TSG-RAN Working Group 2 (Radio layer 2 and Radio layer 3) ***TSGR2#3(99) 215***
Yokohama 13th to 16th April 1999

Agenda Item:	8.4.3
Source:	Alcatel
Title:	Change request to S2.31 to include a new procedure for 'Dynamic Resource Allocation Control of Uplink DCH'
Document for:	Decision

---

1 Introduction

The concept of 'fast arbitration of radio resources allocation for uplink DCH' has been agreed in RAN/WG2#2, based on a proposal from Alcatel (Tdoc RAN/WG2 122/99). This document presents a proposal for the description of a RRC procedure, to be included in S2.31 document.

It is proposed to include the new proposed section between 8.3.3 and 8.3.4 in S2.31.

8.3.5 Dynamic Resource Allocation Control of Uplink DCH

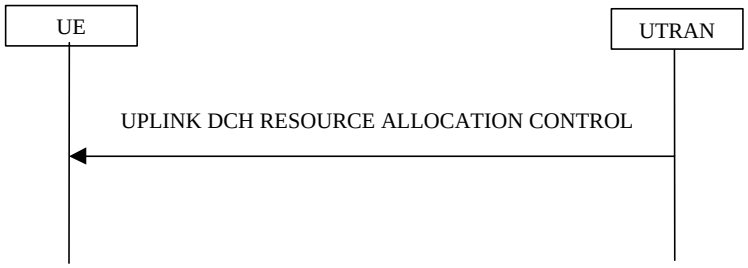

Figure 1: Dynamic Resource Allocation Control of Uplink DCH

The network uses this procedure to control the allocation of resources on uplink DCH, by means of transmission probability and minimum spreading factor.

This procedure is initiated with a Uplink DCH Control message from the CRNC to all UE. This message is sent either on the BCH or on the ACCH transport channel or on both, depending on the network configuration. If there is no ACCH in the cell, the message is sent on the BCCH, otherwise it is sent on the ACCH. A parameter on the BCCH will indicate on which transport channel the information is broadcast. This message contains a set of parameters defined above per UE class. It is sent every frame.

The procedure applies to all uplink DCH being established with a 'Dynamic Control' parameter in the RAB establishment procedure. The UE has to listen to this message prior to any transmission on DCH and continues with a reconfiguration of MAC. The MAC is assigned a new probability of transmission on this DCH and a new subset of the TFS allocated to the DCH, which is derived by RRC from the SF_{min} parameter. The detailed UE MAC procedure is described in S2.21. The L1 is indirectly adapting to the new minimum spreading factor (SF_{min}), through the L1 uplink dynamic rate matching procedure, according to the TBS sent by MAC at each Transmission Time Interval. The UE MAC procedure shall be mandatory for all UEs supporting high bit rate NRT services.

In case of soft handover on the uplink DCH, The UE is requested either to listen to broadcast information from its primary cell (the one with the lowest pathloss), or from all cells involved in its Active Set, depending on its class. In the latter case, the UE is expected to react according to the stricter control information (i.e. lowest ratio p_{tr}/SF_{min}).