



RFC 8691

The journey From the draft to the Standard Track

[MEAC School on IG 2021v](#)

July 4-8, 2021
Cyberspace

Standardization bodies





IETF

- Organized activity of the Internet Society
- A voluntary Standards Development Organization
- Consists of !many! Working Groups
- Organized by Areas: Applications and Real Time, General, Internet, Operations and Management, Routing, Security and Transport
- Most standards work is done by the Working Groups
- Lots more details – not immediately important to you!



IETF Purpose

- Develop and maintain standards for technologies used to provide Internet service or to provide services over the Internet
- Ensure that the technology can perform needed functions
- Ensure that the technology will support the proper scale of deployment and usage
- Ensure that the technology itself is secure and can be operated securely
- Ensure that the technology is manageable



What is the IRTF?

- The Internet Research Task Force is an activity of the Internet Architecture Board
- Investigates more “**researchy**” topics than IETF (i.e., Delay-Tolerant Networking investigated interplanetary internetworking)
- Research Groups (RGs) of the IRTF share space at IETF meetings
- Meetings are open to all attendees as observers, but some have closed membership

The road to the IETF

Past Next Generation Leaders Programs



Past Fellowship to the IETF
(closed)



IGF Ambassadors Program
(closed)



Youth@IGF Program (closed)

IETF fellowship

Policymakers Programme to the IETF Bringing Policy Experts and the IETF Together



The Internet Engineering Task Force (IETF)

The world's premier Internet standards-setting organization, the IETF is responsible for developing many of the Internet's most important standards, such as TCP/IP, email (POP, SMTP, IMAP), instant messaging (XMPP), VoIP (SIP, RTCWEB), and IPv6.

The IETF is an open, international community of volunteer specialists, including operators, network designers, researchers, and vendors, who collaborate to develop and promote the open standards that lie at the heart of the Internet.

The mission of the IETF is to produce high quality, relevant technical and engineering documents that influence the way people design, use, and manage the Internet in such a way as to make the Internet work better.

As the organizational home of the IETF, the Internet Society has developed the Policymakers Programme to the IETF to allow for close interaction between policy experts from developing countries and IETF technical participants in an environment that supports dialogue, information sharing, and problem solving. The programme also provides an opportunity for the IETF to gain a better understanding of policy concerns and priorities.

The Internet Society believes this interaction is critical, because, although very technical, IETF discussions shape the way online communications happen, and policy influences how these technical solutions are implemented and used by society at large. By working together, everyone benefits.

Building Support for Open Standards

The Policymakers Programme to the IETF focuses on bridging the gap between the technical community and policymakers by giving policy experts an opportunity to interact directly with the open, multi-stakeholder community of technical experts at the IETF.

The goal is to build support among policymakers worldwide for the IETF's unique model of standards development and how that contributes to the global Internet and to provide an opportunity for the IETF to gain a better understanding of the concerns and priorities in developing countries.

Topics addressed in the programme include the following areas where the IETF's work intersects with policy:

- Aspects of the Domain Name System (DNS)
- Overview of IP Routing
- Introduction to Interconnection and Traffic Exchange
- Security and Privacy Protocols
- Quality of Service (QoS)
- Open Standards Processes

Who Are Participants in the Policymakers Programme to the IETF?

Participants in the Internet Society's Policymakers Programme to the IETF are senior-level policymakers in their country, organization, or region. They have deep experience in communications policy at the local, regional, or global level. Since 2012, the Internet Society has hosted policymakers from over 53 countries, crossing all regions, to attend the IETF.

The Working group



Datatracker

Groups

Documents

Meetings

Other

User

IP Wireless Access in Vehicular Environments (ipwave)

About

Documents

Meetings

History

Photos

Email expansions

List archive »

Tools »

WG	Name	IP Wireless Access in Vehicular Environments
	Acronym	ipwave
	Area	Internet Area (int)
	State	Active
	Charter	charter-ietf-ipwave-01 Approved
	Dependencies	Document dependency graph (SVG)
	Additional Resources	- Issue tracker - Wiki

Personnel	Chairs	Carlos Bernardos ✉ Russ Housley ✉
	Area Director	Erik Kline ✉

Mailing list	Address	its@ietf.org
	To subscribe	https://www.ietf.org/mailman/listinfo/its
	Archive	https://mailarchive.ietf.org/arch/browse/its/

Jabber chat	Room address	xmpp:ipwave@jabber.ietf.org?join
	Logs	https://jabber.ietf.org/logs/ipwave/

Charter for Working Group

Automobiles and vehicles of all types are increasingly connected to the Internet. Comfort-enhancing entertainment applications, road safety applications using bidirectional data flows, and connected automated driving are some of the new features expected in automobiles to hit the roads from now to year 2020.



The draft

- The first versions were not adopted by the WG yet.

```
[Docs] [txt|pdf|xml|html] [Tracker] [WG] [Email] [Nits]
Versions: 00 01 02 03 04 05 06
          draft-ietf-ipwave-ipv6-over-80211ocb
```

Network Working Group
 Internet-Draft
 Intended status: Informational
 Expires: April 24, 2014

A. Petrescu
 CEA
 R. Kuntz
 IP Flavors
 P. Pfister
 changing
 N. Benamar
 Moulay Ismail University
 October 21, 2013

Transmission of IPv6 Packets over IEEE 802.11p Networks
draft-petrescu-ipv6-over-80211p-00.txt

[[Docs](#)] [[txt](#)|[pdf](#)|[xml](#)] [[Tracker](#)] [[WG](#)] [[Email](#)] [[Diff1](#)] [[Diff2](#)] [[Nits](#)]

Versions: [00](#) [01](#) [02](#) [03](#) [04](#) [05](#) [06](#)
[draft-ietf-ipwave-ipv6-over-80211ocb](#)

Network Working Group
Internet-Draft
Intended status: Standards Track
Expires: June 3, 2017

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November 30, 2016

**Transmission of IPv6 Packets over IEEE 802.11 Outside the Context of a
Basic Service Set (OCB)
draft-petrescu-ipv6-over-80211p-06.txt**

[\[Docs\]](#) [\[txt|pdf|xml|html\]](#) [\[Tracker\]](#) [\[WG\]](#) [\[Email\]](#) [\[Diff1\]](#) [\[Diff2\]](#) [\[Nits\]](#)

Versions: ([draft-petrescu-ipv6-over-80211p](#))

[00](#) [01](#) [02](#) [03](#) [04](#) [05](#) [06](#) [07](#) [08](#) [09](#) [10](#) [11](#)
[12](#) [13](#) [14](#) [15](#) [16](#) [17](#) [18](#) [19](#) [20](#) [21](#) [22](#) [23](#)
[24](#) [25](#) [26](#) [27](#) [28](#) [29](#) [30](#) [31](#) [32](#) [33](#) [34](#) [35](#)
[36](#) [37](#) [38](#) [39](#) [40](#) [41](#) [42](#) [43](#) [44](#) [45](#) [46](#) [47](#)
[48](#) [49](#) [50](#) [51](#) [52](#)

[IPWAVE Working Group](#)
~~Internet-Draft~~

Intended status: Standards Track
Expires: December 17, 2018

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June 15, 2018

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-24](#)

Basic Support for IPv6 Networks Operating Outside the Context of a Basic Service Set over IEEE Std 802.11

draft-ietf-ipwave-ipv6-over-80211ocb-52

Status

IESG evaluation record

IESG writeups

Email expansions

History

Yes

(Suresh Krishnan)

No Objection

(Deborah Brungard)

(Alissa Cooper)

Roman Danyliw

Warren Kumari

(Mirja Kühlewind)

(Barry Leiba)

(Alexey Melnikov)

Alvaro Retana

(Adam Roach)

Martin Vigoureur

Éric Vyncke

(Magnus Westerlund)

No Record

Benjamin Kaduk

Note: This ballot was opened for revision 47 and is now closed.

(Suresh Krishnan)

(Deborah Brungard)

(Alissa Cooper)

Yes

No Objection

(was Discuss)

No Objection

Comment (2019-08-01 for -51)



Thank you addressing my DISCUSS and COMMENT.

Roman Danyliw

(was Discuss)

No Objection

Comment (2019-07-25 for -51)



Thank you for addressing my DISCUSS and some of the COMMENTS.

(Resolved comments removed)

(5) Section 1. Per “The resulting stack inherits from IPv6 over Ethernet [RFC2462], but operates over ...”, what exactly is being inherited? What does “inherited” mean in this case?

(6) Section 4.3. Per “Among these types of addresses only the IPv6 link-local addresses can be formed using an EUI-64 identifier, in particular during transition time”, the meaning of the “in particular during transition time isn’t clear in the text. Should it say “in particular as all clients are upgraded to this specification?”

(9) Section 5. What is “protected 802.11” mentioned in “Such a link is less protected ...”?

(10) Section 5.2. SHA256 needs a reference.

Basic Support for IPv6 Networks Operating Outside the Context of a Basic Service Set over IEEE Std 802.11

draft-ietf-ipwave-ipv6-over-80211ocb-52

Status

[IESG evaluation record](#)

[IESG writeups](#)

[Email expansions](#)

[History](#)

Approval announcement

Draft of message to be sent after approval:

From: The IESG <iesg-secretary@ietf.org>
To: IETF-Announce <ietf-announce@ietf.org>
Cc: The IESG <iesg@ietf.org>, its@ietf.org, Carlos Bernardos <cjbc@it.uc3m.es>, draft-ietf-ipwave-ipv6-over-80211ocb@ietf.org, cjbc@it.uc3m.es, rfc-editor@rfc-editor.org, suresh@kaloom.com, ipwave-chairs@ietf.org
Subject: Protocol Action: 'Basic Support for IPv6 over IEEE Std 802.11 Networks Operating Outside the Context of a Basic Service Set' to Proposed Standard (draft-ietf-ipwave-ipv6-over-80211ocb-52.txt)

The IESG has approved the following document:

- 'Basic Support for IPv6 over IEEE Std 802.11 Networks Operating Outside the Context of a Basic Service Set' (draft-ietf-ipwave-ipv6-over-80211ocb-52.txt) as Proposed Standard

This document is the product of the IP Wireless Access in Vehicular Environments Working Group.

The IESG contact persons are Éric Vyncke and Suresh Krishnan.

A URL of this Internet Draft is:

<https://datatracker.ietf.org/doc/draft-ietf-ipwave-ipv6-over-80211ocb/>

[Docs] [txt|pdf] [draft-ietf-ipwa...] [Tracker]

For this RFC, original HTML is available from the RFC-Editor: [RFC8691](#)

Internet Engineering Task Force (IETF)

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December 2019

Basic Support for IPv6 Networks Operating Outside the Context of a Basic
Service Set over IEEE Std 802.11



Abstract

- This document provides methods and settings for using IPv6 to communicate among nodes within range of one another over a single IEEE 802.11-OCB link. Support for these methods and settings require minimal changes to existing stacks.
- This document also describes limitations associated with using these methods. Optimizations and usage of IPv6 over more complex scenarios are not covered in this specification and are a subject for future work.