**3GPP TSG RAN WG1 #122bis R1-2507972**

**Prague, Czech, Oct 13th – 17th, 2025**

**Source: Ad-Hoc Chair (NTT DOCOMO)**

**Title: Session Notes of AI 9.9**

**Agenda Item: 9.9**

**Document for: Endorsement**

* 1. ***UE features for NTN for Internet of Things (IoT) Phase 3***

Proposal 1:

Introduce the following new FG for support of OCC with interleaved multi-TB scheduling:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Index** | **Feature group** | **Components** | **Prerequisite feature groups** | **Need for the eNB to know if the feature is supported** | **Need for the UE to know if the feature is supported (only for V2X WI, where the PC5-RRC capability signalling is delivered between the UEs)** | **Consequence if the feature is not supported by the UE** | **Type**  **(the ‘type’ definition from UE features should be based on the granularity of 1) Per UE or 2) Per Band or 3) Per BC or 4) Per FS or 5) Per FSPC)** | **Need of FDD/TDD differentiation** | **Capability interpretation for mixture of FDD/TDD** | **Note** | **Mandatory/Optional** |
| 1-4 | OCC for single-tone NPUSCH format 1 with 15 kHz / 3.75 kHz SCS with interleaved multi-TB scheduling in RRC\_CONNECTED | Support OCC for single-tone NPUSCH format1 with 15 kHz / 3.75 kHz SCS with interleaved multi-TB scheduling in RRC\_CONNECTED | At least one of {1-1 or 1-2}, Rel-16 2-8 | Yes | N/A | UE does not support OCC for single-tone NPUSCH format 1 with 15 kHz / 3.75 kHz SCS with interleaved multi-TB scheduling in RRC\_CONNECTED | Per UE | FDD only | N/A | Note: This FG is applicable only to IoT-NTN FDD band | Optional with capability signalling |

R1-2506914 Discussion on the UE feature for NTN for Internet of Things (IoT) Phase 3 ZTE Corporation, Sanechips

R1-2506939 UE features for IoT-NTN Phase 3 Huawei, HiSilicon

R1-2507103 Discussion on UE features for NTN for Internet of Things (IoT) Phase 3 CATT

R1-2507137 Discussion on UE features for NTN for Internet of Things Phase 3 OPPO

R1-2507260 On UE features for IoT-NTN Phase 3 Ericsson

R1-2507276 UE features for IoT NTN Phase 3 Samsung