

**ETSI TC SMG#29**

**TSG S#4 (99) 233**

**Miami, Florida, USA 21<sup>st</sup> – 23<sup>rd</sup> June, 1999**

**Agenda Item:** 5.1

**Source:** S1

**Title:** CR on Security requirements for 3G Phase 1 R99

**Document for:** Approval

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| SA_Tdoc  | Doc | Spec_  | CR#  | R | Vers  | C | New   | Topic    | Title  |
|----------|-----|--------|------|---|-------|---|-------|----------|--|
| SP-99233 | 366 | 22.100 | A017 |   | 3.3.0 | C | 3.4.0 | Security | CR on security requirements for UMTS Phase 1 Release 99: To align the specification with the fact that S3 defines security requirements for UMTS Phase 1 Release 99. |

**TSG-SA Working Group 1 (Services) meeting #3**  
 Hampton Court, Surrey, UK 10<sup>th</sup>-12<sup>th</sup> May 1999  
**TSG\_SA\_WG1**  
**Edinburgh**  
**8-12 March 1999**

**TSGS1#3(99)366**  
 Agenda: 6.1.4  
**S1-99 148**  
 Agenda: 9.0.6

|  |    |                 |   |   |
|--|----|-----------------|---|---|
| <b>CHANGE REQUEST No :</b>   |    | <b>A017</b>     | <small>Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.</small> |   |
| Technical Specification GSM  |    | 22.100          | Version: 3.3.0  |   |
| Submitted to TSG SA  | #4 | for approval    | <input checked="" type="checkbox"/>   | without presentation ("non-strategic") <input type="checkbox"/>     |
| <small>list SMG plenary meeting no. here ↑</small>   |    | for information | <input type="checkbox"/>  | with presentation ("strategic") <input checked="" type="checkbox"/> |
| <small>PT SMG CR cover form is available from: <a href="http://docbox.etsi.org/tech-org/smg/Document/smg/tools/CR_form/crf28_1.zip">http://docbox.etsi.org/tech-org/smg/Document/smg/tools/CR_form/crf28_1.zip</a></small> |    |                 |   |   |

**Proposed change affects:** SIM  ME  Network   
(at least one should be marked with an X)

**Work item:** UMTS Release 99 Requirements

**Source:** Rapporteur of 22.100\_S1 **Date:** 12<sup>th</sup> March 1999

**Subject:** Rewriting of section 11 about security requirements.  
 Adding of reference to S3 specification 21.133 for security requirements for REL99.

|  |   |                                     |                 |            |                                     |
|--|---|-------------------------------------|-----------------|------------|-------------------------------------|
| <b>Category:</b><br><small>(one category and one release only shall be marked with an X)</small> | F Correction  | <input type="checkbox"/>            | <b>Release:</b> | Phase 2    | <input type="checkbox"/>            |
|  | A Corresponds to a correction in an earlier release | <input type="checkbox"/>            |                 | Release 96 | <input type="checkbox"/>            |
|  | B Addition of feature                               | <input type="checkbox"/>            |                 | Release 97 | <input type="checkbox"/>            |
|  | C Functional modification of feature                | <input checked="" type="checkbox"/> |                 | Release 98 | <input type="checkbox"/>            |
|  | D Editorial modification                            | <input type="checkbox"/>            |                 | Release 99 | <input checked="" type="checkbox"/> |

**Reason for change:** To align the specification with the fact that S3 defines security requirements for UMTS Phase 1 Release 99.

**Clauses affected:** section 11

|                              |                               |                          |                |  |
|------------------------------|-------------------------------|--------------------------|----------------|--|
| <b>Other specs affected:</b> | Other releases of same spec   | <input type="checkbox"/> | → List of CRs: |  |
|                              | Other core specifications     | <input type="checkbox"/> | → List of CRs: |  |
|                              | MS test specifications / TBRs | <input type="checkbox"/> | → List of CRs: |  |
|                              | BSS test specifications       | <input type="checkbox"/> | → List of CRs: |  |
|                              | O&M specifications            | <input type="checkbox"/> | → List of CRs: |  |

**Other comments:**



<----- double-click here for help and instructions on how to create a CR.

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# 1 Scope

The UMTS system will be defined in a phased approach. This document specifies the content of the first phase of requirements for UMTS. Some requirements affecting phase 1 to ensure a smooth transition to later releases are also indicated.

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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.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

### 2.1 Normative references

This document is the starting point of the set of specifications that define the UMTS Service Requirements for UMTS Phase 1. The UMTS Service requirements for UMTS phase 1 are defined in the following normative specifications.

- [1] UMTS 22.01: "Universal Mobile Telecommunications System (UMTS): Service aspects; Service principles".
- [2] UMTS 22.05: "Universal Mobile Telecommunications System (UMTS); Services and Service Capabilities".
- [3] UMTS 22.15: "Universal Mobile Telecommunications System (UMTS); Service Aspects: Charging and Billing".
- [4] UMTS 22.20: "Universal Mobile Telecommunications System (UMTS); VHE Stage 1".
- [5] [UMTS TS ??, Handover requirements between UMTS and GSM or other Radio System]".
- [6] UMTS 21.133 : "Universal Mobile Telecommunications System (UMTS) ; Security threats and requirements"

These specifications may refer (directly or indirectly) to further specifications which provide detailed descriptions of service requirements incorporated in UMTS. In particular the service requirements of any GSM component of a UMTS system are specified by reference to GSM service requirements specifications.

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# 11 Security Features

With respect to the GSM security mechanisms the following additional features may be implemented for UMTS phase 1 if required by SMG40+. Security requirements for UMTS Phase 1 Release 99 are defined in the UMTS 21.133 specification [6].

- 1) ~~Mutual authentication between user and serving network, between user and home environment and between serving network and home environment~~
- 2) ~~Confidentiality of user and signalling data to and within the access network (and possibly into the core network)~~
- 3) ~~End to end encryption (as an optional service) between UMTS users, with access to plaintext for lawful interception purposes~~
- 4) ~~TTP (trusted 3rd party) mechanisms, including public key techniques and associated certificates and signing, verification and revocation procedures used, for example, before accessing 3rd party services.~~
- 5) ~~Authentication, confidentiality and integrity of signalling between UMTS network (both core and access) nodes~~
- 6) ~~Confidentiality of the user identity on the radio interface.~~