

Source: SA1
Title: CR 22.228-009r2 on IM CN Subsystem Roaming
Document for: Approval
Agenda Item: 7.1.3

Doc-1st-Level	Spec	CR	Rev	Phase	Cat	Subject	Vers	Vers New	Doc-2nd-Level
SP-010438	22.228	009	2	Rel-5	C	CR to 22.228 on IM CN Subsystem Roaming	5.2.0	5.3.0	S1-010896

CR-Form-v4

CHANGE REQUEST

⌘ **22.228 CR 009** ⌘ rev **R2** ⌘ Current version: **5.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ IMS Roaming and Access Requirements		
Source:	⌘ SA1		
Work item code:	⌘ IMS-CCR	Date:	⌘ 26-7-2001
Category:	⌘ C	Release:	⌘ REL-5
	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.		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)

Reason for change:	⌘ There are currently no requirements detailing the possible scenarios that need to be distinguished when a mobile attempts to connect to IMS, and particularly in the roaming case.
Summary of change:	⌘ <u>Rev 2</u> Cover page modified to reflect changes to requirements at rev 1 (see below), plus cause value in second bullet requirement modified to read 'IMS roaming in this network not allowed' – i.e. words 'in this network' are added. <u>Rev 1</u> Requirements changed to ensure that no references made to CSCF, APN etc. as these are defined by SA2 and should not be referred in the high level requirements specification. Second bullet requirement is deleted as it is a more general requirement not just IMS, others reworded. <u>Rev 0</u> Requirements are added to detail the operation when a terminal attempts to connect to IMS, with four outcomes detailed <ol style="list-style-type: none"> 1. No IMS subsystem available in the serving network 2. APN is not recognised 3. APN recognised, but no roaming agreement exists so access is not allowed 4. APN recognised, access allowed. Registration to IMS can then be attempted.
Consequences if not approved:	⌘ Operation and actions of terminals will not be distinguished between the four different scenarios.

Clauses affected:	⌘	7.2.1	
Other specs affected:	⌘	<input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘
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/3G_Specs/CRs.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://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

7.2 Access to the IM CN subsystem

7.2.1 Access control

The IM CN subsystem shall be able to verify at any time that the user is entitled to use the resources of the IM CN subsystem.

It must be possible to indicate to the terminal the reasons for denying access if this occurs, particularly when roaming. The following rejection scenarios must be supported

1. The serving network does not support IMS. The serving network shall indicate this fact to the terminal using an appropriate reject cause e.g. 'No IMS available'.
2. The serving network supports IMS, but the terminal is not allowed IMS service in this network as there is no roaming agreement in place between operators. The serving network shall indicate this fact to the terminal using an appropriate reject cause e.g. 'IMS roaming in this network not allowed'.
3. The serving network supports IMS, and roaming is allowed. In this case the terminal is allowed access to IMS, but it is still possible that service is rejected by IMS itself, e.g. due to failure of registration with the IMS