3GPP TSG-RAN WG3 #121 R3-234586

21th – 25th Aug 2023

Toulouse, France

Agenda Item: 20.2

Source: ZTE, China Telecom, CATT,

Title: (TP to 38.401) Leftover issues for MT-SDT

Document for: Approval

# Introduction

This TP captures the agreement.

# Text proposal to TS38.401

================<Start of change>=================

. 8.18.x MT-SDT

The procedure for mobile terminated small data transmission in RRC Inactive is shown in Figure 8.18.x-1.



**Figure 8.18.x-1: Mobile Terminated Small Data Transmission in RRC Inactive state.**

1. During the setup or modification of the bearer context as specified in 8.9.2, the gNB-CU-CP requests the gNB-CU-UP to provide MT-SDT information.

2a-0. The gNB-CU-UP receives DL data for the UE in RRC Inactive on NG-U interface.

2a-1. The gNB-CU-UP sends DL DATA NOTIFICATION message to the gNB-CU-CP. If determining that DL data packets are only mapped to SDT bearers, as requested in step 1, the gNB-CU-UP includes the MT-SDT information in the DL DATA NOTIFICATION message.

2b. The gNB-CU-CP receives DL NAS signalling over NGAP.

3. After 2a or 2b, the gNB-CU-CP sends PAGING message to the gNB-DU. The MT-SDT indication may be included in the PAGING message.

4. The gNB-DU sends the *Paging* message to the UE. In case the MT-SDT indication is received in step 3, the gNB-DU includes the MT-SDT indicator in the *Paging* message.

5. If the UE has been successfully reached, it initiates the RRC connection resume procedure as described in 8.6.2 or 8.9.6.2, or initiates the SDT procedure as described in 8.18.1 or from step 9 in 8.18.2 or from step 1 in 8.18.3 with the following difference:

- In case SDT procedure is initiated, the UE may indicate the RRC Resume Request is for MT-SDT, which may be without UL data.

================<End of change>=================