**Source:**         **SA1**

**Title:**          **CR to 22.228 to clarify the meaning of Access Independence**

**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-21 | SP-030465 | 22.228 | 021 | - | Rel-6 | F | Clarification on the meaning of Access Independence | 6.3.0 | 6.4.0 | S1-030906 |

<div style="border">

*CR-Form-v7*

# CHANGE REQUEST

⌘ **22.228 CR 021** ⌘**rev** **-** ⌘ Current version: **6.3.0** ⌘

</div>

*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⌘ **X**        ME **X** Radio Access Network **X** Core Network **X**

| | | |
|---|---|---|
| ***Title:*** ⌘ | Clarification on the meaning of Access Independence | |
| ***Source:*** ⌘ | **SA1 (3, Telecom Italia)** | |
| ***Work item code:***⌘ | IMS | ***Date:*** ⌘ 06/07/2003 |
| ***Category:*** ⌘ | **F** | ***Release:*** ⌘ Rel-6 |

*Use one 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 one 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:*** ⌘ | It could be argued that unecessary debate has been created by vague interpretations of the term access independence. At one extreme the interpretation is that 3GPP must consider every access technique that could possible carry an IP connection to the other extreme that IMS is only compatible with GERAN/UTRAN access. |
| ***Summary of change:***⌘ | It is clarified that access independence means that IMS should be developed as an IP solution but that 3GPP should only take care of interoperability to accesses under it's control i.e. GERAN/UTRAN/ I-WLAN |
| ***Consequences if not approved:*** ⌘ | No clear definition of Access independence in the context of 3GPP causing endless debate. |

| | |
|---|---|
| ***Clauses affected:*** ⌘ | Section 5 |

| | Y | N | | |
|---|---|---|---|---|
| ***Other specs affected:*** ⌘ | | | Other core specifications ⌘ | |
| | | | Test specifications | |
| | | | 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/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.

## 3.1    Definitions

For the purposes of this TS the following definitions apply:

**3GPP Generic User Profile:** 3GPP Generic User Profile (GUP) is the collection of user related data which affects the way in which an individual user experiences services and which may be accessed in a standardised manner.

**Access independence:** the ability for the subscribers to access their IP Multimedia services over any access network capable of providing IP-connectivity, e.g. via:

- 3GPP (UTRAN, GERAN)

- Non 3GPP accesses with specified interworking (e.g. WLAN with 3GPP interworking)

- Other non 3GPP accesses that are not within the current scope of 3GPP (e.g. xDSL, PSTN, satellite, WLAN without 3GPP interworking)

**Basic Voice Call:** A Basic Voice Call (BVC) is a call that conveys only a speech component. The definition of the BVC pertains only to the boundary between the IMS and the CS/PSTN. If more than one IMS party is involved in a communication with a PSTN party/parties, the communication between the IMS parties shall not be adversely impacted by the presence of a PSTN party. Please note that this boundary may still be subject to regulatory requirements associated with communications with the PSTN including, but not limited to, lawful interception of voice calls and number portability.

**Conference:**  An IP multimedia session with two or more participants. Each conference has a "conference focus". A conference can be uniquely identified by a user. An example for a conference could be a multimedia game, in which the conference focus is located in a game server.

**Conference Focus:**  The conference focus is an entity which has abilities to host conferences including their creation, maintenance, and manipulation of the media. A conference focus implements the conference policy (e.g. rules for talk burst control, assign priorities and participant's rights).

**IM CN subsystem:** (IP Multimedia CN subsystem) comprises of all CN elements for the provision of IP multimedia applications over IP multimedia sessions

**IP multimedia application:** an application that handles one or more media simultaneously such as speech, audio, video and data (e.g. chat text, shared whiteboard) in a synchronised way from the user's point of view. A multimedia application may involve multiple parties, multiple connections, and the addition or deletion of resources within a single IP multimedia session.  A user may invoke concurrent IP multimedia applications in an IP multimedia session.

**IP multimedia service:** an IP multimedia service is the user experience provided by one or more IP multimedia applications.

**IP multimedia session:** an IP multimedia session is a set of multimedia senders and receivers and the data streams flowing from senders to receivers.  IP multimedia sessions are supported by the IP multimedia CN Subsystem and are enabled by IP connectivity bearers (e.g. GPRS as a bearer).  A user may invoke concurrent IP multimedia sessions.

**Local service:** See definition in [14].

# 5    High level requirements

Support for IP multimedia sessions shall be provided in a flexible manner to allow operators to differentiate their services in the market place as well customise them to meet specific user needs.  This shall be provided by the use of service capabilities in both networks and terminals, for the creation and support of IP multimedia applications.

The following high level requirements shall be supported for IP multimedia applications:-

- Negotiable QoS for IP multimedia sessions both at the time of a session establishment as well as during the session by the operator and the user

- Negotiable QoS for individual media components in an IP multimedia session both at the time of establishing a media component as well as when the media component is active by the operator and the user

- End to end QoS for voice at least as good as that achieved by the circuit-switched (e.g. AMR codec based) wireless systems shall be enabled

- Support of roaming, negotiation between operators for QoS and for Service Capabilities is required. Such negotiation should be automated rather than manual, e.g., when another operator adds new service capabilities.

- Possibility for a network operator to implement IP Policy Control for IP multimedia applications.

- IP multimedia sessions shall be able to support a variety of different media types. A set of media types shall be identified to ensure interoperability (e.g. default codec selection and header compression).

- Within each IP multimedia session, one or more IP multimedia applications shall be supported

- The possibility for IP multimedia applications to be provided without a reduction in privacy, security, or authentication compared to corresponding GPRS and circuit switched services.

- Roaming shall be supported enabling users to access IP multimedia services provisioned by the:-

    - Home Environment

    - Serving Network

- The principle of aAccess independence shall be supported.  It is desirable that an operator should be able to offer services to their subscribers regardless of how they obtain an IP connection (e.g. GPRS, fixed lines, LAN).

    Note:  Access independence principle can only be ensured by 3GPP for the access technologies 3GPP has defined or has defined specific interworking.

- It shall be possible to support session-related internet applications that have been developed outside the 3GPP community.

- It shall be possible to limit the view of an operator's network topology to authorised entities.

- It shall be possible to support the multiple UEs associated with a single IMS service subscription. It shall be possible to share one Public User Identity between multiple UEs. It shall also be possible to identify the individual UEs with separate Public User Identities.

    In R5 the ISIM application shall require the presence of a USIM application on the same UICC. This shall not preclude the possibility in later releases of having an ISIM in a UICC that does not contain a USIM.