From:	**RAN WG1**
To:	**RAN WG2**
Subject:	**Liaison statement on the issues of Channel Assignment, UE Channel Selection and CPCH Status Indicator Channel (CSICH).**

AH14 and WG1 have considered the merits of Versatile Channel Assignment Method (VCAM) [1,2] in CPCH. After considerable discussions, we have concluded that incorporation of the CA message gives benefits in some scenarios. However there are concerns from some companies: on whether these scenarios represent realistic conditions; the L1 complexity; and the effect of errors in the CA message which could lead to UE transmissions on the wrong CPCH channel. The concern was expressed that this latter case could lead to serious interference on the uplink.

To allow maximum flexibility of deployment it would be desirable that CPCH should support both VCAM and UE Channel Selection (UCS) modes of operation, such that the operator can select the one to be used. However, until the concerns mentioned above are sufficiently resolved to allow VCAM to be part of the UMTS specification, WG1 recommends that proponents prepare two sets of CR's, one for the case of UCS and the other with support for both UCS and VCAM.

WG1 has agreed that both VCAM and UCS should be used in conjunction with a CPCH Status Indicator Channel (CSICH), to improve the throughput by reducing unwanted access attempts. When UCS is used this CSICH would broadcast the availability of each CPCH channel and when VCAM is used it would broadcast the maximum available bit rate.

In the event that VCAM is adopted, to support the operation of both modes it is proposed that UTRAN should indicate the following parameters to the UE by higher layer signaling:

1. Whether CA message is active within a cell or not.
2. The format of the information present on the CSICH (since it may be different for the two modes)
3. The subchannel/AP-signature-to-Data Rate-CPCH physical resource mapping for UE channel selection method and subchannel/AP-signature-to-Data Rate: CA-signature-to-CPCH physical resource mapping for the Versatile Channel Assignment method.

4. The mapping between status indicators on the CSICH and the CPCH resources. This is needed in any case in order that the UE can correctly interpret the broadcast status information.

Depending on the detailed solution adopted, items 1 and 2 above may not need to be sent as explicit parameters. For example, it may be possible to infer this information from the mapping(s) in item 3.

On the UTRAN side the content of the information to be relayed over the CSICH should be provided to Layer 1 by higher layers.

WG1 would like to inform WG2 of the above conclusions in WG1 regarding the Channel Assignment method, the UE channel Selection method and CSICH. WG1 hopes that the above-mentioned framework is aligned with WG2's UE and UTRAN channel selection model.

WG1 welcomes any feedback from WG2 on this topic.

Reference
[1] R1-00-0106 CPCH access methods comparison, Samsung Electronics Co. ltd
[2] R1-00-0107 CPCH channel allocation example, Samsung Electronics Co. ltd