

Source: FUJITSU
Title: REQUEST FOR LIAISON ANSWER FROM TSG-N WG1
Agenda item:
Document for: INFORMATION

Attached liaison statement has been submitted to RAN WG2, WG3 and SMG2 WPA. The MS classmark work within TSG-CN WG1 has been during the last meetings, however, few open issues, which are considered critical, are still open for the formal completion of the work for R99. These open issues have been highlighted in the referred LS.

This contribution would like to urge the appropriate groups within TSG-RAN (R2 and R3) to provide their feedback kindly by 25th October.

A copy of the TR is provided for information in TSGR#5(99)545.

3GPP TSG-N WG1/SMG3 WPA meeting #7
Makuhari, Japan
13-17 September, 1999

Document:

N1-99B34

To: **TSG-RAN WG2, WG3, SMG2 WPA**
Source: **TSG-N WG1**
Subject: **Liaison Statement on Classmark Split**

During their meeting in Makuhari, N1 have made progress with the UMTS release '99 work item "Separation of Radio Resource (RR) and Mobility Management (MM) specific parts of the Mobile Station Classmark (MS CM)". N1 would like to inform R2, R3 and SMG2 WPA about the working assumptions on which N1 has agreed so far, and to ask them for guidance with regard to a few RAN classmark and handover related issues. N1 is aware of the fact that some of the working assumptions actually lie within the area of responsibility of the other groups. R2, R3 and SMG2 WPA are kindly asked to confirm these working assumptions as proposed by N1, or to modify them if this is considered as necessary. The intention of N1 was to indicate in this way which decisions by the other groups are needed most urgently to be able to proceed with the work item.

General principles for the classmark split:

- 1) Radio access network technology and core network technology should be clearly separated in principle so that MM protocol, which is for CN, should be radio independent.
- 2) Mobile station capability related to RAN and CN need to be set in different parameters. Only CN related parameter should be present in MM message, and radio dependent information should not be included in MM messages.
- 3) To allow easier roaming and handover between UMTS and GSM for GSM/UMTS dual mode mobile stations, N1 agreed to allow an exception from principles 1 and 2 for the RAN related classmark information already specified for GSM.

Working assumptions:

- 1) UMTS CN CM will be an evolution of GSM MS CM2, and will be stored in the MSC.
(As GSM MS CM2 has got only few spare bits left, an extension will have to be defined. This will probably be done by introduction of a new information element.)
- 2) Storage of RAN CM information:
MS CM for UTRAN will be stored in the RAN.
GSM RAN CM (i.e. GSM radio related information in MS CM2 and CM3) will be stored in the MSC (as is done now in GSM).
- 3) Structure of RAN CM information (single RAN CM or separate CM for each RAN?)
This decision is left to R2, R3 and SMG2 WPA, however N1 sees advantages for a modular design with a separate CM for each RAN (e.g. possibility of selective interrogation of the data of only those other RANs that are really needed; independent evolution of CM information elements, especially as different RANs are standardised by different groups.)
- 4) Criteria for a GSM/UMTS dual mode MS to send different CN / RAN CM information:
In a single mode network: CN CM is sent always and the RAN CM based on the serving RAN.
In a multimode network, additionally the RAN CM for the other RAN needs to be known. N1 could not reach a final conclusion whether the MS should send this information always, or only after a downlink indication or an enquiry by the network. In the latter case, is it the RNC/BSS or the MSC which initiates the enquiry? In the case of MS CM3, is it transported through the UTRAN in RR or MM messages?
N1 would like to ask R2, R3 and SMG2 WPA for their opinion on this matter. (Possible scenarios to be considered for the answer are not only inter-system handover between GSM and UMTS, but also sub-subsequent handover and inter-system handover. Possible network configurations are UTRAN and GSM RAN connected to a release '99 MSC, and GSM RAN connected to a GSM release '99 MSC.)
N1 is preparing a technical report on the classmark split and needs the answers from R2, R3 and SMG2 WPA to proceed with the work. One of the next tasks of N1 will be to create a list of the L3 messages in which the CN CM information is to be sent, and a list of the messages in which the RAN CM information is to be sent.