

**Review of 8F/1079r1**

**ADDITIONAL TECHNICAL DETAILS SUPPORTING  
IP-OFDMA AS AN IMT-2000 TERRESTRIAL RADIO  
INTERFACE**

IP-OFDMA Evaluation Group Coordination  
Meeting

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Hassan Yaghoobi

# Overview of 8F/1079r1

- The WiMAX Forum® supporting material to complement the IEEE's submission of IP-OFDMA Radio Transmissions Technology (RTT).
- **Section 1:** Additional information on IP-OFDMA technology based on IEEE 802.16 and a description of the WiMAX Network Reference Model developed by the WiMAX Forum, used here as a framework for evaluating the IP-OFDMA radio interface.
  1. Mobile WiMAX Network Architecture
  2. WiMAX Network Reference Model
  3. Physical Layer Description
  4. MAC Layer Description

# Overview of 8F/1079r1 (cont'd)

- **Section 2:** Additional technical material to complement the technology description template in document 8F/1065
  1. Radio Transmission Technology (RTT) according to description template of M.1225
    - a. Updates to Section A1.2 (Technical Parameters) of 8F/1065 primarily focusing on detailed parameters for 5 MHz channel bandwidth option, UL/DL peak data rates and ratio split,
    - b. The information provided in Sections A1.3 (Expected Performance), A1.4 (Technology Design Constrains) and A1.5 (Terrestrial Link Budget) is new material to complement the technology description template included in document 8F/1065.
  2. Requirements and Objectives Template
    - a. In reference to TABLE 1, TABLE 2 and TABLE 3 of the Requirements and Objectives Template in M.1225
  3. Capacity and Coverage
    - a. Voice Capacity: OPNET simulations based on a 19-cell scenario, ITU channel model and detailed modeling of the IP-OFDMA MAC protocols, overhead and latencies.
    - b. Handover Performance/Latency: Optimized HHO, MS and BS initiated HO, intra and inter-FA cases, link loss
    - c. Data Capacity: ITU Ped-B and Veh-A, Mixed user, SIMO/MIMO, 5 and 10 MHz, up to 120 km/hr
    - d. Link Budget/Coverage: Speech, Ped-B/Veh-A Long Constrained Delay and Unconstrained Delay best effort

# Overview of 8F/1079r1 (cont'd)

- **Section 3:** Self-evaluation of the proposed IP-OFDMA RTT, as required by the update process of Recommendation ITU-R M.1457 described in Circular Letter 8/LCCE/95.
  1. **Self Evaluation:** In reference to Annex 3 of M.1225.