2004-11-05	IEEE C802.16e-04/464		
Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> >		
Title	Static IP address configuration		
Data	2004-11-04		
Submitted			
Source(s)	Kang il Koh, Sungsoo Park, Sihoon Ryu, Donghahk Lee, Wonsuk ChungVoice: 82-31-710-5048 Fax: 82-31-710-5098 {melomo,spark}@sktelecom.com		
	9-1, Sunae-Dong, Pundang-gu, Sungnam City, Kyunggi-Do 463-784, Korea		
Re:	Sponsor Ballot 16		
Abstract	The document contains static IP address configuration		
Purpose	The document is submitted for review by 802.16e Working Group members		
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.		
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16		
Patent	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures < <u>http://ieee802.org/16/ipr/patents/policy.</u>		
Policy and			
Procedures	provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard. "Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair < <u>mailto:chiar@wirelessman.org</u> > as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site < <u>http://ieee802.org/16/ipr/patents/</u>		

Static IP address configuration

Kang il Koh, Sungsoo Park, Shihoon Ryu, Donghahk Lee, Wonsuk Chung

SK Telecom

1. Introduction

In current document of IEEE802.16e, there are four possible ways to allocate IP address to MSS which are DHCP, Mobile IPv4, DHCPv6, IPv6 Stateless Address Autoconfiguration. But there also can be cases where static IP configuration preferred. Following are cases where static IP configuration can be used.

- A. Operator policy to give static IP to certain MSS. Operator might choose to give static IP to certain SS/MSS or certain class of SS/MSS for special usage.
- B. When MSS handoffs to target BS which is in different subnet(or different DHCP domain), to provide seamless IP connectivity, MSS has to use current IP(allocated by Serving BS) in order to keep IP connectivity alive.
- C. To provide seamless inter-system HO. For example, when a terminal from 3GPP or 3GPP2 moves to 802.16e network, the terminal needs to use same IP address in order to sustain current IP connection. The terminal from 3GPP or 3GPP2 should request the BS to allocate IP address used by the terminal prior to HO, and BS which received the request can setup a tunnel from 3GPP/3GPP2 network for connectivity support.

In this document, we do not specify any process or signaling required in order to set up a tunnel from serving BS to target BS in detail.

2. Proposed changes to IEEE 802.16e-D3

[Adopt following changes to P802.16e-04/D5:]

Туре	Length	Value
17	1	bit #0: DHCP
		bit #1: Mobile IPv4
		bit #2: DHCPv6
		bit #3: IPv6 Stateless Address Autoconfiguration
		bit #4: static IP
		bit #5-7: reserved; shall be set to zero