

Source: TSG SA WG2

To: TSG RAN WG2

CC: TSG RAN WG3

**Answer to LS on Interactions between Mobility Management and Radio
Mobility**

TSG S2 thanks R2 for its liaison on Interactions between Mobility Management and Radio Mobility and notes the following aspects regarding the case when the UE is in RRC connected mode from the UTRAN point of view and in idle mode from a given CN domain point of view.

1. The UE can monitor the BCCH but it is not reading the location information (LAI/RAI) from the BCCH while in RRC connected mode. In RRC connected state, the location information is provided to the UE only in the *MM system information* (including LAI/RAI) which the UE receives on the established RRC connection. (This is stated in the current text in chapter 4.3.1 of 23.121 v3.0.0)
2. *MM system information* on the established RRC connection needs to be configured in such a way that it always points to SRNC. The LAI/RAI sent in this MM system information must be a LA/RA which is covered by the SRNS, even if the UE is not geographically within that LA/RA. In the case where the SRNS has two or more LA/RA, sending of any of the LA/RA covered by the SRNS has no impact on the solution. S2 would like to draw R2's attention to the current text in 23.121 in chapter 4.3.11.3 MM System Information which states that: "In RRC connected mode, it is the responsibility of the SRNS to control the current MM system information valid for the UE."

The UE in RRC connected mode performs location update towards the CN domain under which it is in MM idle mode only when the location information received in the *MM system information* changes or periodic update timer expires. When SRNC receives a location update request from the UE, it adds the same location information as in MM system information last sent to the UE to that message before sending it to the CN.

Note: The relationship of the UMTS Mobility Management and Radio Mobility concepts under development with Location related services

(LCS and e.g. CAMEL, Solsa, E911) needs further study.