**3GPP TSG-RAN2#112-e R2-2010845**

**Electronic, 2 – 13 November 2020**

**Title: [**Draft] LS on capability for extended RAR window monitoring

**Release:** Rel-16

**Work Item:** NR\_unlic-Core

**Source:** Qualcomm [to be RAN2]

**To:** RAN1

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**Attachments:** R2-2011174.zip

# 1 Overall description

On the support for monitoring an extended RAR window ( > 10ms), RAN2#109bis-e has previously agreed that “it is mandatory to support monitoring the last two bits of SFN for RACH operation in shared spectrum” and sent an LS in to RAN1 (*R2-2005865)* informing this decision.

In the RAN1 LS (R1-2007137) which informs RAN2 on an update to the UE feature sets, the following was stated:

*RAN1 discussed the RAN2 decision conveyed in LS R1-2005204(R2-2005865) not to define a capability bit for FG10-2f. It is RAN1’s understanding that FG10-2f should be optional because some UEs may not require this capability, e.g. UEs supporting only CA/LAA scenario (scenario A in the NR-U WID). Therefore, RAN1 would like to ask RAN2 to introduce a capability bit for FG10-2f.*

In the latest versions (16.2.0) of 38.331 and 38.306, this capability (*extendedRAR-Window-r16)* was already captured as an optional capability as part of *SharedSpectrumChAccessParamsPerBand.*

RAN2#112-e has further discussed this and agreed that this capability should be optional only for the UEs which do not support non-CA deployment scenarios, corresponding to scenarios B, C, D, or E in Annex B.3 of TS 38.300. The reason for this decision was that, to configure *ra-ResponseWindow* larger than 10ms, the network needs to know this capability before initial channel access. RAN2 assumes that this is in line with the RAN1 justification for making the capability optional.

RAN2#112-e has also agreed to rename the capability as *extRA-ResponseWindow-r16* to align with the corresponding RRC field *ra-ResponseWindow* and to be consistent with the RAN2 naming conventions.

The attached agreed 38.306 CR captures this RAN2 decision along with some clarifications for this capability.

RAN2 respectually asks RAN1 to take these RAN2 agrements into account.

# 2 Actions

**To TSG RAN1**

ACTION: RAN2 respectually asks RAN1 to take these RAN2 agrements into account.

# 3 Dates of next TSG RAN WG2 meetings

TSG-RAN2 Meeting #113-e 25 January – 05 February 2021 eMeeting

TSG-RAN2 Meeting #113-bis-e 12 – 20 April 2021 eMeeting