802.16 System Requirements

CALL FOR CONTRIBUTIONS

802.16sc-99/12 (99/05/20)

The 802.16 System Requirements Task Group is working on a document that describes system requirements for broadband wireless access systems. It seeks input and review by the industry to ensure that the 802.16 standards meets industry expectations. The task group hopes to generate a draft by July 5th for debate and discussion at 802.16's Meeting #1 (July 6-8 in Montreal).

At meeting #0 (May 10-12 in Boulder), we identified some key issues to resolve and asked for more contributions. Some people volunteered to provide contributions and we encourage them to do so, but we are not limited to contributions just from those volunteers. Here are 8 specific issues we identified that need contributions:

1. Provide examples of existing systems: protocols, reference architecture, terminology, etc. that affect system requirements. We encourage equipment vendors to submit their own system requirements so as a group we can ensure standards we develop are useful and address real market requirements.
2. Support cases, pro or con for any of the bearer services that we listed as a group (We define "bearer service" to mean a protocol that resides directly above the MAC layer). We expect the most important bearer services to influence requirements of the MAC protocol standard. The services we listed at the Boulder meeting are:
   o ISDN: BRI
   o ISDN: PRI
   o Frame Relay
   o Synchronous Transfer Mode (STM): Plesiosynchronous Digital Hierarchy (PDH) and Synchronous Digital Hierarchy (SDH). Examples: T1, E1, T3, etc.
   o ATM cell relay service
   o IP variable length frames (including VoIP and other IP/QoS services)
   o 802.1 Bridging
3. Provide a description of a QoS-based categorization of applications using common terminology from IETF and/or ATM worlds.
4. Produce revised reference diagrams, both topological and protocol stack versions.
5. Make a short statement or summary regarding cell size (capacity) in terms of users and delivered bandwidth to the bearer service. Other MAC performance requirements are welcome.
6. Provide a short description of physical layer performance metrics to use as requirements.
7. Describe Security: authentication, authorization and privacy protocols; use of 802.10 or other.
8. Make the case for whether MAC protocol should be optimized for variable length vs. fixed length frames, or accommodate both well.

Please submit contributions on these topics using the 802.16 Document Submission Template. **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) 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 July 6-8 meeting, submit your contributions no later than June 14, 1999 to the Editor of the 802.16 System Requirements Document (Brian Petry).

Thank you from the System Requirements coordinators:

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Earlier editions of Call for Contributions for System Requirements:

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80216sc-99_11.pdf	99/04/16

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