

Proposal for IEEE 802.16 Study Group on Public MAN for Broadband Fixed Wireless Access in License Exempt Bands

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## Proposal for IEEE 802.16 Study Group on Public MAN for Broadband Fixed Wireless Access in License Exempt Bands

Venue: 802.16 Study Group on Sub10 GHz, Ad Hoc on Functional Requirements

Base Document: none

Purpose: Proposal for IEEE 802.16 Study Group on Public MAN for Broadband Fixed Wireless Access in License Exempt Bands.

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# **Proposal for IEEE 802.16 Study Group on Public MAN for Broadband Fixed Wireless Access in License Exempt Bands**

**Proposed Study Group:  
Wireless High-Speed Unlicensed Metropolitan Area Network  
(WirelessHUMAN)**

Sub10 Working Group

# Objectives

- Identify license exempt bands suitable for fixed broadband MAN access – e.g. 5-6 GHz bands
- Investigate feasibility of developing an Air Interface Standard for the identified bands
- Investigate feasibility of using common MAC with IEEE 802.11 Enhanced MAC / IEEE 802.16.3 MAC or modifications thereof
- Investigate relationship with 802.11, 802.15 and other standards groups

## Potential Scope of Proposed Project:

- This intended standard will specify the physical layer and media access control layer of the air interface of interoperable fixed point-to-multipoint broadband wireless access systems. The specification will enable public metropolitan area network access to connection-oriented and/or connectionless data, video, and voice services. It will apply to systems primarily operating in license exempt bands between 5 and 6 GHz (e.g. the 5.25-5.35 GHz and 5.725-5.825 GHz UNII bands).

## What's Different?

- IEEE 802.11 – optimized for LANs primarily using ISM bands requiring spread-spectrum => not optimized for MAN access using 5-6 GHz (e.g. UNII bands)
- IEEE 802.15 - optimized for PANs (relatively small range) and focused on ISM bands
- IEEE 802.16.3 – optimized for licensed bands from 2 to 11 GHz
- Proposed Study Group will address public network access in license exempt bands.
- Proposed Study Group will investigate potential to reuse standardization efforts from 802.11/802.15/802.16

# Proposed Activities

- Develop draft PAR if found appropriate by Study Group.
- Proposed Study Group could have an open ballot process to facilitate participation from other groups (e.g. IEEE 802.11)
- Proposed Study Group is interested in holding joint interim meetings with IEEE 802.11/802.15 to investigate synergies.
- Proposed Study Group is open to other recommendations on interactions with 802.11, 802.15 and 802.16 on issues relevant to license exempt bands.

# Existing Support for Active Participation

- Durga P. Satapathy Sprint (Proposed Chair)
- Sanjay Moghe RF Solutions (Proposed Secretary)
- Amarpal Khanna Agilent Technologies
- Demos Kostas Adaptive Broadband
- Valentine Rhodes Intel
- Mika Kasslin Nokia
- David Trinkwon Transcomm Inc.
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- Naftali Chayat Breezecom
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