Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Comments on 802.16g Amendments for 802.21 Services**
Date Submitted	**2007-01-18**
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Re:	IEEE 802.16 Session #47 in London
Abstract	This contribution proposes the updates of IEEE 802.16g D5 document in order to support IEEE 802.21 Media Independent Information Services.
Purpose	Update 802.16g draft to support Media Independent Handover
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Comments on 802.16g Amendments for 802.21 Services

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1. Introduction

The changes introduced in 802.16g, based on contribution C802.16g-07/020r4 are in many places unclear. This contribution suggests some changes to improve the text. Existence of an information service on the layer 2 broadcast area is outside the scope of 802.16, as the case is for, e.g., ARP and DHCP discovery. What the bits in the TLVs should indicate is which MAC management messages and attribute values are supported by the BS.

2. Proposed Text Changes

[In 11.4.1 DCD channel encoding, page 30, line 9, Modify]:

Name	Type	Length	Value	PHY Scope
MIH Capability Support	55	1		All

			Indicates the ~~capability of~~ IEEE 802.21 Media Independent Handover Services capability of the BS. ~~Setting e~~Each bit to 1 indicates that the corresponding service is supported. - ~~Setting~~ If bit # 0 is set to 1, ~~indicates MIH services~~ the MS is permitted to send MOB-MIH-MSG messages (see 6.3.2.3.62) as further indicated through bits #1~~ – #~~3 ~~are supported by the current BS~~. If bit #0 is set to 0, bits #1 – #3 shall be set to 0. ~~- Setting more than one of bit #1~3 without setting bit #0 indicates existence of an MIH service entity within the Layer 2 broadcast domain of the current BS. In this case transport MIH MAC management message (MOB_MIH-MSG) is not supported by the BS.~~ - ~~When~~ If bit #4 is set to be 1, the MS is allowed to transmit an MIH information service request ~~MIH function frame TLV (11.1.9.1)~~ in ~~PKM-REQ~~an MIH Initial Service Request or MIH Comeback Request message (see 6.3.2.3.9). ~~-~~When bit #5 is set to be 1, the MS is allowed to transmit an MIH ~~function frame TLV (11.1.9.1)~~request for ES/CS Capability discovery in an MIH Initial Service Request or MIH Comeback Request message (see 6.3.2.3.9)~~PKM-REQ~~. Bit #0 = MIH (Media Independent Handover) support Bit #1 = Event Service support Bit #2 = Command Service support Bit #3 = Information Service support Bit #4 = Information Service support during network entry Bit #5 = ES/CS capability discovery support during network entry Bit #6~7: *reserved*	

[In 11.4.1 DCD channel encoding, page 30, line 9, Modify]:

11.8.10 MIH Capability Supported TLV

The "MIH Capability Supported" TLV indicates if MIH is supported. MSs and BSs that support the MIH handover function shall identify themselves by inclusion of ~~the MIH capability supported~~this TLV. MSs and BSs that do not support the 802.21 MIH handover

function shall not support the MOB_MIH-MSG management messsage. ~~However, BS may indicate the existence of the MIH service entity within the layer 2 broadcast domain of the current BS by setting bit #0 to be 0 and corresponding services bits of MIH service entity to be 1. In this case, BS doesn't support MOB_MIH-MSG MAC management message and MS shall access the MIH service entity using layer 2 data frames.~~ A BS may provide a network discovery query mechanism during network entry using MIH frames. A BS shall indicate support of this capability ~~of the network discovery query~~ using bits #4 and #5.

Type	Length	Value	Scope
46	1	Indicates the capability of IEEE 802.21 Media Independent Handover Services. ~~Setting e~~Each bit set to 1 indicates that the corresponding service is supported. - If bit # 0 is set to 1 in the SBC-REQ/RSP message, the BS/MS is permitted to send MOB-MIH-MSG messages (see 6.3.2.3.62) as further indicated through bits #1 – #3 . If bit #0 is set to 0, bits #1 – #3 shall be set to 0. ~~Setting bit # 0 to 1 indicates MIH services which further indicated through bit #1~3 are supported.~~ ~~- In SBC-RSP transmitted from BS, more than one of bit #1~3 without setting bit #0 may be set which indicates existence of an MIH service entity within the Layer 2 broadcast domain of the current BS. In this case transport MIH MAC management message (MOB_MIH-MSG) is not supported by the BS.~~ - If bit #4 is set to be 1 in the SBC-RSP response message, the MS is allowed to transmit an MIH information service request in an MIH Initial Service Request or MIH Comeback Request message (see 6.3.2.3.9).~~When bit #4 is set to be 1, MS is allowed to transmit MIH information service request MIH function frame TLV (11.1.9.1) in PKM-REQ.~~ - When bit #5 is set to be 1 in the SBC-RSP message, the MS is allowed to transmit an MIH request for ES/CS Capability discovery in an MIH Initial Service Request or MIH Comeback Request message (see 6.3.2.3.9)~~When bit #5 is set to be 1, MS is allowed to transmit MIH function frame TLV (11.1.9.1) for ES/CS Capability discovery in PKM-REQ~~. Bit #0 = MIH (Media Independent Handover) support Bit #1 = Event Service support Bit #2 = Command Service support Bit #3 = Information Service support Bit #4 = Information Service support during network entry Bit #5 = ES/CS capability discovery support during network entry Bit #6~7: *reserved*	SBC-REQ SBC-RSP