TSG-RAN meeting #27 RP-050011
Tokyo, Japan, March 9th – 11th 2005

# Status Report for WI to TSG

## Work Item Name: Optimisation of DL channelisation code utilisation

**SOURCE:** Rapporteur (Sarah Boumendil, Nortel) **TSG:** RAN **WG:** 1

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**Ref. to WI sheet:** RAN_Work_Items.doc

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

RAN1 #40
Performance of the alternative solution (slot format containing 2TPC bits at SF 256) was evaluated and compared to that of the default solution (slot format containing 2TPC bits and 2 pilot bits at SF256). RAN1 agreed to retain the alternative slot format in replacement of the default solution that had been selected at RAN1#39. Impact on the synchronisation, power control (outer-loop) and soft handover was also agreed Draft CRs that had been based on the defaults solution before RAN#26 were updated to reflect this new slot format and approved as listed below (See RP-05088):

- 25.211-200r1, Introduction of F-DPCH without pilot field
- 25.212-193r1, Introduction of F-DPCH
- 25.213-070r1, Introduction of F-DPCH
- 25.214-368r1, Introduction of F-DPCH without pilot field
- 25.215-155, Introduction of F-DPCH without pilot field

RAN 1 agreed as well that the F-DPCH should be mandatory for Rel-6 UEs supporting HSDPA

RAN2#46
CRs available at RAN2#45 were updated to reflect RAN1's decision. CRs as listed below were agreed (See RP-050074):

- 25.302-149, Introduction of F-DPCH
- 25.331-2528, Introduction of F-DPCH

RAN3#46
CRs that had been agreed by RAN3 at RAN#45 were updated to reflect RAN1's decision. RAN3 agreed the following CRs introducing F-DPCH in its specification as listed below (see RP-050056):

- 25.402-046 (Rel-6 CR), Introduction of Fractional DPCH
- 25.420-047 (Rel-6 CR), Introduction of Fractional DPCH
- 25.423-1036r1 (Rel-6 CR), Introduction of Fractional DPCH
- 25.433-1082r1 (Rel-6 CR), Introduction of Fractional DPCH
- 25.430-059 (Rel-6 CR), Introduction of Fractional DPCH

RAN4#34
A test proposal for the introduction of F-DPCH in 25.101 along with simulation assumption and first results were presented in R4-050100. It was agreed to continue the work with the usual procedure. Assumptions are to be agreed on the email reflector.

Document (R4-050101, Introduction to Fractional DPCH (CR 722 to 25.133 Rel-6)) was presented and discussed. The CR was technically endorsed but will be kept on-hold until the whole set of RAN4 CRs are available.

## List of Completed elements (for complex work items):

- Physical layer aspects (slot format, physical channel description, modulation, transmit diversity, power control, timing aspects)
- Configuration aspects in UE and node B (RRC, NBAP/RNSAP)
- RRM aspects (soft handover, power control, synchronisation)

## List of open issues:

- Minimum performance requirements for the UE for the support of F-DPCH (CRs on 25.133 and 25.101)

**Estimates of the level of completion (when possible):**
100% for RAN1/2/3 work. 50% for RAN4 work

**WI completion date review resulting from the discussion at the working group:**
RAN#28 to allow for RAN4 work to be complete

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