

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

NP-040131

Source: 3GPP TSG CN2
Title: CRs for Rel-6 WI TEI6
Agenda item: 7.1
Document for: APPROVAL

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

TDoc #	WI	Rel	Title	Spec	CR #	Cat	Re	Versio
N2-040159	TEI6	Rel-6	GPRS ODB reporting to CAMEL SCP	23.078	686	F	1	6.0.0

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

Title:	⌘ GPRS ODB reporting to CAMEL SCP		
Source:	⌘ Nokia		
Work item code:	⌘ TEI6	Date:	⌘ 20.2.2004
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> 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 <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)

Reason for change:	⌘ It is not specified what happens in various cases when a PDP context is disconnected due to Operator Determined Barring (ODB)
Summary of change:	⌘ 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.
Consequences if not approved:	⌘ Possible inter-operability problems. The gsmSCF resources are kept reserved unnecessarily, even for hours.

Clauses affected:	⌘ 6.5.3.9						
Other specs affected:	<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"/>	⌘	
Y	N						
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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 type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Test specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
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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 type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> O&M Specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
Other comments:	⌘ - In WFI state ODB input may occur only when Scenario 1 is in use, and another PDPid is in a point in association (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

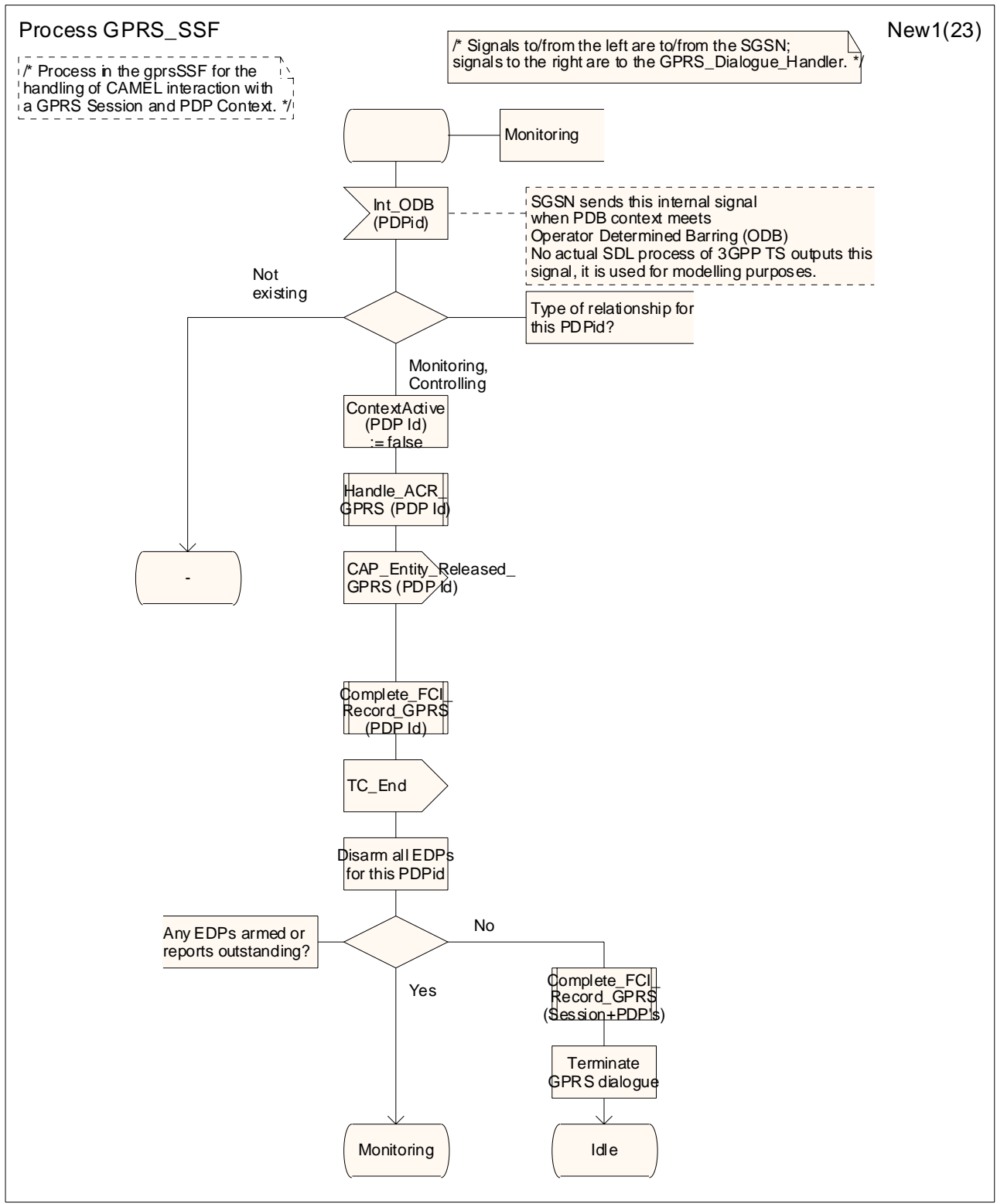


Figure 6.17-x: Process GPRS_SSF (sheet x)

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.

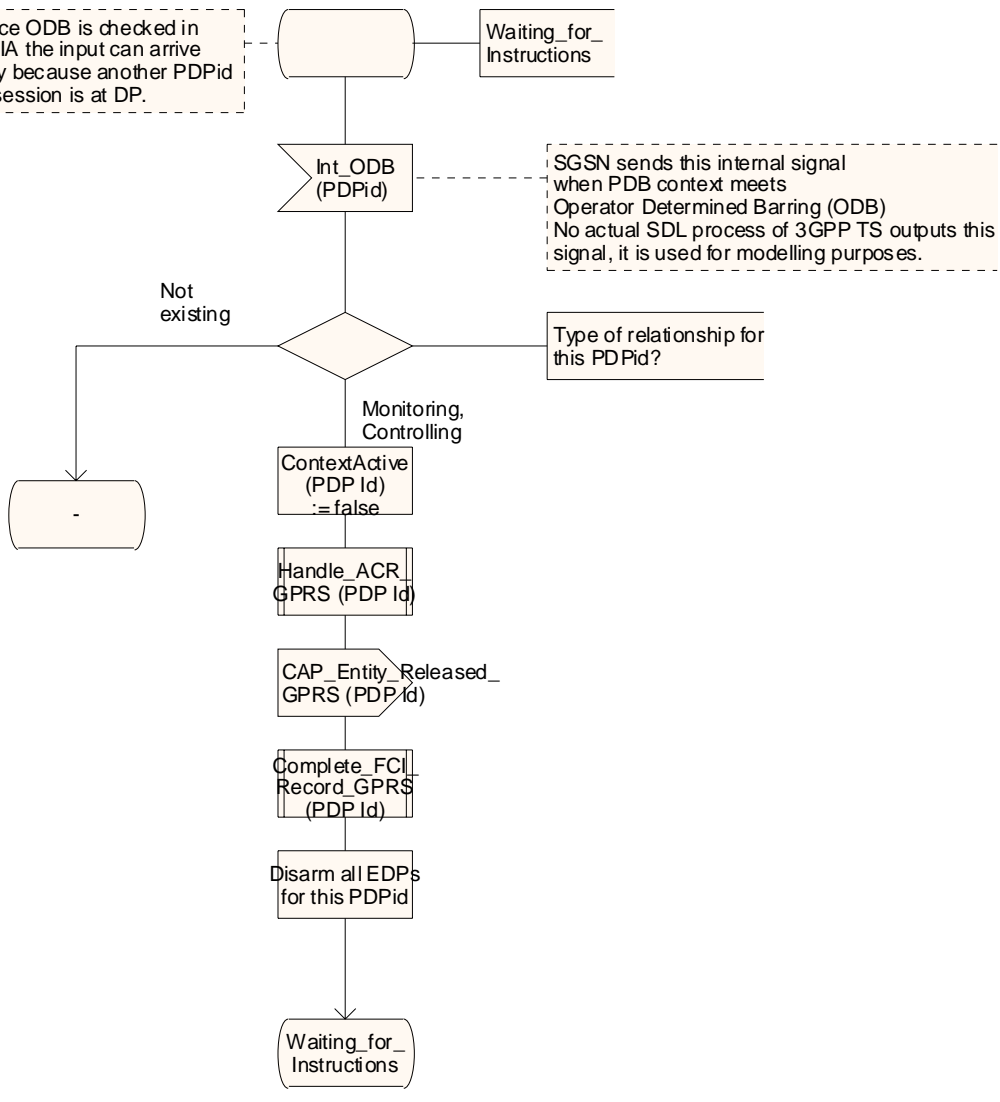


Figure 6.17-y: Process GPRS_SSF (sheet y)