

**3GPP TSG CN Plenary Meeting #14
Japan, Kyoto, 12th – 14th December 2001**

Tdoc NP-010581

Source: TSG CN WG2
Title: CRs on R97 Work Item CAMEL2, Pack 2
Agenda item: 7.1
Document for: APPROVAL

Introduction:

This document contains 4 CRs on R97 Work Item CAMEL2 (2 CRs for R97 and the 2 mirror CRs for R98) that have been agreed by TSG CN WG2, and are forwarded to TSG CN Plenary meeting #14 for approval.

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
03.78	A166		N2-010748	R97	Correction to implementation of CR 03.78-A141r1	F	6.9.1
03.78	A168		N2-010797	R98	Correction to implementation of CR 03.78-A141r1	A	7.6.1
03.78	A167	1	N2-010799	R97	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	F	6.9.1
03.78	A169		N2-010800	R98	Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service	A	7.6.1

***** First Change *****

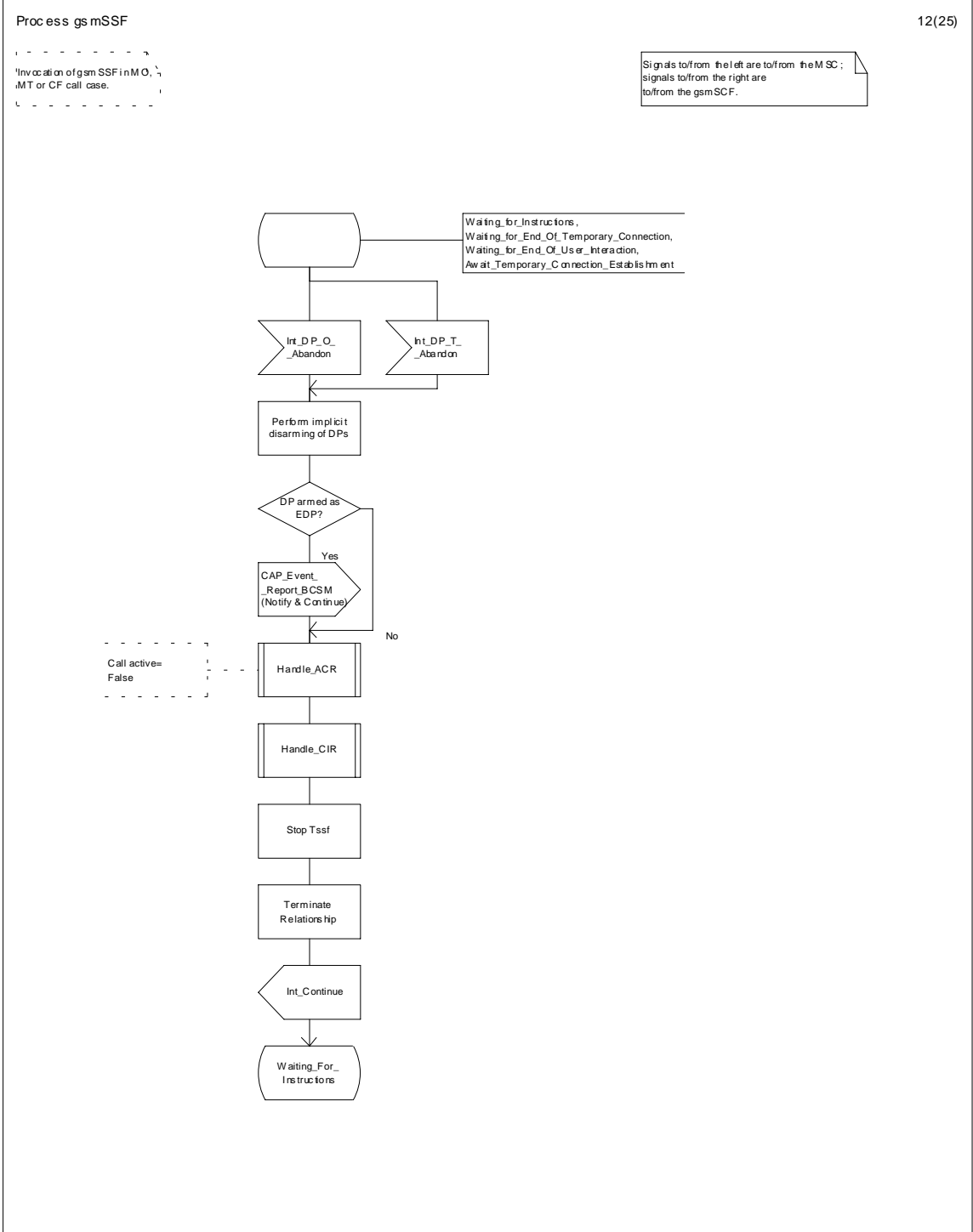


Figure 45k: Process gs mSSF (sheet 12)

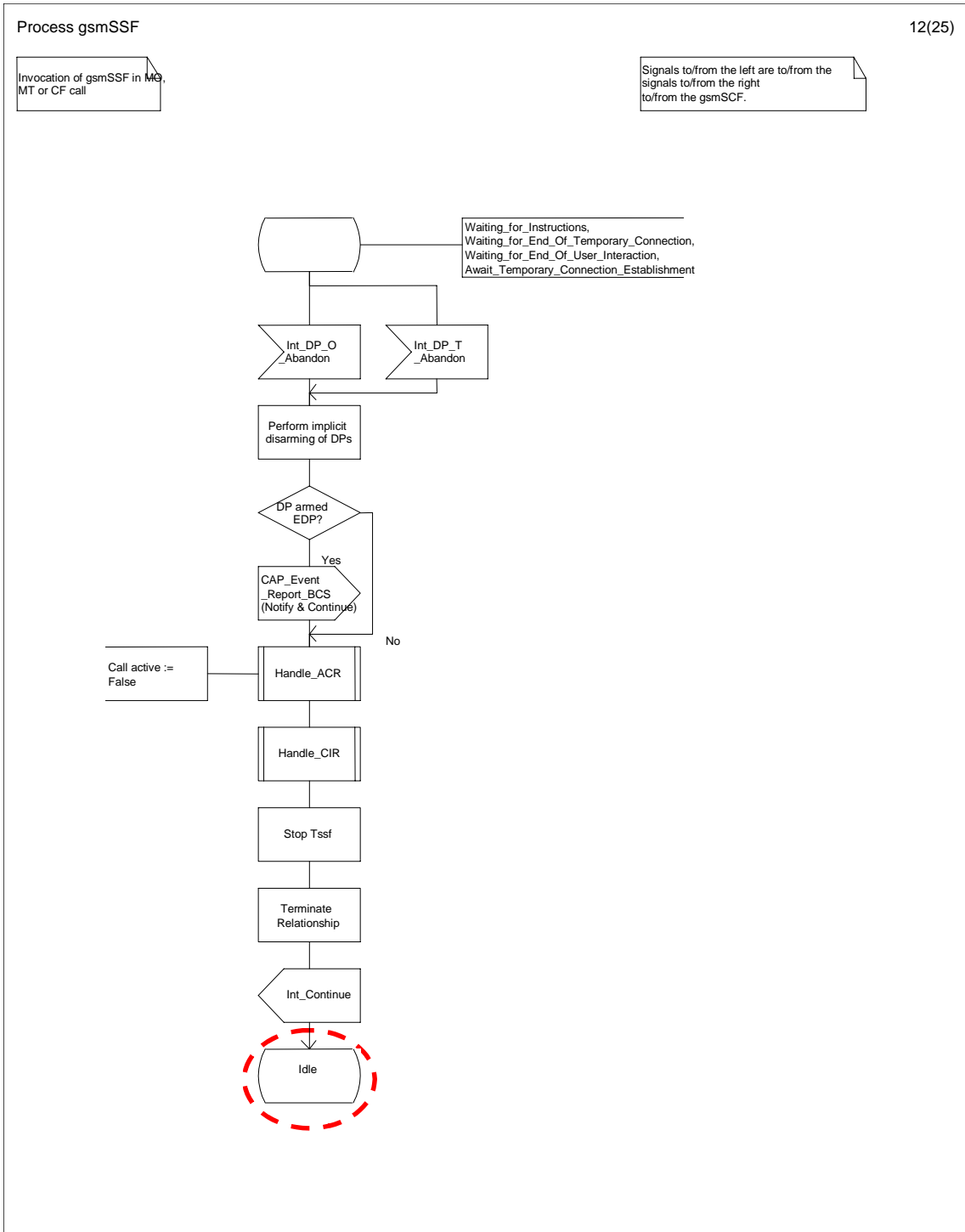


Figure 45k: Process gsmSSF (sheet 12)

*** End of Document ***

CHANGE REQUEST

⌘ **03.78** **CR** **A168** ⌘ rev ⌘ Current version: 7.6.1 ⌘

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Correction to implementation of CR 03.78-A141r1		
Source:	⌘ Ericsson		
Work item code:	⌘ CAMEL Phase 2	Date:	⌘ 14 October 2001
Category:	⌘ A	Release:	⌘ R98
	<i>Use one of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)		<i>Use one of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change: ⌘ CR 03.78-A141r1, contained in N2-99C59, was presented at 3GPP TSG-N2 #07 in Abiko, Japan and has been approved by SMG#30. That CR has, however, not been implemented correctly in the specification.

The non-inclusion of this approved CR in GSM TS 03.78 has lead to confusion and may continue to do so, if not corrected.

It is important that GSM TS 03.78 properly reflect the above mentioned agreed CR (CR 03.78-A141r1).

The present CR proposes to include the said approved CR in GSM TS 03.78.

Summary of change: ⌘ Correction to figure 45k: Process gsmSSF (sheet 12)

Consequences if not approved: ⌘ If the present CR is not approved, then there may be frequent CAP dialogue termination errors between the gsmSSF and gsmSCF. This may lead to communication errors for e.g. CAMEL based pre-paid systems or "hanging" gsmSSFs.

Clauses affected: ⌘ Section 8.6, "Handling of mobile calls in the gsmSSF" (process "gsmSSF"), sheet 12.

Other specs Affected: ⌘ Other core specifications ⌘
 Test specifications
 O&M Specifications

Other comments: ⌘

***** First Change *****

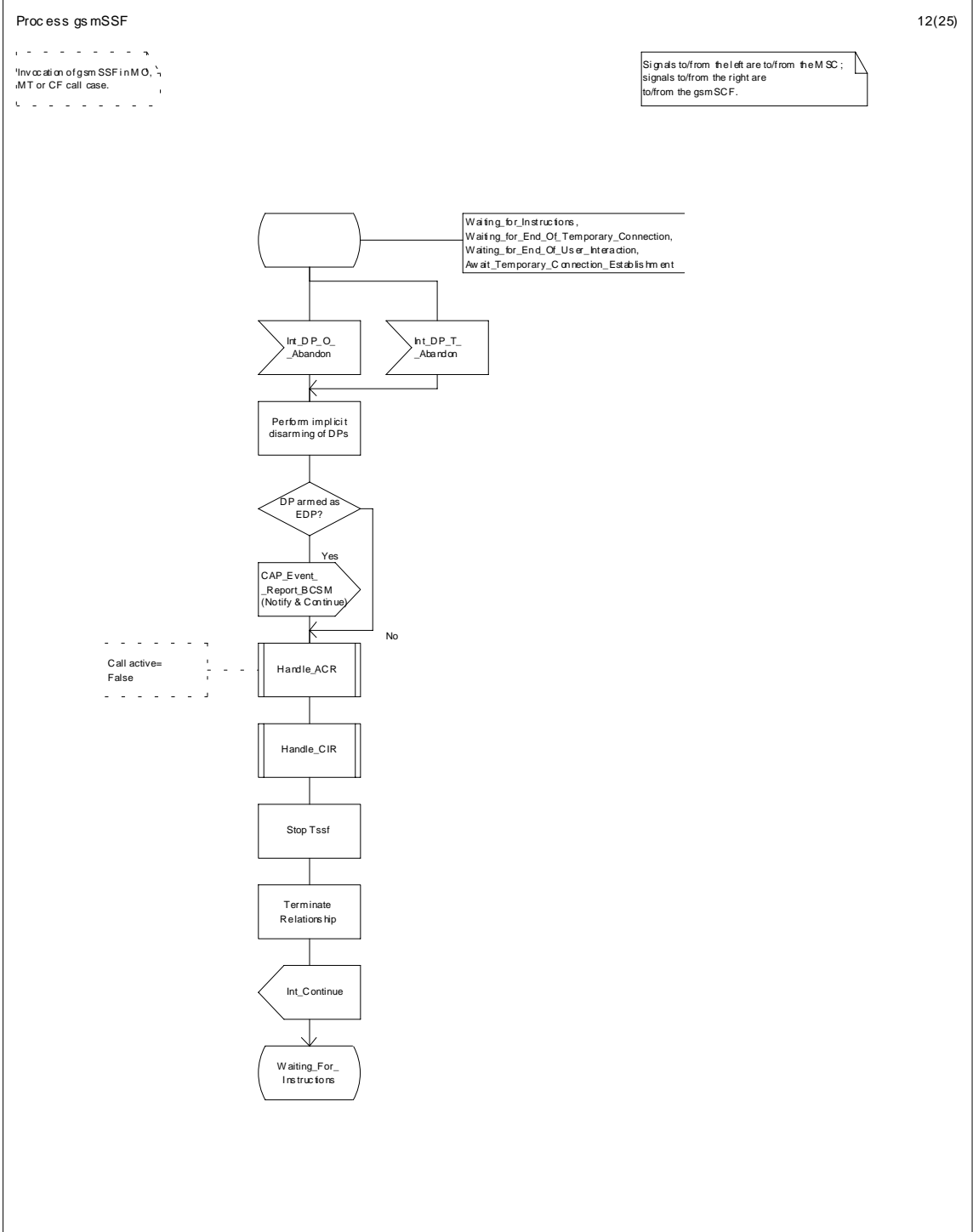


Figure 45k: Process gs mSSF (sheet 12)

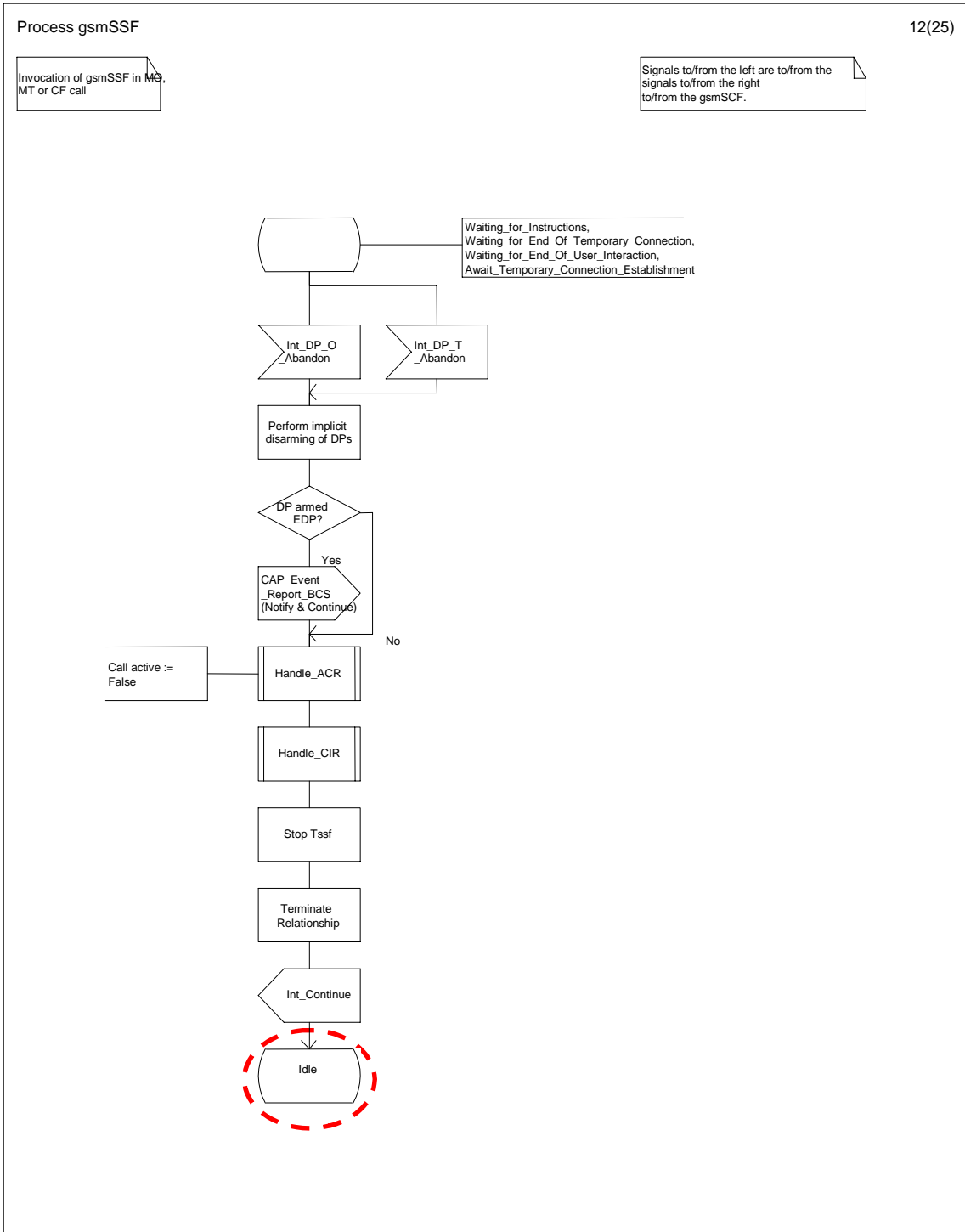


Figure 45k: Process gsmSSF (sheet 12)

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

CR-Form-v4

CHANGE REQUEST

⌘ **03.78 CR A167** ⌘ rev **1** ⌘ Current version: **6.9.1** ⌘

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

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title: ⌘ Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service.

Source: ⌘ Siemens AG

Work item code: ⌘ CAMEL2

Date: ⌘ 15 October 2001

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

Release: ⌘ R97

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)

Detailed explanations of the above categories can be found in 3GPP [TR 21.900](#).

REL-4 (Release 4)

REL-5 (Release 5)

Reason for change: ⌘ The description for the Send Charging Information does not provide the description for the further processing if the subscriber is not provisioned with the AoC service or the network does not support this service. The situation could lead various implementation understandings, e.g. processing is silently discarded, continue processing until e-parameter is sent to the MS, or send indication to the gsmSCF. This variation due to the absence of the clear guidance could cause critical misinterpretation in the multi-vendor environment.

Summary of change: ⌘ In CAMEL2 R97/R98, a health warning is added to indicate there would be various interpretation.

Consequences if not approved: ⌘ Risk for unexpected interoperability problem.

Clauses affected: ⌘ 9

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

Other comments: ⌘

9.2.14 Send Charging Information

9.2.14.1 Description

This IF is used to send e-parameters from the gsmSCF to the gsmSSF. If charge advice information is received from the gsmSCF, it shall replace the charge advice information which would be generated by the MSC and inhibit any further generation of CAI by the MSC. Further processing of the charge advice information by the MSC shall be in accordance with the GSM Advice of Charge Supplementary Service.

NOTE 1: If charge advice information is received from the gsmSCF after charge information has been generated by the MSC and sent to the MS, the behaviour of the service may be unpredictable or incorrect ; the service designer should therefore ensure that the first set of charge advice information is sent to the gsmSSF before charge information is sent to the to the MS.

NOTE 2: There are various interpretations of how the gsmSSF should behave if the subscriber is not provisioned with the GSM Advice of Charge supplementary service or if the VPLMN does not support this service.

9.2.14.2 Information Elements

The following information elements are only used for the MO case :

Information element name	MO	Description
SCI Billing Charging Characteristics	M	This IE defines the Advice Of Charge related information to be provided to the Mobile Station
Leg ID	M	This IE indicates where the charging information shall be sent.

M Mandatory (The IE shall always be sent)

SCI Billing Charging Characteristics is defined as:

Information element name	MO	Description
AOC After Answer	C	This IE is sent after an Answer from event has been detected from the called party, the current connected SRF or the temporary connection.
AOC Before Answer	C	This IE is sent before an Answer event has been detected from the called party, the current connected SRF or the temporary connection.

C Conditional (only one of these IEs may be sent)

AOC Before Answer is defined as:

Information element name	MO	Description
AOC Initial	M	This IE contains CAI elements as defined in 3GPP TS 02.24 [14].
AOC Subsequent	O	See definition in the next table.

M Mandatory (The IE shall always be sent)

O Optional (Service logic dependent)

AOCSubsequent is defined as:

Information element name	MO	Description
CAI Elements	M	This IE contains CAI elements as defined in 3GPP TS 02.24 [14].
Tariff Switch Interval	O	This IE indicates the tariff switch time until the next tariff switch applies.

M Mandatory (The IE shall always be sent)

O Optional (Service logic dependent)

AOCAfterAnswer is defined as:

Information element name	MO	Description
CAI Elements	M	This IE contains CAI elements as defined in 3GPP TS 02.24 [14].
Tariff Switch Interval	O	This IE indicates the tariff switch time until the next tariff switch applies.

M Mandatory (The IE shall always be sent)

CR-Form-v4

CHANGE REQUEST

⌘ **03.78 CR A169** ⌘ rev **-** ⌘ Current version: **7.6.1** ⌘

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

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title: ⌘ Guidance to the SCI operation if the subscriber or the VPLMN do not support AoC service.

Source: ⌘ Siemens AG

Work item code: ⌘ CAMEL2 **Date:** ⌘ 16 October 2001

<p>Category: ⌘ A</p> <p>Use <u>one</u> of the following categories:</p> <ul style="list-style-type: none"> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	<p>Release: ⌘ R98</p> <p>Use <u>one</u> of the following releases:</p> <ul style="list-style-type: none"> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)
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Reason for change: ⌘ The description for the Send Charging Information does not provide the description for the further processing if the subscriber is not provisioned with the AoC service or the network does not support this service. The situation could lead various implementation understandings, e.g. processing is silently discarded, continue processing until e-parameter is sent to the MS, or send indication to the gsmSCF. This variation due to the absence of the clear guidance could cause critical misinterpretation in the multi-vendor environment.

Summary of change: ⌘ In CAMEL2 R97/R98, a health warning is added to indicate there would be various interpretation.

Consequences if not approved: ⌘ Risk for unexpected interoperability problem.

Clauses affected: ⌘ 9

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

Other comments: ⌘

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Information element name	MO	Description
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AOC Before Answer	C	This IE is sent before an Answer event has been detected from the called party, the current connected SRF or the temporary connection.

C Conditional (only one of these IEs may be sent)

AOC Before Answer is defined as:

Information element name	MO	Description
AOC Initial	M	This IE contains CAI elements as defined in 3GPP TS 02.24 [14].
AOC Subsequent	O	See definition in the next table.

M Mandatory (The IE shall always be sent)

O Optional (Service logic dependent)

AOCSubsequent is defined as:

Information element name	MO	Description
CAI Elements	M	This IE contains CAI elements as defined in 3GPP TS 02.24 [14].
Tariff Switch Interval	O	This IE indicates the tariff switch time until the next tariff switch applies.

M Mandatory (The IE shall always be sent)

O Optional (Service logic dependent)

AOCAfterAnswer is defined as:

Information element name	MO	Description
CAI Elements	M	This IE contains CAI elements as defined in 3GPP TS 02.24 [14].
Tariff Switch Interval	O	This IE indicates the tariff switch time until the next tariff switch applies.

M Mandatory (The IE shall always be sent)