

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Comments of IEEE 802.16 Working Group on Proposed P802.16y PAR	
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Re:	Proposed P802.11y PAR (IEEE 802.11-05/0565r3) and Five Criteria (IEEE 802.11-05/0351r4)	
Abstract	Comments and questions on proposed P802.11y PAR.	
Purpose	The IEEE 802.16 is submitting these comments to be addressed by IEEE 802.11's Contention Based Protocol Study Group.	
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Comments of IEEE 802.16 Working Group on Proposed P802.16y PAR

802.16 has serious concerns with the draft PAR proposed for 802.11y but could support it so long as the following comments are resolved: (deletions are shown in “~~strikethrough~~” font and additions are italicized)

(1) Question for clarification

We observe that this PAR is unusual in being so directly tied to specific rules in a specific regulatory regime. Given that those rules may not yet be final, we are concerned that the PAR might be premature.

This PAR was originally submitted for the July 2005 Plenary but the deferred by the CBP Study Group and by the 802.11 WG. We understand that the reasoning was as follows:

From: Peter Ecclesine
Sent: Thursday, July 14, 2005 12:57 PM
Subject: Contention-Based Protocol SG update

Hi Stuart,

At our last SG telecon, we reviewed the situation:

There is no timetable for the start of FCC actions. The publication of FCC 05-45, 70/80/90 GHz took three months, of 05-65 3650-3700 MHz took two months.

FCC 05-65 Wireless Broadband Services in the 3650-3700 MHz Band became law May 11th

Eight petitions for reconsideration were received by the FCC on June 10th

There are four distinct possibilities:

The FCC publishes a notice asking for comments on the petitions, and replies to those comments (60 days)

The FCC publishes a notice asking for replies to the petitions (15 or 30 days)

The FCC writes a memorandum opinion and order, perhaps making small changes

The FCC does nothing

The CBP-SG felt that acting on 802.11-05/565r1 draft PAR in the July session is questionable, and will discuss the situation in the 802.11 Monday WG Plenary, and ask that the Study Group be continued through the November Plenary, so that we can make whatever changes seem adequate and have the November ExCom meeting decide.

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We would like to understand what has changed about this reasoning since July. For clarification, we would like to ask the following questions:

*Which of these four actions, if any, has the FCC taken?

*In what way does this FCC action change the July decision to defer the PAR into a November decision to proceed?

(2) **Comment:** The Purpose statement (Clause 14) begins: “The purpose of this project is to standardise the mechanisms required to allow shared operation in the 3650-3700 MHz band in the USA.” This statement is too broad, because it implied that the resulting mechanisms would be required to allow any shared operation in the band. Based on the title and scope statement, the purpose is narrow.

Suggested remedy: Change the sentence to “The purpose of this project is to standardise the mechanisms required to allow shared operation of 802.11 devices in the 3650-3700 MHz band in the USA.”

(3) **Comment:** 802.16 believes that the text in section 3 a) of the 5 criteria document suggests that since 802.16h is addressing only coexistence between .16 devices, that this does not satisfy the FCC rule requirements. However 802.16 questions whether the activity proposed by the 802.11y PAR completely satisfies the FCC rules either. However it can be understood that both these activities at least address in part the requirements of the FCC rules.

Therefore 802.16 proposes the following amendments to the text in the 5 criteria document:

Suggested remedy for section 3 a) of the 5 criteria: There are no other IEEE 802 projects *specifically currently* addressing the issue of FCC Part 90 Subpart Z Wireless Broadband operation in the US 3650-3700 MHz band. Systems compliant to IEEE 802.16-2004 can operate in the 3650-3700 MHz band in other regulatory domains, and a coexistence protocol for 802.16h systems ~~is~~ currently being addressed in the P802.16h project *could be employed by devices operating in the US 3650-3700 MHz band.* ~~The 802.16h TG is writing an amendment that will enable coexistence only between those 802.16 systems that support the amendment.~~ P802.22 is working on a cognitive radio approach to sharing unused channels in the 52 MHz to 900 MHz TV broadcast bands, using spectrum sensing and a master/slave relationship between base stations and user terminals to determine whether given transmit frequencies and power levels will cause harmful interference to licensed services. ~~Neither of these projects currently address operation under FCC Part 90 Subpart Z rules, however~~ There has been discussion in P802.22 about the possibility that 802.22 base stations, but not user terminals, might be candidates for some sort of ‘light licensing’/registration regime.

(4) **Comment:** Item 17 (“Are there other documents or projects with a similar scope?”), says “The current ETSI HiperMAN and IEEE 802.16-2004 projects do not address the rules specified by the FCC for a Contention-Based Protocol for operation in the 3650-3700 MHz band, nor do they address coexistence with IEEE 802.11 projects, but they do address operation in 3400-3800 MHz bands in other regulatory domains.”

ETSI HiperMAN and IEEE 802.16-2004 are standard, not projects.

Suggested remedy: Change “The current ETSI HiperMAN and IEEE 802.16-2004 projects” to “The current ETSI HiperMAN and IEEE 802.16-2004 *standards*”.

(5) **Comment Section 17 of the draft PAR:** 802.16 believes that the statements in section 17 are incomplete without a reference to the 802.16h project as this is specifically dealing with the development of relevant coexistence mechanisms.

Suggested remedy for section 17 of the draft PAR: The current ETSI HiperMAN and IEEE 802.16-2004

standards do not specifically address the rules specified by the FCC for a Contention-Based Protocol for operation in the 3650-3700 MHz band, nor do they address coexistence with IEEE 802.11 projects, but they do address operation in 3400-3800 MHz bands in other regulatory domains. A coexistence protocol for 802.16 systems is currently being addressed in the P802.16h project that could be employed by devices operating in the US 3650-3700 MHz band.