IEEE P802.11  
Wireless LANs

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| Minutes of the 2024-09-11 meeting of the IEEE 802.11 Enhanced Light Communication Study Group | | | | |
| Date: 2024-09-11 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Guido R. Hiertz | Ericsson GmbH | Ericsson Allee 1 52134 Herzogenrath Germany |  | hiertz@ieee.org |

Abstract

This document contains the minutes of the 2024-09-11 meeting of the IEEE 802.11 Enhanced Light Communication Study Group.

1. At 2024-09-11T08:05-10:00 the chair calls the meeting of the IEEE 802.11 Enhanced Light communication Study Group (SG) to order.
   1. Nikola Serafimovski acts as chair of the SG. Guido R. Hiertz acts recording secretary of the SG.
2. The chair presents 11-24/1598r2. The chair reminds attendees of their obligations when participating in the SG’s meeting.
3. At 2024-09-11T08:09-10:00 the chair presents page 14 of the slide deck and introduces the proposed agenda.
   1. At 2024-09-11T08:10-10:00 attendees approve the proposed agenda by unanimous consent.
4. At 2024-09-11T08:12-10:00 Mohamed Islim presents 11-24/1627r0. He concludes his presentation at 2024-09-11T08:23-10:00. Attendees discuss the presentation.
   1. Comment: The blue shift is a well-known issue. We have discussed this in IEEE 802.11 TGbb. In IEEE 802.11bb we assumed the use of dichroic filters. I appreciate that you bring the topic to our attention.
   2. Comment: It will be interesting to see what kind of channelization we can achieve. We will not reach DWDM with 22 nm bandpass but maybe with less than a 100 nm bandpass.
   3. Comment: Is it possible to use a CDMA-type enconding or matched-filters to separate the wavelengths?
   4. Comment: Depending on the angle that light is reaching the filter, filters show very different behaviors. The filter characteristic has a high directionality. As the angle increases the cutoff areas change.
5. At 2024-09-11T08:32-10:00 Stefan Videv presents 11-24/1628r0. He concludes his presentation at 2024-09-11T08:46-10:00.
   1. Comment: What is the range you can achieve underwater?
   2. Comment: We are looking at communication in the horizontal and not the vertical range. Hundreds of meters should be possible. The achievable communication distance depends a lot on water quality. It’s not the depth that is the issue. If there are not many sediments, there are less issues. A coastal area with shallow water is more of a problem.
   3. Comment: What do you think of relays that could form a mesh network?
   4. Comment: Yes, this could make a difference. In the real world it’s much of a point-to-point deployment.
   5. Comment: Can you refer us to the SDO that does standards for underwater communication? They could come to our meetings, or we could exchange liaison letters with them.
   6. Comment: We have activities on positioning in IEEE 802.11. These are separate projects.
   7. Comment: Does water quality also impact acoustic communication?
   8. Comment: Yes, it does. There are various effects.
   9. Comment: If you consider relay deployments in ELC, please do not reinvent the wheel. The standard already incorporates several relay solutions and modes including IEEE 802.11s.
6. At 2024-09-11T08:58-10:00 the chair presents 11-24/1599r1. Attendees discuss the draft PAR and propose modifications and improvements. Related discussions finish at 2024-09-11T09:53-10:00. Afterwards, the chair presents the following straw poll:
   1. “Is there any objection using the Scope defined in doc. 11-24/1599r2 (section 5.2.b) as the starting point for the ELC PAR?”
      1. No attendee expresses disagreement with the question asked.
7. At 2024-09-11T09:55-10:00 presents the following motion:
   1. “Is there any objection using the Scope defined in doc. 11-24/1599r2 (section 5.2.b) as the starting point for the ELC PAR?”
      1. Moved: Juan Carlos Zúñiga
      2. Seconded: Volker Jungnickel
      3. There is no discussion.
   2. Attendees approve the motion by unanimous consent.
8. At 202-09-11T10:02-10:00 the chair declares the SG’s meeting adjourned.