

Project	IEEE 802.16 Broadband Wireless Access Working Group < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	[Comments and changes to Requirements Section 7]	
Date Submitted	[2007-02-23]	
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Re:	In response to the "Call for Contributions on Requirements for P802.16m -Advanced Air Interface" issued on 2007-01-29	
Abstract	[Comments and suggested changes to document 80216m-07_002.pdf section 7]	
Purpose	[For consideration by the Requirements Ad hoc]	
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## Comments and changes to Requirements Section 7

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### 7.2 Spectrum efficiency – original Text

The IEEE 802.16m amendment shall provide enhancements to the existing standard to reduce the amount of PHY and MAC layer overhead, particularly in cases of large numbers of users with small or sporadic bandwidth demands, in order to make more efficient use of available capacity.

[Spectral efficiency in the range of 8-10 bps/second/Hz/cell will be required to achieve the subscriber penetration rates and aggregate data rates needed to ensure commercial success for these networks, given the bandwidth-intensive multimedia services they must support.]

[Average downlink/uplink sector throughput should be at least 2 x 802.16e reference systems]

***Comment: Remove brackets around second paragraph above as a spectral efficiency of 8-10 bps/second/Hz/Cell will certainly be required to meet data rate requirements of IMT-Advanced. Also I believe this is nearly 2x the efficiency of 16e thus the second bracketed sentence may be removed.***

Spectral efficiency in the range of 8-10 bps/second/Hz/cell will be required to achieve the subscriber penetration rates and aggregate data rates needed to ensure commercial success for these networks, given the bandwidth-intensive multimedia services they must support.

### 7.4 Coverage

[Enhanced cell-edge coverage]

***Comment: Define what is meant by cell edge coverage and add that the standard should allow multihop/relay to improve conditions at the cell edge. Add the following***

95% of subscribers should obtain their requested bit-rate regardless of their distance from the BS

The standard shall provide the capability of using multi-hop/relay transmission to improve a subscriber station's bit-rate when at a cell edge.