**IEEE P802.19**

**Wireless Coexistence**

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| Project | IEEE P802.19 Wireless Coexistence WG |
| Title | Proposed draft text related to the radio noise emission from electronic devices |
| Date Submitted | July 27, 2025 |
| Source | Kazuto Yano (ATR) | E-mail: kzyano@atr.jp |
| Abstract | This submission contains a proposed draft text about the measurement of radio noise emission from electronic devices. |
| Purpose | For developing the TG3a draft. |
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## Discussion

Several contributions (19-24/0029r0, 19-24/0038r0, and 19-25/0012r0) noted that there are some electronic devices that emit radio noise with a negligible noise level over the Sub-1 GHz band. One of the contributions showed that such radio noise can cause the degradation of the communication performance of IEEE 802.11 S1G at the quite vicinity of the noise source. It is worthwhile noting in an informative section of the Recommended Practice that the users of communication systems using the S1G band should consider locating S1G communication equipment apart from such a noise source to achieve good communication performance.

## Proposed draft text

***TG3a editor: Please add a new subclause 7.7.a at the end of Subclause7.7 as follows:***

**7.7.a Radio noise emission from electronic device over Sub-1 GHz band**

As reported in references [BXXa, BXXb, BXXc], there are some electronic devices that emit radio noise with a negligible noise level over the Sub-1 GHz band. Such radio noise can cause the degradation of the communication performance of IEEE 802.11 S1G at the vicinity of the noise source [BXXc]. The users of communication systems using the S1G band are recommended to consider locating S1G communication equipment apart from such a noise source to achieve good communication performance.

***TG3a editor: Please add the following references into Biography:***

**Bibliography**

[BXXa] Yano, K., S. Ano, S. Shimizu, and T. Sakano, “Measurement result of radio noise over 920 MHz band emitted from mini PC,” IEEE 802.19 document 19-24-0029-00, 2024.

[BXXb] Yano, K., S. Ano, S. Shimizu, and T. Sakano, “Measurement results of radio noise over Sub-1 GHz band emitted from mini PC and laptop PC,” IEEE 802.19 document 19-24-0038-00, 2024.

[BXXc] Yano, K., S. Ano, A. Hasegawa, S. Shimizu, and T. Sakano, “Follow up on measurement of radio noise over Sub-1 GHz band emitted from mini PC and laptop PC, and its impact on communication performance of IEEE 802.11ah,” IEEE 802.19 document 19-25-0012-00, 2025.