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| Project | IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 > | |
| Title | Initial Table of Contents for IEEE P802.16h | |
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| Re: | | |
| Abstract | | |
| Purpose | Discuss the document and clarify the 802.16h opinion, to be used in further work. | |
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Table of Contents for IEEE P802.16h

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Alvarion

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
 - [Storage of identification information](#)
 - [Registration data-base](#)
 - [Security](#)

Interference prevention

- Adaptive Channel Selection – ACS
 - Between [802.16](#) systems
- Dynamic Frequency Selection – DFS
 - Frequency selection for regulatory compliance
- Pro-active cognitive approach
 - Signaling to other systems
 - [Recognition of other systems](#)

Transmission of information

- Using dedicated messages
 - o Common PHY
 - o Between BS and SS
 - o BS to BS
 - o Connection sponsorship
- Using a common management system
 - o Higher layers communication
 - o Decentralized control
 - o Information sharing
 - o IP / [MAC](#) 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