

Status Report for SI to TSG

Study Item Name: FCS (Fast Cell Selection) for HS-DSCH

SOURCE: Rapporteur (Rizwan Hassan, Lucent Technologies)

TSG: RAN **WG:** 1

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Ref. to SI sheet: RAN_Study_Items.doc

Progress Report since the last TSG (for all involved WGs):

RAN1#28bis: Two contributions on FCS were presented. One highlighted different alternatives with FCS like Intra Node-B FCS and Inter Node-B FCS, each of which can be either UE controlled or Node-B controlled. The other highlighted the performance aspects and showed some gains at low speeds (3kmph). There were some comments that these gains are higher than have been observed in past studies by other companies. This could be attributed to different simulation assumptions like use of different type of schedulers, size of active set, CQI delay and errors. The chairman asked the interested companies to review their analysis based on the presented results.

RAN1#29: Only one contribution on the topic was presented. The contribution showed that the system throughput gains depend on the active set thresholds. With large thresholds (>3db) at slow speeds, the system could benefit from cell fading diversity within the same Node-B while at higher speeds or smaller active set thresholds, FCS does not provide any gains. There was a comment that proportional fair scheduler should be considered rather than Max C/I to get a better picture. In general, there were open questions on whether this feature provides enough benefits to merit further study.

List of Completed elements (for complex work items):

- Initial study to establish the benefit of the feature against complexity is still commencing.

List of open issues:

Simulation results to consider CQI feedback issues and fairer schedulers, such as proportional fair scheduler.

Estimates of the level of completion (when possible):

20%

SI completion date review resulting from the discussion at the working group:

March 2003

References to WG's internal documentation and/or TRs: