

3GPP TSG CN Plenary Meeting #22
10th – 12th December 2003 Maui, USA.

NP-030579

Source: TSG CN WG4
Title: Corrections on Camel Phase 2
Agenda item: 7.2
Document for: APPROVAL

| Spec | CR | Rev | Doc-2nd-Level | Phase | Subject | Cat | Ver_C |
|-------------|-----------|------------|----------------------|--------------|---|------------|--------------|
| 03.18 | A070 | 2 | | R97 | MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter | F | 6.7.0 |
| 03.18 | A071 | 1 | | R98 | MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter | A | 7.4.0 |

CHANGE REQUEST

⌘ **03.18 CR A070** ⌘ rev **2** ⌘ Current version: **6.7.0** ⌘

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: | ⌘ MAP and CAP 3G SAI mapping to 2G CellIDorLAI Location Information parameter | | |
| Source: | ⌘ CN4 | | |
| Work item code: | ⌘ CAMEL2 | Date: | ⌘ 11.12.2003 |
| Category: | ⌘ F (Agreed by consensus) | Release: | ⌘ R97 |
| | Use <u>one</u> of the following categories: | | Use <u>one</u> 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) |
| | | | Rel-6 (Release 6) |

Reason for change: ⌘ If CAMEL1 or CAMEL2 is used in 3G environment then SAI may be mapped to CellIDorLAI CAP and MAP parameter, within LocationInformation main parameter. The same question keeps popping up, so it may be useful to document this possibility.
 It was also noticed that CAMEL and MAP have CellIDorLAI parameter, but 03.18 is talking about "CellID". This should be fixed as well.

29.002 ASN.1:

```

LocationInformation ::= SEQUENCE {
    ageOfLocationInformation      AgeOfLocationInformation      (
    geographicalInformation       [0] GeographicalInformation    (
    vlr-number                    [1] ISDN-AddressString        (
    locationNumber                [2] LocationNumber            (
    cellIdOrLAI                   [3] CellIdOrLAI              (
    extensionContainer            [4] ExtensionContainer          (
    ... }
    
```

-- For information, 03.78 IDP --

Location Information contains the following information:

| Information element name | MO | MF | MT | Description |
|-----------------------------|----------|----------|----------|-------------------------------|
| Location Number | - | - | C | See 3GPP TS 03.18 [3]. |
| CellIdOrLAI | M | - | C | See 3GPP TS 03.18 [3]. |
| Geographical Information | C | - | C | See 3GPP TS 03.18 [3]. |
| Age Of Location Information | M | - | C | See 3GPP TS 03.18 [3]. |

| | | | | | |
|--------------------------------------|---|---|---|---|------------------------|
| | VLR number | M | - | C | See 3GPP TS 03.18 [3]. |
| | M Mandatory (The IE shall always be sent) C Conditional (The IE shall be sent, if available) - Not applicable | | | | |
| Summary of change: | ⌘ | A note is added about 3G environment. | | | |
| Consequences if not approved: | ⌘ | Confusion continues how to use CAPv1 and CAPv2 and pre-R99 MAP in 3G. Inter-working problems if SAI is not packed to CellGlobalID because receiving entity regards valid cellID as a mandatory parameter. | | | |

| Clauses affected: | ⌘ | 8.3.5.1 | | | | | | | | | | | |
|------------------------------|---|---|---|---|--|---|--|---|--|---|--|---|--|
| Other specs affected: | ⌘ | <table border="1"> <thead> <tr> <th>Y</th> <th>N</th> </tr> </thead> <tbody> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </tbody> </table> | Y | N | | X | | X | | X | Other core specifications Test specifications O&M Specifications | ⌘ | |
| Y | N | | | | | | | | | | | | |
| | X | | | | | | | | | | | | |
| | X | | | | | | | | | | | | |
| | X | | | | | | | | | | | | |
| Other comments: | ⌘ | - CAMEL 03.78 refers to 03.18. No description of its own. - In R99 and onwards the SAI is mapped to the same parameter, and there is a separate indicator that it contains SAI. Also the parameter name is changed to indicate the possibility of SAI in R99. - R96 CAMEL1 spec is not changed. This R97&R98 CAMEL2 change should give enough guidance for CAMEL1 implementation. | | | | | | | | | | | |

-- First modified section --

8.3.5.1 Location information

The compound information element Location information consists of the following subordinate information elements:

| Information element name | Required | Description |
|--------------------------------|----------|---|
| Location number | C | For a definition of this information element, see ETS 300 356-1 [Error! Reference source not found.] . Shall be present if the VLR can derive it from the stored cell global identity or location area identity; otherwise shall be absent. The mapping from cell ID and location area to location number is network-specific and outside the scope of the GSM standard. |
| Cell ID or LAI | C | Cell global identity of the cell or Location Area identity in which the MS is currently in radio contact or in which the MS was last in radio contact. Shall be present if the subscriber record is marked as confirmed by radio contact; otherwise shall be absent. If CAMEL phase 1 or 2, or MAP pre-R99 is used in a 3G radio access of R99 or later network element then this IE may contain the 3G Service Area Identity (SAI). The encoding of SAI is identical to the Cell Global ID. |
| Geographical information | C | For a definition of this information element, see GSM 03.32 (Universal Geographical Area Description). Shall be present if the VLR can derive it from the stored cell global identity or location area identity; otherwise shall be absent. |
| VLR number | O | E.164 number which identifies the VLR (see GSM 03.03 [Error! Reference source not found.]). If the HLR receives it from the VLR it shall ignore it. |
| Age of location information | C | Measured in minutes. Shall be present if available in the MSC/VLR; otherwise shall be absent. |

CHANGE REQUEST

⌘ **03.18 CR A071** ⌘ rev **1** ⌘ Current version: **7.4.0** ⌘

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| | X | | | | | | | | | | | | |
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| | | Test specifications | | | | | | | | | | | |
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