3GPP TSG RAN WG2 Meeting #119-e R2-220xxxx

Electronic, 17–29 August, 2022

**Title: LS on enabling/disabling HARQ feedback via UE specific RRC signalling**

**Response to: -**

**Release: Rel-18**

**Work Item: LTE\_NBIOT\_eMTC\_NTN-Core**

**Source: MediaTek [to be RAN WG2]**

**To: RAN WG1**

**Cc: -**

**Contact person: Abhishek Roy**

**Abhishek.Roy@mediatek.com**

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

**Attachments:** -

# 1 Overall description

In R18, IoT-NTN operation is extended to include User Plane Enhancements, containing signalling details for selectively enabling/disabling HARQ feedback in individual HARQ processes to mitigate impact of HARQ stalling on UE data rates. During RAN2 119-e the following agreements are made:

Agreements:

1. Disabling DL HARQ feedback is supported for NB-IoT and eMTC NTN. FFS on UE capability
2. For UL HARQ operation, introduce two HARQ modes, i.e., HARQ mode A and HARQ mode B in IoT NTN (both NB-IoT and eMTC NTN), similarly to NR NTN
3. From RAN2 perspective, at least for eMTC, enabling/disabling HARQ feedback can be configured per DL HARQ process at least via UE specific RRC signalling. FFS for NB-IoT (and especially for CP solution for NB-IOT).

Based on the above agreements, RAN2 would like to inform of the RAN1 about RAN2’s decision that for eMTC-based NTN, enabling/disabling HARQ feedback can be configured per DL HARQ process basis at least by UE specific RRC signalling. RAN2 is still discussing enabling/disabling HARQ feedback for NB-IoT based NTN.

Question: RAN2 would like to check if RAN1 have any concern with using RRC for enabling/disabling HARQ feedback in IoT-NTN.

# 2 Actions

**To RAN WG1**

**ACTION:** RAN2 respectfully asks RAN1 to take the above into account RAN2’s decision and agreements and provide feedback if they have any concern.

# 3 Dates of next RAN WG2 meetings

RAN2#119bis 10–19 October 2022, Electronic meeting (Note that only Rel-18 discussion will take place)

RAN2 #120 14–18 November 2022, Europe