

3GPP TSG RAN Rel-18 workshop

June 28 – July 02, 2021

Agenda: 4.2 Non-eMBB-driven Functional Evolution

TDOC: RWS-210203

For: discussion

Fixed Wireless Access Enhancements in Rel-18

Source: Rakuten Mobile



Fixed Wireless Access : High Capability CPEs

Motivation:

Wireless Network Operators can improve their share of home broadband market by providing comparative or better user experience as compared to Fixed line. This is possible by further increasing the capability of FWA UE (CPE) and improving spectral efficiency.

Proposal:

We propose to support the following enhancements of FWA/High Capability CPE

- Support maximum of 12/16 Layers and 3 /4 CWs. (12/16RX Ant)
- Higher order modulation (DL): 4096-QAM (FR1) & 1024-QAM (FR2)
- UL transmission with >4 ant/layers (codebook and non-codebook based)
- Increased Tx Power for CPE (Power class 1: 29dBm)
- OTA testing and 4-Layers for FR2

