TSG-RAN Working Group 1 meeting #7bis
Kyongju, South Korea

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To: RAN WG2

Source: RAN WG1

Title: Contents of measurement control RRC messages

RAN WG1 has reviewed the specification TS 25.215 & TS 25.225 (Measurements), and come to the conclusion that some contents in that specification should be described in the WG2 documentation, and more specifically probably in the RRC specification, TS 25.331. RAN WG1 would like to ask RAN WG2 to take the information below into account when updating TS 25.331, since it is WG1's belief that some information needs to be added to the measurement control RRC messages.

RAN WG1 has already as a consequence of this liaison statement removed the information below from TS 25.215 & TS 25.225.

For **FDD to FDD handover measurements on the same frequency,** and **FDD to FDD handover measurements on other frequencies**, WG1 has identified the need for the UE to have at least the following information:

- The cell scrambling code used for downlink scrambling.
- The carrier centre frequency. (Only for measurements on other frequencies)
- SFN measurement indicator which indicates whether the UE should read SFN of the target cell or not. (Only for measurements on same frequency)

Additionally there can be the following information if timing information between cells is used:

- The relative timing difference between the cell transmitting the handover monitoring list and each neighbouring cell on the same frequency.
- The estimated accuracy of the timing difference indication.

This timing information can be given for example in the following format, where 16 bits are used for the message:

Code	Measurement accuracy (step)	Estimate of timing difference
00	40 chips	0 to 38400 chips steps of 40 chips
01	256 chips (1/10 slots)	0 to 38400 chips in steps of 256 chips
10	2560 chips (1 slot)	0 to 38400 chips in steps of 2560 chips
11	More than 2560 chips	

For **FDD to TDD handover measurements on other frequencies and TDD to TDD handover measurements**, WG1 has identified the need for the UE to have at least the following information:

- The carrier center frequency information (only for measurements on other frequencies).
- An information field for the cell parameters (t_{offset}, basic midamble code, scrambling code)
- The timeslot number of the PCCPCH and SCH.
- Observed time difference of the target cell if available

Each UE has stored a ‘cell parameter list’ which maps the information field value to one out of 128 sets of cell parameters. The list is common to all TDD systems and is described in TS 25.223.