

**Final Task Group Review:  
IEEE 802.16ab-01/01r1  
IEEE 802.16 Task Groups 3 and 4  
Projects IEEE P802.16a/P802.16b  
Deadline: 27 August 2001**

Task Groups 3 and 4 of the IEEE 802.16 Working Group on Broadband Wireless Access are currently defining the PHY and MAC layers for a broadband wireless access network specification for frequencies from 2-11 GHz. The Task Groups are now seeking to refine their joint Working Document ([IEEE 802.16ab-01/01r1](#)) in preparation for submission to a Working Group Letter Ballot, planned for September 2001. This Task Group Review invites comments for consideration at Session #15 (10-14 September 2001 in Denver, CO, USA).

Commenters are encouraged to be thorough and concise. Comments must identify specific problems and should propose specific changes to correct them. Comments regarding changes to the overall structure of the document or regarding a higher level of integration among the various options are welcome. In addition, comments on the following topics are particularly encouraged:

For the Single Carrier PHY:

- Minimum RF Performance Requirements and Compliance for Base and Subscriber Stations (Capture Range, Power Level, Sensitivity, Frequency stability, etc.)
- Service Access Point (SAP) definition & Issues
- RF & Modulation Parameters (Carrier Offset, Ranging, etc)
- Robustness against Partial Band Interference
- Adaptive Antennas

For the OFDM PHY:

- Consolidation of OFDM and OFDMA
- Specifics of TDD and FDD operation
- Ranging
- Performance Analysis:
- FFT vs. BW
- Coding scenarios vs. traffic
- Spectral masks
- Channel estimation
- PHY impacts on registration (which PHY capabilities need to be registered)
- Power Control
- Advanced antenna techniques
- Pilots—fixed and moving
- Guard band timing
- Evaluation techniques

For the MAC:

- Power control
- Support for advanced antennae technologies
- Ease of installation support

- Dynamic Frequency Selection
- Co-existence in License Exempt bands

For the MAC/PHY Interface:

- MAP Relevance
- Subcarrier Based Polling
- Frame Structure, PHY Bursts, Transmission Convergence Sublayer
- Formats of PHY dependent Messages

Notes and instructions:

- **Commentary 1.2** <<http://ieee802.org/16/docs/Commentary.html>> serves as the comment preparation and submission tool. This standalone application, available for Windows and MacOS, includes instructions.
- In “Letter Ballot Number”, enter “TG3&4 Review”. *The Vote field will be ignored.*
- Under “Document under Review”, enter “802.16ab-01/01r1”.
- If it is necessary to support comments with details that cannot be accommodated in the text-based format, then the voter should contribute a document for publication on the IEEE 802.16 web site following the 802.16 Submission Instructions <<http://www.ieee802.org/16/submit.html>>. Documents should be submitted at least five days before the close of the ballot to provide time for the document to be numbered and posted. The ballot comment may then refer specifically to the posted document by number.
- Please take note of the IEEE 802.16 Patent Policy. Note that “anyone, whether participating in IEEE 802.16 or not, should notify the Chair of any patents (granted or under application, and regardless of the assignee or the patent nationality) that may cover technology that is under consideration by or has been approved by IEEE 802.16.
- Comments will be posted to the 802.16 Web Site.