

IEEE 802.16 Working Group on Broadband Wireless Access

<http://WirelessMAN.org>



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To: Walter Johnston
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VIA ECFS

Subj: New IEEE Project P802.16.3 on Mobile Broadband Network Performance Measurements

The IEEE 802.16 Working Group (WG) on Broadband Wireless Access has taken note of the Commission's [4 September 2012 announcement](#) of a "new program to measure mobile broadband service performance in the United States" and an [open meeting of 21 September 2012](#) to introduce the program. The IEEE 802.16 WG hereby provides its views regarding that announcement and on related standardization activities within the WG. We have noted that the program will "develop information on mobile broadband service performance in the United States" utilizing a "collaborative model"; that it anticipates supporting a methodology that "allows comparisons and analyses that are valuable to consumers and spur competition among service providers"; and that the FCC "looks forward to the participation of other critical stakeholders." We have also noted that, in the 21 September meeting, the FCC staff will discuss "the technical methods for performance testing of mobile broadband Internet service, methodological approaches to remotely acquiring and analyzing such data, and other methodological considerations for the testing of mobile broadband performance."

Given our understanding of this new mobile broadband service performance measurement program, the IEEE 802.16 WG would like to bring to your attention the new, and quite relevant, IEEE Project P802.16.3 on *Mobile Broadband Network Performance Measurements*. This project was authorized on 30 August 2012 by the IEEE-SA Standards Board and assigned to the IEEE 802.16 WG for standardization development. The proposal was developed, beginning in March 2012, in the 802.16 Working Group's [Metrology Study Group](#).

Details of the project are available in the PAR and Five Criteria statement ([IEEE 802.16-12-0489](#)). In particular, the scope states that the standard will specify "procedures for characterizing the performance of deployed mobile broadband networks from a user perspective. It specifies metrics and test procedures as well as communication protocols and data formats allowing a network-based server to coordinate and manage test

operation and data collection.” Please note that the scope of the project addresses end-to-end measurements and is not limited to any particular air interface.

For more detail, we also call your attention to working document [IEEE 802.16-12-0483](#) (“[Draft] Applications and Requirements for Mobile Broadband Network Performance Measurements”). This early draft includes our initial assessment of key measurement applications across eight stakeholder roles, as well as our initial view of requirements.

It is our current view that the P802.16.3 project will attempt to incorporate existing standards when feasible. For example, the PAR refers to several related standardization activities. Working document 802.16-12-0483 incorporates a view that the standard “should reference metrics specified by IETF (particularly from the IP Performance Metrics (IPPM) Working Group) whenever feasible.” The 802.16 Working Group has received a [liaison communication from the Broadband Forum End to End Architecture Group](#) with information about the new Working Text WT-304 (“Broadband Service Attributes and Performance Metrics”). Meeting this week, the 802.16 Working Group has [responded to the Broadband Forum](#) and [provided a statement to IETF](#) as well.

While the P802.16.3 project intends to reference existing standards where feasible, some extensions may be inevitable. In particular, the project specifically addresses the mobile case as the core issue. To our understanding, most other relevant projects, while not specifically excluding mobile devices, do not target them. The mobile case raises distinct issues that might not be prioritized when the focus is fixed access. We observe that the FCC’s approach of addressing the fixed case prior to the mobile one underscores this situation.

According to our understanding, the target applications of Project P802.16.3 include those of the FCC’s program but appear to be a bit broader. The FCC’s statement to the BBF refers to data “to the consumer, to policy makers, to the academic community and to Internet service providers.” Working document 802.16-12-0483 calls out a broader set of eight “stakeholder roles”: governmental policy maker, user (individual or enterprise), cell tower operator, wireless carrier, researcher, standards developer, user device vendor, and application developer.

Given these circumstances outlined here, it appears likely that Project P802.16.3 could develop a standard that addresses the needs of the new FCC mobile broadband service performance measurements program. We would appreciate your views on this suggestion. We also welcome your input on the appropriate technical requirements to ensure that Project P802.16.3 does indeed meet your needs. If it is convenient for you, we encourage you to provide comments regarding our working document [802.16-12-0483](#).

We welcome your perspectives and encourage communication. Our next opportunity to respond to a formal communication will occur at [IEEE 802.16 Session #82](#) (12-15 Nov 2012 in San Antonio, TX, USA). For information on our future meetings schedules, see <http://ieee802.org/16/calendar.html>.

Sincerely,

/s/

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