

Project	IEEE 802.16 Mobile Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	Subnet Zone ID Support
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Re:	Working Group Review of P802.16-REVe_D2
Abstract	If the MSS moves the subnet boundaries, then the MSS can trigger to request re-assignment of IP address or MIP refreshment by knowing the Subnet Zone ID transmitted in NBR-ADV and PAG-ADV.
Purpose	Propose to add new Subnet Zone ID in the text of IEEE802.16REVe/D2-2004
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2 1. Introduction

3 Currently, the MSS in idle mode shall trigger to request new IP address or to register his Mobile IP FA address to the MIP HA
4 whenever the MSS moves the BS boundary. It is inefficient that the MSS shall trigger to do that even though the subnet is still the
5 same. This inefficiency is arisen from the absence of L2 zone ID corresponding to one subnet on broadcast CID.

6 For remedy of this inefficient problem, Subnet Zone ID is newly introduced in NBR-ADV and PAG-ADV management messages.

7 If the subnet zone id is transmitted in NBR-ADV and PAG-ADV, then the MSS will trigger to request new IP address or to register
8 its MIP FA address to MIP HA only when subnet zone is changed.

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10 2. Changes to the standard

11 **Table 92d – MOB-NBR-ADV Message Format**

Syntax	Size	Notes
MOB-NBR-ADV_Message_Format() {		
Management Message Type = 49	8 bits	
Operator ID	24 bits	Unique ID assigned to the operator
N_NEIGHBORS	8 bits	
For (j=0; j<N_NEIGHBORS; j++) {		
Neighbor BS-ID	48 bits	
<u>Subnet Zone ID</u>	<u>8 bits</u>	<u>Subnet ID that the corresponding neighbor BS currently belongs to</u>
Physical Frequency	32 bits	
Configuration Change Count	8 bits	
Hysteresis threshold	8 bits	
MAHO report preiod	8 bits	
TLV Encoded Neighbor information	Variable	TLV specific
}		
}		

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13 Subnet Zone ID – Subnet ID that the corresponding neighbor BS currently belongs to

14 **Table 92k—BS Broadcast Paging (MOB_PAG-ADV) message format**

Syntax	Size	Notes
MOB_PAG-ADV_Message_Format() {		
Management Message Type = ??	8 bits	
<u>Subnet Zone ID</u>	<u>8 bits</u>	<u>Subnet ID that the corresponding BS currently belongs to</u>
Num_Pagin Group IDs	8 bits	Number of Paging Group IDs in this message
For (i=0; i<Num_Paging_Group_IDs; i++) {		
For (j=0; j<N_NEIGHBORS; j++)		

{		
Paging Group ID	8 bits	
}		
For (j=0; j<Num_MACs; j++) {		
MSS MAC Address hash	24 bits	
Action Code	2 bits	
Reserved	6 bits	
}		
}		

Subnet Zone ID – Subnet ID that the corresponding BS currently belongs to

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