

**3GPP TSG-CN Meeting #23**  
**10th - 12th March 2004, Phoenix, USA**

**NP-040090**

**Source: 3GPP TSG CN2**  
**Title: CRs for R99 WI CAMEL3**  
**Agenda item: 7.1**  
**Document for: APPROVAL**

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This document contains following CRs that are approved by CN2 and are forwarded to TSG CN#23 for approval:

<b>TDoc #</b>	<b>WI</b>	<b>Rel</b>	<b>Title</b>	<b>Spec</b>	<b>CR #</b>	<b>Cat</b>	<b>Re</b>	<b>Versio</b>
N2-040016	CAMEL3	R99	DP Triggering without having armed the TDP	23.078	653	F		3.18.0
N2-040017	CAMEL3	Rel-4	DP Triggering without having armed the TDP	23.078	654	A		4.10.0
N2-040018	CAMEL3	Rel-5	DP Triggering without having armed the TDP	23.078	655	A		5.6.0
N2-040019	CAMEL3	Rel-6	DP Triggering without having armed the TDP	23.078	656	A		6.0.0
N2-040159	CAMEL3	Rel-6	GPRS ODB reporting to CAMEL SCP	23.078	686	F	1	6.0.0

## CHANGE REQUEST

⌘ **23.078 CR 653** ⌘ rev **-** ⌘ Current version: **3.18.0** ⌘

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>	⌘ DP Triggering without having armed the TDP		
<b>Source:</b>	⌘ Alcatel		
<b>Work item code:</b>	⌘ CAMEL3	<b>Date:</b>	⌘ 30/01/2004
<b>Category:</b>	⌘ <b>F (Agreed by consensus)</b>	<b>Release:</b>	⌘ R99
	<i>Use one of the following categories:</i> <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> .		<i>Use one of the following releases:</i> <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘ A subscriber may have O-CSI with e.g. TDP Route Select Failure, but without TDP Collect Info. In that case the gsmSSF shall only trigger on TDP Route Select Failure but not for TDP Collect Info. At call set-up the MSC will invoke the gsmSSF (CS_gsmSSF process) via Int_invoke_gsmSSF. In this case only TDP Route_Select_Failure will be armed by the gsmSSF. Later on, the MSC sends Int_DP_Collected_Information. On receipt of Int_DP_Collected_Information the gsmSSF will call the Procedure Check_Criteria_Collected_Info. That procedure will check the criteria only but not the TDP. Depending on that result, the gsmSSF does triggering or not the TDP. This behaviour is wrong. The TDP shall only be triggered if it is armed and the gsmSSF shall check whether or not the TDP is armed as well. The same situation is also valid for the T-CSI and VT-CSI. They may include only one of the TDPs T_Busy or T_No_Answer. In this case Procedure Check_Criteria_Unsuccessful is used for criteria checking. For each of the D-CSI / N-CSI a specific gsmSSF process is invoked and the TDP Analysed Information is armed. Therefore, the Procedure Check_Criteria_Analysed_Info used by the specific gsmSSF does not need to check if the TDP is armed or not.
<b>Summary of change:</b>	⌘ The procedures Check_Criteria_Collected_Info and Check_Criteria_Unsuccessful shall also check if the associated TDP is armed or not.
<b>Consequences if not approved:</b>	⌘ The gsmSSF will also trigger if the TDP is not armed. This will result in non working services and serious complains by the CAMEL subscribers. Note: only approving Rel-5 and/or Rel-6 CRs does lead to inconsistent and misleading specifications between R99 and later releases.

<b>Clauses affected:</b>	⌘ 4.5.6.4
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**Other specs  
affected:**

	Y	N
⌘		

Other core specifications ⌘  
Test specifications  
O&M Specifications

**Other comments:**

⌘ Doing the TDP check in the procedures Check\_Criteria\_Collected\_Info and Check\_Criteria\_Unsuccessful concentrates the decision on triggering the TDP on a single place in the SDLs. This is preferred rather than to do also some checking in the CS\_gsmSSF Process itself.

— First modified section —

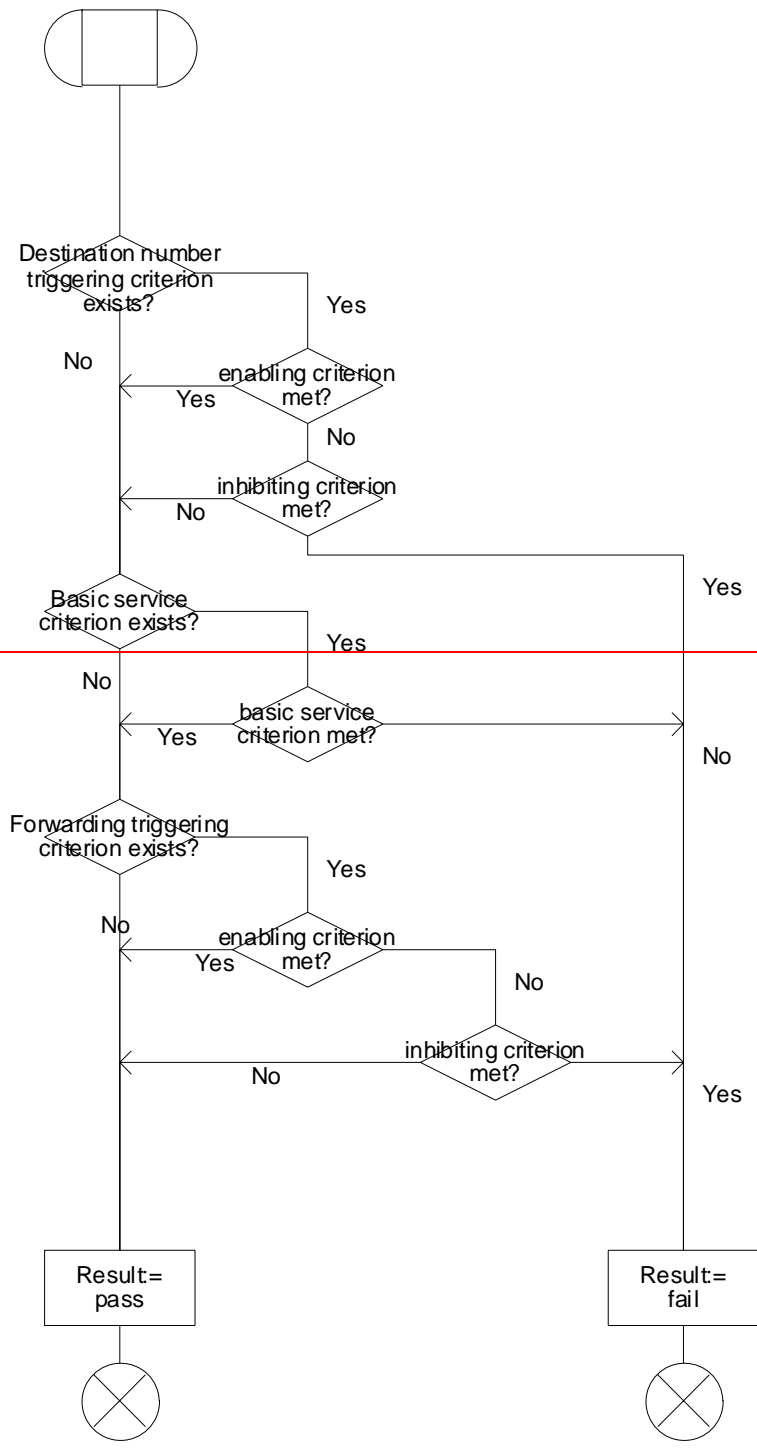
4.5.6.4 Process gsmSSF and procedures

...

Procedure Check\_Criteria\_Collected\_Info

1(1)

*/\* Procedure to check the criteria in the gsmSSF \*/*



Procedure Check\_Criteria\_Collected\_Info

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/

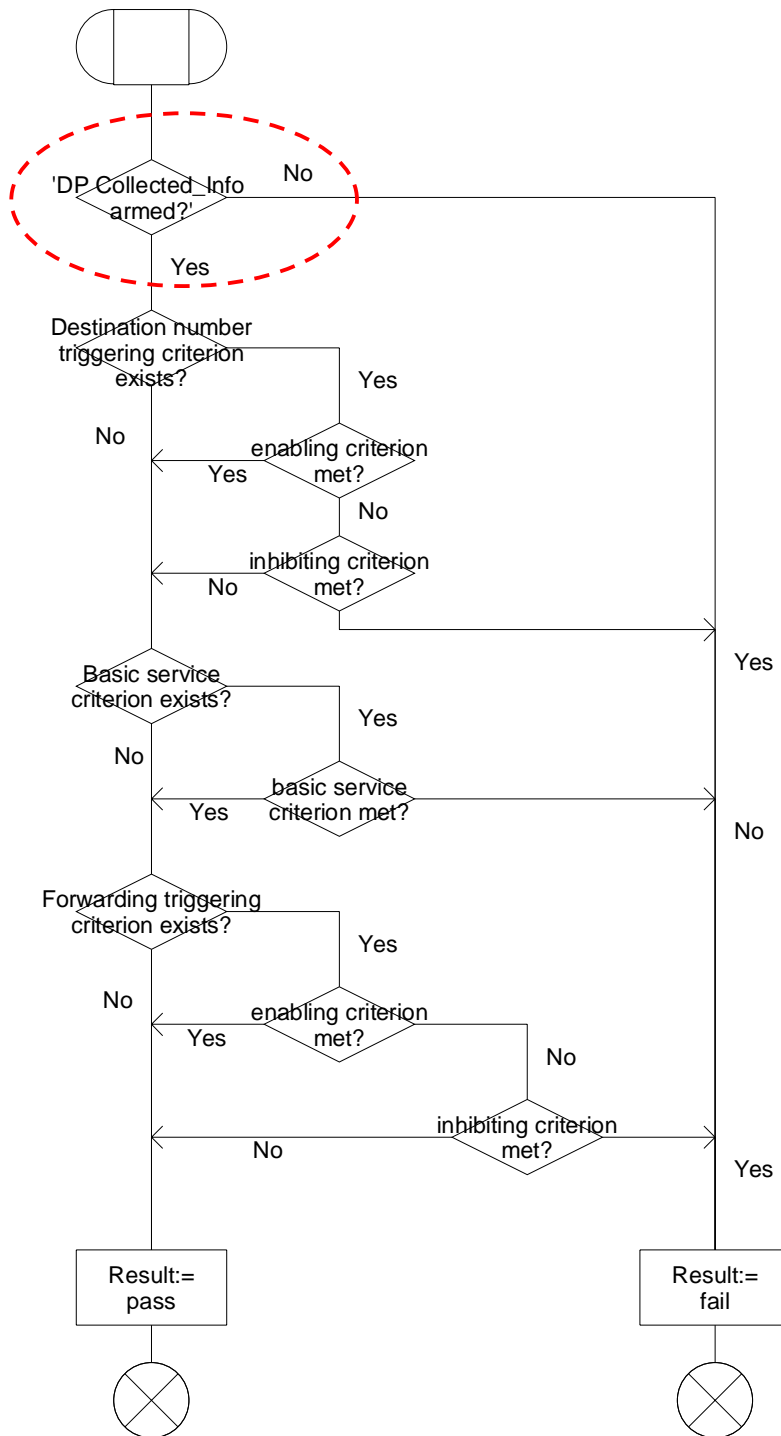


Figure 4.65: Procedure Check\_Criteria\_Collected\_Info(sheet 1)

...

— Next modified section —

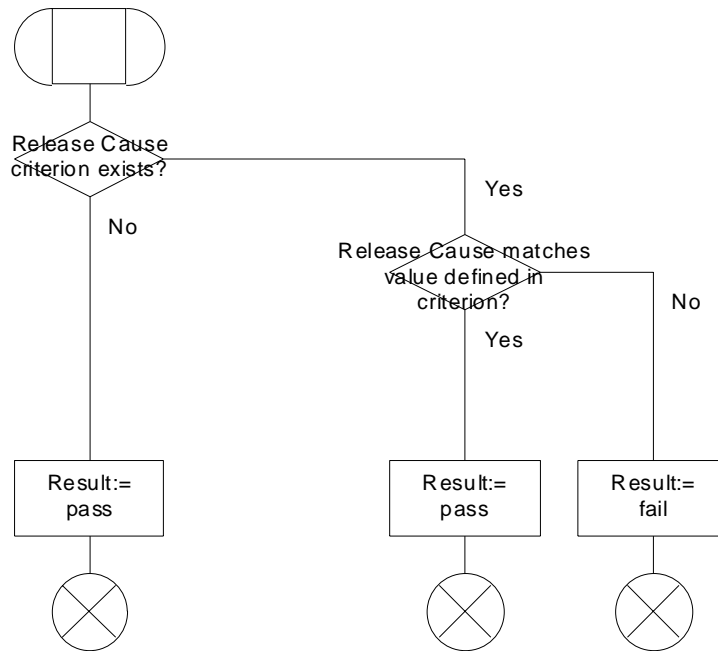
4.5.6.4 Process gsmSSF and procedures

...

Procedure Check\_Criteria\_Unsuccessful

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/



Procedure Check\_Criteria\_Unsuccessful

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/

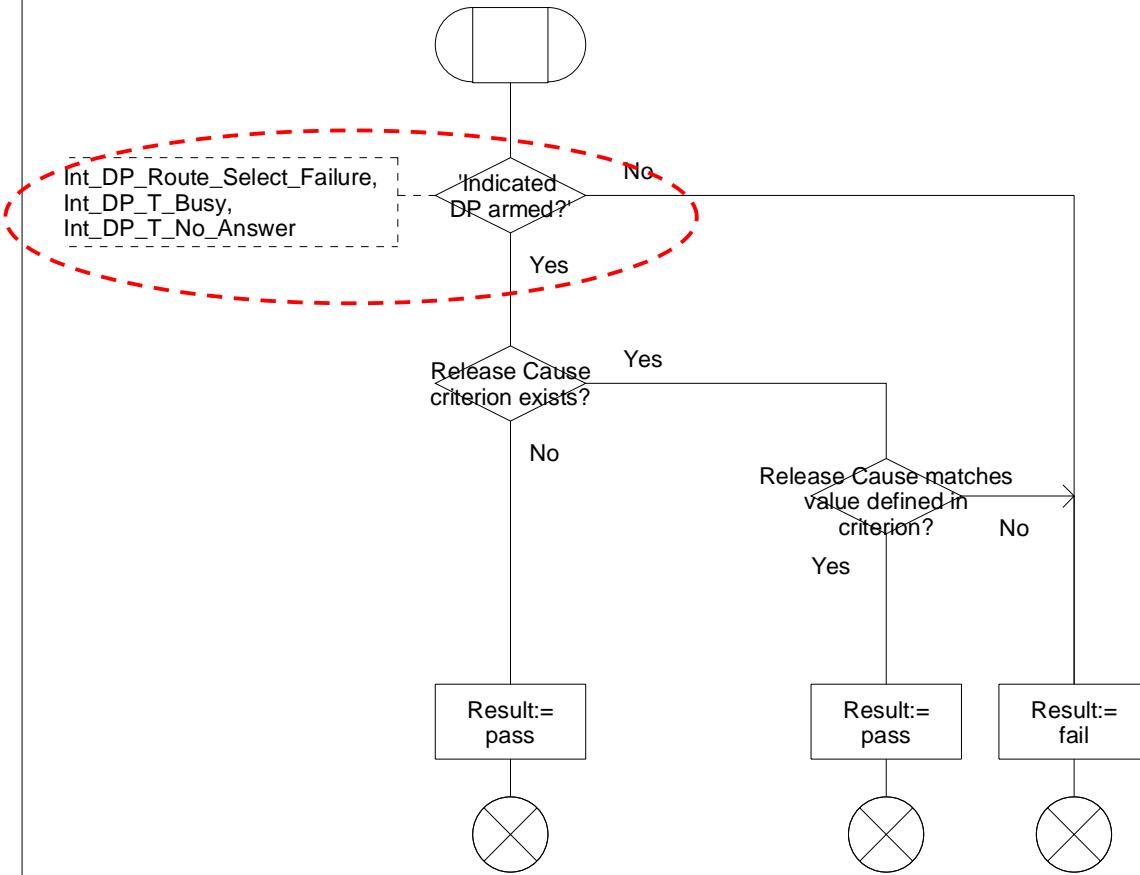


Figure 4.67: Procedure Check\_Criteria\_Unsuccessful(sheet 1)

— END —

## CHANGE REQUEST

⌘ **23.078 CR 654** ⌘ rev **-** ⌘ Current version: **4.10.0** ⌘

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>	⌘ DP Triggering without having armed the TDP		
<b>Source:</b>	⌘ Alcatel		
<b>Work item code:</b>	⌘ CAMEL3	<b>Date:</b>	⌘ 30/01/2004
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ Rel-4
	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>	⌘ A subscriber may have O-CSI with e.g. TDP Route Select Failure, but without TDP Collect Info. In that case the gsmSSF shall only trigger on TDP Route Select Failure but not for TDP Collect Info. At call set-up the MSC will invoke the gsmSSF (CS_gsmSSF process) via Int_invoke_gsmSSF. In this case only TDP Route_Select_Failure will be armed by the gsmSSF. Later on, the MSC sends Int_DP_Collected_Information. On receipt of Int_DP_Collected_Information the gsmSSF will call the Procedure Check_Criteria_Collected_Info. That procedure will check the criteria only but not the TDP. Depending on that result, the gsmSSF does triggering or not the TDP. This behaviour is wrong. The TDP shall only be triggered if it is armed and the gsmSSF shall check whether or not the TDP is armed as well. The same situation is also valid for the T-CSI and VT-CSI. They may include only one of the TDPs T_Busy or T_No_Answer. In this case Procedure Check_Criteria_Unsuccessful is used for criteria checking. For each of the D-CSI / N-CSI a specific gsmSSF process is invoked and the TDP Analysed Information is armed. Therefore, the Procedure Check_Criteria_Analysed_Info used by the specific gsmSSF does not need to check if the TDP is armed or not.
<b>Summary of change:</b>	⌘ The procedures Check_Criteria_Collected_Info and Check_Criteria_Unsuccessful shall also check if the associated TDP is armed or not.
<b>Consequences if not approved:</b>	⌘ The gsmSSF will also trigger if the TDP is not armed. This will result in non working services and serious complains by the CAMEL subscribers. Note: only approving Rel-5 and/or Rel-6 CRs does lead to inconsistent and misleading specifications between R99 and later releases.



<b>Clauses affected:</b>	⌘	4.5.6.4										
<b>Other specs affected:</b>	⌘	<table border="1"><tr><th>Y</th><th>N</th></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>	Y	N							Other core specifications	⌘
		Y	N									
	Test specifications											
	O&M Specifications											
<b>Other comments:</b>	⌘	Doing the TDP check in the procedures Check_Criteria_Collected_Info and Check_Criteria_Unsuccessful concentrates the decision on triggering the TDP on a single place in the SDLs. This is preferred rather than to do also some checking in the CS_gsmSSF Process itself.										

— **First modified section** —

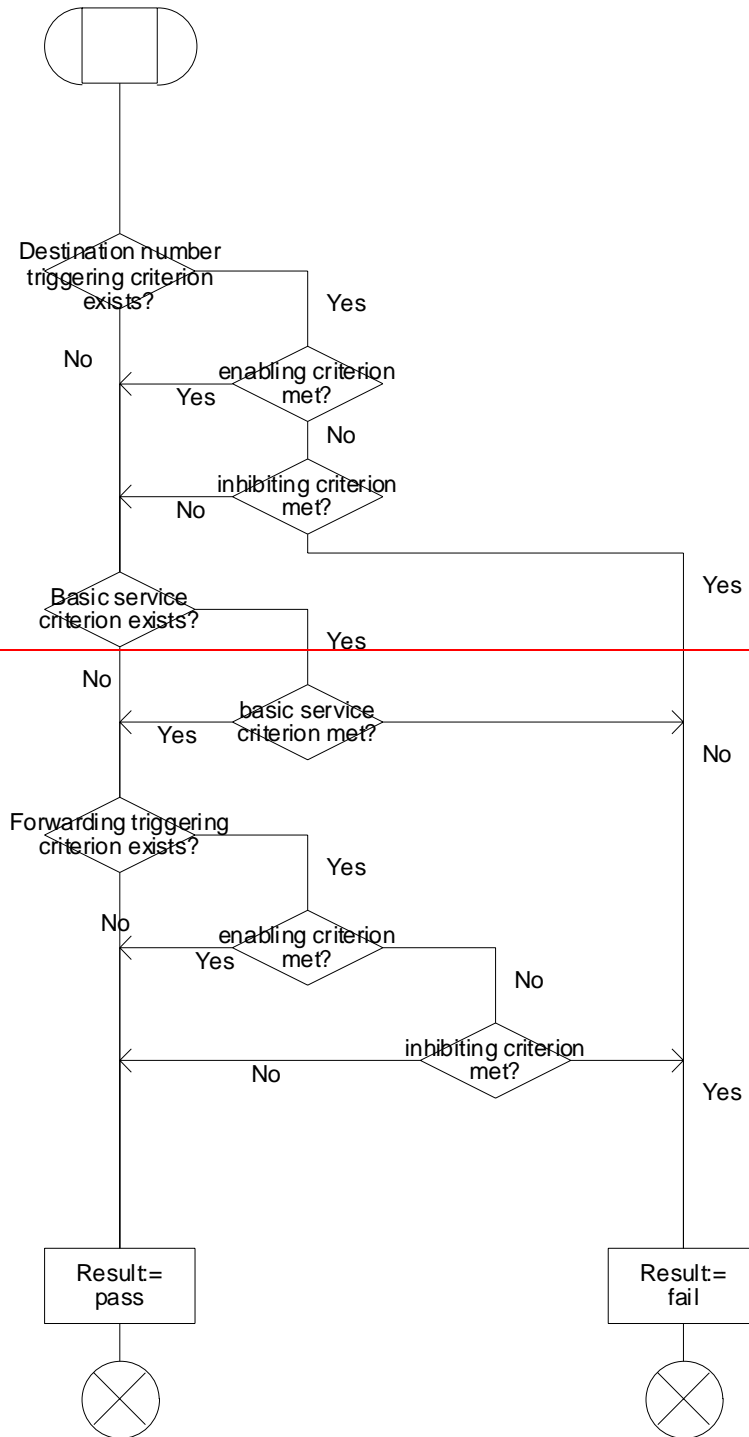
4.5.6.4 Process gsmSSF and procedures

...

Procedure Check\_Criteria\_Collected\_Info

1(1)

*/\* Procedure to check the criteria in the gsmSSF \*/*



Procedure Check\_Criteria\_Collected\_Info

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/

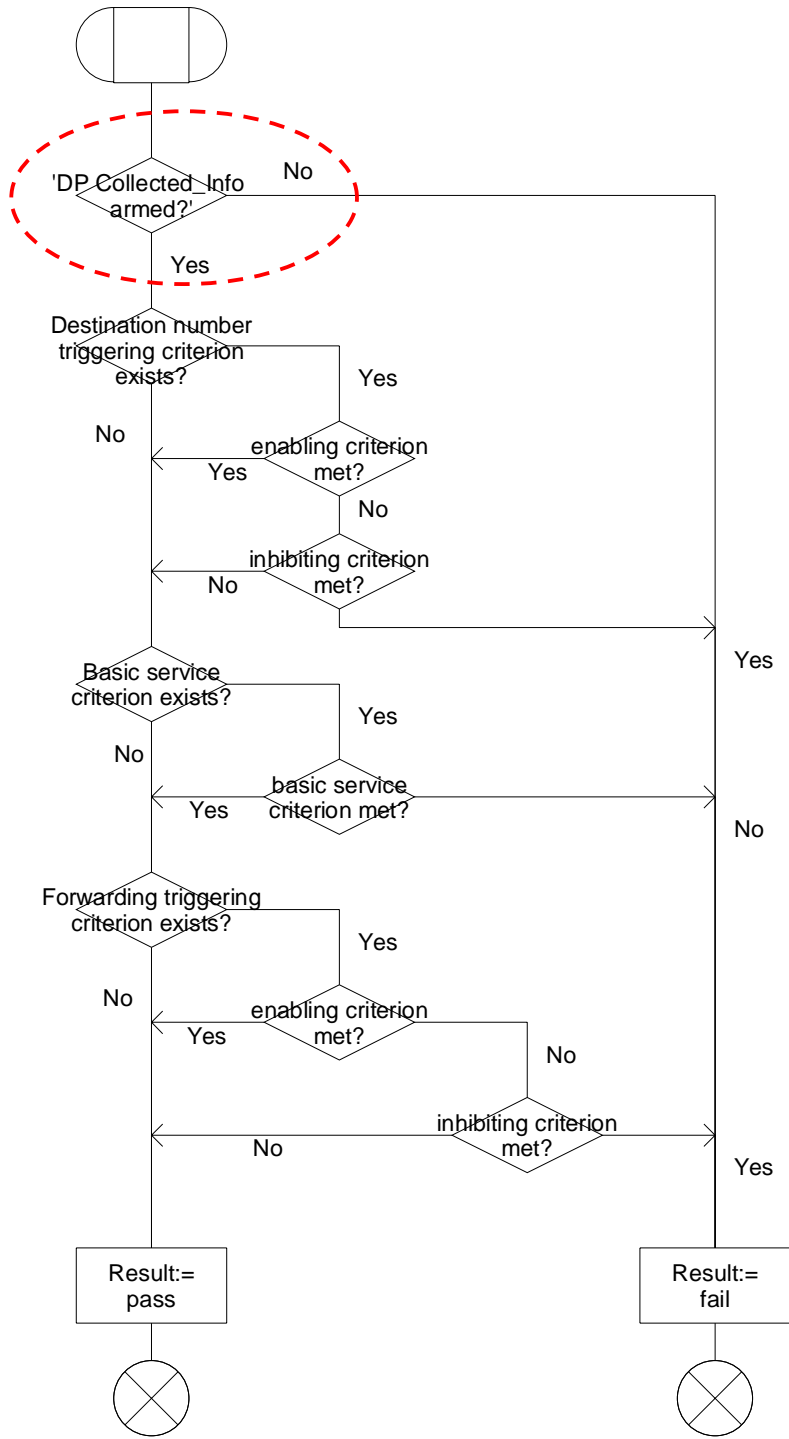


Figure 4.65: Procedure Check\_Criteria\_Collected\_Info(sheet 1)

...

— Next modified section —

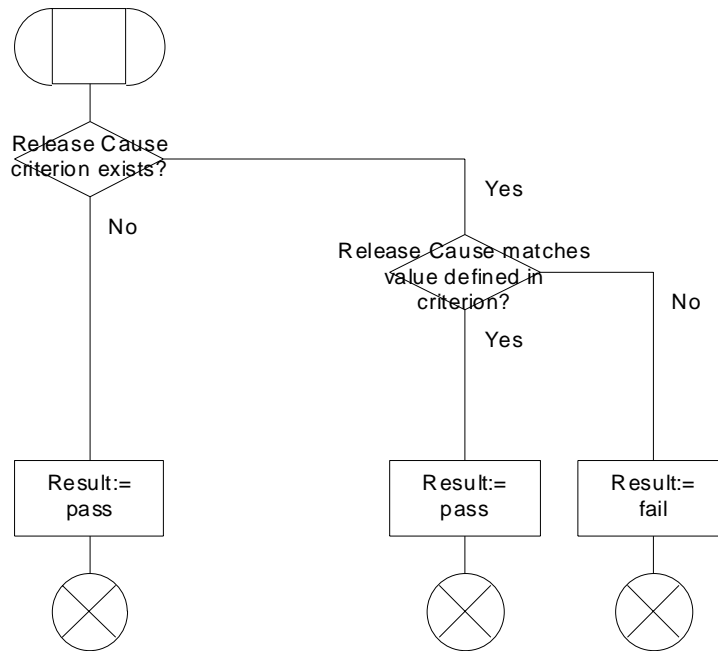
4.5.6.4 Process gsmSSF and procedures

...

Procedure Check\_Criteria\_Unsuccessful

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/



Procedure Check\_Criteria\_Unsuccessful

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/

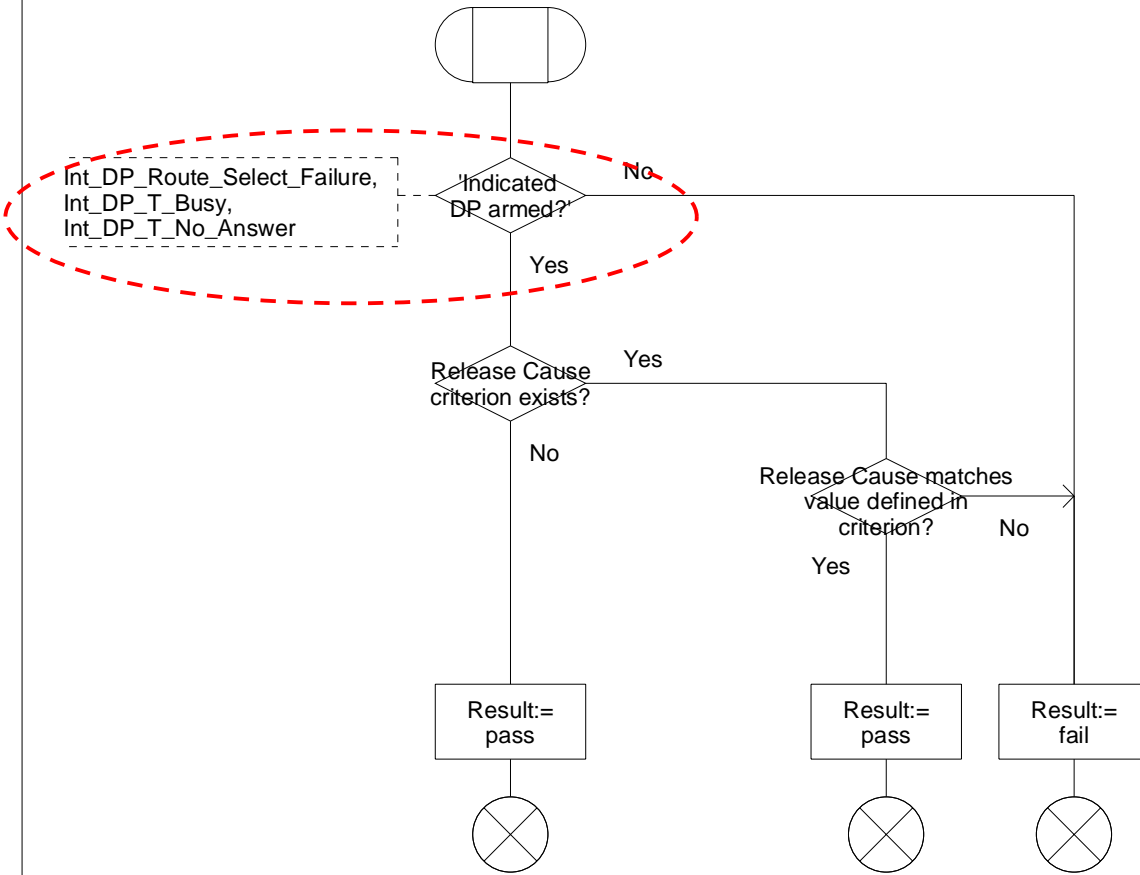


Figure 4.67: Procedure Check\_Criteria\_Unsuccessful(sheet 1)

— END —

## CHANGE REQUEST

⌘ **23.078 CR 655** ⌘ rev **-** ⌘ Current version: **5.6.0** ⌘

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>	⌘ DP Triggering without having armed the TDP		
<b>Source:</b>	⌘ Alcatel		
<b>Work item code:</b>	⌘ CAMEL4	<b>Date:</b>	⌘ 30/01/2004
<b>Category:</b>	⌘ <b>A</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>	⌘ A subscriber may have O-CSI with e.g. TDP Route Select Failure, but without TDP Collect Info. In that case the gsmSSF shall only trigger on TDP Route Select Failure but not for TDP Collect Info. At call set-up the MSC will invoke the gsmSSF (CS_gsmSSF process) via Int_invoke_gsmSSF. In this case only TDP Route_Select_Failure will be armed by the gsmSSF. Later on, the MSC sends Int_DP_Collected_Information. On receipt of Int_DP_Collected_Information the gsmSSF will call the Procedure Check_Criteria_Collected_Info. That procedure will check the criteria only but not the TDP. Depending on that result, the gsmSSF does triggering or not the TDP. This behaviour is wrong. The TDP shall only be triggered if it is armed and the gsmSSF shall check whether or not the TDP is armed as well. The same situation is also valid for the T-CSI and VT-CSI. They may include only one of the TDPs T_Busy or T_No_Answer. In this case Procedure Check_Criteria_Unsuccessful is used for criteria checking. For each of the D-CSI / N-CSI a specific gsmSSF process is invoked and the TDP Analysed Information is armed. Therefore, the Procedure Check_Criteria_Analysed_Info used by the specific gsmSSF does not need to check if the TDP is armed or not.
<b>Summary of change:</b>	⌘ The procedures Check_Criteria_Collected_Info and Check_Criteria_Unsuccessful shall also check if the associated TDP is armed or not.
<b>Consequences if not approved:</b>	⌘ The gsmSSF will also trigger if the TDP is not armed. This will result in non working services and serious complains by the CAMEL subscribers. Note: only approving Rel-5 and/or Rel-6 CRs does lead to inconsistent and misleading specifications between R99 and later releases.

<b>Clauses affected:</b>	⌘	4.5.7.5										
<b>Other specs affected:</b>	⌘	<table border="1"><tr><th>Y</th><th>N</th></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>	Y	N							Other core specifications	⌘
		Y	N									
	Test specifications											
	O&M Specifications											
<b>Other comments:</b>	⌘	Doing the TDP check in the procedures Check_Criteria_Collected_Info and Check_Criteria_Unsuccessful concentrates the decision on triggering the TDP on a single place in the SDLs. This is preferred rather than to do also some checking in the CS_gsmSSF Process itself.										

— **First modified section** —

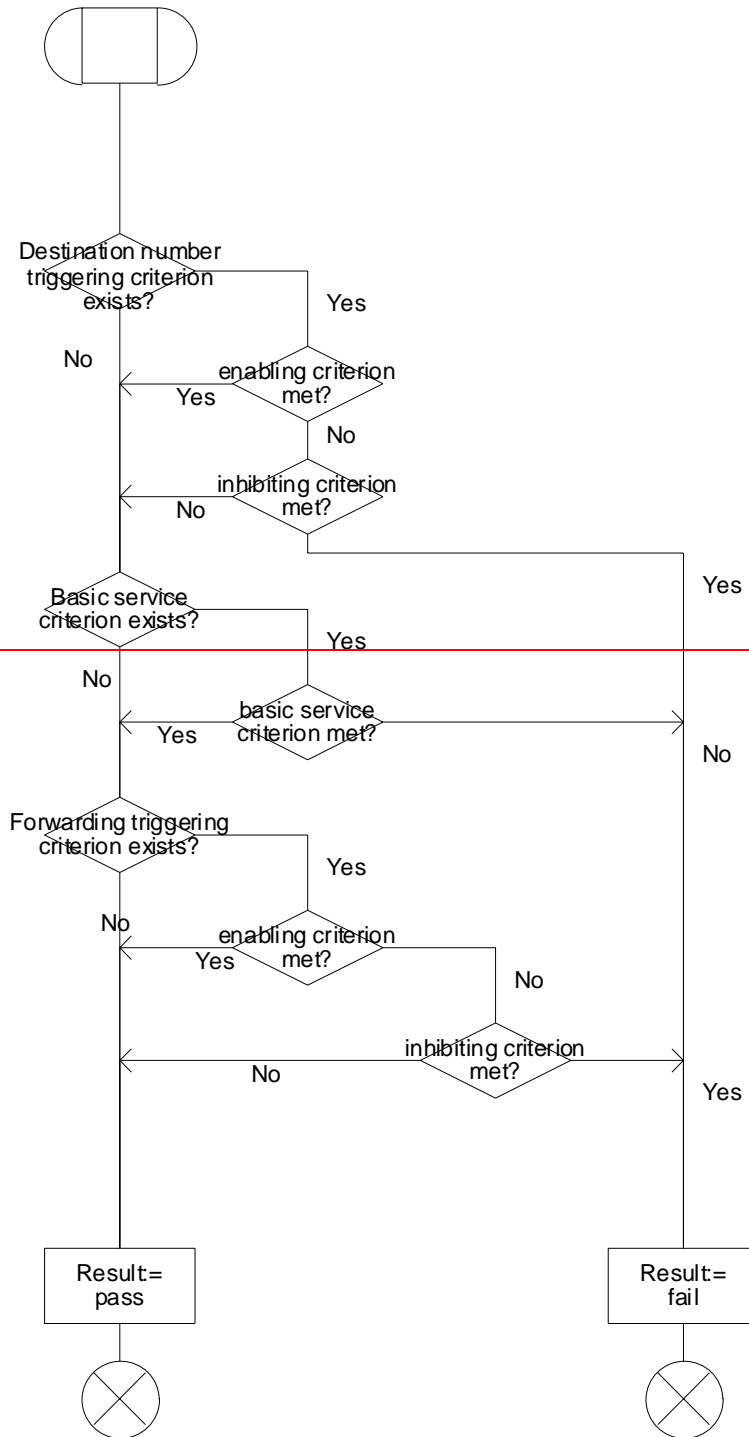
4.5.7.5 Process CS\_gsmSSF and procedures

...

Procedure Check\_Criteria\_Collected\_Info

1(1)

*/\* Procedure to check the criteria in the gsmSSF \*/*





Procedure Check\_Criteria\_Collected\_Info

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/

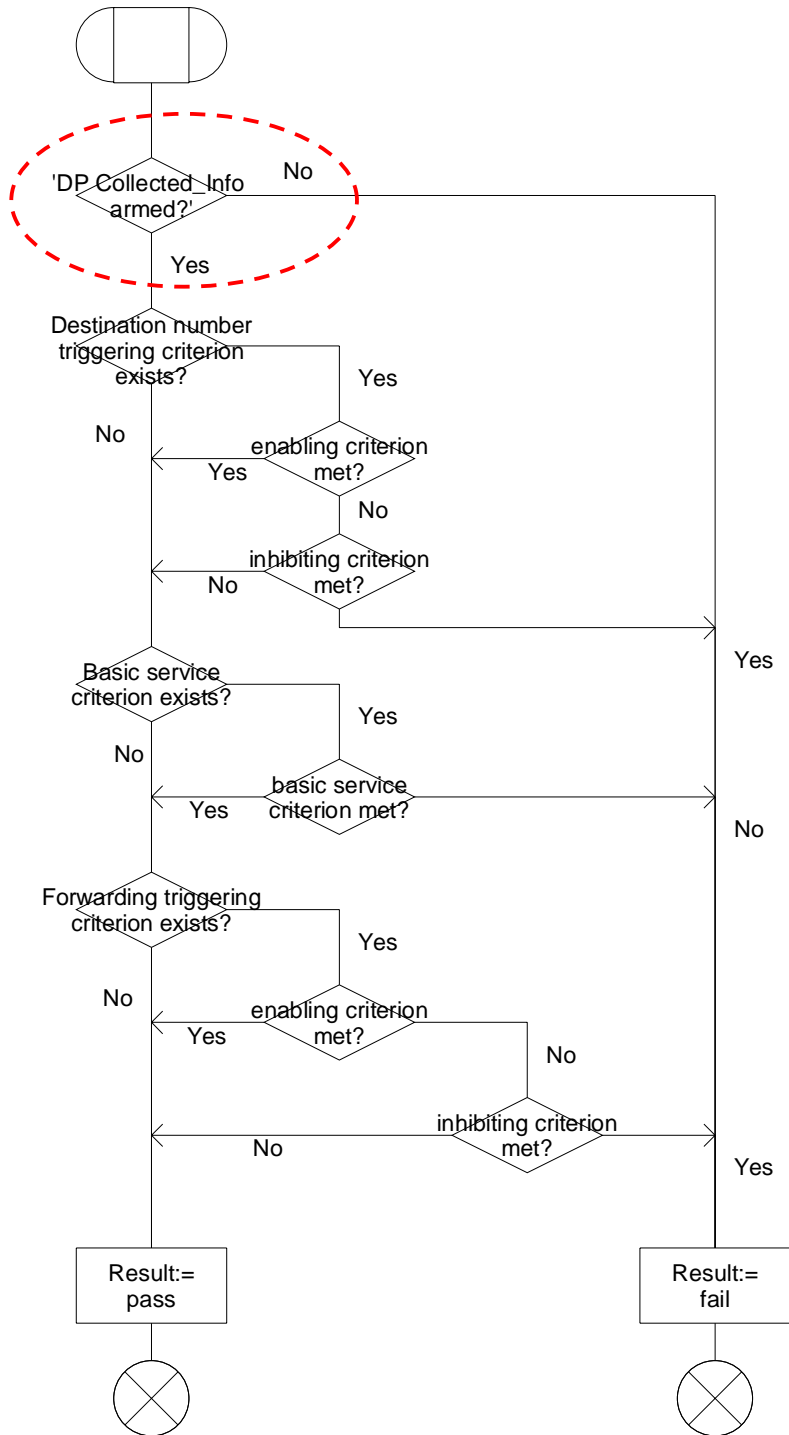


Figure 4.97-1: Procedure Check\_Criteria\_Collected\_Info (sheet 1)

...

— Next modified section —

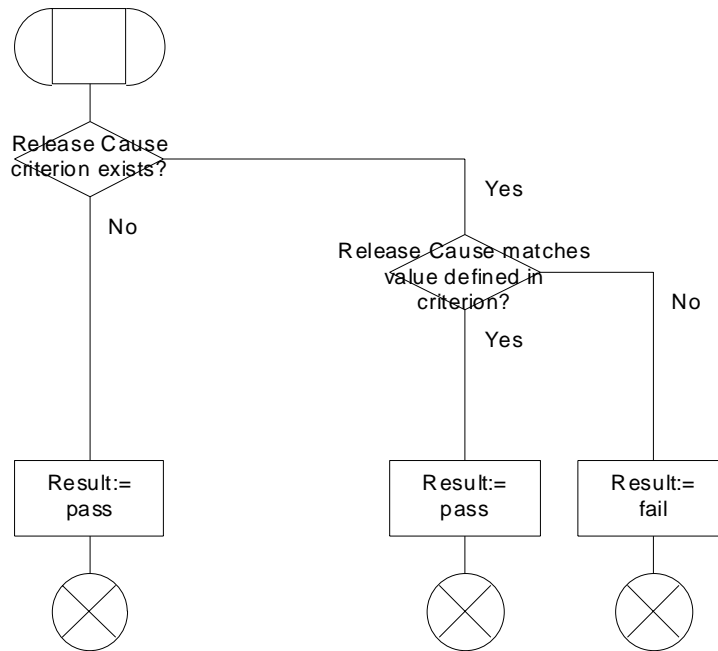
4.5.7.5 Process CS\_gsmSSF and procedures

...

Procedure Check\_Criteria\_Unsuccessful

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/



Procedure Check\_Criteria\_Unsuccessful

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/

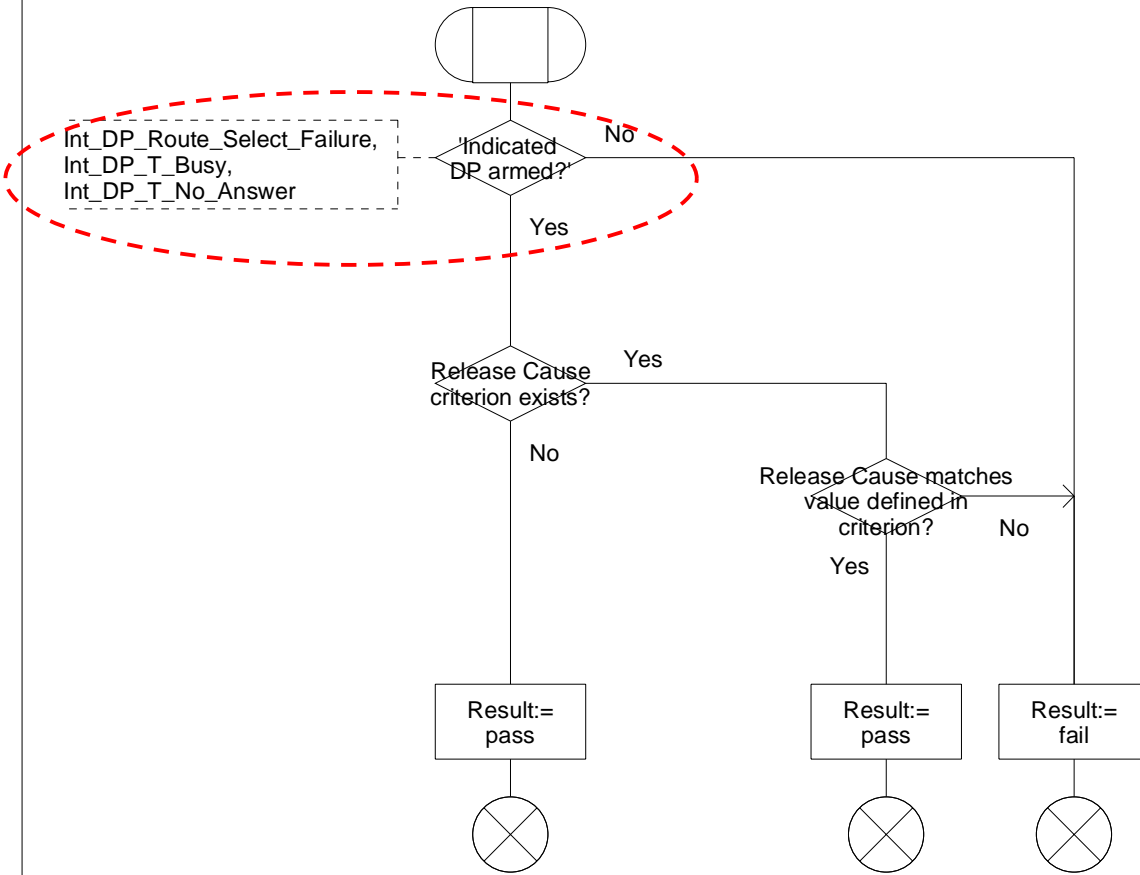


Figure 4.99-1: Procedure Check\_Criteria\_Unsuccessful (sheet 1)

— END —

## CHANGE REQUEST

⌘ **23.078 CR 656** ⌘ rev **-** ⌘ Current version: **6.0.0** ⌘

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>	⌘ DP Triggering without having armed the TDP		
<b>Source:</b>	⌘ Alcatel		
<b>Work item code:</b>	⌘ CAMEL4	<b>Date:</b>	⌘ 30/01/2004
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ Rel-6
	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>	⌘ A subscriber may have O-CSI with e.g. TDP Route Select Failure, but without TDP Collect Info. In that case the gsmSSF shall only trigger on TDP Route Select Failure but not for TDP Collect Info. At call set-up the MSC will invoke the gsmSSF (CS_gsmSSF process) via Int_invoke_gsmSSF. In this case only TDP Route_Select_Failure will be armed by the gsmSSF. Later on, the MSC sends Int_DP_Collected_Information. On receipt of Int_DP_Collected_Information the gsmSSF will call the Procedure Check_Criteria_Collected_Info. That procedure will check the criteria only but not the TDP. Depending on that result, the gsmSSF does triggering or not the TDP. This behaviour is wrong. The TDP shall only be triggered if it is armed and the gsmSSF shall check whether or not the TDP is armed as well. The same situation is also valid for the T-CSI and VT-CSI. They may include only one of the TDPs T_Busy or T_No_Answer. In this case Procedure Check_Criteria_Unsuccessful is used for criteria checking. For each of the D-CSI / N-CSI a specific gsmSSF process is invoked and the TDP Analysed Information is armed. Therefore, the Procedure Check_Criteria_Analysed_Info used by the specific gsmSSF does not need to check if the TDP is armed or not.
<b>Summary of change:</b>	⌘ The procedures Check_Criteria_Collected_Info and Check_Criteria_Unsuccessful shall also check if the associated TDP is armed or not.
<b>Consequences if not approved:</b>	⌘ The gsmSSF will also trigger if the TDP is not armed. This will result in non working services and serious complains by the CAMEL subscribers. Note: only approving Rel-5 and/or Rel-6 CRs does lead to inconsistent and misleading specifications between R99 and later releases.

<b>Clauses affected:</b>	⌘	4.5.7.5										
<b>Other specs affected:</b>	⌘	<table border="1"><tr><th>Y</th><th>N</th></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>	Y	N							Other core specifications	⌘
		Y	N									
	Test specifications											
	O&M Specifications											
<b>Other comments:</b>	⌘	Doing the TDP check in the procedures Check_Criteria_Collected_Info and Check_Criteria_Unsuccessful concentrates the decision on triggering the TDP on a single place in the SDLs. This is preferred rather than to do also some checking in the CS_gsmSSF Process itself.										

— **First modified section** —

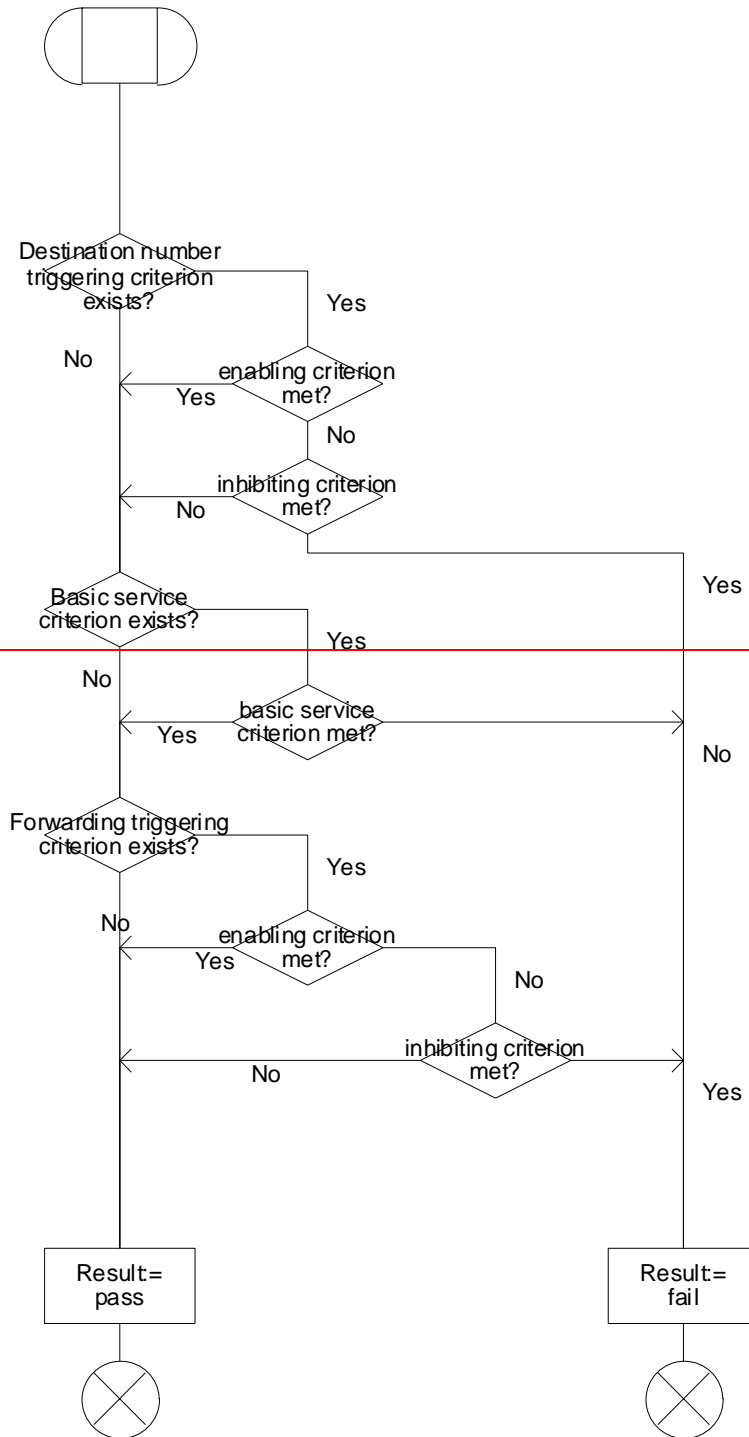
4.5.7.5 Process CS\_gsmSSF and procedures

...

Procedure Check\_Criteria\_Collected\_Info

1(1)

*/\* Procedure to check the criteria in the gsmSSF \*/*



Procedure Check\_Criteria\_Collected\_Info

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/

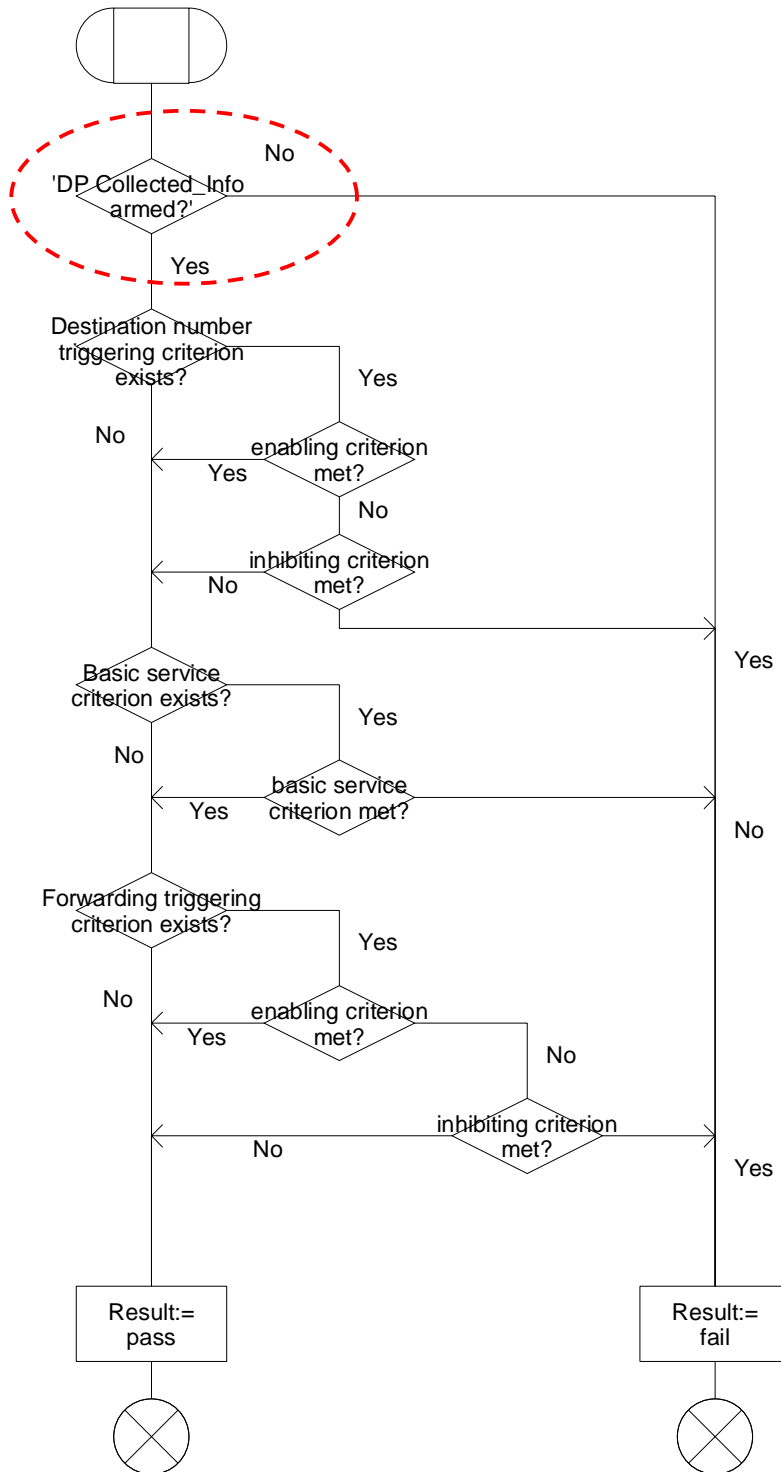


Figure 4.98-1: Procedure Check\_Criteria\_Collected\_Info (sheet 1)

...

— Next modified section —

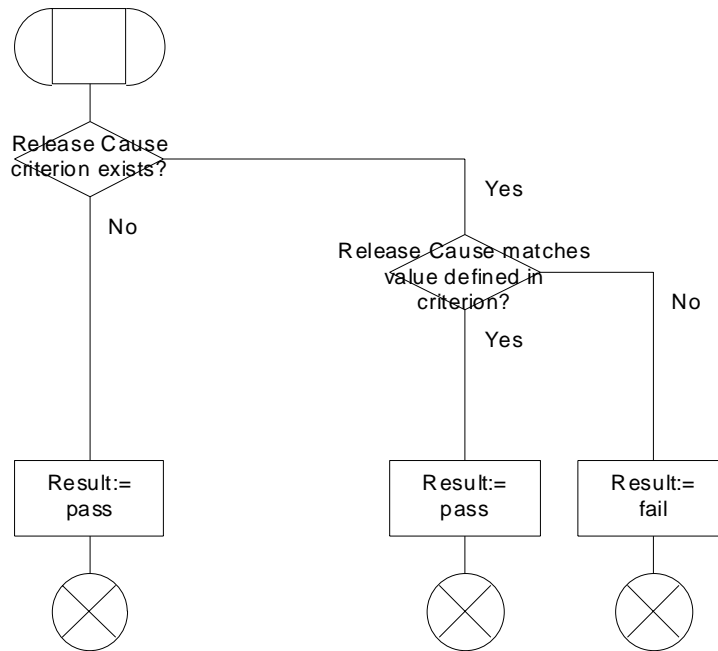
4.5.7.5 Process CS\_gsmSSF and procedures

...

Procedure Check\_Criteria\_Unsuccessful

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/





Procedure Check\_Criteria\_Unsuccessful

1(1)

/\* Procedure to check the criteria in the gsmSSF \*/

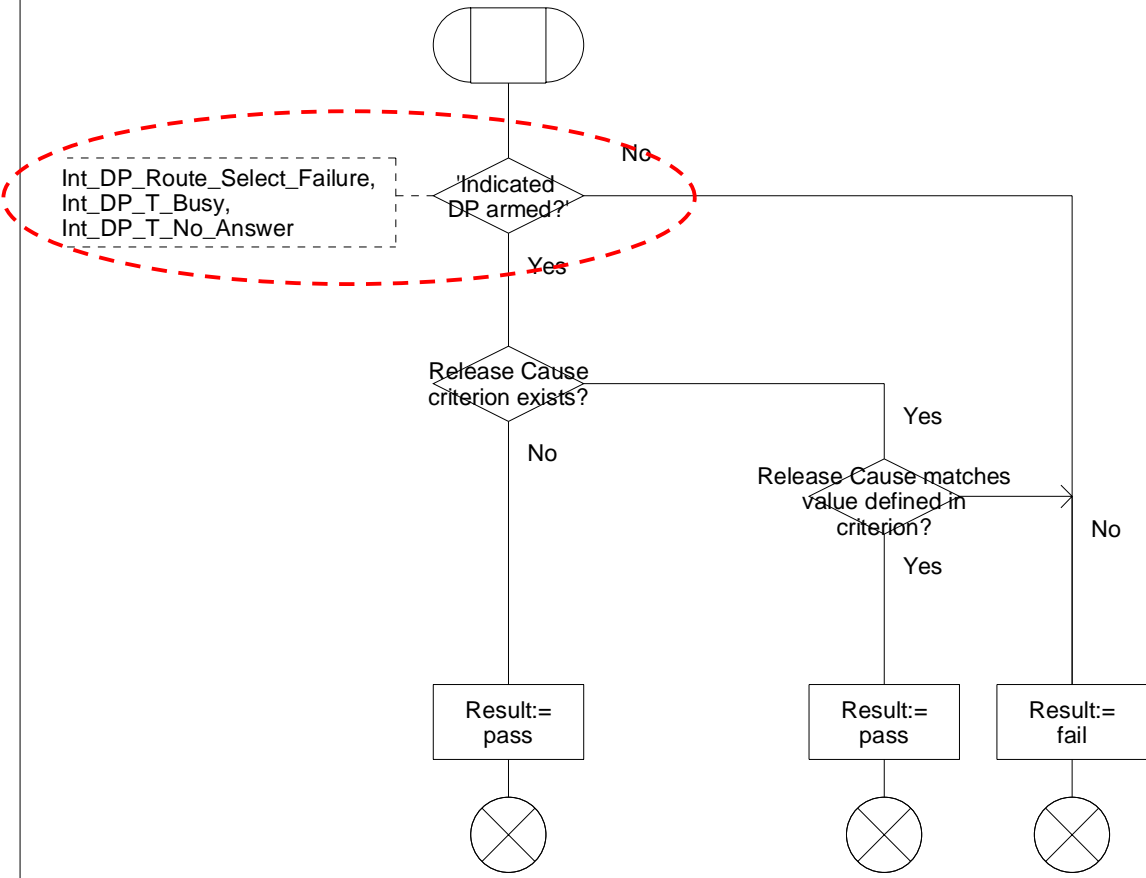


Figure 4.100-1: Procedure Check\_Criteria\_Unsuccessful (sheet 1)

— END —

## CHANGE REQUEST

⌘ **23.078 CR 686** ⌘ rev **1** ⌘ Current version: **6.0.0** ⌘

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>	⌘ GPRS ODB reporting to CAMEL SCP ⌘		
<b>Source:</b>	⌘ Nokia ⌘		
<b>Work item code:</b>	⌘ CAMEL3 ⌘	<b>Date:</b>	⌘ 20.2.2004 ⌘
<b>Category:</b>	⌘ <b>F</b> ⌘	<b>Release:</b>	⌘ Rel-6 ⌘
	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>	⌘ It is not specified what happens in various cases when a PDP context is disconnected due to Operator Determined Barring (ODB) ⌘
<b>Summary of change:</b>	⌘ The gprsSSF is modelled to have an ODB input. If there is no relationship for this PDP context then nothing is sent to SCP. If there is a monitoring or controlling relationship then ACR-GPRS is sent, FCI record is closed, EntityReleasedGPRS is sent and all EDPs for the PDPid are disarmed. ⌘
<b>Consequences if not approved:</b>	⌘ Possible inter-operability problems. The gsmSCF resources are kept reserved unnecessarily, even for hours. ⌘

<b>Clauses affected:</b>	⌘ 6.5.3.9 ⌘						
<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"/>		
Y	N						
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 20px; text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Test specifications ⌘	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 20px; text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> O&M Specifications ⌘	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						
<b>Other comments:</b>	⌘ - In WFI state ODB input may occur only when Scenario 1 is in use, and another PDPid is in a point in accosiation (not in a DP). - Tssf timer is not set. This is in line with PDB disconnection case when EDP is not armed. ⌘						

## -- For Information --

### 6.4.3.1 Description of the PDP Context model (PIAs)

This subclause describes the model for PDP Context State Model in the SGSN. For each PIA a description can be found of the entry events, actions and exit events.

#### 6.4.3.1.1 Idle

Entry events:

- Deactivation (user or network initiated) and clearing of a previous PDP Context.
- Processing of exceptional conditions.

Actions:

- Interface is idled.
- Activate PDP Context request is received from MS (containing NSAPI, PDP Type, PDP Address, Access Point Name, QoS Requested, PDP Configuration Options), or Inter-SGSN Routeing Area Update is accepted (DP Change of Position Context).
- Information being analyzed, e.g. GPRS-CSI is analyzed.

Exit events:

- GPRS-CSI is analyzed (DP PDP Context Establishment or DP Change of Position Context, new SGSN).

#### 6.4.3.1.2 PDP Context Setup

Entry events:

- GPRS-CSI is analyzed (DP PDP Context Establishment).

Actions:

- APN and GGSN selection procedure is performed for a primary PDP context as specified in Annex A of 3GPP TS 23.060 [15]. APN and GGSN selection procedure is not performed for a secondary PDP context.
- Access Point Name is verified against the subscription. If the gsmSCF has provided an Access Point Name then the Access Point Name provided by the gsmSCF is checked against the subscription. For details refer to 3GPP TS 23.060 [15] Annex A.
- The operator determined barring category "Barring of all Packet Oriented Services " is checked and invoked if necessary.
- The operator determined barring category "Barring of Packet Oriented Services from access points that are within the HPLMN whilst the subscriber is roaming in a VPLMN" is checked and invoked if necessary.
- The operator determined barring category "Barring of Packet Oriented Services from access points that are within the roamed to VPLMN" is checked and invoked if necessary.
- The SGSN ensures that an already active PDP context is not reactivated.
- GGSN address is derived from the Access Point Name by interrogation of a DNS. The Access Point Name consists of a Network Identifier and an Operator Identifier.
- Create PDP Context Request is sent to the GGSN.

Exit events:

- Create PDP Context Response is received from the GGSN (DP PDP Context Establishment Acknowledgement).
- An exception is encountered.

### 6.4.3.1.3 PDP Context Established

Entry events:

- GPRS-CSI is analyzed (DP PDP Context Establishment Acknowledgement or DP Change of Position Context).

Actions:

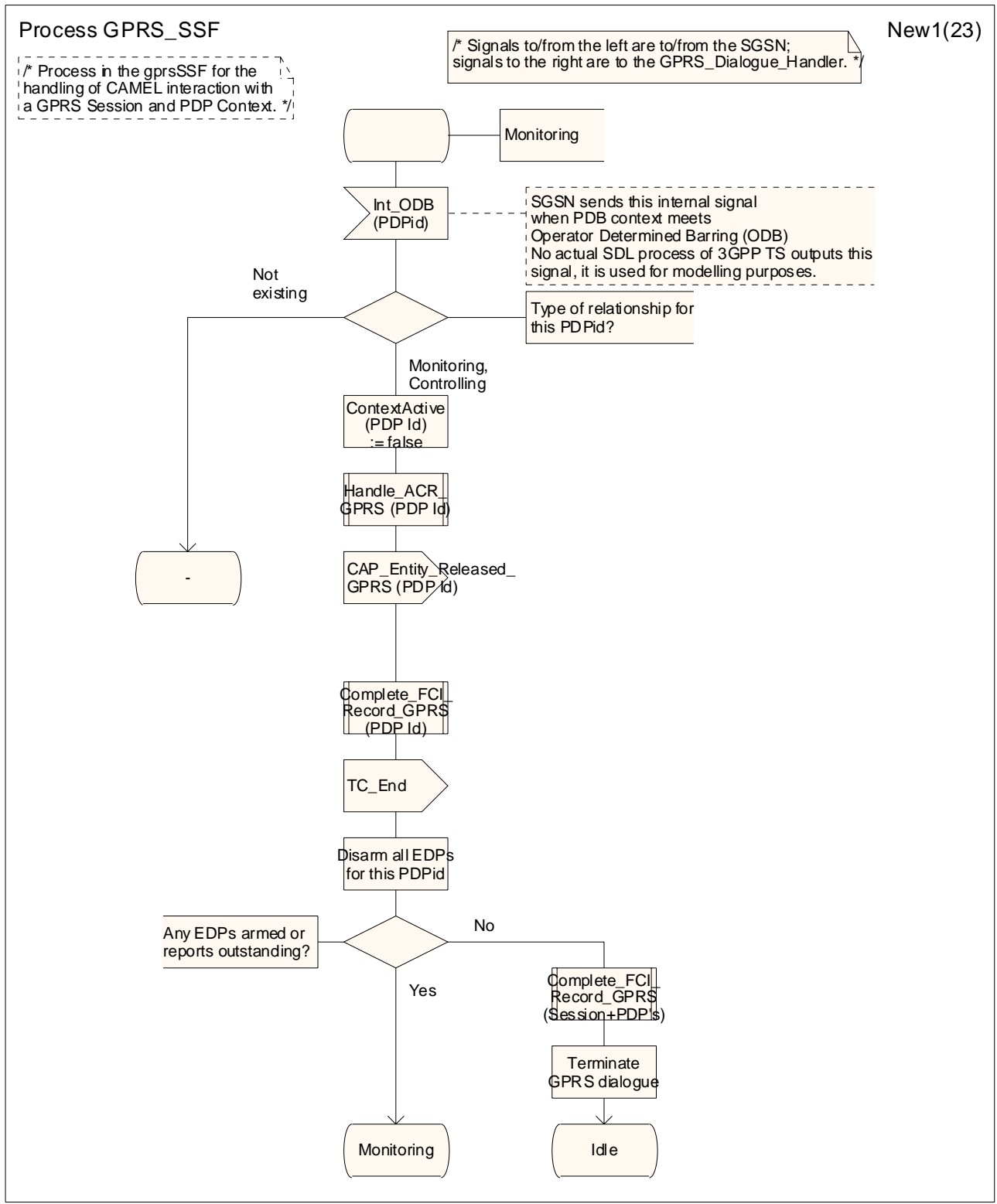
- PDP context is established at the MS and the SGSN.

Exit events:

- Deactivation of the PDP Context is received from the MS or the GGSN, or is due to an inter SGSN routing area update (DP PDP Context Disconnection, old SGSN).
- Intra-SGSN Routeing Area Update Request is received from the MS (DP Change of Position Context).
- Inter-SGSN Routeing Area Update (DP Change of Position Context, new SGSN).
- An exception is encountered.

## -- First modified section --

### 6.5.3.9 SDL diagrams for process GPRS\_SSF and procedures



**Figure 6.17-x: Process GPRS\_SSF (sheet x)**

Process GPRS\_SSF

New2(23)

/\* Process in the gprsSSF for the handling of CAMEL interaction with a GPRS Session and PDP Context. \*/

/\* Signals to/from the left are to/from the SGSN; signals to the right are to the GPRS\_Dialogue\_Handler. \*/

Since ODB is checked in a PIA the input can arrive only because another PDPid or session is at DP.

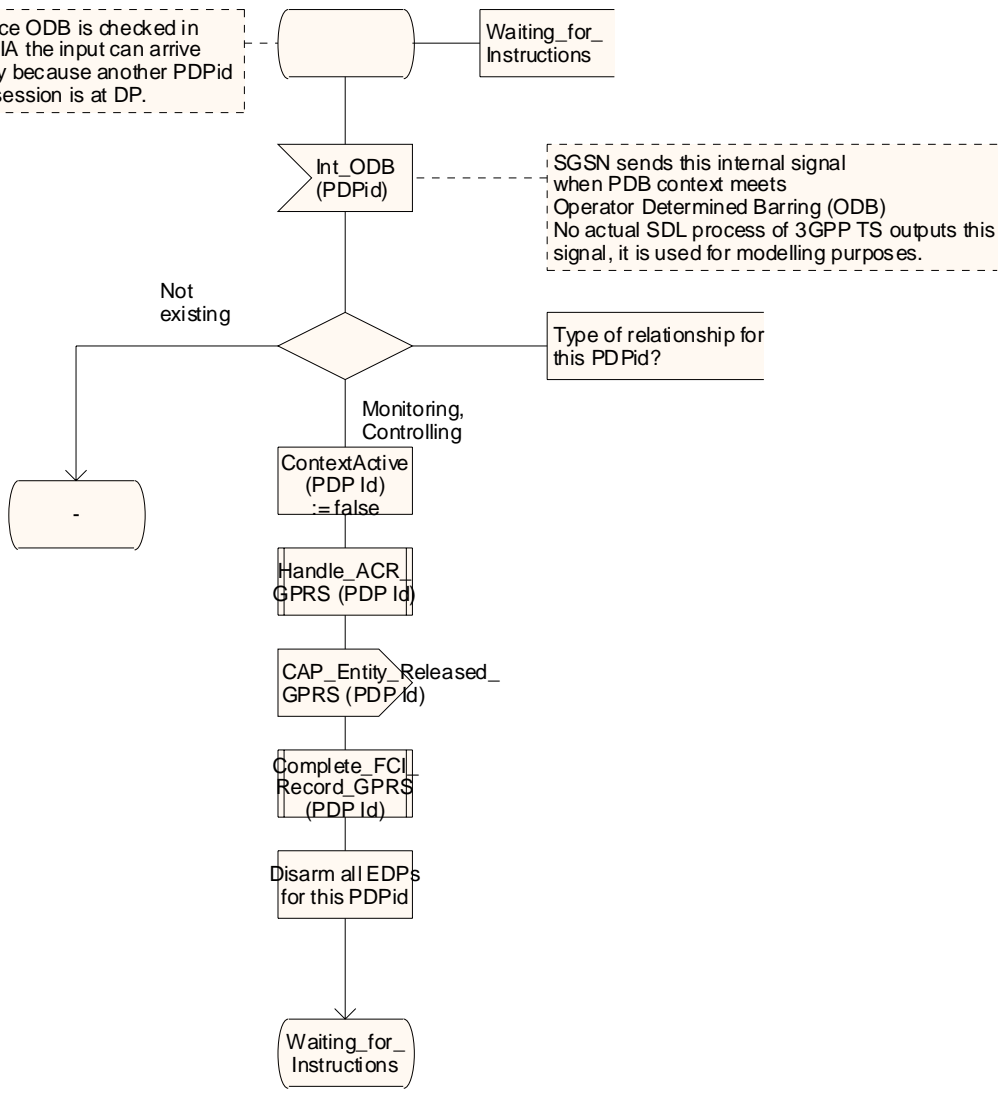


Figure 6.17-y: Process GPRS\_SSF (sheet y)