Title: Preferred Roaming List for 3GPP2/3GPP Multi-mode Terminal

Response to: SP-030766

Release: Work Item:

Source: 3GPP TSG-SA **To**: 3GPP2 TSG-C

Cc:

Contact Person:

Name: Niels Peter Skov Andersen

Tel. Number: +45 43 48 81 10

E-mail Address: npa001@motorola.com

Attachments: none

1. Overall Description:

3GPP TSG SA thanks 3GPP2 TSG-C for their LS on "Preferred Roaming List for 3GPP2 Multi-mode Terminal".

In consideration of discussion in 3GPP working groups which took place, SA would like to clarify the general requirements for multi-mode terminals including a 3GPP mode of operation:

- Such a multi-mode terminal when in 3GPP mode of operation shall be compliant to the 3GPP specifications, including PLMN selection, cell selection and re-selection, paging reception etc.
- As consequence of point 1, the multi-mode terminal when entering 3GPP mode of operation shall act as a 3GPP only terminal upon switch-on. Similarly, when leaving the 3GPP mode of operation the multimode terminal shall act as a 3GPP only terminal being switch-off

The switching between modes can then be considered as an overlay functionality selecting mode of operation. For the design of the overlay functionality 3GPP TSG SA believes the following issues needs to be considered

- The current 3GPP specification provides the capability for the user to set its own PLMN selection
 preferences; as well the user can manually select any PLMN. This has been done to ensure a fair
 competition environment. TSG SA expects that this is maintained in the design of the overlay
 functionality.
- The overlay functionality would need to include a mechanism to avoid ping-pong between systems, e.g., a timer or hysteresis function
- The overlay functionality should not include network priority mechanisms, which risk to conflict with the network priority mechanisms included in the specifications of the individual modes. 3GPP TSG SA would like to inform 3GPP2 TSG-C that the 3GPP specifications include a background scan within 3GPP based systems for PLMNs of higher priority of the current serving PLMN.
- Any functionality in the overlay system, such as background scan of other systems, does not impact the 3GPP protocol requirements (in particular in regards to paging, cell selection, cell re-selection and PLMN selection)

Regarding the possible issue of service continuity, it is TSG SA's understanding that the proposal for
overlay functionality applies in idle mode only, thus not endangering ongoing CS services. In addition, it
is TSG SA's understanding that as PDP contexts might be impacted there is a potential impact on PS
services, and thus there is a need to consider exactly in which situations the overlay functionality should
apply.

TSG SA is unable to verify that the above requirements are met by the proposed PRL logic. Concern was raised that the proposal seemed to be based rather on PLMN selection than on system selection and e.g. could lead to conflict with the 3GPP background scan for PLMNs of higher priority with risk of causing infinite loops.

3GPP TSG SA is willing to work with 3GPP2 on development of an overlay functionality for system selection. TSG SA would like to receive more detailed proposals, including more details on scenarios and service requirements.

2. Actions:

TSG SA requests that 3GPP2 TSG-C continues to be aware of 3GPP's interest in the overlay system selection function specification work and provide answer to issues raised in this LS and provide more information so that TSG SA can better understand the work which has to be performed.

3GPP TSG SA ask 3GPP2 TSG-C to provide answers to the issues raised in this LS and provide more information about the overlay functionality. In addition, 3GPP TSG SA would like receive more background information about the scenarios and service requirements.

3. Date of Next TSG SA Meetings:

SA#24 7 – 10 June 2004 Seoul, S. Korea

SA#25 13 - 16 September 2004 Palm Springs, CA