

Transmission of IPv6 Packets over IEEE802.16 Networks

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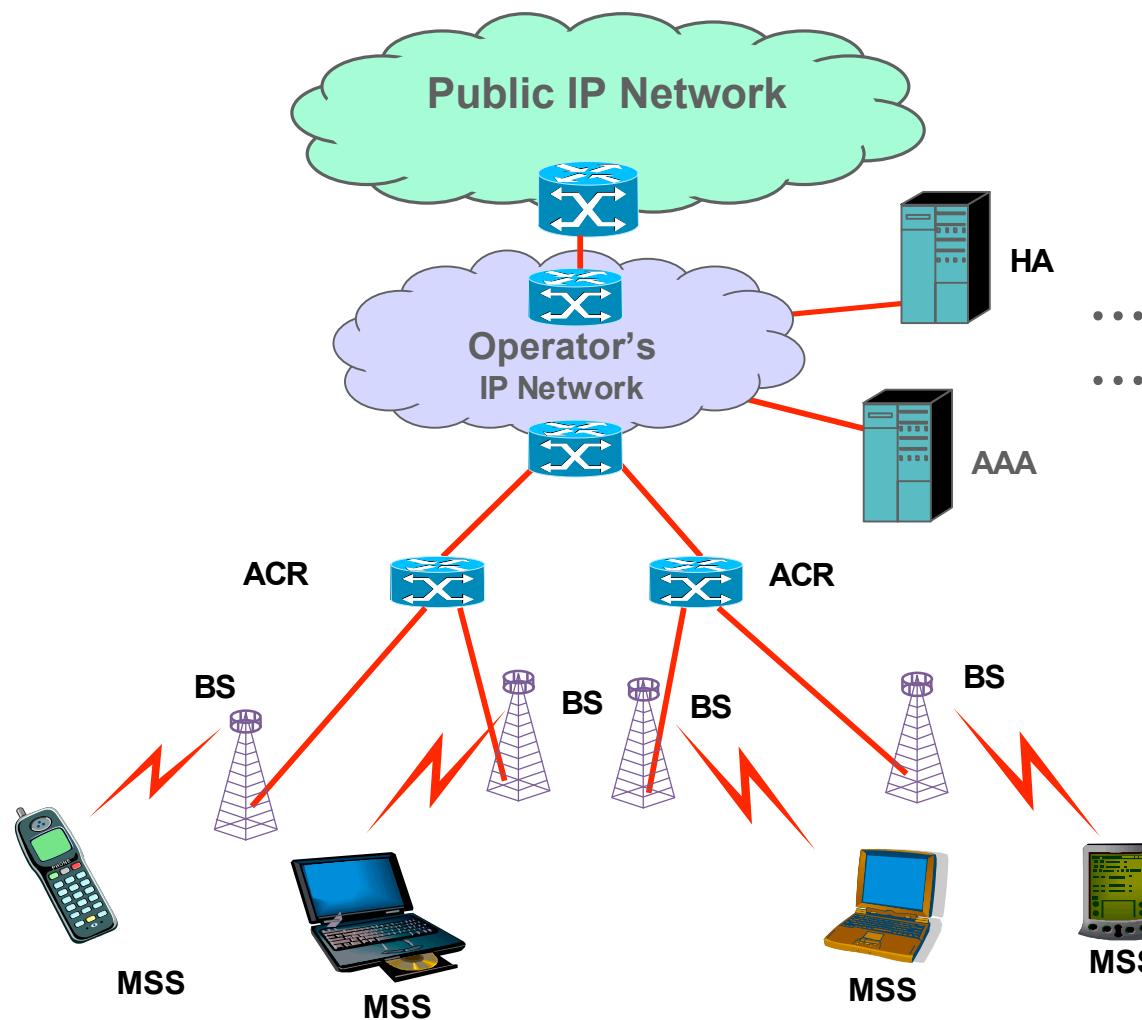
Background

- WMAN based on IEEE802.16 specifications is emerging as a promising technology supporting Mobile Broadband Wireless Access with wide coverage and inexpensive cost.
- The access networks are being established and the service will be very active within 1~2 years.

Motivation

- New IT area is the right place for early IP v6 deployment
- Now is the right time for the specifications of IPv6 related issues for WMAN technologies

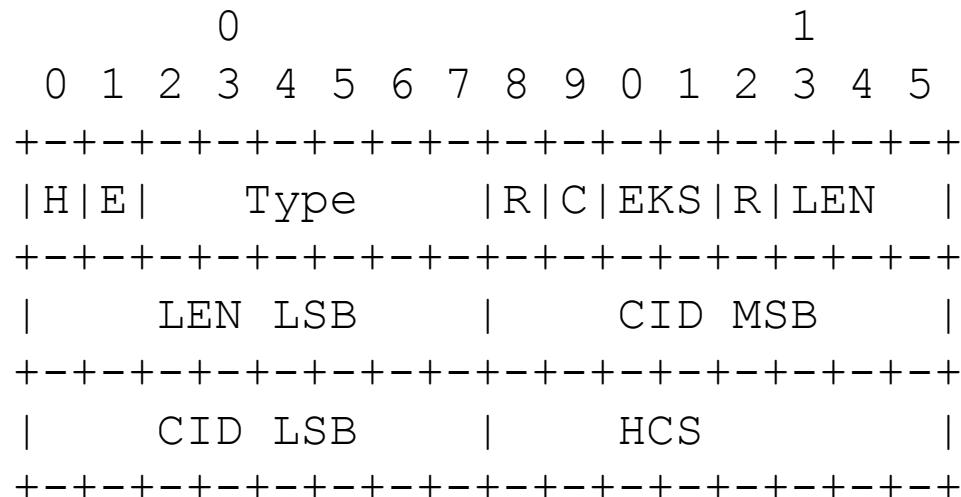
Network Architecture



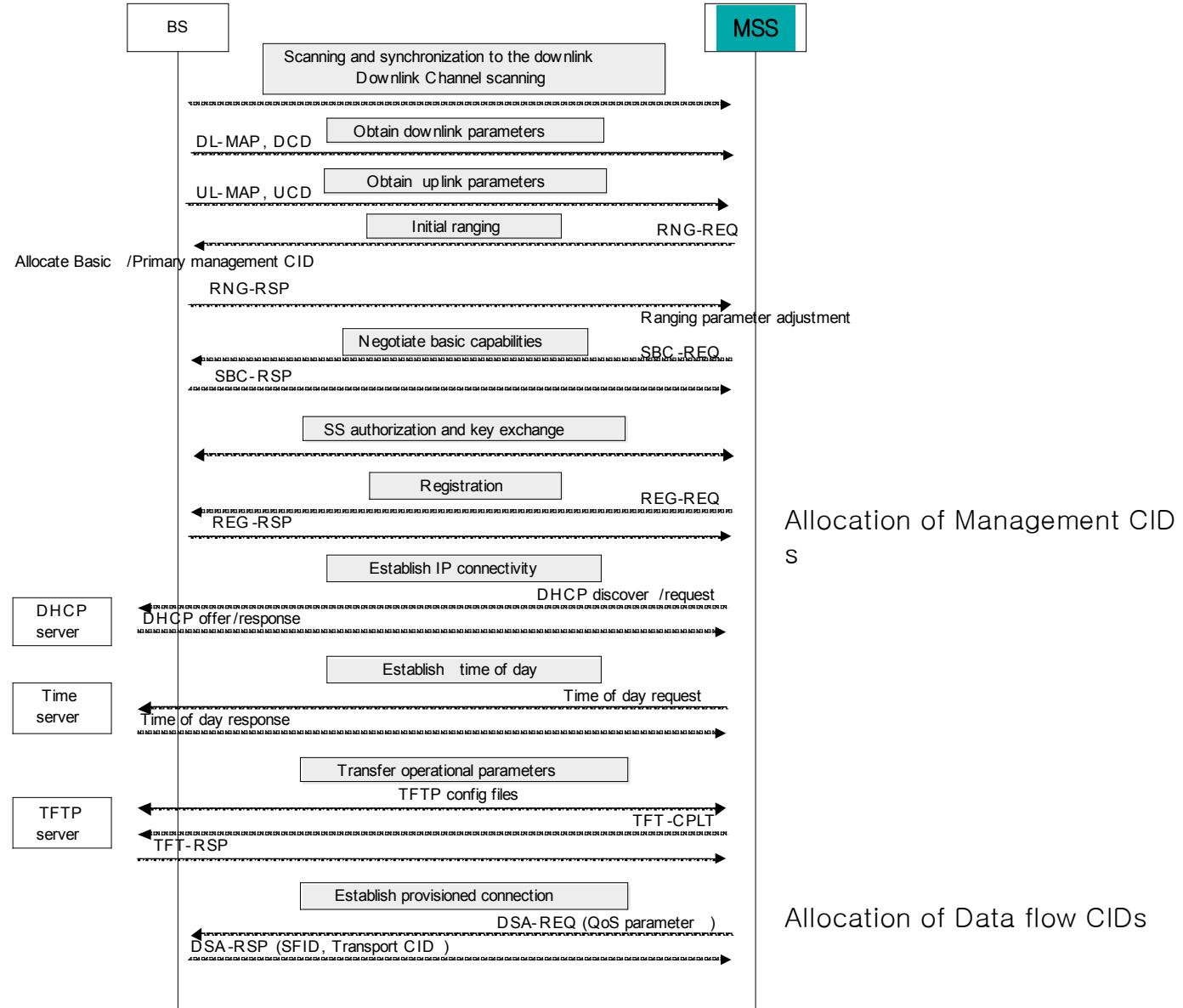
Frame Format

The diagram illustrates the IEEE 802.3 frame structure. It consists of three main fields arranged horizontally: "Generic MAC Header", "Payload (Optional)", and "CRC (Optional)". Above the first field is the label "MSB" and above the last field is the label "LSB". The fields are separated by vertical lines, and the entire structure is enclosed in a horizontal line at the bottom.

Generic MAC Header Formats in the MAC PDUs have the form illustrated below.



Signaling between MSS and BS



The Issues

- Terminology
- Maximum Transmission Unit
- Frame Format
- Stateless Address Autoconfiguration
- Link Local Addresses
- Address Mapping – Unicast and Multicast
- Security Considerations

Proposal

- draft-jin-ipv6-over-ieee802.16-00.txt
- New Project of IPv6 WG or appropriate New WG ?