NP-020396

Source: ORANGE, ERICSSON, LUCENT

Title: Addition of an error mapping table for MAP Update Location operation

Agenda item: 7.11

Document for: APPROVAL

# 3GPP TSG CN WG4 Meeting #15

N4-021051- rev

Helsinki, Finland, 29<sup>th</sup> July – 2<sup>nd</sup> August 2002

CHANGE REQUEST

# 29.010 CR 057 # rev 1 # Current version: 3.8.0 # 2.8.0

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: Addition of an error mapping table for MAP Update Location operation **3** Orange, Ericsson, Lucent Source: Date: # 10/07/2002 Category: Release: # R99 Use one of the following categories: Use <u>one</u> of the following releases: (GSM Phase 2) F (correction) 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 (Release 4) Rel-4 be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change: 
The MAP Operations UPDATE\_LOCATION\_AREA and DETACH\_IMSI have been removed from the R99 29.010, following the removal of this operation in 29.002.
There is a need in the 29.010 of a mapping table between MAP and DTAP error causes for the Location Update procedure.

This is an essential correction

Summary of change: 
Introduction of an error cause mapping table for the Location Update procedure.

Consequences if not approved:

Risk of inconsistent mapping by the MSC.
The consequence is that for the same error condition reported by the HLR, the

handling of the UE will be different in different MSC implementations. Depending on the mapping done by the MSC the UE might be denied service.

Clauses affected:	第 2.1, 3.2						
		Υ	N				
Other specs	ж		X	Other core specifications	ж		
affected:			X	Test specifications			
			X	O&M Specifications			
	_						
Other comments:	ж						

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <a href="http://www.3gpp.org/specs/CR.htm">http://www.3gpp.org/specs/CR.htm</a>. 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> 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 \*\*\*\*

### 2.1 Transparent procedures

The following MSC procedures require transparent mapping of <u>BSSAP-access protocol</u> information elements into MAP parameters and vice versa (see <u>GSM3GPP TS</u> <u>0929.002</u> for definitions and the use of the procedures):

- location update;
- forward new TMSI;
- provide IMSI;
- obtain IMEI;
- check IMEI;
- authenticate;
- trace subscriber activity.

\*\*\*\* NEXT MODIFIED SECTION \*\*\*\*

## 3.2 Location update

	24.008	29.002	Notes
Forward	MM (LOCATION UPDATING	MAP_UPDATE_LOCATION_	<del>                                     </del>
	REQUEST)	request =	T .
	Location area id		<del>2</del>
	Service area id		3
	Mobile identity Mobile station	IMSI	+
	classmark 1	<del></del>	+
	Mobile station		<u>t</u>
	classmark 2 Ciphering key	_	<b>_</b>
	seq_number		+
	Location update	_	<del> </del>
	type Cell identifier		
	Cell Identifier Chosen channel		<u>‡</u> _
			<del> -</del>
Positive results	MM (LOCATION	MAP_UPDATE_LOCATION	
	UPDATING ACCEPT)	response	T .
	Location area identity		+
	Mobile identity	_	<del>                                     </del>
	Follow on proceed	-	<u> </u>
Negative	MM (LOCATION	MAP UPDATE LOCATION	<b>‡</b>
results	UPDATING REJECT)	response	<u> </u>
	TMCT unitrocum in III D	Tinknown gubaani bon	$\sqsubseteq$
	IMSI unknown in HLR	Unknown subscriber Roaming not allowed:	<del>                                     </del>
	PLMN not allowed	PLMN not allowed	+
	LA not allowed	_	
	Roaming not allowed in this LA		$\perp$
	No Suitable cells in		+
	location area		†
	PLMN not allowed	Operator	
	Tilogal MC	determined barring	$\perp$
	Illegal MS Illegal ME		+
	Network failure	System Failure	<del> </del>
	Network failure	Unexpected data value	
	Network failure Network failure	MAP_U/P_ABORT MAP_NOTICE	<u> </u>
	Network failure	MAP_NOTICE MAP_CLOSE	<del> -</del>
<del></del>			<del></del>

NOTE 1 The HLR shall also send this error if there is an error in the type of subscription (i.e. VLR requests service for a GPRS only subscriber).

NOTE 2 This parameter applies for GSM access

NOTE 3 This parameter applies for UTRAN access

\*\*\*\* END OF MODIFICATIONS \*\*\*\*