

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Comment on Final Draft DL MIMO SDD text: Analog Feedback for SU/MU/Multi-cell MIMO	
Date Submitted	2008-07-11	
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Re:	Call for Comments on the DL-MIMO Rapporteur group final draft: C802.16m-08/657r2.	
Abstract	Proposed text for Analog Feedback	
Purpose	To be discussed and adopted by 802.16m SDD.	
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Comment on Final Draft DL MIMO SDD text: Analog Feedback for SU/MU/Multi-cell MIMO

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Contributions C80216m-08_529r1, C80216m-08_526r1, C80216m-08_522r1, C80216m-08_372r3 discuss the advantages and technical details of analog feedback.

We propose to add analog feedback in addition to the current codebook based feedback.

Proposed Text

11.x.2.1.3. Feedback for SU-MIMO

Add to current text on line 15:

For analog based feedback the following options may be supported in FDD or TDD:

1. Channel matrix
2. Average channel covariance matrix
3. Average right strongest singular vector or vectors
4. Average singular values ratio (for 2 receive antenna subscriber)

11.x.2.2.3.2 CSI Feedback

Add to current text on line 20 :

Analog based feedback for TDD and FDD may be supported with the following options:

1. Channel matrix
2. Average channel covariance matrix
3. Average right strongest singular vector or vectors
4. Average singular values ratio (for 2 receive antenna subscriber)

11.x.4.2 Multi-cell MIMO

Add to current text on line 13 before the sentence that starts with ‘ The feedback information...’ :

Analog based feedback for TDD and FDD may be supported with the following options:

1. Channel matrix
2. Average channel covariance matrix
3. Average right strongest singular vector or vectors
4. Average singular values ratio (for 2 receive antenna subscriber)