

3GPP TSG RAN Meeting #67
Shanghai, China, March 9-12, 2015

RP-150275

Document for: Information

Agenda Item: 11.3.4

Motivation for WID Revision:
LTE Carrier Aggregation
Enhancement Beyond 5 Carriers

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Motivation 1: Timeline for core & performance work needs clarifying correction

Review of RAN#66 status:

- At RAN#66, the WID in [RP-142286](#) had been approved containing unclear core and performance work target end dates
- A related clarification was added already to the RAN#66 draft meeting minutes in [RP-150002](#)
 - Core work to be finalized by RAN#70
 - Performance work to be finalized by RAN#72

The needed changes to clarify the finalization of core & performance work are contained in the revised WID.

Motivation 2: Additional clarification on Band-agnostic WI focus (1/3)

Review of RAN#66 status (based on RP-142286):

- The 3rd objective of the WID reads as:
 3. *Specify the necessary (if any) eNB and UE core requirements [RAN4]*
 - *No band specific RAN4 work is planned as part of this work item.*

We believe, that it might be good to make it more clear in the WID based on this goal, that only band agnostic work (not band and band combination specific) is to be carried out in this WI also in the other parts of the WID.

- Accordingly, two related additions are suggested (see next slides)

Motivation 2: Additional clarification on band-agnostic WI focus (2/3)

Suggested related addition to the end of Section 3 / WI Justification:

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Despite of introduction of PUCCH on SCell or Dual PUCCH, CA extension to support up to 32 component carriers calls also for enhancements on HARQ-ACK feedback and CSI feedback carried on single UL carrier. Such enhancements can also improve CA operation with TDD PCell, which faces limitations on PDSCH HARQ-ACK feedback already with 3 component carriers.

In order to accommodate the future demand for CA with beyond 5 carriers and associated potentially foreseeable issues, all the band-agnostic requirements for the CA enhancements are specified. In principle, any band combination specific requirements for beyond 5 carriers will be specified in separate specific WIs according to the market demands after the completion of this WI.

Suggested addition to the end of Section 4.2 / Objective of Perf. Part:

4.2 Objective of Performance part WI

NOTE: Leave empty if the WI proposal does not contain a RAN performance part.

- Specify the necessary (if any) UE and eNodeB performance requirements for PUCCH on SCell for LTE Carrier Aggregation for the scenarios addressed in RAN1 and RAN2 specifications.
- Specify the necessary (if any) UE and eNodeB performance requirements for support of up to 32 component carriers for LTE Carrier Aggregation for the scenarios addressed in RAN1 and RAN2 specifications.
- Note: No band specific RAN4 work is planned (according to the 3rd objective of the core part).