**3GPP TSG CN Plenary**
**Meeting #10, Bangkok, Thailand**
**6th – 8th December 2000**

**Tdoc NP-000647**

**Source:** TSG_CN WG 4

**Title:** CRs to R99 Work Item USSD

**Agenda item:** 7.23

**Document for:** APPROVAL

---

**Introduction:**

This document contains 2 CRs on R99 Work Item USSD, that have been agreed by TSG_CN WG4, and is forwarded to TSG_CN Plenary meeting #10 for approval.

| SMG# | TDoc | SPEC | CR | RE | PHAS | VERS | SUBJECT | CAT |
|---|---|---|---|---|---|---|---|---|
| CN10 | N4-001068 | 29.002 | 192 | 2 | R99 | 3.6.0 | USSD corrections for Follow Me | F |
| CN10 | N4-001069 | 29.002 | 193 | 2 | Rel-4 | 4.1.0 | USSD corrections for Follow Me | A |

3GPP TSG-CN4
Paris, FRANCE
13th November – 17th November 2000

**Tdoc N4-001068**

# CHANGE REQUEST

| 29.002 | CR | 192r2 | Current Version: | 3.6.0 |
|---|---|---|---|---|

For submission to: CN#10 — for approval [X] — for information [ ] — strategic [ ] — non-strategic [ ]

*Form: CR cover sheet, version 2 for 3GPP and SMG* *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

**Proposed change affects:** (U)SIM [ ] ME [ ] UTRAN / Radio [ ] Core Network [X]
*(at least one should be marked with an X)*

**Source:** CN4 **Date:** 14th November 2000

**Subject:** USSD corrections for Follow Me

**Work item:** Follow Me

**Category:**

| | | | | | |
|---|---|---|---|---|---|
| F | Correction | [X] | **Release:** | Phase 2 | [ ] |
| A | Corresponds to a correction in an earlier release | [ ] | | Release 96 | [ ] |
| B | Addition of feature | [ ] | | Release 97 | [ ] |
| C | Functional modification of feature | [ ] | | Release 98 | [ ] |
| D | Editorial modification | [ ] | | Release 99 | [X] |
| | | | | Release 00 | [ ] |

**Reason for change:**
critical correction
to include the gsmSCF address as originating reference for network initiated USSD messages on the FFN-HLR interface in order to allow screening at the HLR (fraud prevention).
to allow the MSISDN (rather than IMSI) to be sent as destination reference for network/mobile initiated USSD messages on the FFN-HLR interface.

**Clauses affected:** 7.3.1

**Other specs affected:**

| | | | |
|---|---|---|---|
| Other 3G core specifications | [ ] | → List of CRs: | R00 |
| Other GSM core specifications | [ ] | → List of CRs: | |
| MS test specifications | [ ] | → List of CRs: | |
| BSS test specifications | [ ] | → List of CRs: | |
| O&M specifications | [ ] | → List of CRs: | |

**Other comments:**

## 7.3.1 MAP-OPEN service

This service is used for establishing a MAP dialogue between two MAP service-users. The service is a confirmed service with service primitives as shown in table 7.3/1.

**Table 7.3/1: Service-primitives for the MAP-OPEN service**

| Parameters | Request | Indication | Response | Confirm |
|---|---|---|---|---|
| Application context name | M | M(=) | U | C(=) |
| Destination address | M | M(=) | | |
| Destination reference | U | C(=) | | |
| Originating address | U | O | | |
| Originating reference | U | C(=) | | |
| Specific information | U | C(=) | U | C(=) |
| Responding address | | | U | C(=) |
| Result | | | M | M(=) |
| Refuse-reason | | | C | C(=) |
| Provider error | | | | O |

Application context name:
This parameter identifies the type of application context being established. If the dialogue is accepted the received application context name shall be echoed. In case of refusal of dialogue this parameter shall indicate the highest version supported.
Destination address:
A valid SCCP address identifying the destination peer entity (see also clause 6). As an implementation option, this parameter may also, in the indication, be implicitly associated with the service access point at which the primitive is issued.
Destination-reference:
This parameter is a reference which refines the identification of the called process. It may be identical to Destination address but its value is to be carried at MAP level. Table 7.3/2 describes the MAP services using this parameter. Only these services are allowed to use it.

**Table 7.3/2: Use of the destination reference**

| MAP service | Reference type | Use of the parameter |
|---|---|---|
| MAP-REGISTER-SS | IMSI | Subscriber identity |
| MAP-ERASE-SS | IMSI | Subscriber identity |
| MAP-ACTIVATE-SS | IMSI | Subscriber identity |
| MAP-DEACTIVATE-SS | IMSI | Subscriber identity |
| MAP-INTERROGATE-SS | IMSI | Subscriber identity |
| MAP-REGISTER-PASSWORD | IMSI | Subscriber identity |
| MAP-PROCESS-UNSTRUCTURED-SS-REQUEST | IMSI (note 1) | Subscriber identity |
| MAP-UNSTRUCTURED-SS-REQUEST | IMSI (note 2) | Subscriber identity |
| MAP-UNSTRUCTURED-SS-NOTIFY | IMSI (note 2) | Subscriber identity |
| MAP-FORWARD-SHORT-MESSAGE | IMSI (note 3) | Subscriber identity |
| MAP-REGISTER-CC-ENTRY | IMSI | Subscriber identity |
| MAP-ERASE-CC-ENTRY | IMSI | Subscriber identity |

NOTE 1: On the HLR - HLR interface and on the HLR - gsmSCF interface the Destination reference shall be either IMSI or MSISDN.

NOTE 2: On the gsmSCF - HLR interface and on the HLR - HLR interface the Destination reference shall be either IMSI or MSISDN.

NOTE 3: Only when the IMSI and the LMSI are received together from the HLR in the mobile terminated short message transfer.

Originating address:
A valid SCCP address identifying the requestor of a MAP dialogue (see also clause 6). As an implementation option, this parameter may also, in the request, be implicitly associated with the service access point at which the primitive is issued.
Originating-reference:
This parameter is a reference which refines the identification of the calling process. It may be identical to the Originating address but its value is to be carried at MAP level. Table 7.3/3 describes the MAP services using the parameter. Only these services are allowed to use it. Processing of the Originating-reference shall be performed according to the supplementary service descriptions and other service descriptions, e.g. operator determined barring. Furthermore the receiving entity may be able to use the value of the Originating-reference to screen the service indication.

**Table 7.3/3: Use of the originating reference**

| MAP service | Reference type | Use of the parameter |
|---|---|---|
| MAP-REGISTER-SS | ISDN-Address-String | Originated entity address |
| MAP-ERASE-SS | ISDN-Address-String | Originated entity address |
| MAP-ACTIVATE-SS | ISDN-Address-String | Originated entity address |
| MAP-DEACTIVATE-SS | ISDN-Address-String | Originated entity address |
| MAP-INTERROGATE-SS | ISDN-Address-String | Originated entity address |
| MAP-REGISTER-PASSWORD | ISDN-Address-String | Originated entity address |
| MAP-PROCESS-UNSTRUCTURED-SS-REQUEST | ISDN-Address-String | Originated entity address |
| MAP-UNSTRUCTURED-SS-REQUEST | ISDN-Address-String (note) | Originated entity address |
| MAP-UNSTRUCTURED-SS-NOTIFY | ISDN-Address-String (note) | Originated entity address |
| MAP-REGISTER-CC-ENTRY | ISDN-Address-String | Originated entity address |
| MAP-ERASE-CC-ENTRY | ISDN-Address-String | Originated entity address |

NOTE: The Originating reference may be omitted.

Specific information:
This parameter may be used for passing any user specific information. Establishment and processing of the Specific information is not specified by GSM and shall be performed according to operator specific requirements.
Responding address:
An address identifying the responding entity. The responding address is included if required by the context (e.g. if it is different from the destination address).
Result:
This parameter indicates whether the dialogue is accepted by the peer.
Refuse reason:
This parameter is only present if the Result parameter indicates that the dialogue is refused. It takes one of the following values:

- Application-context-not-supported;
- Invalid-destination-reference;
- Invalid-originating-reference;
- No-reason-given;
- Remote node not reachable;
- Potential version incompatibility.

3GPP TSG-CN4
Paris, FRANCE
13th November – 17th November 2000

**Tdoc N4-001069**

# CHANGE REQUEST

| 29.002 | CR | 193r2 | Current Version: | 4.1.0 |
|---|---|---|---|---|

For submission to: CN#10 | for approval [X] | for information [ ] | strategic [ ] | non-strategic [ ]

*Form: CR cover sheet, version 2 for 3GPP and SMG* *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

**Proposed change affects:** (U)SIM [ ] ME [ ] UTRAN / Radio [ ] Core Network [X]
*(at least one should be marked with an X)*

**Source:** CN4 **Date:** 12th September 2000

**Subject:** USSD Corrections for Follow Me

**Work item:** Follow Me

**Category:**

| | | |
|---|---|---|
| F | Correction | [ ] |
| A | Corresponds to a correction in an earlier release | [X] |
| B | Addition of feature | [ ] |
| C | Functional modification of feature | [ ] |
| D | Editorial modification | [ ] |

**Release:**

| | |
|---|---|
| Phase 2 | [ ] |
| Release 96 | [ ] |
| Release 97 | [ ] |
| Release 98 | [ ] |
| Release 99 | [ ] |
| Release 00 | [X] |

**Reason for change:** To include the gsmSCF address as originating reference for network initiated USSD messages on the FFN-HLR interface in order to allow screening at the HLR (fraud prevention).
to allow the MSISDN (rather than IMSI) to be sent as destination reference for network/mobile initiated USSD messages on the FFN-HLR interface.

**Clauses affected:** 7.3.1,

**Other specs affected:**

| | | |
|---|---|---|
| Other 3G core specifications | [ ] | → List of CRs: R99 |
| Other GSM core specifications | [ ] | → List of CRs: |
| MS test specifications | [ ] | → List of CRs: |
| BSS test specifications | [ ] | → List of CRs: |
| O&M specifications | [ ] | → List of CRs: |

**Other comments:**

### 7.3.1 MAP-OPEN service

This service is used for establishing a MAP dialogue between two MAP service-users. The service is a confirmed service with service primitives as shown in table 7.3/1.

**Table 7.3/1: Service-primitives for the MAP-OPEN service**

| Parameters | Request | Indication | Response | Confirm |
|---|---|---|---|---|
| Application context name | M | M(=) | U | C(=) |
| Destination address | M | M(=) | | |
| Destination reference | U | C(=) | | |
| Originating address | U | O | | |
| Originating reference | U | C(=) | | |
| Specific information | U | C(=) | U | C(=) |
| Responding address | | | U | C(=) |
| Result | | | M | M(=) |
| Refuse-reason | | | C | C(=) |
| Provider error | | | | O |

Application context name:
This parameter identifies the type of application context being established. If the dialogue is accepted the received application context name shall be echoed. In case of refusal of dialogue this parameter shall indicate the highest version supported.
Destination address:
A valid SCCP address identifying the destination peer entity (see also clause 6). As an implementation option, this parameter may also, in the indication, be implicitly associated with the service access point at which the primitive is issued.
Destination-reference:
This parameter is a reference that refines the identification of the called process. It may be identical to Destination address but its value is to be carried at MAP level. Table 7.3/2 describes the MAP services using this parameter. Only these services are allowed to use it.

**Table 7.3/2: Use of the destination reference**

| MAP service | Reference type | Use of the parameter |
|---|---|---|
| MAP-REGISTER-SS | IMSI | Subscriber identity |
| MAP-ERASE-SS | IMSI | Subscriber identity |
| MAP-ACTIVATE-SS | IMSI | Subscriber identity |
| MAP-DEACTIVATE-SS | IMSI | Subscriber identity |
| MAP-INTERROGATE-SS | IMSI | Subscriber identity |
| MAP-REGISTER-PASSWORD | IMSI | Subscriber identity |
| MAP-PROCESS-UNSTRUCTURED-SS-REQUEST | IMSI (note 1) | Subscriber identity |
| MAP-UNSTRUCTURED-SS-REQUEST | IMSI (note 2) | Subscriber identity |
| MAP-UNSTRUCTURED-SS-NOTIFY | IMSI (note 2) | Subscriber identity |
| MAP-FORWARD-SHORT-MESSAGE | IMSI (note 3) | Subscriber identity |
| MAP-REGISTER-CC-ENTRY | IMSI | Subscriber identity |
| MAP-ERASE-CC-ENTRY | IMSI | Subscriber identity |

NOTE 1: On the HLR - HLR interface and on the HLR - gsmSCF interface the Destination reference shall be either IMSI or MSISDN.

NOTE 2: On the gsmSCF - HLR interface and on the HLR - HLR interface the Destination reference shall be either IMSI or MSISDN.

NOTE 3: Only when the IMSI and the LMSI are received together from the HLR in the mobile terminated short message transfer.

Originating address:
A valid SCCP address identifying the requestor of a MAP dialogue (see also clause 6). As an implementation option, this parameter may also, in the request, be implicitly associated with the service access point at which the primitive is issued.
Originating-reference:
This parameter is a reference that refines the identification of the calling process. It may be identical to the Originating address but its value is to be carried at MAP level. Table 7.3/3 describes the MAP services using the parameter. Only these services are allowed to use it. Processing of the Originating-reference shall be performed according to the supplementary service descriptions and other service descriptions, e.g. operator determined barring. Furthermore the receiving entity may be able to use the value of the Originating-reference to screen the service indication.

**Table 7.3/3: Use of the originating reference**

| MAP service | Reference type | Use of the parameter |
|---|---|---|
| MAP-REGISTER-SS | ISDN-Address-String | Originated entity address |
| MAP-ERASE-SS | ISDN-Address-String | Originated entity address |
| MAP-ACTIVATE-SS | ISDN-Address-String | Originated entity address |
| MAP-DEACTIVATE-SS | ISDN-Address-String | Originated entity address |
| MAP-INTERROGATE-SS | ISDN-Address-String | Originated entity address |
| MAP-REGISTER-PASSWORD | ISDN-Address-String | Originated entity address |
| MAP-PROCESS-UNSTRUCTURED-SS-REQUEST | ISDN-Address-String | Originated entity address |
| MAP-UNSTRUCTURED-SS-REQUEST | ISDN-Address-String (note) | Originated entity address |
| MAP-UNSTRUCTURED-SS-NOTIFY | ISDN-Address-String (note) | Originated entity address |
| MAP-REGISTER-CC-ENTRY | ISDN-Address-String | Originated entity address |
| MAP-ERASE-CC-ENTRY | ISDN-Address-String | Originated entity address |

NOTE: The Originating reference may be omitted.

Specific information:
This parameter may be used for passing any user specific information. Establishment and processing of the Specific information is not specified by GSM and shall be performed according to operator specific requirements.
Responding address:
An address identifying the responding entity. The responding address is included if required by the context (e.g. if it is different from the destination address).
Result:
This parameter indicates whether the peer accepts the dialogue.
Refuse reason:
This parameter is only present if the Result parameter indicates that the dialogue is refused. It takes one of the following values:

- Application-context-not-supported;
- Invalid-destination-reference;
- Invalid-originating-reference;
- No-reason-given;
- Remote node not reachable;
- Potential version incompatibility;
- Secured transport not possible.