

Source: SA1

Title: CRs to 22.011 on Addition of 'Network Control of UE Capabilities'
and to correct an error (Rel-7)

Document for: Approval

Agenda Item: 7.1.3

Meeting	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Current	Vers New	SA1 Doc
SP-27	SP-050063	22.011	066	-	Rel-7	B	Addition of "Network Control of UE Capabilities"	7.0.0	7.1.0	S1-050233
SP-27	SP-050063	22.011	067	-	Rel-7	B	Reinstate CR016 for GPRS Terminal PLMN Reselection	7.0.0	7.1.0	S1-050245

CR-Form-v7
CHANGE REQUEST
⌘ 22.011 CR 066 ⌘ rev - ⌘ Current version: 7.0.0 ⌘

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:	⌘ Addition of "Network Control of UE Capabilities"	
Source:	⌘ SA1 (Motorola)	
Work item code:	⌘ Network Protection	Date: ⌘ 19/12/2004
Category:	⌘ B 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 .	Release: ⌘ Rel-7 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:	⌘ At the TSG SA(#24) meeting a new work item (WI) on 'Selective Disabling UE Capabilities' was approved (SP-040477). The intention is to disable MSs when necessary on criteria to be decided by the operator. There is a need to include the requirements in TS 22.011
Summary of change:	⌘ Introduction of an additional list of Selective MS Capabilities in the MS to indicate disabled services which can not be used in the PLMN code of the network on which the list was received and any other network. The MS shall not request services that are indicated as disabled. The Selective MS Capabilities list is stored in the ME and it shall not be deleted at switch off. Therefore, the mobile station maintains the status of specific MS capabilities at switch on. Additionally, the MS should use the indications given in the Selective MS Capabilities list to inform the user about the availability of the appropriate services, e.g. SMS via PS are not allowed
Consequences if not approved:	⌘

Clauses affected:	⌘ 4.5 (new)						
Other specs Affected:	<table border="1" style="display: inline-table; vertical-align: middle;"> <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> </table> Other core specifications ⌘ Test specifications ⌘	Y	N	⌘	X	⌘	X
Y	N						
⌘	X						
⌘	X						

Other comments: ☞

How to create CRs using this form:

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

4.5 Control of UE Capabilities

To protect the user from the effects of a misbehaving UE (e.g causing additional charges, degraded performance) and to protect the network operator's network capacity, including radio resources and network signaling and processing, means shall be provided for the HPLMN and the VPLMN to provide an indication to the UE as to which network provided services or functions it is not allowed to use.

The Selective UE Capabilities list, shall be maintained in the UE and the UE shall not request any services indicated as disabled. At registration the HPLMN or VPLMN may interrogate the status of the list and provide a new list.

The Selective UE Capabilities list shall not be deleted at switch off and will remain valid until a new list is provided by the network. The Selective UE Capabilities list relates to the ME and not to the subscription.

It should be ensured that UEs are not maliciously disabled, including malicious disabling by a VPLMN, or accidentally disabled, or kept disabled, and there shall be a mechanism for restoring disabled UEs in all situations (e.g. in the case that the serving network does not support the control of UE Capabilities).

The UE should use the indications given in the Selective UE Capabilities list to inform the user of the non-availability of services or functions.

There shall be a means for the network to provide an optional customer service number(s) which can be used, by the user, to assist in determining the cause of non-availability of specific services. The specifications should also provide the capability for the network to include an optional text string that will be displayed by the UE.

The UE Capabilities list shall take precedence over subscribed services.

The services to be included in the list are:

- Call Control functions
- Supplementary Services
- Emergency Calls (including the (U)SIM-less case and subject to regional regulatory requirements, i.e. emergency calls shall not be disabled in regions where support of them is required)
- SMS, via CS and PS
- LCS, via CS and PS
- GPRS based services
- MBMS
- IMS

CR-Form-v7.1

CHANGE REQUEST

⌘ **22.011 CR 067** ⌘ rev **-** ⌘ Current version: **7.0.0** ⌘

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:	⌘ Reinstated CR016 for GPRS Terminal PLMN Reselection		
Source:	⌘ SA1 (Research In Motion)		
Work item code:	⌘ TEI-4	Date:	⌘ 20/01/2005
Category:	⌘ B	Release:	⌘ Rel-7
	<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> Ph2 (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) Rel-7 (Release 7)

Reason for change:	⌘ 22.011 currently only allows reselection attempts when in idle mode for circuit services and does not cover the case for GPRS terminals. This does not align with the Stage 3. The requirement for GPRS Terminals were previously agreed in CR-016 but has subsequently been lost.		
Summary of change:	⌘ Reinstated approved CR-016. (CR016 of 22.011 was approved in SA WG1 #8 April 2000 S1-00-335, as category-B CR for addition of feature to Rel-4.)		
Consequences if not approved:	⌘ Misalignment between Stage 1 and Stage 3.		

Clauses affected:	⌘ 3.2.2.5										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications Test specifications O&M Specifications	⌘
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Other comments:	⌘										

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3.2.2.5 Periodic network selection attempts

A UE in Automatic Mode shall make periodic attempts to look for a higher priority PLMN of the same country as the currently received PLMN. For the ranking of PLMNs the UE shall use the order used in subclause 3.2.2.2. In the case that the UE has stored a list of equivalent PLMNs, the UE shall only select a PLMN if it has a higher priority than all the PLMNs, in the list of equivalent PLMNs, which are of the same country as the currently registered PLMN.

NOTE: In the context of this 3GPP TS, the term country is to be interpreted not as a political entity but as a single Mobile Country Code (MCC). For instance the USA has multiple MCC. The USA case is in fact treated as an exception in the 3GPP specifications. For all other countries, multiple MCCs may be used, however the specifications have not taken this into account and there could be adverse effects such as the UE being unable to detect that multiple MCCs are within the same country.

The UE shall only make reselection attempts while in idle mode for circuit services. [In case of GPRS terminals, the UE shall only make reselection attempts while in Idle or Stand-by mode.](#)

The interval between attempts shall be stored in the SIM/USIM. Only the service provider shall be able to select for which of the previous situations, periodic network selection shall be attempted and to set the interval, which shall be between 6 minutes and 8 hours, with a step size of 6 minutes. One value shall be designated to indicate that no periodic attempts shall be made.

In the absence of a permitted value in the SIM/USIM, or the SIM/USIM is phase 1 and therefore does not contain the datafield, then a default value of 60 minutes, shall be used by the UE.

NOTE: Use of values less than 60 minutes may result in excessive ME battery drain.