## TSGR1#7(99)c44

## TSG-RAN Working Group 1 Hannover, Germany, 30 August – 03 September 1999

TSG-RAN Working Group 2 (Radio layer 2 and Radio layer 3) Sophia Antipolis, France, August 16<sup>th</sup> to 20<sup>th</sup> 1999

TSGR2#6(99)9999

To: RAN WG1

Source: RAN WG2

**Title:** Proposed LS on status of the work on RACH model

**Document for:** Approval

RANWG2 would like to inform RANWG1 about the status of their work on PRACH procedures.

At the RANWG2#6 meeting, a clarification on the interaction between WG1 and WG2 concerning PRACH procedures was approved in a Change Request to S25.303 (Tdoc R2-99933), along the following lines :

- The broadcast parameters needed to control RACH access will be defined in WG2. Subchannels, i.e. RACH partitioning according to signatures and access slots will be done in WG2. The power ramp-up is processed in L1 until the preamble is detected in the BTS. After that the control should be in WG2 for the backoff etc..
- It was confirmed that the access class selection is done in the MAC for uplink access on the random access channel. This is indicated to L1 with the data request primitive. For this, a parameter in the data request primitive is needed.

Also in Tdoc R2-99970, a Change Request on S25.301 (UTRAN Radio Interface) on the definition of Access Service Classes based both on RACH partitioning (according to access slots and/or signatures) and/or backoff algorithm parameters (e.g. persistence level or exponential backoff), was approved.

Concern over the efficiency of RACH partitioning into access slots was expressed, but as the indicated problems were addressing PRACH efficiency and therefore perceived as belonging to the domain of WG1, WG2 approved the option for the network to partition in both dimensions also in the case of FDD. WG2 would like WG1 to review the text of the Change Request included below and if needed, express your opinion on the use of access slots for RACH partitioning.

[ Text from CR 015 on S25.301 :

Access Service Class selection for RACH transmission. The RACH resources (i.e. access slots and preamble signatures for FDD, timeslot and channelisation code for TDD) may be divided between different Access Service Classes in order to provide different priorities of RACH usage. In addition it is possible for more than one ASC or for all ASC's to be assigned to the same access slot/signature space. Each access service class will also have a set of back-off parameters associated with it, some or all of which may be broadcast by the network. The MAC function applies the appropriate back-off and indicates to the PHY layer the RACH partition associated to a given MAC PDU transfer.