

Title: Draft LS to WG2: Open issues for work item on Node B synchronisation

Source: TSG-RAN WG1

To: TSG-RAN WG2

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TSG RAN WG1 as the leading working group has begun work for R2000 according to RP-000055, proposed work item "Node B Synchronisation for TDD".

WG 1 has selected for the Layer 1 a concept based on transmissions of special synchronisation bursts in the PRACH timeslot. The concept is described in R1-00-0074 and TR 25.836, which are both attached.

In order to complete the task, WG1 has identified among others the following main issues, where support is needed from WG2:

- **Measurements:** A new timing measurement is necessary. Potentially, the new timing measurement and its schedule and reporting affects parts of specifications other than the pure definition.
- **Blocking of resources:** It might be advantageous to block certain, specified resources. This could be the timeslot and cell, where the measurements are performed. It is under study in WG1, whether the sync burst and PRACH bursts can be received in parallel. PRACH bursts from the UEs in the timeslot where a sync burst is transmitted are lost in any case. It is within the scope of WG2, to decide the appropriate solutions for this case.
- **Timing advance procedure:** There is a concept proposed in WG1, that, before performing a handover, the UE gets information about the synchronisation accuracy to the new cell. The initial TA value to be used in the new cell is the one autonomously calculated by the UE adjusted by the sync accuracy received from the UTRAN. The final conclusion on this subject is still open.



R1-000-74 NodeB Sync.zip



R1-00-0879.zip