IEEE P802.11
Wireless LANs

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| Minutes of the November 2024 meetings of the IEEE 802.11 Coexistence Standing Committee |
| Date: 2024-12-16 |
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Abstract

This document contains the minutes of the November 2024 meetings of the IEEE 802.11 Coexistence Standing Committee.

# Tuesday, 2024-11-12, PM1 session

1. At 2024-11-12T13:31-08:00 the chair of the IEEE 802.11 Coexistence Standing Committee (SC) calls the meeting to order. Marc Emmelmann acts as chair of the SC. Guido R. Hiertz acts as recording secretary. The chair presents 11-24/1759r0.
2. At 2024-11-12T13:32-08:00 the chair present 11-24/1757r1. The document contains the proposed agenda for the sessions of the SC’s meetings during this week.
3. At 2024-11-12T13:36-08:00 the chair presents the following motion as contained in page six in 11-24/1759r0.
	1. “Move to approve Coex SC agenda as contained in 11-24/1757r1.”
		1. Mover: Carlos Codeiro
		2. Seconded: Lei Wang
		3. The SC approves this motion by unanimous consent.
		4. In approving this consent agenda, the minutes of the previous meeting as contained in 11-24/1462r0 are approved, too.
4. At 2024-11-12T13:37-08:00 the chair presents 11-23/448r1 and familiarizes attendees with their obligations when attending meetings conducted by groups under IEEE SA.
5. At 2024-11-12T13:41-08:00 the chair continues presenting from slide 10 of 11-24/1759r0.
6. At 2024-11-12T13:43-08:00 Rich Kennedy presents 11-24/1742r0. At 2024-11-12T13:51-08:00 Rich concludes his presentation.
7. At 2024-11-12T13:52-08:00 Guido presents 18-24/116r1. He concludes his presentation at 2024-11-12T14:01-08:00.
8. At 2024-11-12T14:02-08:00 Menzo Wentink presents 11-24/1912r0. At 2024-11-12T14:12-08:00 he concludes his presentation.
	1. Comment: How low is low?
	2. Comment: I believe it is 5 %.
	3. Comment: On slide 18, the lower bars are for low duty cycles?
	4. Comment: Yes.
	5. Comment: How long is the delay of SCD?
	6. Comment: It is 18 µs of CCA and 20 µs of switch time. So, it’s 38 µs for an SCD attempt.
	7. Comment: The idea of these simulations is to look at 5 GHz spectrum where there is no Wi-Fi in a relatively small amount of the band.
9. At 2024-11-12T14:16-08:00 Menzo presents 11-24/1913r0. He concludes his presentation at 2024-11-12T14:26-08:00.
	1. Comment: It feels a bit one-sided. We have a lot of 802.11 experts. Probably more 802.11 than NB experts. What are the ideas that Wi-Fi could do?
	2. Comment: It could be nice to have channels like these inside 6 GHz. This is a 160 MHz mode of operation. There could be a 140 MHz mode of operation.
	3. Comment: We talk often about such topics. Of course, reduced channel sizes leaving room for NB would be a way forward.
	4. Comment: If you reduce the duty cycle for NB you reduce the throughput for NB.
	5. Comment: Moving to 5 GHz doesn’t affect NB throughput.
	6. Comment: There are technical challenges in dynamically moving from 6 GHz to 5 GHz etc.
	7. Comment: Do you have any latency results for both NB and Wi-Fi?
	8. Comment: I could have added these results but I didn’t want to bloat the slides.
	9. Comment: In the US and Europe, I see at least 60 MHz of spectrum not occupied by Wi-Fi in 5 GHz.
	10. Comment: The setup is 160 MHz for Wi-Fi and NB using 2 MHz.
	11. Comment: Yes.
	12. Comment: At which distance does a 160 MHz Wi-Fi system defer to a 2 MHz transmission?
	13. Comment: Do your assumptions all of 160 MHz or not?
	14. Comment: Yes, it defers as long as anything in the 160 MHz channel is occupied.
	15. Comment: Regular Wi-Fi uses 160 MHz, or just primary the 80 MHz. It is already used in Wi-Fi.
	16. Comment: This use is not mandatory.
	17. Comment: I believe your assumptions are not realistic.
	18. Comment: Wi-Fi is more flexible in using the spectrum than just statically occupying a 160 MHz channel
	19. Comment: The dynamic use is not that easy. There is still interference from a lower 80 MHz into the upper 80 MHz if devices give up on part of the 160 MHz channel.
	20. Comment: Did you assume adjacent channel interference between the three 160 MHz systems.
	21. Comment: I did not.
	22. Comment: With ACL in mind, the three 160 MHz systems cannot operate independently at this distance at neighboring channels.
	23. Comment: I believe the ACL would just cause lower throughput.
	24. Comment: I believe these systems would lower their transmit power because they are so close.
10. At 2024-11-12T14:45-08:00 the chair presents page 15 of 11-24/1759r0.
11. At 2024-11-12T14:49-08:00 the chair declares the meeting to be in recess.

# Tuesday, 2024-11-12, EVE session

1. At 2024-11-12T19:33-08:00 the chair calls the meeting to order. The chair presents 11-24/1759r0. The chair reminds everyone that the SC operates under the rules of IEEE SA.
2. At 2024-11-12T19:34-08:00 the chair presents 11-24/1757r2. This agenda is approved by unanimous consent.
3. At 2024-11-12T19:37-08:00 Benjamin A. Rolfe presents 15-24/637r0.
	1. Comment: The KDB does not interpret rules or redefines them, it just helps you to comply with the rules.
	2. Comment: The opposite of a contention-based protocol is a centrally scheduled one, TDMA for example.
	3. Comment: The contention-based protocol is just a definition, it’s not part of the regulation.
	4. Comment: What kind of NB equipment did you see in the test reports?
	5. Comment: From my research, it seems like 802.15 NB products.
	6. Comment: Many products refer to 802.15.4 but this standard doesn’t even consider the 5 GHz or 6 GHz band. The standard does consider 2.4 GHz, today.
	7. Comment: So, this seems to be Zigbee-like equipment operating in the 5 GHz and 6 GHz band.
	8. Comment: Could this NB equipment in the 6 GHz be related to 802.15.4ab?
	9. Comment: Yes, that is probably what it is.
	10. Comment: So, it’s a pre-standard implementation.
	11. Comment: 802.15.4ab is Zigbee with minor modifications.
	12. Comment: Most of the devices are mobile phones, watches, earbuds.
	13. Comment: FCC’s KDB talks about protection of incumbents and sharing.
	14. Comment: I believe we should be aware that our products are being used globally. Thus, we should consider the most restrictive requirements. Thus, I am looking at what ETSI defines.
4. Ben concludes his presentation at 2024-11-12T21:14-08:00
5. At 2024-11-12T21:16-08:00 the chair declares the SC’s meeting adjourned.