NORTEL NETWORKS

**3GPP RAN WG1 #9**
**R1-99l51**
**Dresden(Germany)**
**Nov 30th-Dec 3rd 1999**

# Ad-hoc 9 physical meeting#2 report

# Ad-hoc 9 #2 report

- **Downlink inner loop power control for FDD**
  - Downlink power control in soft handover (SSDT case)
    - *Compressed mode impact and requirements on the Node B reaction time*
      - R1-99j55, Primary state update rule in SSDT operation, NEC
        - This document consists in providing an additional criterion to change state to primary in compressed mode. The document also proposes to set some requirements on the node B on the State update timing in SSDT. The proposed requirement corresponds to a 2 slot delay leading to a maximum cell size of 154 km.
      - R1-99j56, Change Request for state update rule addition in SSDT specification, NEC
        - This document is a modification of 25.214 corresponding to the proposal contained in R1-99j55. The CR was agreed in principle. However some small redrafting is needed. A new version should be made available to the plenary.

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# Ad-hoc 9 #2 report

- **Downlink inner loop power control for FDD**
  - Downlink power control in soft handover (SSDT case)
    - *Modification of the SSDT codes*
      - List of contributions
        - R1-99k91, SSDT ID code Samsung,
        - R1-99k17, CR 25.214-037: The new SSDT ID code Samsung
        - R1-99, Optimum ID Codes for Site Selection Diversity Transmission Power Control, LGIC
      - R1-99k91 and R1-99k76 evaluate two new codes for SSDT.
      - R1-99k91 shows a better performance of the Samsung code compared to the LGIC proposal. However it appears that in the simulations it was assumed that the RNC reallocates the SSDT codes to the cells in the active set in such a way that the sub-set of codes is away used as a function of the active set size. Based on the knowledge of the ad-hoc this may not be in line with the RAN WG3 since this would require a reallocation of the codes as the content of the active set is modified. Additionally it was also commented that not all cases were covered in the simulations in terms of code length and use of puncturing.

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- **Downlink inner loop power control for FDD**
  - Downlink power control in soft handover (SSDT case)
    - *Modification of the SSDT codes*
      - R1-99k76 from LGIC evaluates a new set of codes for SSDT. Performance of these new codes, the existing codes and the codes as proposed by Samsung is provided in terms of Hamming distance and code error . The different code lengths and use of puncturing were considered. In the simulations no assumption was done on an optimal allocation of the codes by the RNC. The simulations show that the LGIC codes outperformed the existing codes and the codes proposed by Samsung.
      - Some companies indicated support to the LGIC proposal and indicated that the assumption taken in their simulation are in line with the WG3 specification to their knowledge. No conclusion could however be taken by the ad-hoc. Samsung indeed indicated that they wanted to check the RAN WG3 specifications. AS a conclusion the ad-hoc is reporting this to the RAN 1 plenary and would like to ask guidance to the plenary on how to progress on this issue.

# Ad-hoc 9 report

- **8 Uplink inner loop Power control for FDD**
  - 8.2 Uplink inner loop PC in normal mode in soft handover
    - R1-99j02 *Soft symbol reliability for uplink PC in soft handover (Rev.)*
    - *This document contains a CR introducing the soft bit error as a quality criterion for the soft handover with TPC bit not known to be the same. The CR was agreed.*