3GPP TSG-RAN WG4 Meeting #94-e  *[draft]* R4-2002494

**Electronic meeting, 24th Feb– 6th Mar, 2020**

**Agenda Item: 8.5.4**

**Source: Samsung**

**Title: WF on IAB-MT class definition**

**Document for: Approval**

# WF on IAB-MT class

* **2 IAB- MT classes will be defined in Rel-16 as a starting point** 
  + Wide area IAB MT
  + [medium range or Local area] IAB MT

*Note: More classes in the future are not precluded.*

* **IAB-MT classification criteria** 
  + Many of the candidate options have been discussed in 1st round as below
  + Option 1: Distance from donor node (minimum/maximum)
  + Option 2: Power dynamic range
  + Option 3: Max Tx power(TRP or EIRP)
  + Option 4: Min distance to other operator
  + Option 5: planned or unplanned
  + It’s believed that the deployment scenario should be considered to derive criteria of IAB-MT classification
  + It seems distance from donor node would be easiest and most straight forward parameter as starting point for next step discussion
    - It is encouraged companies to provide proposal on distance to differentiate the scenario
  + Other factor on top of distance is not precluded if it can identify the scenario more accurately together with distance
* **IAB-MT classification dependent RF requirement** 
  + At least it is agreed to discuss max Tx power requirements for the each IAB-MT class
  + Max Tx power is declared by vendor
  + Max Tx power is different for each IAB MT class
  + Wide area IAB
    - No max Tx power for FR2
    - FFS on Max Tx power for FR1
  + [Medium range or local area] IAB
    - FFS max Tx power for FR2
    - FFS on Max Tx power for FR1
  + FFS on other RF requirements
  + *Note: ACLR &dynamic range, ACS, REFSENS and details on max TX power will be elaborated and discussed in separate WFs*
* **Relationship between IAB-MT class and IAB-DU class**
  + It is agreed to allow any combination of IAB-MT class with IAB-DU class.

# Reference

[1] R4-2002373, Email discussion summary for RAN4#94e\_#83\_NR\_IAB\_RF\_Tx

[2] R4-2001868, IAB class definition

[3] R4-2001283, On IAB-MT classes and dynamic range

[4] R4-2001709, [IAB] Discussion on power classes

[5] R4-2001436, IAB-Node transmitter requirements for FR2

[6] R4-2000276, Radiated transmit power and OTA output power for IAB-MT