3GPP TSG CN Plenary Meeting #23 **NP-040056**
10th – 12th March 2004 Phoenix, USA.

Source: TSG CN WG4

Title: Corrections on Support of Presence Capability

Agenda item: 9.2

Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.002	701	3	N4-040249	Rel-6	Introduction of Presence Stage 3 (Ph, Pc and Pg) to the MAP interface	B	6.4.0
23.003	087		N4-040250	Rel-6	Assignment of SSN for Presence Network Agent	B	6.1.0

3GPP TSG CN WG4 Meeting #22 ***N4-040249***
Atlanta, USA, 16th – 20 th February 2004 **(Revision of N4-040088)**

CR-Form-v7

CHANGE REQUEST

⌘ **29.002** **CR** **701** ⌘**rev** **3** ⌘ Current version: **6.4.0** ⌘

*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 **X**

Title:	⌘	Introduction of Presence Stage 3 (Ph, Pc and Pg) to the MAP interface
Source:	⌘	CN4
Work item code:	⌘	PRESNC
Date:	⌘	16/02/2004
Category:	⌘	**B**
Release:	⌘	Rel-6

Use one 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 one 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:	⌘	The Presence architecture document (Stage 2) in TS 23.141 defines a Ph, Pc and Pg reference point between the Presence Network Agent and the: HSS/HLR, the MSC/VLR and the SGSN respectively. This Presence Network Agent queries the HSS/HLR, MSC/VLR and/or the SGSN to gain information about the user (associated with a presentity). The Ph, Pc and Pg interfaces re-use some of the mechanisms defined for the MAP interface in order to do this.This CR introduces a linkage of the Presence capability (Ph, Pc and Pg) into the Stage 3 for the MAP Interface.
Summary of change:	⌘	A reference is added to the Presence stage 2, 3GPP TS 23.141: "Presence Service; Architecture and Functional Description. A paragraph is added to 6.1.2 to say the Presence Network Agent emulates the behaviour of the gsmSCF when present in the network. Paragraphs are added to the definition sections of Note-MM, ATI and ATM to say these MAP services can be used for Presence.
Consequences if not approved:	⌘	There is no link in the Stage 3 for MAP between the Presence Stage 2 architecture and the Stage 3 interface that the stage 2 requires to be assigned.

Clauses affected:	⌘	2, 6.1.2, 8.1.8, 8.11.1 and 8.11.4.

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

Other comments:	⌘	

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:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

First modified section

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2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document.*

[1] 3GPP TS 21.905: "3G Vocabulary".

[2] 3GPP TS 22.001: "Digital cellular telecommunications system (Phase 2+); Principles of telecommunication services supported by a Public Land Mobile Network (PLMN)".

[3] 3GPP TS 22.002: "Bearer Services Supported by a Public Land Mobile Network (PLMN)".

[4] 3GPP TS 22.003: "Circuit Teleservices Supported by a Public Land Mobile Network (PLMN)".

[5] 3GPP TS 22.004: "General on Supplementary Services".

[6] 3GPP TS 42.009: "Digital cellular telecommunications system (Phase 2+); Security aspects".

[7] 3GPP TS 22.016: "International Mobile station Equipment Identities (IMEI)".

[8] 3GPP TS 22.041: "Operator Determined Barring".

[9] 3GPP TS 22.081: "Line identification supplementary services - Stage 1".

[10] 3GPP TS 22.082: "Call Forwarding (CF) supplementary services - Stage 1".

Text Removed for clarity

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[123] 3GPP TS 22.071: " Location Services (LCS); Service description, Stage 1"

[124] ITU-T Recommendation X.880: "Data networks and open system communication - Open System Interconnection - Service definitions - Remote operations: Concepts, model and notation".

[125] 3GPP TS 23.278: “Customised Applications for Mobile Network Enhanced Logic (CAMEL) Phase 4 – Stage 2 IM CN Interworking (Rel-5)”

[126] 3GPP TS 23.172: "Technical realization of Circuit Switched (CS) multimedia service; UDI/RDI fallback and service modification"

[XX] 3GPP TS 23.141: "Presence Service; Architecture and Functional Description"

Next Modified Section

6.1.2 Sub-System Number (SSN)

The Application Entities (AEs) defined for MAP consist of several Application Service Elements (ASEs) and are addressed by sub-system numbers (SSNs). The SSNs for MAP are specified in 3GPP TS 23.003 [17].

When the SGSN emulates MSC behaviour for processing messages (MAP-MO-FORWARD-SHORT-MESSAGE, MAP_CHECK_IMEI, MAP_SUBSCRIBER_LOCATION_REPORT) towards entities which do not support interworking to SGSNs, it shall use the MSC SSN in the calling party address instead of the SGSN SSN.

When present in the network, the Presence Network Agent emulates the behaviour of the GSM Service Control Function (gsm SCF) for processing of messages (MAP-NOTE-MM-EVENT, MAP-ANY-TIME-INTERROGATION and MAP-ANY-TIME-MODIFICATION).

Next Modified Section

8.1.8 MAP-NOTE-MM-EVENT

8.1.8.1 Definition

This service is used between the VLR and the gsmSCF or between the SGSN and the gsmSCF when a mobility management event for a subscriber has been processed successfully, that subscriber is provisioned with M-CSI or MG-CSI and the relevant mobility management event is marked for reporting.

This service is also used between the VLR and the Presence Network Agent or between the SGSN and the Presence Network Agent to notify the Presence Network Agent when a mobility management event for a subscriber has been processed successfully, that subscriber is provisioned with M-CSI or MG-CSI and the relevant mobility management event is marked for reporting (see 3GPP TS 23.141 [XX]).

Next Modified Section

8.11.1 MAP-ANY-TIME-INTERROGATION service

8.11.1.1 Definition

This service is used by the gsmSCF, to request information (e.g. subscriber state and location) from the HLR or the GMLC at any time. This service may also be used by the gsmSCF to request the Mobile Number Portability (MNP) information from the NPLR..

This service is also used by the Presence Network Agent to request information, (e.g. subscriber state and location) about the subscriber (associated with a presentity) from the HLR at any time (see 3GPP TS 23.141 [XX]).

When this service is used to the HLR, the subscriber state or location may be requested.

When this service is used to the GMLC, only the location may be requested.

When this service is used to the NPLR, only the MNP information may be requested.

The MAP-ANY-TIME-INTERROGATION service is a confirmed service using the service primitives defined in table 8.11/1.

Last Modified Section

8.11.4 MAP-ANY-TIME-MODIFICATION service

8.11.4.1 Definition

This service is used by the gsmSCF, to modify information of the HLR at any time.

This service is also used by the Presence Network Agent to activate or deactivate reporting of mobility management events (associated with a presentity) from the VLR or SGSN (see 3GPP TS 23.141 [XX]).

3GPP TSG CN WG4 Meeting #22 **N4-040250**
Atlanta, USA, 16th – 20st February 2003

CR-Form-v7

CHANGE REQUEST

⌘ **23.003** **CR** **087** ⌘**rev** **-** ⌘ Current version: **6.1.0** ⌘

*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:	⌘	Assignment of SSN for Presence Network Agent
Source:	⌘	CN4
Work item code:	⌘	PRESNC
Date:	⌘	16/02/2004
Category:	⌘	**B**
Release:	⌘	Rel-6

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Reason for change:	⌘	The Presence architecture document (Stage 2) in TS 23.141 defines a Ph, Pc and Pg reference point between the Presence Network Agent and the: HSS/HLR, the MSC/VLR and the SGSN respectively. This Presence Network Agent queries the HSS/HLR, MSC/VLR and/or the SGSN to gain information about the user (associated with a presentity). With the introduction of the Presence Network Agent, it needs to be clarified in 23.003 that the same Sub System Number is used for both the PNA and the gsmSCF.
Summary of change:	⌘	It is clarified that the same SSN is used for the PNA, gsmSCF and IM-SSF.
Consequences if not approved:	⌘	PNA and gsmSCF SSNs use is unclear.

Clauses affected:	⌘	8.2

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

⌘

Other comments:	⌘	

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8.2 National network subsystem numbers used for GSM/UMTS

The following national network subsystem numbers have been allocated for use within GSM/UMTS networks:

1111 1001PCAP;

1111 1010BSC (BSSAP-LE);

1111 1011MSC (BSSAP-LE);

1111 1100SMLC (BSSAP-LE);

1111 1101BSS O&M (A interface);

1111 1110BSSAP (A interface).

The following national network subsystem numbers have been allocated for use within and between GSM/UMTS networks:

1000 1110RANAP;

1000 1111RNSAP;

1001 0001GMLC (MAP);

1001 0010CAP;

1001 0011gsmSCF (MAP) or IM-SSF (MAP) or Presence Network Agent;

1001 0100SIWF (MAP);

1001 0101SGSN (MAP);

1001 0110GGSN (MAP).