Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**	
Title	**Secondary Management Connection Transport**	
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Re:		
Abstract	Fixes to section 14.2.3	
Purpose	Adoption, Replacing IP signaling with simple payload	
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Changes to Section 14. 2. 3

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Abstract

Correct section 14.2.3 “IP management with secondary management connection”. Replace DHCP/MIP and IP address signaling with a generic payload. Payload may carry IP signaling but no need to be shown in the spec.

14.2.3 Secondary Management Connection Transport

This primitive provides transport of IP address signaling and ~~allocation~~ information between the NCMS and an 802.16 entity. This primitive is provided when the IP connection is managed by the secondary management connection. It is available for both IPv4 and IP.

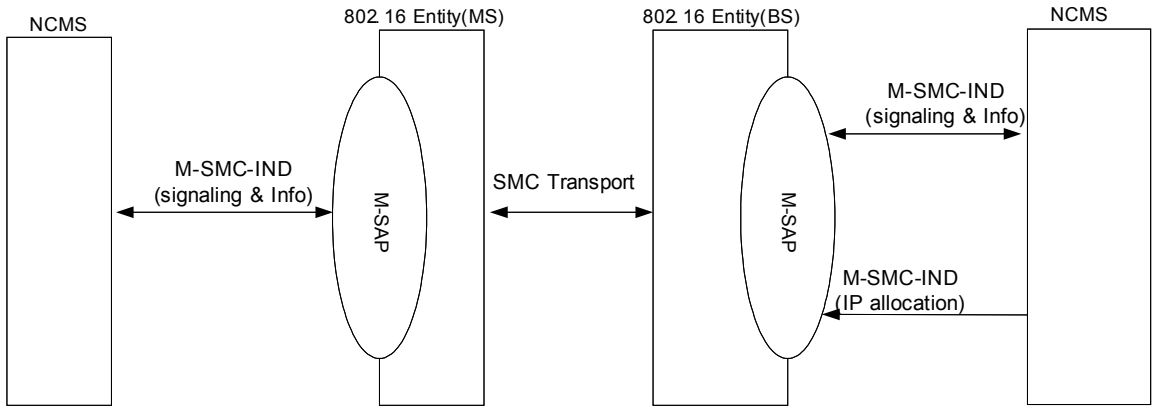

Figure 477—SMC IP address signaling transport and notification

14.2.3.1 M-SMC-IND

Function:

This primitive is used by an 802.16 entity or the NCMS to transfer ~~signaling~~ payload that may also include IP address signaling and information~~allocation~~. The IP address for the SMC~~, which~~ may be allocated statically, or through DHCP or MIP signaling ~~payload~~. The primitive can ~~It~~ also ~~can~~ be used by the NCMS to notify the BS of an SS IP address status change and its new address. The Event Type included in this primitive defines the information included in this primitive. The possible Event Types for this primitive are listed in the Table below:

Event Type	Description
SMC-IND~~DHCP_TRANSFER~~	Forward SMC~~DHCP~~ payload~~, between DHCP client and DHCP server.~~
~~MIP_TRANSFER~~	~~Forward MIP payload between MIP client and MIP agent~~

IP_ALLOCATION	NCMS notify the BS of a SS/MS' IP address status change

26

27 ~~**14.2.3.1.1 M-SMC-IND (Event_Type==DHCP_TRANSFER)**~~

28 ~~**Function:**~~

29 ~~DHCP payloads are exchanged between an DHCP Client and a DHCP Server entity. The DHCP payloads are~~
30 ~~encapsulated in the DHCP Transfer primitive because it is not interpreted in the 802.16 entity.~~

31

32 **Semantics of the service primitives:**

33 The parameters of the primitives are as follows:

34 M-SMC-IND
35 (
36 Event_Type(SMC-IND)~~DHCP_TRANSFER~~),
37 Destination(SS/MS, ~~or~~ BS, or NCMS),
38 Attribute _list:
39 ~~SS~~ MAC Address
40 SMC~~DHCP~~ Payload
41)
42
43 **SS/MS MAC Address**
44 48-bit unique identifier used for the 802.16 entity~~user~~ identification~~ between BS and~~
45 ~~NCMS~~
46 **SMC~~DHCP~~ Payload**
47 Contains the ~~DHCP~~ SMC payload

48 **When generated:**

49 •802.16 entity to NCMS:
50 This primitive is generated when the 802.16 entity sends ~~receives~~ ~~DHCP~~ to the NCMS traffic
51 received over the secondary management connection.
52 •NCMS to 802.16 entity:
53 This primitive is used when the NCMS ~~DHCP entity in NCMS sends DHCP~~ wants to send SMC
54 traffic~~-~~ over the air~~to an 802.16 entity~~.

55 **Effect of receipt:**

56 •802.16 entity to NCMS:
57 On receipt of this primitive from the M-SAP, the NCMS examines the payload. If it contains IP
58 address signaling, the NCMS will engage the proper signaling agent (DHCP or MIP) ~~The DHCP entity~~
59 ~~(server or relay) in NCMS processes the DHCP signaling.~~
60 •NCMS to 802.16 entity:
61 On receipt of this primitive t~~T~~he 802.16 entity transfers the SMC payload over the air. ~~transmits~~
62 ~~DHCP payload from the primitive over secondary management connection.~~

63 ~~**14.2.3.1.2 M-SMC-IND (Event_Type=MIP_TRANSFER)**~~

64 ~~**Function:**~~

65 ~~MIP payloads are exchanged between a mobility entity in the NCMS. The MIP payloads are encapsulated in the~~
66 ~~MIP Transfer primitive because it is not interpreted in the 802.16 entity.~~

67 ~~**Semantics of the service primitives:**~~

~~The parameters of the primitives are as follows:~~

~~**M-SMC-IND**~~
~~(~~
~~Event_Type(MIP_TRANSFER),~~
~~Destination(MS, or BS, or NCMS),~~
~~Attribute_list:~~
~~MS MAC Address~~
~~MIP Payload~~
~~)~~

~~**MS MAC Address**~~
~~48-bit unique identifier used for user identification between BS and NCMS~~
~~**MIP Payload**~~
~~Contains the MIP payload~~

~~**When generated:**~~

- ~~802.16 entity to NCMS:~~
  ~~This M-SMC-IND (MIP TRANSFER) primitive is generated when the 802.16 entity receives MIP signaling traffic over secondary management connection.~~
- ~~NCMS to 802.16 entity:~~
  ~~This primitive is used when the MIP agent in NCMS sends MIP signaling traffic to an 802.16 entity.~~

~~**Effect of receipt:**~~

- ~~802.16 entity to NCMS:~~
  ~~The MIP entity in NCMS processes the MIP signaling. .~~
- ~~NCMS to 802.16 entity:~~
  ~~The 802.16 entity transmits MIP payload from the primitive over secondary management connection.~~

14.2.3.1.3 M-SMC-IND (Event_Type==IP_ALLOCATION)

Function:

When the~~After MIP or DHCP exchanges are completed, the status of~~ IP address for a SS/MS is~~may be~~ changed~~.~~, the ~~For the BS,~~ NCMS in the BS may notify the BS ~~BS of~~ the new status of the IP address ~~of the SS/MS~~. If the status value is NEW, the NCMS sends the~~a~~ new allocated IP address~~. for the SS/MS in this primitive~~. This primitive is only sent from the NCMS to the BS.

Semantics of the service primitives:

The parameters of the primitives are as follows:

M-SMC-IND
(
Event_Type (IP_ALLOCATION),
Destination (BS),
Attribute _list:
SS/MS MAC Address
Status
IP Address
)

SS MAC Address
48-bit unique identifier used for user identification between BS and NCMS
Status

The status of the IP address of a SS/MS. The value may be NEW, REMAIN, RELEASE

IP Address

If the Status value is NEW, this parameters should be thea new allocated address allocated of to the SS/MS using DHCP or MIP.

When generated:

This primitive is issued by thea NCMS (a DHCP client or a Mobility Agent) when the IP address of the SS/MS has changedexchange procedure are successfully completed.

Effect of receipt:

The BS learns knows about the status and the new IP address and its status of the SS/MS.