Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**	
Title	**Corrections about ARQ Block Size**	
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Re:	IEEE802.16e-2005	
Abstract	Corrections about ARQ Block Size	
Purpose	Adopt proposed changes	
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Corrections about ARQ Block Size

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Motivation

In IEEE Std 802.16-2004 and 802.16e-2005, we cannot use exact ARQ block size. In case higher throughput is needed, larger ARQ block size is necessary because the transmission may be limited by ARQ window size. So, the requester wants to use larger ARQ block size. For doing that, what the requester is only to do is to set the largest ARQ block size which the request can support in DSA-REQ message, but, the receiver may select smaller value than the desired size used by the requester. Therefore, current specification cannot guarantee to use proper ARQ block size.

Proposed Text Changes

[Change the text in 11.13.18.8 on page 739 of IEEE802.16e-2005]

11.13.18.8 ARQ_BLOCK_SIZE

This value of this parameter specifies the size of an ARQ block. This parameter shall be established by negotiation during the connection creation dialog.

~~The requester includes its desired setting in the REQ message. The receiver of the REQ message shall take the smaller of the value it prefers and value in the REQ message. This minimum value is included in the RSP message and becomes the agreed upon length value.~~The requester includes its desired minimum and maximum setting in the DSA-REQ/REG-REQ message. The receiver of the DSA-REQ/REG-REQ message shall select the value it prefers within the range of the two values, inclusive, in the DSA-REQ/REG-REQ message. This selected value is included in selected block size of the DSA-RSP/REG-RSP message.

Absence of the parameter during a DSA dialog shall indicate the originator of the message desires the maximum value.

Type	Length	Value	Scope
[145/146].26 1.26	~~2~~1	~~0-15: Reserved~~ ~~16, 32, 64, 128, 256, 512, or 1024: Desired/Agreed size in bytes~~ ~~2041-65535: Reserved~~For DSA-REQ and REG-REQ: Bit 0-3: encoding for proposed minimum block size (M) Bit 4-7: encoding for proposed maximum block size (N) where: The minimum block size is equal to 2^(M+4) and, the maximum block size is equal to 2^(N+4), M <= 6, N <= 6 and M <= N For DSA-RSP and REG-RSP: Bit 0-3: encoding for selected block size (P) Bit 4-7: set to 0 where: The block size is equal to 2^(P+4), P <= 6 and M <= P <= N	DSA-REQ, DSA-RSP REG-REQ, REG-RSP