**3GPP TSG RAN WG2#126 R2-240zzzz**

**Fukuoka, Japan, 20th - 24th May 2024**

**Title: Draft Reply LS on IE supportedBandwidthCombinationSetIntraENDC and IE intraBandENDC-Support**

**Response to: R2-2402136/R4-2403809 “LS on IE supportedBandwidthCombinationSetIntraENDC and IE intraBandENDC-Support”**

**Release: Rel-17**

**Work Item: TEI17**

**Source: Google (to be RAN2)**

**To: RAN4**

**Cc:**

**Contact person: Frank Wu**

**Email Address: frankwu@google.com**

**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

**Attachments:** R2-2405975/R2-2405976/R2-2405977/R2-2405978

# 1 Overall description

RAN2 thanks RAN4 for the LS on IE *supportedBandwidthCombinationSetIntraENDC* and IE *intraBandENDC-Support*.

RAN2 has discussed and agreed to introduce new capabilities to support an inter-band (NG)EN-DC band combination with multiple intra-band (NG)EN-DC components.

* A new capability (i.e., *supportedBandwidthCombinationSetIntraENDC-v17xy*) is introduced to indicate BCS for each of the multiple (NG)EN-DC components. The new capability can be indicated only if the UE supports different BCSs for the multiple (NG)EN-DC components. If the UE supports the same set of BCSs for the multiple (NG)EN-DC components, the existing capability (i.e., *supportedBandwidthCombinationSetIntraENDC* without suffix) is applicable instead of this new capability.
* A new capability (i.e., *intraBandENDC-Support-v17xy*) is introduced to indicate a spectrum contiguity capability in DL for each of the multiple (NG)EN-DC components. The new capability can be indicated only if the UE supports different spectrum contiguity capabilities in DL for each of the multiple (NG)EN-DC components. If the UE supports the same spectrum contiguity capability in DL for each of the multiple (NG)EN-DC components, the existing capability (i.e., *intraBandENDC-Support* without suffix) is applicable instead of this new capability.
* A new capability (i.e., *intraBandENDC-Support-UL-v17xy*) is introduced to indicate a spectrum contiguity capability in UL for each of the multiple (NG)EN-DC components. The new capability can be indicated only if the UE supports different spectrum contiguity capabilities for the multiple (NG)EN-DC components. If the UE supports the same spectrum contiguity capabilities in UL for each of the multiple (NG)EN-DC components, the existing capability (i.e., *intraBandENDC-Support-UL* without suffix) is applicable instead of this new capability.

The RAN2 agreed CRs are also attached for information. With the agreed CRs, the UE can indicate BCSs and spectrum contiguity capabilities for the maximum four intra-band (NG)EN-DC components in an inter-band (NG)EN-DC band combination.

# 2 Actions

**To RAN4**

**ACTION:** RAN2 kindly asks RAN4 to confirm whether the above fulfils the RAN4 requirement for supporting multiple intra-band (NG)EN-DC components within an inter-band (NG)EN-DC band combination.

# 3 Dates of next RAN2 meetings

RAN2#127 August 19th - 23th, 2024 Maastricht, NL

RAN2#127-bis October 14th - 18th, 2024 TBC, China