

Source: SA5 (Telecom Management)
Title: 2 Rel-5 CR 32.205/215 Include UTRAN positioning data parameter ñ
Align with 29.002 CR 710
Document for: Approval
Agenda Item: 7.5.3

Doc-1 st - Level	Doc-2 nd - Level	Spec	CR	Rev	Phase	Subject	Cat	Ver- Cur	Wi
SP-040548	S5-044516	32.205	027	--	Rel-5	Inclusion of UTRAN positioning data parameter ñ Align with 29.002 CR 710	F	5.7.0	OAM- CH
SP-040548	S5-044517	32.215	036	--	Rel-5	Inclusion of UTRAN positioning data parameter ñ Align with 29.002 CR 710	F	5.6.0	OAM- CH

CHANGE REQUEST

⌘ **32.205 CR 027** ⌘ rev - ⌘ Current version: **5.7.0** ⌘

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:	⌘ Inclusion of UTRAN positioning data parameter ñ Align with 29.002 CR 710		
Source:	⌘ SA5 (gerald.goermer@siemens.com)		
Work item code:	⌘ OAM-CH	Date:	⌘ 02/07/2004
Category:	⌘ F	Release:	⌘ Rel-5
	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:	⌘ This CR aligns TS 32.205 (CS Charging) with the changes to MAP according to TS 29.002 CR 710.		
Summary of change:	⌘ <ol style="list-style-type: none">1. The positioning information in the LCS CDRs is enhanced with a choice for GERAN and UTRAN specific value sets.2. Adaptation of the isystem typei parameter to support the enhanced functionality.		
Consequences if not approved:	⌘ Billing errors due to wrong interpretation of positioning results. No possibility to charge correctly for UTRAN LCS invocations.		

Clauses affected:	⌘ 2, 5.64, 5.65, 5.82, 6										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr><td>Y</td><td>N</td></tr> <tr><td></td><td>X</td></tr> <tr><td></td><td>X</td></tr> <tr><td>X</td><td></td></tr> </table> Other core specifications Test specifications O&M Specifications	Y	N		X		X	X		⌘	Rel-5 32.215
Y	N										
	X										
	X										
X											
Other comments:	⌘ Corresponds to correction in NP-040050 (CR 29.002 - 710) Corresponding correction Rel-5 32.215 in S5-044517										

How to create CRs using this form:

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 TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 23.003: "Numbering, addressing and identification".
- [3] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS)".
- [4] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core Network Protocols; Stage 3".
- [5] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".
- [6] ITU-T Recommendation X.121: "International numbering plan for public data networks".
- [7] ISO 8824-1 (1994)/ITU-T Recommendation X.680 (1994): "Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- [8] ITU-T Recommendation X.208: "Specification of Abstract Syntax Notation One (ASN.1)"
- [9] ITU-T Recommendation X.209: "Specification of basic encoding rules for Abstract Syntax Notation One (ASN.1)"
- [10] 3GPP TS 22.024: "Description of Charge Advice Information (CAI)".
- [11] 3GPP TS 22.086: "Advice of Charge (AoC) supplementary services - Stage 1".
- [12] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".
- [13] 3GPP TS 29.078: "Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification".
- [14] ITU-T Recommendation Q.767: "Application of the ISDN user part of CCITT signalling System No.7 for international ISDN interconnections".
- [15] [3GPP TS 25.413: "UTRAN Iu Interface RANAP Signalling"](#).~~Void.~~
- [16] Void.
- [17] 3GPP TS 23.002: "Network Architecture".
- [18] 3GPP TS 22.115: "Service aspects; Charging and billing".
- [19] 3GPP TS 22.004: "General on Supplementary Services".
- [20] 3GPP TS 22.003: "Circuit Teleservices Supported by a Public Land Mobile Network (PLMN)".
- [21] 3GPP TS 22.002: "Circuit Bearer Services (BS) supported by a Public Land Mobile Network (PLMN)".
- [22] 3GPP TS 32.200: "Telecommunication management; Charging management; Charging principles".

- [23] 3GPP TS 32.215: "Telecommunication management; Charging management; Charging data description for the Packet Switched (PS) domain".
- [24] 3GPP TS 32.235: "Telecommunication management; Charging management; Charging data description for application services".
- [25] GSM 12.01: "Network Management (NM); Part 2: Common aspects of GSM/DCS 1800 network management". - This reference does NOT exist in Rel-5, hence needs to be replaced or removed.
- [26] IETF RFC 959 (1985): "File Transfer Protocol"; J. Postel, J. Reynolds, ISI.
- [27] IETF RFC 783 (1981): "TFTP Protocol (revision 2)"; K.R. Sollins MIT.[28] GSM 05.01: "Physical layer on the radio path; General description".
- [29] GSM 08.08: "Mobile-services Switching Centre - Base Station System (MSC - BSS) interface; Layer 3 specification". - This reference does NOT exist in Rel-5, hence needs to be replaced e.g. by 48.008 or removed.
- [30] ITU-T Recommendation X.25: "Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit".
- [31] 3GPP TS 49.031: "Location Services (LCS); Base Station System Application Part LCS Extension (BSSAP-LE)".
- [32] 3GPP TS 24.080: "Mobile radio Layer 3 supplementary service specification; Formats and coding".
- [33] 3GPP TS 27.001: "General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS)".
- [34] 3GPP TS 29.007: "General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN)".
- [35] ITU-T Recommendation Q.931: "DSS 1 - ISDN user network interface layer 3 specification for basic call control". (this must be the same version as the one referenced by TS 29.007 [34])

End of Change in Clause 2

Change in Clause 5.64

5.64 Positioning Data

This information element is providing positioning data

- [for GERAN](#) associated with a successful or unsuccessful location attempt for a target MS according to TS 49.031 [31];
- [for UTRAN associated with a successful location attempt for a target UE according to 3GPP TS 25.413 \[15\].](#)

[The `system type` parameter included in the LCS CDRs indicates whether GERAN or UTRAN applies.](#)

End of Change in Clause 5.64

Change in Clause 5.65

5.65 ~~Positioning Data~~Void

~~This information element is providing positioning data associated with a successful or unsuccessful location attempt for a target MS according TS 49.031 [31].~~

End of Change in Clause 5.65

Change in Clause 5.82

5.82 System type

This field indicates the use of GERAN, UTRAN (or a value of unknown). This field is present when either the UTRAN or GERAN air-interface is used on call set-up. For an open CDR in a 2G NE (responsible for the CDR), the field is not present (even if the call is handed off to a 3G air interface). For a CDR in a 3G NE ([the anchor MSC is](#) responsible for the CDR), the value unknown shall be used after [inter MSC](#) handover.

End of Change in Clause 5.82

Change in Clause 6

Ö

```
PartialRecordType ::= ENUMERATED
{
    timeLimit           (0),
    serviceChange       (1),
    locationChange      (2),
    classmarkChange     (3),
    aocParmChange       (4),
    radioChannelChange  (5),
    hSCSDParmChange     (6),
    changeOfCAMELDestination (7)
}
```

```
PositioningData ::= OCTET STRING (SIZE(1..33))
--
-- the octet string contains either "geranPositioningData" or "utranPositioningData"
-- according to the value of the "systemType" included in the LCS CDR. "geranPositioningData"
-- and "utranPositioningData" are encoded as specified in TS 29.002 \[5\]
See Positioning Data IE (octet-3..n), 3GPP TS 49.031
--
```

```
RadioChannelsRequested ::= SET OF RadioChanRequested
```

Ö

End of Change in Clause 6
End of Document

Annex B (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
Mar 2001	S_11	SP-010025	--	--	Replaces Release 99 of 3GPP 32.005, which will be discontinued from Release 4 onwards.	-	1.0.0
Jun 2001	S_12	SP-010236	--	--	Re-submitted to SA#12 for Information	1.1.0	1.1.1
Sep 2001	S_13	SP-010464	--	--	Submitted to TSG SA #13 for Approval	2.0.0	4.0.0
Mar 2002	S_15	SP-020022	001	--	Addition of CAMEL phase 3 extensions in SMS-MO CDR	4.0.0	4.1.0
Mar 2002	S_15	SP-020035	002	--	Addition of Charging Data Record definition for Location Service in CS domain	4.1.0	5.0.0
Mar 2002	S_15	SP-020025	003	--	Addition of CAMEL phase 4 extensions in SMS-MT CDRs	4.1.0	5.0.0
Jun 2002	S_16	SP-020285	005	--	Corrections of parameter CallEventRecord	5.0.0	5.1.0
Dec 2002	S_18	SP-020734	007	--	Corrections on parameter Destination Number	5.1.0	5.2.0
Dec 2002	S_18	SP-020736	009	--	Corrections on LCS error cause definitions	5.1.0	5.2.0
Dec 2002	S_18	SP-020737	010	--	Charging for Mobile Number Portability (MNP) - Alignment with 23.066	5.1.0	5.2.0
Dec 2002	S_18	SP-020808	012	1	Corrections on MMS records ASN.1 definition and addition of the MMBBox CDR types	5.1.0	5.2.0
Mar 2003	S_19	SP-030054	014	--	CDR correction for data services over Iu-interface - alignment with SA1's 22.002	5.2.0	5.3.0
Mar 2003	S_19	SP-030056	015	--	Corrections to ASN.1 Syntax associated with Wireless Number Portability (WNP)	5.2.0	5.3.0
Jun 2003	S_20	SP-030269	016	--	Correction of record contents regarding Partial Record Type	5.3.0	5.4.0
Jun 2003	S_20	SP-030269	017	--	Correction on MMS records ASN.1 definition	5.3.0	5.4.0
Jun 2003	S_20	SP-030269	018	--	Correction on IMS record definitions	5.3.0	5.4.0
Dec 2003	S_22	SP-030765	022	1	Add inter-network accounting in the GMSC (only if CN#22 approved CN3 CR 29.007)	5.4.0	5.5.0
Dec 2003	S_22	SP-030620	023	--	Correction to Level of CAMEL Service	5.4.0	5.5.0
Mar 2004	S_23	SP-040139	025	--	Correction to ASN.1 Charging Data Record (CDR) - Alignment with R99 32.005	5.5.0	5.6.0
Jun 2004	S_24	SP-040275	026	--	Add Charging Data Description for CAMEL CPH - Align with CN2's 23.078	5.6.0	5.7.0

CHANGE REQUEST

⌘ **32.215 CR 036** ⌘ rev - ⌘ Current version: **5.6.0** ⌘

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

Title:	⌘ Inclusion of UTRAN positioning data parameter ñ Align with 29.002 CR 710		
Source:	⌘ SA5 (gerald.goermer@siemens.com)		
Work item code:	⌘ OAM-CH	Date:	⌘ 02/07/2004
Category:	⌘ F	Release:	⌘ Rel-5
	<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) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		<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) Rel-6 (Release 6)

Reason for change:	⌘ This CR aligns TS 32.215 (PS Charging) with the changes to MAP according to TS 29.002 CR 710.
Summary of change:	⌘ The positioning information in the LCS CDRs is enhanced with a choice for GERAN and UTRAN specific value sets.
Consequences if not approved:	⌘ Billing errors due to wrong interpretation of positioning results. No possibility to charge correctly for UTRAN LCS invocations.

Clauses affected:	⌘ 5.35										
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;"> </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;">X</td> <td style="text-align: center;"> </td> </tr> </table>	Y	N		X		X	X		Other core specifications Test specifications O&M Specifications	⌘ Rel-5 32.205
Y	N										
	X										
	X										
X											
Other comments:	⌘ Corresponds to correction in NP-040050 (CR 29.002 - 710) Corresponding correction Rel-5 32.205 in S5-044516										

How to create CRs using this form:

Change in Clause 5.35

5.35 Positioning Data

This information element is providing positioning data

- [for GERAN](#) associated with a successful or unsuccessful location attempt for a target MS according to 3GPP TS 49.031 [23];
- [for UTRAN associated with a successful location attempt for a target MS according 3GPP TS 25.413 \[11\]](#).

[The 'system type' parameter included in the LCS CDRs indicates whether GERAN or UTRAN applies.](#)

End of Change in Clause 5.35
End of Document

Annex B (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
May 2001	--	--	--	--	Transferred from 3GPP 32.015 v3.5.0.	--	1.0.0
Jun 2001	S_12	SP-010236	--	--	Submitted to TSG SA #12 for Information	1.0.0	1.0.1
Sep 2001	S_13	SP-010464	--	--	Submitted to TSG SA #13 for Approval	2.0.0	4.0.0
Dec 2001	S_14	SP-010633	001	--	Specification of the "Data Record Format" and "Data Record Format Version"	4.0.0	4.1.0
Dec 2001	S_14	SP-010633	002	--	Correction of ASN.1 data item QoSInformation	4.0.0	4.1.0
Dec 2001	S_14	SP-010634	003	--	Correction of ASN.1 statements for backwards compatibility reason	4.0.0	4.1.0
Mar 2002	S_15	SP-020022	004	--	Addition of CAMEL phase 3 extensions in SMS-MO CDR	4.1.0	4.2.0
Mar 2002	S_15	SP-020024	005	--	Addition of "QoSRequested" parameter into "traffic volume containers"	4.1.0	4.2.0
Mar 2002	S_15	SP-020025	006	--	Addition of CAMEL phase 4 extensions in SMS-MT CDRs	4.2.0	5.0.0
Jun 2002	S_16	SP-020289	007	--	Addition of real-time delivery of Charging Data Records (CDRs) to the Billing System	5.0.0	5.1.0
Jun 2002	S_16	SP-020289	008	--	Alignment of CDRs' IPv4 versus IPv6 address usage with architectural principles	5.0.0	5.1.0
Jun 2002	S_16	SP-020286	010	--	Correction of S-CDR triggers	5.0.0	5.1.0
Jun 2002	S_16	SP-020289	011	--	Addition of external charging identifier into G-CDR	5.0.0	5.1.0
Jun 2002	S_16	SP-020289	012	--	Addition of an "IMS signalling PDP context" flag into G-CDR	5.0.0	5.1.0
Jun 2002	S_16	SP-020288	014	--	Correcting definition of traffic data volume CDR field & Specify usage of the LRSN to avoid loss of billing data	5.0.0	5.1.0
Jun 2002	S_16	SP-020285	016	--	Alignment with 23.271 (LCS stage 2) of CDR definition for LCS in PS domain	5.0.0	5.1.0
Dec 2002	S_18	SP-020734	018	--	Corrections on parameter Destination Number	5.1.0	5.2.0
Dec 2002	S_18	SP-020736	021	--	Corrections on LCS error cause definitions	5.1.0	5.2.0
Dec 2002	S_18	SP-020738	022	--	IPv4-IPv6 co-existence in PS charging	5.1.0	5.2.0
Dec 2002	S_18	SP-020738	023	--	Correction of the list of parameters of the QoS profile (requested and negotiated)	5.1.0	5.2.0
Dec 2002	S_18	SP-020738	024	--	Extension of CDR encoding	5.1.0	5.2.0
Mar 2003	S_19	SP-030055	025	--	Addition of SGSN's Mobile Country Code (MCC) and Mobile Network Code (MNC) on G-CDR - alignment with CN4's 29.060	5.2.0	5.3.0
Jun 2003	S_20	SP-030270	026	--	Correction of "Cause Code"	5.3.0	5.4.0
Dec 2003	S_22	SP-030618	029	--	Correction of "Data Record Format Version"	5.4.0	5.5.0
Dec 2003	S_22	SP-030620	030	--	Correction to Level of CAMEL Service	5.4.0	5.5.0
Dec 2003	S_22	SP-030621	031	--	Correction on QoS Information (only if CN#22 approved CN4 CR 24.060)	5.4.0	5.5.0
Jun 2004	S_24	SP-040277	035	--	Correction to the selection and use of charging characteristics and profiles	5.5.0	5.6.0