

802.16 System Requirements

CALL FOR CONTRIBUTIONS

802.16sc-99/11 (99/04/16)

Building upon a March 10-11, 1999 meeting of the System Requirements Task Group of the [802 Executive Committee Study Group on Broadband Wireless Access](#), the 802.16 System Requirements Task Group is working on description of system requirements for broadband wireless access systems. It seeks input and review by the industry to ensure that the ultimate 802.16 standard meets industry expectations. The contributions will be used by the Task Group in the development of a System Requirements document, both in on-line discussions and during the [802.16 Interim Task Group meeting on May 10-12, 1999](#). The Task Group hopes to generate a draft document by July 5th, 1999. We request contributions both concerning a tentative outline (see below) and to the content of the various sections. [Contributed documents are on-line](#).

Specifically, the task group seeks content contributions and subsequent review for:

- Targeted markets and services
- Network topology, interface reference models
- External interfaces
- Capacity requirements
- Other areas of the outline

A condensed, "bulletized" version of the outline follows:

Target Markets and services Supported

- Commercial
 - Large, Medium, Small
- Residential
 - suburban, high-density suburban, multi-tenant
- Services
 - data, video (multicast, broadcast), video conferencing, voice

System Description

- Overview, operational concepts, architecture
- Reference Model
 - Identification of interfaces
 - Reference model diagram
- Network topology
 - diagram
- Cells and (vs) Frames

External Interfaces

- Subscriber-side
 - Data: Ethernet, ATM, etc.
 - Video broadcast
 - Telephony: POTS, STM
- Base-station-side
 - Data: IP, Tunnels, etc.
 - Voice: STM, SONET, etc.
 - signalling gateway?
 - Video distribution: MPEG sources

Capacity Requirements and Scalability

- Delivered bandwidths; ranges (e.g., from 64K to 155Mbps)
- Maximum number of user terminals per base station
- Performance Requirements
 - availability
 - latency
 - BER

Quality of Service

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- Multiaccess
- Demand bandwidth
- Dedicated bandwidth

Management (OAM&P)

- Layer Management
 - managed objects, statistics, counters, etc.
- Provisioning and configuration
- Management protocols
- Accounting and Auditing
- Billing

Security

- Authentication and Authorization
- Data Encryption

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](#).** If you wish to submit a copyrighted or otherwise confidential document, please make prior arrangements.

For consideration at the May 10-12 meeting, submit your contributions **no later than April 30, 1999** to the Editor of the 802.16 System Requirements Document:

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