**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | UWB Protection Elevator Pitch | |
| Date Submitted | [12 September, 2018] | |
| Source | Timothy Harrington (Pro-ID ) |  |
| Re: | UWB Protection Elevator Pitch | |
| Abstract | A short document that give the highlights of UWB along with a pitch as to why it should be protected from high power RLAN | |
| Purpose | give the highlights of UWB along with a pitch as to why it should be protected from high power RLAN | |
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UWB is the only technology that can provide safe and secure wireless access. Applications include secure mobile transactions, vehicle access, and consumer ranging using devices such as smart phones, IOT connected devices, smart home devices, and industrial tags.

It is unique in that it provides the most precise locating capability using the least energy of any wireless technology. For example; a single coin cell can provide constant visibility for years.

UWB is unlicensed and co-exists with all currently legal radio devices without causing or suffering interference. The installed base is greater than 2 M, and some of the installed base is already at 6.5 center frequency and can’t change. Market projections are 3.1 B devices per year in 2025.

RLAN is not currently legal at 6 GHz anywhere in the world and the difference in transmit Power being requested is more than 10,000 to 1. This will cause total failures of UWB systems at distances closer than ??? m.

The EU will only allow 6-6.425 GHz so we would like to use the band from 6.3 – 6.8 GHz. This would give RLAN 400 MHz of new bandwidth.