

**IEEE 802.16 Working Group on Broadband Wireless Access**  
<http://WirelessMAN.org>



Roger B. Marks  
Chair, IEEE 802.16 Working Group  
r.b.marks@ieee.org  
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To: David Allan, Co-chair, Broadband Forum End to End Architecture Group

cc: Christophe Alter, Broadband Forum Technical Committee Chair  
Paul Nikolich, Chair, IEEE 802 Executive Committee  
Tony Jeffree, Chair, IEEE 802.1 Working Group

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

The IEEE 802.16 Working Group (WG) on Broadband Wireless Access acknowledges with appreciation your statement of 31 August on “Project update and Request for input (WT-304 Broadband Service Attributes and Performance Metrics)” and the invitation to contribute toward the project. This notice is timely. The new IEEE Project P802.16.3 on *Mobile Broadband Network Performance Measurements* 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 in the 802.16 Working Group’s [Metrology Study Group](#).

Details of the project are available in the Project Authorization Request (PAR) and Five Criteria statement ([IEEE 802.16-12-0489](#)). In particular, the scope specifies 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 will consider end-to-end measurements and is not limited to any particular air interface.

The PAR refers to several related standardization activities. Unfortunately, the 802.16 WG was unaware of WT-304 during PAR preparation.

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 first 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 as much as feasible. For example, the current view is that metrics established through the IETF IPPM WG will be applied where feasible, though some extensions (particularly to the mobile case) may be inevitable. Likewise, the P802.16.3 project may be able to reference elements of the WT-304 approach. Some key features that we suspect may distinguish the P802.16.3 project from WT-304 include the following:

- (1) The P802.16.3 project is specifically addressing mobile user devices. While your description of WT-304 does not exclude mobile devices, we do not see them explicitly targeted. Since, in our view, mobility is a major architectural feature, we surmise that WT-304 may be aimed at stationary or portable terminals. We would appreciate clarification on that topic.
- (2) We understand from your use of terminology (such as “Network Segment(s) being tested”) that you may be considering measurement points inside the operator’s network. We would appreciate your clarification on that topic as well. In the P802.16.3 Project, we are considering the problem “from a user perspective” and thereby intend to specify end-to-end measurements characterizing the network only at the edge. Our expected user base will include users with no internal access points. Also, we presume that some of our anticipated stakeholder base will require open data access, so we expect that model to be fully supported in the standard.

We will 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). Our next meeting after your December meeting will be at [IEEE 802.16 Session #83](#) (14-17 Jan 2013 in Vancouver, BC, Canada).

Sincerely,



Roger B. Marks

Chair, IEEE 802.16 Working Group on Broadband Wireless Access