

IEEE 802.11 WLAN Working Group Liaison Communication

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Subject: Liaison communication to WAA regarding PQC project at the IEEE 802.11 WG

Approval: WG Closing Plenary on 17 July 2026

Dear Colleagues,

The IEEE 802.11 Working Group has launched a new project, **P802.11bt**, with the scope of extending IEEE 802.11 security to support **post-quantum cryptography (PQC)** algorithms.

Advances in quantum computing are expected to weaken the public-key cryptography that underpins today's Wi-Fi authentication and key establishment. P802.11bt will introduce quantum-resistant mechanisms so that Wi-Fi continues to provide trusted security for the billions of devices and users that rely on it — protecting enterprise, consumer, and critical-infrastructure deployments as the industry transitions to a post-quantum world. The project provides a clear,

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.

standards-based migration path for vendors and operators, and aligns Wi-Fi with broader industry and regulatory PQC timelines.

The project has made significant advances over the past few weeks, focusing on these regulatory requirements and timelines.

The scope of the task group as defined in the PAR is:

This amendment extends 802.11 security to support algorithms for post-quantum cryptography (PQC). The extension specifies:

- a) authentication and key management (AKM) suites for PQC,
- b) digital signature and key establishment algorithms that use PQC,
- c) a password authenticated key exchange that uses PQC, and
- d) modifications to key handshake protocols for PQC.

For the latest information on our PQC projects and status please reference our agendas and meeting minutes that can be found on the TGbt IEEE mentor page

https://mentor.ieee.org/802.11/documents?is_dcn=DCN%2C%20Title%2C%20Author%20or%20Affiliation&is_group=00bt).

The Task Group is actively working toward a D1.0.

We are prepared to share project status, technical direction, and timelines, and we welcome the WAA input on market needs and deployment considerations as the work progresses.

We look forward to continued collaboration.

Sincerely,

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