

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 BS and MS until the persistent assignment is de-allocated, changed, or an error event occurs.

For handling persistent resources, the BS shall transmit the DL assignment IE for DL persistent allocations and the UL assignment IE for UL persistent allocations. The Allocation Period and Number of ACID required for persistent operation is configured outside of USCCH. 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 IE.

15.2.x.1 Allocation/De-allocation

If the assignment IE Type indicates persistent allocation, the assigned resource in DL/UL assignment 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 BS and MS for adding new persistent allocation service, BS and MS 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 IE or UL assignment 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 BS shall transmit the DL assignment IE for DL reallocation and the UL assignment IE for UL reallocation. If the assignment IE Type indicates persistent allocation and the ACID assigned in DL/UL assignment IE is equivalent to the ACID of persistent allocation assigned in a particular subframe, the MS shall assume that the original persistent allocation is replaced to the assignment indicated in DL assignment IE or UL assignment IE.

----- End of Proposed Amendment Text -----

References

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