**3GPP TSG RAN WG1 #109-e R1-22xxxxx**

**e-Meeting, May 9th – 20th, 2022**

**Title:** Reply LS on power control for NR-DC

**Response to:** (R1-2103030/R4-2206566) Further Reply LS on power control for NR-DC

**Release:** Rel-16

**Work Item:** LTE\_NR\_DC\_CA\_enh-Core

**Source:** RAN1

**To:** RAN2, RAN4

**Contact Person:**

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**Attachments: -**

**1. Overall Description:**

RAN1 would like to thank RAN4 for the Further Reply LS on power control for NR-DC. RAN1 discussed the issue in RAN1#109e meeting in May 2022. There was no consensus in RAN1 to update the RAN1 specifications.

RAN1 identified the need to update the descriptions of the NR dual-connectivity related UE capabilities as well as the 38.331 field description of *p-NR-FR2* to correctly reflect the specification support for NR dual connectivity.

RAN1 requests RAN2 to modify the NR-DC power sharing mode related capabilities in TS38.306 (and potentially in TR38.822) as follows:

* For capabilities *intraFR-NR-DC-PwrSharingMode1-r16*, *intraFR-NR-DC-PwrSharingMode2-r16* and *intraFR-NR-DC-DynamicPwrSharing-r16* (FGs 18-1/1a/1b):
	+ In case MCG and/or SCG have cells in different frequency ranges, this FG indicates the capability of the power sharing only between those MCG and SCG cells with UL in FR1.
* Note: above clarification for FG18-1/1a/1b does not mean that Rel-16 Ues are mandated to support power sharing mechanisms like FG18-1/1a/1b for FR2-FR2 DC.

RAN1 also requests RAN2 to add a note to the *p-NR-FR2* field description as follows:

|  |
| --- |
| ***p-NR-FR2***The maximum total transmit power to be used by the UE in this NR cell group across all serving cells in frequency range 2 (FR2). The maximum transmit power that the UE may use may be additionally limited by *p-Max* (configured in *FrequencyInfoUL*) and by *p-UE-FR2* (configured total for all serving cells operating on FR2). This field is only used in NR-DC. UE does not expect to be configured with this parameter in this release of the specification. |

**2. Actions:**

**To RAN2:**

**ACTION:** RAN1 respectfully asks RAN2 to take the above information into account and update the specifications accordingly.

**3. Date of Next TSG WG RAN1 Meetings:**

TSG-RAN WG1 Meeting #110 22 - 26 August 2022 Location TBC