
Title: Initial Table of Contents for IEEE 802.16h

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Abstract

Purpose: To be used in further work.

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Table of Contents for IEEE 802.16h

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Introduction
The scope of drafting a TOC: guidance for further submissions and work.

Proposed Draft

**802.16h scope**
- take the PAR text

**802.16h applicability**
Un-coordinated frequency operation in all bands in which 802.16-2004 is applicable, including bands allowing shared services.

*Interference detection and prevention – general architecture*

Shared Radio Resource Management
- Principles
- Shared distributed system architecture

**Interference victims and sources**
- Identification of the interference situations
  - Interferer identification
  - Grouping of interfering/not-interfering units
- Identification of spectrum sharers
  - Regulations
  - Messages to disseminate the information
  - Avoid false-identification situations

**Interference prevention**
- Adaptive Channel Selection – ACS
  - Between systems
- Dynamic Frequency Selection – DFS
  - Frequency selection for regulatory compliance
- Pro-active cognitive approach
  - Signaling to other systems

**Transmission of information**
- Using dedicated messages
  - Common PHY
- Between BS and SS
- BS to BS
- Connection sponsorship
  - Using a common management system
    o Higher layers communication
    o Decentralized control
    o Information sharing
    o IP address dissemination

**Common policies**

- How to select a “free” channel (for ACS and DFS)
  o Acceptable S/(N+I)
  o Acceptable time occupancy
  o Capability of sharing the spectrum to implement a Shared Radio Resource policy

- Interference reduction policies:
  o BS synchronization
    ▪ GPS
    ▪ Ad-hoc
  o Shared Radio Resource Management
    ▪ Fairness criteria
    ▪ Distributed scheduling
      ▪ Assignments
    ▪ Distributed power control
    ▪ Distributed bandwidth control
    ▪ Beam-forming