# Transmission of IPv6 Packets over IEEE 802.11 Networks operating in mode Outside the Context of a Basic Service Set (IPv6-over-80211-OCB)

draft-ietf-ipwave-ipv6-over-80211ocb-25.txt

A. Petrescu, N. Benamar, J. Härri, C. Huitema, J-H. Lee, T. Ernst

IETF 102, Montréal, July 16th, 2018

### Contents

- Changes since London:
  - QoS Data is a MUST
  - Clarified Ethernet Adaptation Layer
  - ND text changes
  - SLAAD text changes (IID)
  - Nits

## QoS Data is a MUST

- In practice, IPv6 packets can be sent on 802.11-OCB links with 802.11 Data headers, or QoS Data headers.
- The agreement is to use "QoS Data" headers, with certain constants.

#### Now the draft says:

IP packets MUST be transmitted over 802.11-0CB media as QoS Data frames whose format is specified in IEEE Std 802.11.

The IPv6 packet transmitted on 802.11-OCB MUST be immediately preceded by a Logical Link Control (LLC) header and an 802.11 header. In the LLC header, and in accordance with the EtherType Protocol Discrimination (EPD), the value of the Type field MUST be set to 0x86DD (IPv6). In the 802.11 header, the value of the Subtype sub-field in the Frame Control field MUST be set to 8 (i.e. 'QoS Data'); the value of the Traffic Identifier (TID) sub-field of the QoS Control field of the 802.11 header MUST be set to binary 001 (i.e. User Priority 'Background', QoS Access Category 'AC\_BK').

## Clarified intro text to Ethernet Adaptation Layer

The new intro text to EAL is now clearer:

To simplify the Application Programming Interface (API) between the operating system and the 802.11-0CB media, device drivers MAY implement an Ethernet Adaptation Layer that translates Ethernet II frames to the 802.11 format and vice versa. An Ethernet Adaptation Layer is described in Section 4.2.1.

## ND text changes

#### OLD text:

The operation of the Neighbor Discovery protocol (ND) over 802.11-OCB links is different than over 802.11 links. In OCB, the link layer does not ensure that all associated members receive all messages, because there is no association operation. The operation of ND over 802.11-OCB is not specified in this document.

#### **NEW text:**

The operation of the Neighbor Discovery protocol (ND) over 802.11-OCB links is different than over 802.11 links. In OCB, the link layer does not ensure that all associated members receive all messages, because there is no association operation. Neighbor Discovery (ND) is used over 802.11-OCB.

# SLAAC text changes (Interface ID)

#### OLD text:

The Interface Identifier for an 802.11-OCB interface is formed using the same rules as the Interface Identifier for an Ethernet interface; this is described in section 4 of [RFC2464]. No changes are needed, but some care must be taken when considering the use of the Stateless Address Auto-Configuration procedure.

#### **NEW text:**

The Interface Identifier for an 802.11-OCB interface is formed using the same rules as the Interface Identifier for an Ethernet interface; the RECOMMENDED method for forming stable Interface Identifiers (IIDs) is described in [RFC8064]. The method of forming IIDs described in section 4 of [RFC2464] MAY be used during transition time.

## **Nits**

- Introduction refers to more appendices, to better explain 802.11 OCB to newcomer
- First page mentions WG "IPWAVE" instead of "Network Working Group", for process reasons.