**3GPP** **TSG CT WG1 Meeting 122-e TDoc C1-20TBD**

**Electronic meeting, 20-28 February 2020**

**Title: LS on suspend indication to the NAS**

**Response to:**

**Release: Rel-16**

**Work Item: 5G\_CIoT**

**Source:** **CT1**

**To: RAN2**

**Cc: SA2**

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**Attachments:**

# 1 Overall description

CT1 would like to highlight the ambiguity associated with the suspend indication that the RRC provides to the NAS as follows:

**Section 5.3.1.4 of TS 24.501 states:**

The UE shall transition from 5GMM-CONNECTED mode over 3GPP access to 5GMM-CONNECTED mode with RRC inactive indication upon receiving an indication from the lower layers that the RRC connection has been suspended.

Note: see also section 5.3.8.7 (titled: UE actions upon entering RRC\_INACTIVE) of TS 36.331:

“*1> indicate the suspension of the RRC connection to upper layers;*”

**For a UE that is using user plane CIoT 5GS optimization, section 5.3.1.5 of TS 24.501 states:**

Upon indication from the lower layers that the RRC connection has been suspended, the UE shall enter 5GMM-IDLE mode with suspend indication

Note: see also section 5.3.12 (titled: UE actions upon leaving RRC\_CONNECTED or RRC\_INACTIVE) of TS 36.331:

“*1> if leaving RRC\_CONNECTED was triggered by suspension of the RRC:*

*… [SKIP] …*

*2> store the following information provided by E-UTRAN:*

*3> the resumeIdentity;*

*… [SKIP] …*

*2> indicate the suspension of the RRC connection to upper layers;*”

Per the above, for the UE in WB-N1 mode that is using user plane CIoT 5GS optimization, the NAS cannot know the actual reason for the suspend indication from the lower layers i.e. due to the RRC entering RRC inactive state or due to suspension of the RRC connection for user plane CIoT 5GS optimization.

# 2 Actions

**To RAN2**

**ACTION:** CT1 kindly requests RAN2 to clarify how the NAS can determine the actual reason behind a suspend indication from the RRC.

# 3 Dates of next TSG CT WG1 meetings

TSG CT WG1 Meeting 123 20-24 April 2020 Dubrovnik (Croatia)

TSG CT WG1 Meeting 124 25-29 May 2020 TBD