

3GPP TSG RAN meeting #102
Edinburgh, Scotland, December 11-15, 2023

RP-233776

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CA Framework Overhaul

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Summary

- Background - CA Specification issues
- CA Framework Overhaul
- High Level Requirements and Functionality

CA Specification Framework Issues

- **CA Specification issues**
 - CA combinations are included in tables in the RAN4 specifications (38.101-1, -2, -3)
 - Tables are extremely long (even >60 pages) and make the specifications virtually unreadable
 - Files take a long time to open, scrolling is very slow, etc
 - Identifying whether a combination is specified or not takes a long time
 - Finding all the specifications that apply to a combination(e.g. MPR/A-MPR, MSD) is time consuming
 - Any new band leads to a large number of new combinations
 - A new 5-band CA combination means 10s of fallback combinations
- **CA combination handling inefficiencies**
 - A lot of time/energy is spent in RAN4 on handling CA combinations,
 - Many basket WIs, 100s of TPs in each meeting
 - Only a handful of the proposed combinations are actually analyzed and discussed
- **Problem is only expected to become worse as more bands are being defined**
 - 3GPP bands are the basic pillar for any deployment

CA Framework Overhaul

- **A completely new way of handling the CA specifications is needed**
- New tool/methodology that solves the issues in the previous page
- RAN Plenary should discuss how to trigger and organize such work
 - This issue cannot be solved only in RAN4 as it is not a pure technical issue
- Work on identifying/development of this new tool/methodology should start as soon as possible
 - Process expected to take at least a few years
 - Identifying/development of a new tool will take time
 - Specifications would have to be maintained in parallel until the new tool/methodology becomes fully usable and stable
 - Ideally this should be available when 6G normative work starts

High Level Requirements and Functionality

- Below is an open list given as a starting point
 - Requirements and Functionality will need to be further refined
- 1. Ability to maintain lists of all CA combinations defined
 - For example a database instead of using MS Word Tables
 - RAN4 specifications would contain the necessary reference to such database
- 2. Ability to quickly identify if a CA combination is defined or not
 - Searching for a CA combination is very time consuming
 - Preferably an easy way to identify all the combinations defined for a combination of bands
- 3. Ability to find all the specifications applicable to a band combination (e.g. MPR/A-MPR, MSD, etc)
- 4. Ability to track changes and versions (change/review marks and versioning)
- 5. A simple tool for companies to request the introduction of a new combination
 - Ideally this would automatically generate TPs/CRs or flag the specifications that need further discussion



Thank you

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