IEEE 802.11 WLAN Working Group
Liaison Communication

Source:	IEEE 802.11 Working Group[1]	
To:	Wireless Broadband Alliance, E2E Wi-Fi QoS & L4S	
CC:	Alpesh Shah	Secretary, IEEE-SA Standards Board Secretary, IEEE-SA Board of Governors sasecretary@ieee.org]
	James Gilb	Chair, IEEE 802 LMSC gilb_ieee@TUTA.COM
	Jon Rosdahl	Vice-chair, IEEE 802.11 WLAN Working Group jrosdahl@ieee.org
	Stephen McCann	Vice-chair, IEEE 802.11 WLAN Working Group mccann.stephen@gmail.com
From:	Robert Stacey	Chair, IEEE 802.11 WLAN Working Group robert.stacey@intel.com
Subject:	Response to WBA liaison on implementation guidelines for L4S	
Approval:	Approved by the IEEE 802.11 Working Group at the 2024 November IEEE 802 Plenary Session, Vancouver, BC, Canada	

Dear WBA E2E Wi-Fi QoS & L4S project group,

Thank you for your Liaison Statement on Implementation Guidelines for Low Latency, Low Loss, and Scalable Throughput (L4S) in Wi-Fi Equipment, and providing opportunity to IEEE 802 LMSC to review and provide feedback on the document.

IEEE 802.11 Working Group is currently reviewing the document, and will provide feedback as soon as possible.

We note, as also noted in your document, that L4S raises some interesting discussion about the architectural aspects as well as implementation techniques for supporting and integrating it into an 802.11 environment. As such, our discussions are crossing task group/standing committee activities, with potential interest and technical work within the scope of ARChitecture, REVision

[1] This document represents the views of the IEEE 802.11 Working Group and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE 802.

mf, and P802.11bn activities. Each of these subgroups considered your liaison and document during the week of November 11-15, 2024. Also, an overview of the implementation guidelines was presented to the 802.11 ARC Standing Committee [1] in September 2024 Interim.

In addition, the IEEE 802.11bn Task Group (TG) is actively focusing on reducing latency in 802.11 networks. The scope of the Task Group includes at least one operational mode targeting a 25% reduction in latency at the 95th percentile compared to Extremely High Throughput (EHT) MAC/PHY operation [2]. To achieve this objective, the Task Group is considering multiple features to reduce media access delays, including but not limited to enhancements to EDCA, coordinated TDMA, Coordinated Restricted Target Wake Time, and preemption. L4S is also an active area of interest in this task group. Several submissions have been presented, each proposing various approaches to enable support for L4S in IEEE 802.11bn [3-9].

We also note your suggestion for a presentation of an overview of the WBA efforts in this area, to an upcoming IEEE 802.11 session. Unfortunately, it was not possible to schedule that for this November session, as you suggested. However, we would welcome consideration of such a presentation at an upcoming session. Future meeting dates and locations can be found at the link below, for your consideration.

Future meeting dates:

See: http://www.ieee802.org/11/Meetings/Meeting_Plan.html for Future meeting dates of the IEEE 802.11 Working Group

References

[1] https://mentor.ieee.org/802.11/dcn/24/11-24-1617-00-0arc-overview-of-wba-l4s-implementation-guidelines.pptx
[2] https://development.standards.ieee.org/myproject-web/app#viewpar/14476/10639
[3] 11-23-0679-00-0uhr-low-latency-qos-based-on-l4s
[4] 11-24-0384-01-00bn-low-latency-based-on-l4s
[5] 11-24-0399-01-00bn-thoughts-on-l4s-in-wi-fi
[6] 11-23-0650-01-0uhr-qos-re-visited
[7] 11-24-0818-04-00bn-low-latency-flow-treatment-triggered-by-upper-layer-including-ecn-indicators
[8] 11-24-1566-01-00bn-l4s-support-in-802-11bn
[9]11-24-1350-02-00bn-l4s-support-implementation-options

Sincerely,

Robert Stacey

Chair, IEEE 802.11 WLAN Working Group