3GPP TSG-RAN WG4 Meeting # 95-e R4-2008777

Electronic Meeting, 25 May – 5 June, 2020

Title: TP for TR 38.809: Transmit ON/OFF power

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Agenda item: 6.5.2.1.3

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# Introduction

This contribution provides TP for TR 38.809 based on the RAN4 discussion and agreements.

# Reference

[1] R4-2002495, “WF on IAB-MT Tx power requirements”

[2] R4-2005438, “Email discussion summary for [94e Bis][208] NR\_IAB\_RF\_Part\_2”

# Annex: TP for IAB TR

*<First part>*

## 7.4 Transmit ON/OFF power

Transmit ON/OFF power requirements include two parts: transmitter off power and transmitter transient period. For IAB-DU, it’s straightforward to reuse BS’s both requirements because IAB-DU behaviour is the same as BS.

For IAB-MT, reusing BS or UE requirements for both OFF power and transient period are the candidates. Comparing BS OFF power and UE OFF power requirements, BS FR1 requirements are more stringent than UE but FR2 visa verse. It is unlikely there will be many IAB nodes in close proximity so a relaxed requirement compared to UEs should not cause a rise in overall interference in the system. Therefore, IAB-MT can reuse BS off power. Regarding transient period requirements, the general profiles for BS and UE are similar but FR2 BS transient period length is shorter than UE. UE has many specific profiles requirements to explicitly define the transient period location for different physical layers and different test cases. As IAB-MT implementation has less restriction than commercial UE, it is expected that IAB-MT can meet BS more stringent transient period length requirements. Thus IAB-MT general profile requirements can reuse BS requirements. For the UE specific profiles, they are not needed for IAB-MT because IAB-MT should know UE behaviour when different physical channels are transmitted.

Based the above analysis, both IAB-DU and IAB-MT reuse BS ON/OFF power requirements including the OFF power and transient period.

*<Next part>*

## 9.5 OTA transmit ON/OFF power

According to the analysis in 7.4, both IAB-DU and IAB-MT reuse BS radiated ON/OFF power requirements including the OFF power and transient period.

*<End of the TP>*