

Title: Reply LS on 2G/3G subscriber distinction and roaming restriction
Response to: LS SP-040172 from GSMA IREG (Doc 46_089)

Source: 3GPP SA
To: GSMA IREG
Cc: 3GPP SA1

Contact Person:

Name: Michele Zarri
Tel. Number: +44 79 3200 2114
E-mail Address: Michele.Zarri@T-Mobile.co.uk

1. Overall Description:

TSG SA would like to thank GSMA IREG for their Liaison statement on 2G/3G subscriber distinction and roaming restrictions.

IREG asked the following three questions

1. To ensure that the new "Administrative restriction feature" will be mandatory for vendors
2. The specifications should be made in the way that Operators who do not want to make 2G/3G distinction do not have to change their actual implementation, i.e the implementation of the distinction feature should be backwards compatible to the current situation with no distinction
3. To confirm that that the possibility " for a VPLMN to specify different roaming authorizations for his 2G and 3G coverage, even in case of combined 2G/3G network elements " requirement will also be taken into account in 3GPP specifications.

SA has assumed that by 2G[3G] subscriber IREG intends to indicate a user who can only access the GSM[WCDMA] location areas, and that this restriction only applies at time of location registration/update. Furthermore, SA understand that a network operator will not place under the same location area identity 2G and 3G cells. SA would like IREG to confirm that these two assumptions are correct.

With regards to question 1 SA would like to observe that TSG CN meeting agreed to standardise the administration parameters on the HLR that allows the control of the subscribers' RAT selection in the HPLMN, and this is mandatory. As a consequence, since 3GPP always strives to guarantee backwards compatibility, SA feels that the request made by IREG in question 2 can be fulfilled by the recently approved change requests in TSG CN at least for the control of subscribers belonging to the HPLMN when they are in the HPLMN.

The request expressed in question 3 will need to be further analysed by 3GPP. It is SA's belief that the tools provided currently in the 3GPP system allow meeting the requirement of IREG. In particular, *in the case where network operators don't place 2G and 3G cells under the same location area identity*, the mobile operator may enforce different roaming authorisations by issuing Location Update Rejection Cause #15. It is possible for the network operator to indicate to a UE which radio access technology is allowed and which one is not allowed without causing the UE to switch to a different PLMN.

It should be noted that in case IREG requires that the restriction needs to apply also to handover, fundamental modifications to the 3GPP system may be required such as introduction of new location rejection causes (with consequent legacy problems) as well as re-thinking of the PLMN selection principles. This would require a considerable amount of time to be realised and GSMA should provide a strong justification before 3GPP undertakes this activity.

Concerning the need to standardise the criteria by which the VPLMN decides to issue rejection cause #15, 3GPP notices that where this decision is to be based on specific VPLMN criteria rather than available and standardised parameters (e.g. existence or not existence of a roaming agreement with the HPLMN of the inbound roaming subscriber) then standardisation of a generic mechanism will need further work. As first step it is desired that IREG provides a set of rules widely agreed by the operators community.

2. Actions:

1. TSG SA would respectfully require IREG to confirm that the interpretation of 2G[3G] subscriber is correct.
2. IREG is requested to confirm that the roaming restriction only applies at time of location registration/update.
3. IREG is asked to provide more details on the parameters and criteria that network operators are planning to use in order to decide whether or not issuing location update rejection cause #15 so that 3GPP can study what can be standardised.

3. Date of Next TSG-SA Meetings:

TSG-SA Meeting #24	07 – 10 June 2004	Seoul, Korea
TSG-SA Meeting #25	13 – 16 September 2004	Palm Springs, USA