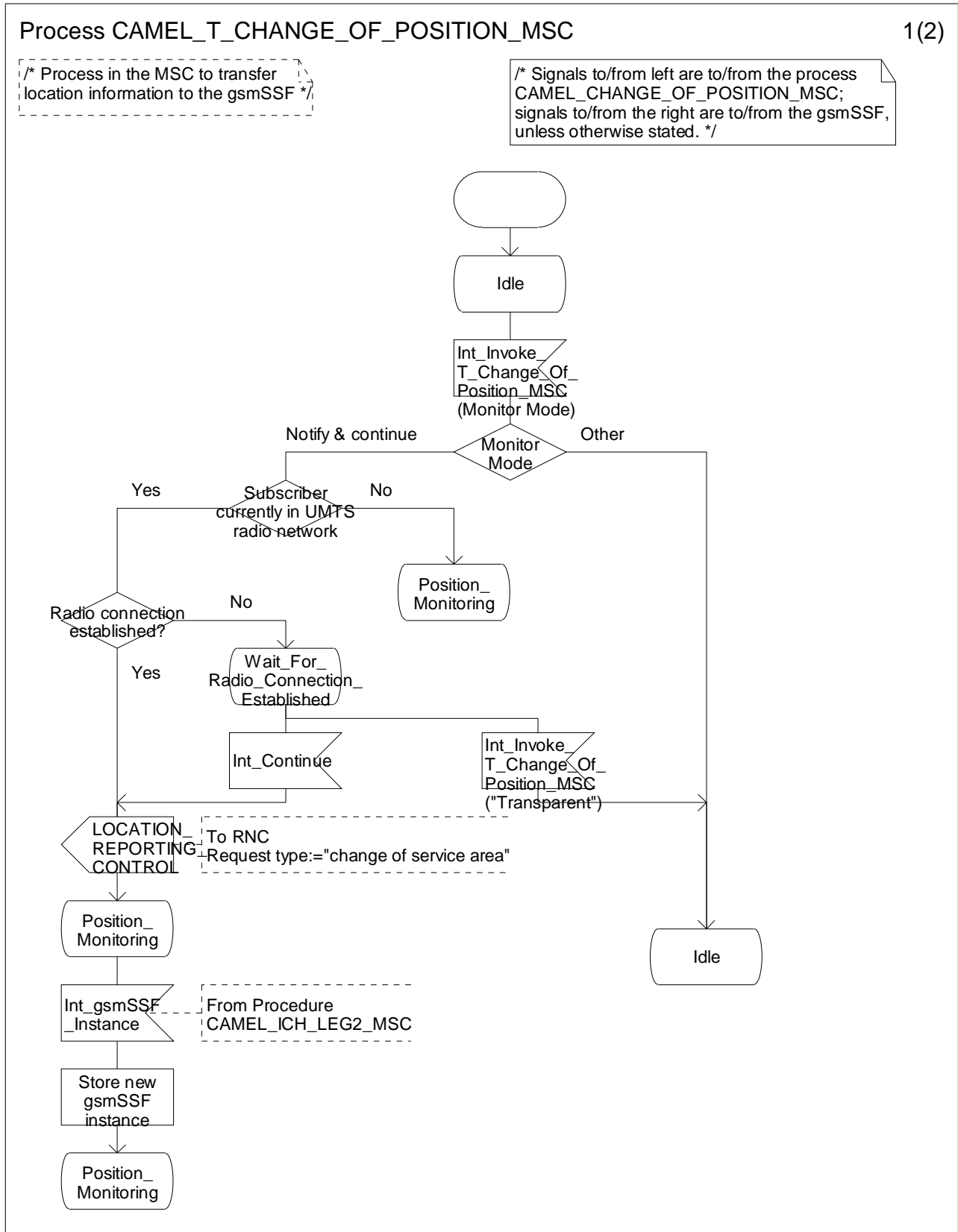


Figure 4.71-1: Process CAMEL\_T\_CHANGE\_OF\_POSITION\_MSC (sheet 1)

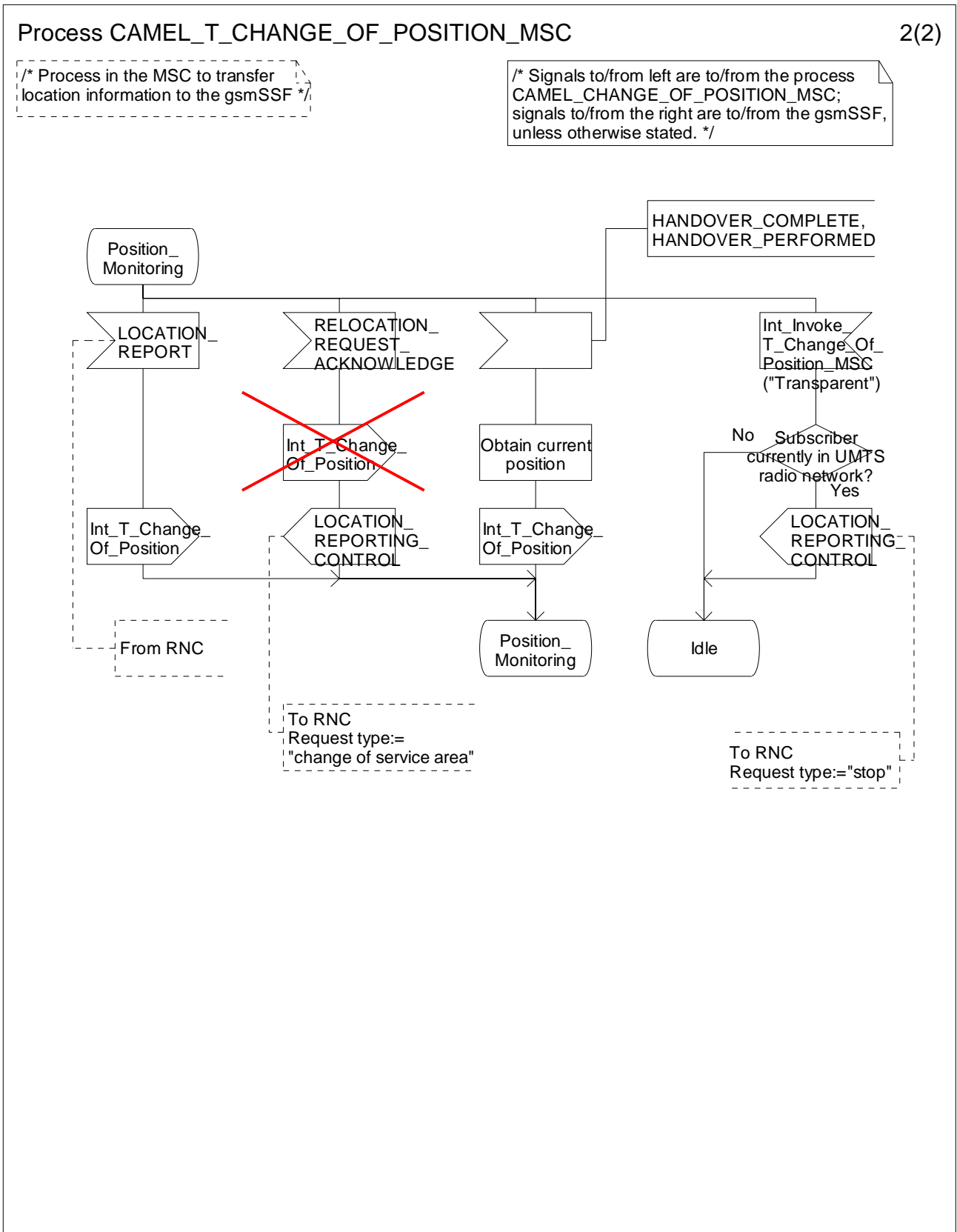


Figure 4.71-2: Procedure CAMEL\_T\_CHANGE\_OF\_POSITION\_MSC (sheet 2)

CR-Form-v7

## CHANGE REQUEST

⌘ **23.078 CR 615** ⌘ rev **-** ⌘ Current version: **5.4.0** ⌘

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>	⌘ Correction on MG-CSI sending to the SGSN		
<b>Source:</b>	⌘ Alcatel		
<b>Work item code:</b>	⌘ CAMEL4	<b>Date:</b>	⌘ 12/08/2003
<b>Category:</b>	⌘ <b>F</b> (essential correction) 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>	⌘ <b>Rel-5</b> 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>	⌘ Currently in the 23:078 it is specified that MG-CSI is sent to the SGSN during the Routing Area Update and Restore Data procedures or when MG-CSI is modified in the HLR. This statement is not completely correct. Indeed the MG-CSI is sent at the update location GPRS procedure. Moreover the Restore Data procedure does not exist between the SGSN and the HLR, this procedure exists only between the VLR and the HLR.
<b>Summary of change:</b>	⌘ modification on some text in the subclause 9 relative to the MG-CSI to be in line the procedure relevant in the PS domain.
<b>Consequences if not approved:</b>	⌘ Misintrepretation of the sending of MG-CSI may induced different implementation

<b>Clauses affected:</b>	⌘ § 9.1.1						
<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;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
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Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
<b>Other comments:</b>	⌘						

**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:

# 9 Mobility Management

## 9.1 Architecture

### 9.1.1 Functional Entities used for CAMEL

This subclause describes the functional architecture required to support Mobility Management in CAMEL. Figures 9.1-1 and 9.1-2 show the functional entities involved in CAMEL support of Mobility Management. The architecture in the figure 9.1-1 is applicable to the third phase of CAMEL or higher and the architecture in the figure 9.1-2 is applicable to the fourth phase of CAMEL.

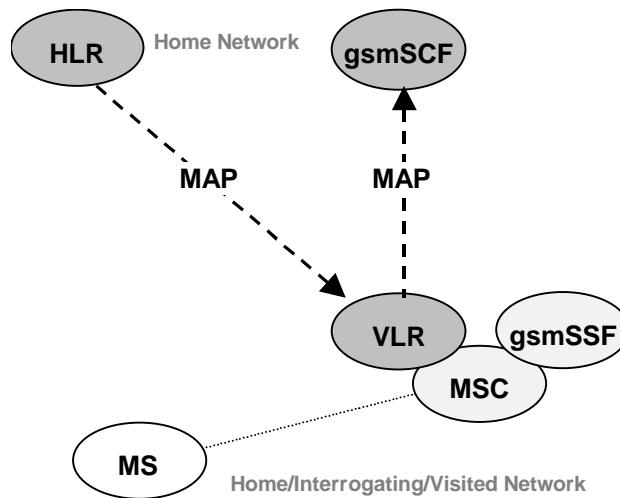


Figure 9.1-1: Functional architecture for CS subscriber support of CAMEL

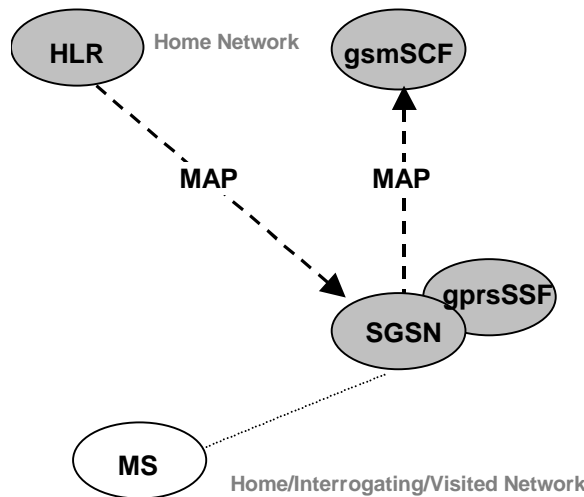


Figure 9.1-2: Functional architecture for GPRS subscriber support of CAMEL

**gsmSCF:** see subclause 3.1.

**HLR:** The HLR contains Mobility management CAMEL Subscription Information (M-CSI) for those CS subscribers that require CAMEL control of Mobility Management events and Mobility management GPRS CAMEL Subscription Information (MG-CSI) for those GPRS subscribers that require CAMEL control of Mobility Management events. M-CSI is sent to the VLR during the Location Update and Restore Data procedures or when M-CSI is modified in the HLR. The M-CSI is deleted in the VLR with the Delete Subscriber Data procedure. MG-CSI is sent to the SGSN during the ~~Routing Area Update and Restore Data procedures~~ [Location Update GPRS procedure](#) or when MG-CSI is modified in the HLR. The MG-CSI is deleted in the SGSN with the Delete Subscriber Data procedure.

**MS:** Mobile Station.

**MSC:** see subclause 4.1.

**VLR:** After having completed a Mobility Management event from a CS subscriber, the VLR may find it necessary to send a notification to the gsmSCF. The content of M-CSI indicates which Mobility Management events shall be reported to the gsmSCF.

**SGSN:** After having completed a Mobility Management event from a GPRS subscriber, the SGSN may find it necessary to send a notification to the gsmSCF. The content of MG-CSI indicates which Mobility Management events shall be reported to the gsmSCF.

## CHANGE REQUEST

⌘ **23.078 CR 602** ⌘ rev **1** ⌘ Current version: **5.4.0** ⌘

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

<b>Title:</b>	⌘ Alignment of Offered CAMEL4 functionalities		
<b>Source:</b>	⌘ Ericsson		
<b>Work item code:</b>	⌘ CAMEL4	<b>Date:</b>	⌘ 26 August 2003
<b>Category:</b>	⌘ <b>F</b> (essential correction) 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)	<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>	⌘ Sections 1.1 and 4.6.1.8 specify how the gsmSSF may report its CAMEL Phase 4 capability to the gsmSCF. The descriptions used in these sections are, however, contradicting. The present CR proposes corrections to these descriptions.
<b>Summary of change:</b>	⌘ The proposed changes are explained by means of MS Word Comment Boxes, associated with each change. The text boxes are for the purpose of the present CR only and are not meant for inclusion in the specification.
<b>Consequences if not approved:</b>	⌘ Incorrect implementation of CAMEL Phase 4 subsets. Different gsmSSFs may report their CAMEL Phase 4 capability in inconsistent ways. This may lead to serious interworking problems.

<b>Clauses affected:</b>	⌘ 1.1, 4.6.1.8										
<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>	Y	N		X		X		X	⌘ Other core specifications ⌘ Test specifications ⌘ O&M Specifications	⌘
Y	N										
	X										
	X										
	X										
<b>Other comments:</b>	⌘ Refer to the <b>For Information</b> section of the present CR. Section 4.6.1.7 specifies that ICA-Ack shall contain the Supported CAMEL Phases and the Offered CAMEL4 Functionalities, for both NC call case and NP call case. However, in the case of an NP call, the SCP has already been informed about the gsmSSF's capabilities, either through IDP or through ICA-Ack for the preceding ICA (NC call). It may therefore be contemplated to remove the "M" marking for the NP call case for these IEs in ICA-Ack.										



**\*\*\* For Information \*\*\***

4.6.1.7 Initiate Call Attempt ack

4.6.1.7.1 Description

This IF is the successful response to the Initiate Call Attempt IF.

4.6.1.7.2 Information Elements

Information element name	NC	NP	Description
Supported CAMEL Phases	M	M	This IE indicates the CAMEL Phases supported.
Offered CAMEL4 Functionalities	M	M	This IE is described in subclause 4.6.1.8. This IE indicates the CAMEL phase 4 functionalities offered.

**\*\*\* First Modification \*\*\***

## 1.1 Support of partial implementation of CAMEL phase 4

A functional entity (VMSC, GMSC or SGSN) may support the complete CAMEL phase 4 functionality or, as a network option, it may support the complete CAMEL phase 3 functionality and a partial implementation of CAMEL phase 4.

If a functional entity supports any part of CAMEL phase 4, then the HLR is informed of the CAMEL phase 4 CSIs supported. An SGSN may also indicate support of the Provide Subscriber Information IF. To indicate support of a specific CSI, a functional entity shall have the ability to trigger on any initial service event possible for that CSI.

If a VMSC or GMSC supports any of the CAMEL phase 4 circuit switched CSIs (O-CSI, D-CSI, T-CSI or VT-CSI), then the gsmSCF is informed of the CAMEL phase 4 circuit switched functionalities offered. The gsmSCF shall not send information flows or parameters that conflict with the functionalities offered by the VMSC or GMSC.

If a CAMEL subscriber attempts to register in a VMSC or SGSN which supports at least one CAMEL phase 4 CSI or the enhancement of Provide Subscriber Information IF, then the VMSC or SGSN indicates in the registration request to the HLR the phase of CAMEL which the VMSC or SGSN supports (at least phase 4). In addition, the VMSC or SGSN indicates which CAMEL phase 4 CSIs may be downloaded. An SGSN may also indicate support of the Provide Subscriber Information IF.

If a GMSC supports at least one CAMEL phase 4 CSI, then the GMSC indicates in the Send Routing Info to the HLR the phase of CAMEL which the GMSC supports (at least phase 4). In addition, the GMSC indicates which CAMEL phase 4 CSIs may be downloaded.

If a VMSC/gsmSSF or GMSC/gsmSSF initiates contact with the gsmSCF using the Initial DP IF, or acknowledges a gsmSCF initiated contact using the Initiate Call Attempt ack IF, then the VMSC/gsmSSF or GMSC/gsmSSF indicates in the IF the CAMEL phase 4 functionalities offered to the gsmSCF.

If a VLR initiates contact with the gsmSCF using a Mobility Management Event Notification IF, then the VLR or SGSN indicates in the IF the functionalities offered to the gsmSCF.

### 1.1.1 CAMEL Phase 4 CSIs

A network entity may indicate to the HLR an offer of support for the following CAMEL phase 4 CSIs:

- CAMEL phase 4 O-CSI;
- CAMEL phase 4 D-CSI;
- CAMEL phase 4 T-CSI;

- CAMEL phase 4 VT-CSI;
- CAMEL phase 4 MT-SMS-CSI;
- CAMEL phase 4 MG-CSI.

An SGSN may also indicate support of the CAMEL phase 4 Provide Subscriber Information IF.

A functional entity (VMSC, GMSC or SGSN) may offer the CSIs in any combination applicable for this entity. A functional entity shall indicate to the HLR all the CSIs it offers. The HLR may ignore the offer of the supported CSIs if they are not applicable for the sending entity, but it shall not reject the operation in this case.

### 1.1.2 CAMEL Phase 4 Functionalities

The CAMEL phase 4 functionalities which may be offered to the gsmSCF are the following:

- Creating additional parties in a call, Creating a new call (Initiate Call Attempt);
- Placing an individual call party on hold [or moving an individual call party to Call Segment 1, when Call Segment 1 does not exist](#) (Split Leg);
- Connecting an individual call party to the group (Move Leg);
- Releasing an individual call party (Disconnect Leg);
- Indication of the release of a call party or call segment (Entity Released);
- Enhancements for subscriber interactions with the gsmSCF (Disconnect Forward Connection With Argument);
- Inclusion of flexible tone injection (Play Tone);
- DTMF Mid call procedure for MO and VT calls (DP O\_Mid\_Call, DP T\_Mid\_Call, ~~Automatic Rearm~~);
- Provision of ~~charging~~[Charge I](#) Indicator at answer DP (Charge Indicator at DP O\_Answer, DP T\_Answer);
- Support of Alerting DP (DP O\_Term\_Seized, DP Call\_Accepted);
- Provision of location information of called subscriber ~~in the alerting phase~~[at alerting DP](#) (Location information at ~~Alerting DP~~ [DP Call\\_Accepted](#));
- Provision of location information during an ongoing call (DP O\_Change\_Of\_Position, DP T\_Change\_Of\_Position, ~~Automatic Rearm~~);
- Interactions with [Basic](#) Optimal Routing ([Basic](#) OR Interrogation Requested [in Connect and Continue With Argument](#), Route Not Permitted [in DP O\\_Abandon](#));
- Warning tone enhancements (~~Play~~-Burstlist for Audible Indicator); and
- Enhancements of Call Forwarding indication (Forwarding Destination Number).

A functional entity (VMSC or GMSC) may offer the functionalities in any combination applicable for this entity and applicable to the offered CSIs.

A functional entity (VMSC or GMSC) shall indicate to the gsmSCF all the functionalities it offers.

**\*\*\* Next 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

&lt; unmodified &gt;

Offered CAMEL4 Functionalities contains the following information elements:

Information element name	Status	Description
Initiate Call Attempt	S	This IE indicates that the gsmSCF may send to the gsmSSF the Initiate Call Attempt IF.
Split Leg	S	This IE indicates that the gsmSCF may send to the gsmSSF the Split Leg IF.
Move Leg	S	This IE indicates that the gsmSCF may send to the gsmSSF the Move Leg IF.
Disconnect Leg	S	This IE indicates that the gsmSCF may send to the gsmSSF the Disconnect Leg IF.
Entity Released	S	This IE indicates that the gsmSSF <del>shall</del> <u>will</u> send to the gsmSCF the <u>Entity Released IF, when appropriate</u> .
DFC With Argument	S	This IE indicates that the gsmSCF may send to the gsmSSF <u>the</u> Disconnect Forward Connection With Argument IF.
Play Tone	S	This IE indicates that the gsmSCF may send to the gsmSSF the Play Tone IF.
DTMF Mid Call	S	This IE indicates that the gsmSCF may instruct the gsmSSF to arm the O_MidCall or T_MidCall DP <u>s</u> . The gsmSCF may instruct the gsmSSF to automatically re-arm the DP <u>s</u> , <u>when encountered</u> .
Charging Indicator	S	This IE indicates that the Charge Indicator IE may be present in the Event Report BCSM IF reporting the O_Answer or T_Answer DP.
Alerting DP	S	This IE indicates that the gsmSCF may instruct the gsmSSF to arm the O_Term_Seized or Call_Accepted DP <u>s</u> .
Location At Alerting	S	This IE indicates that the Location Information IE shall be present (if available) in the Event Report BCSM IF reporting the Call_Accepted DP.
Change Of Position DP	S	This IE indicates that the gsmSCF may instruct the gsmSSF to arm the O_Change_Of_Position or T_Change_Of_Position DP <u>s</u> . The gsmSCF may instruct the gsmSSF to au <u>t</u> omatically re-arm the DP <u>s</u> , <u>when encountered</u> .
OR Interactions	S	This IE indicates that the gsmSCF may send to the gsmSSF the Basic OR Interrogation Requested IE in the Connect or Continue With Argument IF <u>s</u> . This IE indicates <u>that</u> the Route Not Permitted IE may be present in the Event Report BCSM IF reporting the O_Abandon DP.
Warning Tone Enhancements	S	This IE indicates that the gsmSCF may send to the gsmSSF the <del>Play</del> -Burstlist IE (within the Audible Indicator IE) in an Apply Charging IF.
CF Enhancements	S	This IE indicates that the Forwarding Destination Number IE may be present in the Event Report BCSM IF reporting the T_Busy or T_No_Answer DP.

&lt; unmodified &gt;

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