3GPP TSG-RAN WG2 Meeting #116bis-e R2-22xxxxx

**E-meeting, January 17 – January 25, 2022**

**Title: Draft** Reply LS to RAN4 on NCSG

**Response to:** LS on NCSG (R4-2120306)

**Release:** Rel-17

**Work Item:** NR\_MG\_enh-Core

**Source:** Apple [To be RAN2]

**To:** RAN4

**Cc:** -

**Contact Person:**

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# **1. Overall Description**

RAN2 thanks RAN4 for the LS R4-2120306. RAN2 has discussed the technical aspects related to the LS and made following agreements.

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| --- |
| * From RRC signaling design, RAN2 aim to support joint working among Pre-MG, concurrent gaps, and NCSG
* Re-use the Rel-16 NeedForGap reporting like procedure for NCSG reporting:

- UE indicates capability on NCSG support in UE capability reporting (FFS on UE capability reporting details). - NW configures the NCSG reporting in *RRCReconfiguration* and *RRCResume* message.- UE reports the NCSG capabilities in *RRCReconfigurationComplete* and *RRCResumeComplete* messages.* Agree that NCSG can be configured as per UE, (per FR1 and per FR2 patterns is FFS).
* FFS if NCSG patterns corresponding to legacy patterns #0 and #1 are mandatorily supported if UE supports NCSG. And to further discuss UE capability between reporting an indicator of NCSG feature support and reporting supported NCSG patterns
* Detailed design Same as Rel-16 NeedForGap, support NCSG reporting for both intra-frequency and inter-frequency. FFS Inter RAT
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In addition, RAN2 would like to kindly ask RAN4 following question:

**Q:** **Whether to support simultaneous configurations on the following combinations?**

* 1. **NCSG FR1 gap + NCSG FR2 gap**
	2. **Legacy FR1 gap + NCSG FR2 gap**
	3. **Legacy FR2 gap + NCSG FR1 gap**
	4. **One legacy perUE gap + one NCSG perUE gap**
	5. **One legacy perUE gap + NCSG FR1 gap**
	6. **One legacy perUE gap + NCSG FR2 gap**

**2. Actions:**

RAN2 respectfully asks RAN4 to provide answer to the question above.

**3. Date of Next RAN2 Meetings:**

TSG-RAN WG2 Meeting #117e 21 Feb - 03 Mar 2022 E-meeting

TSG-RAN WG2 Meeting #118-e 16 - 27 May 2022 E-meeting