

**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:**

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**Attachments:** none

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#### 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 if it were a 3GPP only terminal which had just been switched-on. Similarly, when leaving the 3GPP mode of operation the multimode terminal shall act as if it were a 3GPP only terminal which had just been switched-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 their 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 should 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 than the current serving PLMN.
- Any functionality in the overlay system, such as background scan of other systems, must 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:**

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