**3GPP TSG-RAN4 Meeting #100-e *R4-2113355***

**Electronic meeting, , 16th – 27th August 2021**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **38.176-1** | **CR** |  | **rev** |  | **Current version:** | **16.0.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:***  | Draft CR to 38.176-1: Applicability for IAB-MT requirements |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** | NR\_IAB-Perf |  | ***Date:*** | 2021-08-16 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-16 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | Currently the applicability for IAB-MT requirements is not defined. |
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| ***Summary of change:*** | IAB-MT requirements applicability is captured in both declarations and relating to capability signaling. The declarations align the applicability to the approach for IAB-DU and the capability table relates the applicability to RAN2 signaling. |
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| ***Consequences if not approved:*** | Unclear applicability for IAB-MT requirements. |
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| ***Clauses affected:*** | 8.2.2.1 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

#### 8.2.2.1 General

##### 8.2.2.1.1 Applicability of requirements

##### 8.2.3.1.1.1 General

Unless otherwise stated, for a IAB-MT declared to support more than 2 demodulation branches (for *IAB-MT type 1-O* and *IAB-MT type 2-O*), the performance requirement tests for 2 demodulation branches shall apply, and the mapping between connectors and demodulation branches is up to IAB-MT implementation.

The tests requiring more than [20] dB SNR level are set to N/A in the test requirements.

##### 8.2.2.1.1.2 Applicability of requirements for different subcarrier spacings

Unless otherwise stated, the tests shall apply only for each subcarrier spacing declared to be supported (see D.7 in table 4.6-1).

##### 8.2.2.1.1.3 Applicability of requirements for TDD with different UL-DL patterns

Unless otherwise stated, for each subcarrier spacing declared to be supported, if IAB-MT supports multiple TDD UL-DL patterns, only one of the supported TDD UL-DL patterns shall be used for all tests.

##### 8.2.2.1.1.4 Applicability of requirements for optional IAB-MT features

Placeholder for possible introduction in next releases

##### 8.2.2.1.1.5 Applicability of requirements for mandatory IAB-MT features with capability signalling

The performance requirements in Table 8.2.2.1.1.5-1 shall apply for IAB-MT which support mandatory IAB-MT features with capability signalling only.

**Table 8.2.2.1.1.5-1: Requirements applicability for mandatory features with IAB-MT capability signalling**

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| **IAB-MT feature/capability [14]** | **Test type** | **Test list** | **Applicability notes** |
| 256QAM modulation scheme for PDSCH for FR1 (*pdsch-256QAM-FR1*) | FR1 TDD | PDSCH | Clause 8.2.2.2.5 (Test 1) |  |
| Supported maximum number of ports across all configured NZP-CSI-RS resources per CC (*maxConfigNumberPortsAcrossNZP-CSI-RS-PerCC*) | FR1 TDD | PDSCH | Clause 8.2.2.2.5 (Test 4, 5) | The requirements apply only in case the number of NZP-CSI-RS ports in the test case satisfies IAB-MT capability on maximum number of NZP-CSI-RS ports |
| Supported maximum number of PDSCH MIMO layers (*maxNumberMIMO-LayersPDSCH*) | FR1 TDD | PDSCH | Clause 8.2.2.2.5 (Test 3, 4, 5) | The requirements apply only in case the PDSCH MIMO rank in the test case does not exceed IAB-MT PDSCH MIMO layers capability |