

---

Project	IEEE 802.16 Broadband Wireless Access Working Group		
Title	System Requirements Call for Contributions for Meeting #2		
Date Submitted	16 July, 1999		
Source	Brian Petry 3Com 12230 World Trade Dr. San Diego, CA	Voice: Fax: E-mail:	858-674-8533  brian_petry@3com.com
Re:	At 802.16 meeting #0, attendees identified a need for contributions in some areas. This document is a call for contributions in those areas. The contents of this document were originally emailed in text form to the 802.16 reflector.		
Abstract	Call for contributions.		
Purpose	Solicit input from the 802.16 system requirements task group.		
Notice	This document has been prepared to assist the IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.		
Release	The contributor acknowledges and accepts that this contribution may be made publicly available by 802.16.		

---

\* 802.16 SYSTEM REQUIREMENTS GROUP SEEKS INPUT:  
\*  
\* Call for Contributions  
\*

The 802.16 System Requirements Task Group is working on a document that describes system requirements that directly affect the development of the 802.16 air interface standard for broadband wireless access systems, as described in the Project Authorization Request (<http://grouper.ieee.org/groups/802/16/interop/par.html>). It seeks input and review by 802.16 members, participants and the industry to ensure that the 802.16 standards meets industry expectations.

The current working draft, accepted by the task group at 802.16 meeting #1 (6-8 July, 1999), is at [http://grouper.ieee.org/groups/802/16/sysreq/contributions/80216s0-99\\_2.pdf](http://grouper.ieee.org/groups/802/16/sysreq/contributions/80216s0-99_2.pdf)

At meeting #1, we identified some key issues to resolve and asked for more contributions. Here are 9 specific issues we identified that need contributions:

1. Provide further description of bearer service attributes for the bearer services described in section 2.2. The intent is to identify specific requirements of each bearer service that directly affect MAC and PHY requirements.
2. Additional contributions regarding delay and delay variation (jitter) requirements. One contribution to meeting #1, 802.16sc-99/21, described some delay requirements from the perspective of ITU telephony requirements. The group agreed that more input is needed in this area, such as delay and jitter requirements of non-telephony bearer services.
3. Contributions regarding error rate requirements. The current draft cites a very aggressive BER of 10E-9 for data services, allowing perhaps for reduced error rates for other services. The group desires more input regarding error rate requirements, to relax the 10E-9 requirement and identify error rates required for various bearer services. Also, the group requires to know the highest (worst) BER that would be accepted by 802 for data services such as LAN bridging.
4. Provide input as to the requirements for specific connection types to be carried by the MAC layer: permanent virtual circuit (PVC) and/or switched virtual circuit (SVC). Contributions describing the requirement for only one or the other, or both, or "it doesn't matter" will be accepted.
5. Contribution specifying the particular requirements of IP version 6 (IPv6) that may not be considered by the current draft's IP bearer service requirements (section 2.2.4).
6. Provide concrete arguments for ATM vs. IP issues: IP (variable-length frame) only service, ATM-only (fixed-length cell) service, or support for both. Contributions should demonstrate feasibility as part of a concrete argument.
7. Input to a possible study group or sub-task-group for inclusion and requirement for a wireless repeater capability in the air interface. Contributions likely will be referred to a sub task group to study this issue.
8. Arguments pro- and con- for the elimination of the requirement for explicit support of synchronous transfer mode (STM, SDH/PDH) service.
9. Provide a case for security requirements, particularly the recommendation (or not) to use 802.10 security facilities.

Please submit contributions on these topics using the 802.16 Document Submission Template ([http://grouper.ieee.org/groups/802/16/rules\\_proc/802\\_16\\_template.doc](http://grouper.ieee.org/groups/802/16/rules_proc/802_16_template.doc)) Submissions will be considered non-confidential and will be posted for public access on the System Requirements Area of the 802.16 Web Site, unless you have a strong requirement for password protection. If you have a substantial contribution and require some password protection or control over distribution due to copyright or other confidentiality requirements, please contact Roger Marks ([r.b.marks@ieee.gov](mailto:r.b.marks@ieee.gov)) to make arrangements. However, the 802.16 group encourages open, unprotected communications.

For consideration for incorporating your contribution in the System Requirements document and at the August 4-6 meeting in Denver, submit your contributions no later than Wednesday July 28, 1999 to the Editor of the 802.16 System Requirements Document (Brian Petry).

Thank you, from the System Requirements Task Group leadership:

George Fishel (Chair)  
Communications Consulting Services  
Shermans Dale, PA  
tel: 717-582-2507  
[grfishel@pa.net](mailto:grfishel@pa.net)

David Jarrett (Vice Chair)  
Lucent Technologies  
Milpitas, CA  
tel: 408-952-7452  
[djarrett@lucent.com](mailto:djarrett@lucent.com)

Brian Petry (Editor)  
3Com Corp.  
San Diego, CA  
tel: 858-674-8533  
[brian\\_petry@3com.com](mailto:brian_petry@3com.com)