Project	**IEEE 802.16 Broadband Wireless Access Working Group <**http://ieee802.org/16**>**
Title	**Proposed Text of Persistent Allocation for IEEE 802.16m Amendment**
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Re:	IEEE 802.16m-09/0012, "Call for Contributions on Project 802.16m Amendment Working Document (AWD) Content". Target topic: "Persistent Allocation"
Abstract	The contribution proposes the text of persistent allocation to be included in the 802.16m amendment.
Purpose	To be discussed and adopted by TGm for the 802.16m amendment.
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Proposed Text of Persistent Allocation for IEEE 802.16m Amendment

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1. Introduction

This contribution proposes the text amendment for persistent allocation of 802.16m based on the definition of SDD [1].

2. Text proposal for Persistent allocation in 802.16m amendment

-- Start of Proposed Amendment Text ---

15.2.x Persistent Allocation

Persistent allocation is a technique used to reduce assignment overhead for connections with periodic traffic pattern and with relatively fixed payload size. The persistently allocated resource size, position and the MCS shall be maintained by the ABS and AMS until the persistent assignment is de-allocated, changed, or an error event occurs.

For handling persistent resources, the ABS shall transmit the DL assignment A-MAP IE for DL persistent allocations and the UL assignment A-MAP IE for UL persistent allocations. The Persistent Flag is to distinguish between persistent and non-persistent operation. The Allocation Period and Number of ACID required for persistent operation is configured outside of A-MAP. Persistent scheduling does not include special arrangements for retransmission of data initially transmitted using persistently allocated resources. Resources for retransmission can be allocated one at a time as needed using DL/UL assignment A-MAP IE.

15.2.x.1 Allocation/De-allocation

If the Persistent Flag is set to 1, the assigned resource in DL/UL assignment A-MAP IE is persistently assigned with fixed resource size, position and MCS. The Allocation Period and Number of ACID required for persistent operation is configured in a DSA (dynamic service addition) message. During negotiation between ABS and AMS for adding new persistent allocation service, ABS and AMS share the Allocation period and Number of ACID required for handling a particular persistent allocation. The format of Allocation Period and Number of ACID in DSA is TBD.
Persistent allocation is de-allocated when DL assignment A-MAP IE or UL assignment A-MAP IE contains empty resource assignment which has zero LRU assignment in Resource Allocation field.

15.2.x.2 Assignment Replacement

To adapt radio channel variation and avoid resource hole, the persistently allocated resource can be changed. To change the persistent assignment, the ABS shall transmit the DL assignment A-MAP IE for DL reallocation and the UL assignment A-MAP IE for UL reallocation. If the Persistent Flag is set to 1 and the ACID assigned in DL/UL assignment A-MAP IE is equivalent to the ACID of persistent allocation assigned in a particular subframe, the AMS shall assume that the original persistent allocation is replaced to the assignment indicated in

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DL assignment A-MAP IE or UL assignment A-MAP IE.

--- End of Proposed Amendment Text ---

References

[1] IEEE 802.16m-08/003r7, "The Draft IEEE 802.16m System Description Document"