IEEE P802.11
Wireless LANs

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| Liaison statement from the IEEE 802 to the ITU-R on light communications |
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Abstract

This document contains provides draft wording to be considered by the 802.18 Working Group as a response to the request for input by the ITU-R SG1 WP1A editor (Rene Vroom) from the 802.11 LC TIG Chair (Nikola Serafimovski). The ITU-R SG1 WP1A is composing a preliminary draft new report ITU-R SM.[VISIBLE-LIGHT] with input from various organizations looking at the use of the light spectrum for broadband communications. The group held a workshop in Eindhoven on 8 March 2017 and a summary can be seen here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0706-00-00lc-agentschap-telecom-summary-of-workshop-on-owc.docx>

The entire draft report from the ITU-R SG1 WP1A is available here: <https://mentor.ieee.org/802.11/dcn/17/11-17-0772-00-00lc-20170505-working-document-itu-r-towards-a-pdnr-on-near-visible-light-vlc-owc.docx>

**Liaison Statement from the IEEE 802 to the ITU-R SG1 WP1A**

**IEEE 802.15 has already developed wireless communications standards in the light spectrum (IEEE Std 802.15.7-2011) and is actively engaged in follow-on standards work specifically between 100 nm and 10,000 nm. IEEE 802.11 is looking at standardizing wireless communications in the light spectrum. Both groups support exchanging information as needed with the ITU-R SG1 WP1A on this topic.**

**Optical Wireless Communications (OWC) or Light Communications (LC) has the potential to ease congestion in the lower radio frequency (RF) spectrum bands where light can be used as an additional spectrum resource for broadband communications.**

**Because of the substantially different propagation characteristics in the light spectrum relative to the lower frequencies in the radio frequency spectrum, there is no need for it to be managed by spectrum regulators. Instead, having devices that adhere to the relevant local health and safety regulations regarding human eye safety and sensitivity should be sufficient. Additionally, devices using LC or OWC should also adhere to any local regulations regarding spurious RF emissions and should avoid causing interference in other RF spectrum bands.**