Our view on 16m requirement

Voice:

IEEE 802.16 Presentation Submission Template (Rev. 8.3)

Document Number:

IEEE C802.16m-07/081

Date Submitted:

2007-05-01

Source:

Cui Chunfeng China Mobile Communication Company

Dong Xiaolu CATR Fax: [Fax Number]

Suo Shiqiang DaTang Mobile E-mail: cuichunfeng@chinamobile.com

Lu Jianmin HuaWei dongxiaolu@mail.ritt.com.cn

Wu Yanwei, Huo Di ZTE corporation suoshiqiang@datangmobile.cn

lujianmin@huawei.com wu.yanwei@zte.com.cn

[Telephone Number]

Venue:

[Cite the specific meeting and any known agenda details.]

Base Document:

[If this presentation accompanies an 802.16 document, cite the document number (e.g., IEEE C802.16x-02/NNr0) and URL

http://ieee802.org/16/... C80216x-02 NNr0.pdf>.]

Purpose:

This presentation is intended to give a view on 16m requirement.

Notice:

This document has been prepared to assist 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 grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.

IEEE 802.16 Patent Policy:

The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures http://ieee802.org/16/ipr/patents/policy.html, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair mailto:chair@wirelessman.org as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site http://ieee802.org/16/ipr/patents/notices.

Comment: Legacy support

 To 16m, the performance and/or capability enhancements to 16e should be treated with a higher priority when meeting the legacy support requirement.

 Please see contribution :C802.16m-07_006 to get more detail.

Comment : Bandwidths

Section 5.5, page 13, line 27

Current Requirements	Suggested remedy
5 to 20 MHz	IEEE 802.16m shall support scalable bandwidths from 5 to 40 MHz. Other bandwidths shall be considered as necessary to meet operator and ITU requirements

Comment : Advanced Antenna

Techniques

Current Requirements	New Requirements
minimum configurations: 2x2 downlink, 1x2 uplink	maximum configurations: 8x4 downlink, 4x8 uplink

Section 5.7, page 14, line 11

- in line #11: The IEEE 802.16m standard shall define minimum and maximum antenna requirements for the base station and mobile station.
- at the end of this section, add the following sentences:

For the base station, a maximum of eight transmit and four receive antennas shall be required. For the MS, a maximum of four transmit and eight received antennas shall be required. This maximum is consistent with a 8x4 downlink configuration and a 4x8 uplink configuration.

Comment: User throughput of absolute performance

Current Requirements	New Requirements
The requirement of value in Table 7 should be defined.	Average: > 3bps/Hz (downlink), > 2bps/Hz (uplink)
	Cell edge: > 1bps/Hz (downlink),
	> 0.7bps/Hz (uplink)

Section 7.1.2, page 22, table 7, Suggested remedy:

Metric	DL Data	UL Data
Average User Throughput	> 3bps/Hz	> 2bps/Hz
Cell Edge User Throughput	> 1bps/Hz	> 0.7bps/Hz

Thank you!