**Revision to IEEE802.15.7**

**Suggested Revision Title**

Part 15.7: Short-Range Optical Wireless Communication

**Suggested Revision Scope**

This standard defines a PHY and MAC layer for short-range optical wireless communications in optically transparent media using light wavelengths from 10,000 nm to 190 nm. The standard is capable of delivering data rates sufficient to support audio and video multimedia services and also considers mobility of the visible link, compatibility with various light infrastructures, impairments due to noise and interference from sources like ambient light and a MAC layer that accommodates the unique needs of visible links as well as the other targeted light wavelengths. It also accommodates optical communications for cameras where transmitting devices incorporate light emitting sources and receivers are digital cameras with a lens and image sensor. The standard adheres to applicable eye safety regulations.

**Appendix – Background Material**

Based upon an action item from the committee, I’m proposing the base standard and amendment title/scope edits as shown below:

**Base Standard Title Edits**

Part 15.7: Short-Range Optical Wireless ~~Optical~~ Communication Using ~~Visible~~ Light

**Edited Base Standard Scope**

This standard defines a PHY and MAC layer for short-range optical wireless communications using, but not restricted to, visible light in optically transparent media. The visible light spectrum extends from 380 nm to 780 nm in wavelength. The standard is capable of delivering data rates sufficient to support audio and video multimedia services and also considers mobility of the visible link, compatibility with visible-light infrastructures, impairments due to noise and interference from sources like ambient light and a MAC layer that accommodates visible links. The standard adheres to applicable eye safety regulations.

**Edited Amendment Title**

Standard for Local and Metropolitan Area Networks--Part 15.7: Short-Range Optical Wireless ~~Optical~~ Communication Using ~~Visible~~ Light Amendment for a Physical Layer Supporting Optical Wireless Camera Communications

**Edited Amendment Scope**

This amendment defines a Physical Layer (PHY) supporting Optical Wireless Camera Communications (OWCC) using light ~~frequencies~~ wavelengths over the spectral range of 10,000nm ( Infra-Red (IR)) to 190nm (near Ultra-Violet (UV)) and any MAC changes specifically required to support this PHY. Transmitting devices include such sources as mobile device displays~~, typically found on cameras and mobile devices,~~ and other LED based sources such as flashes, flashlights, LED Tags, LED/Laser sources, display/image patterns ~~(like QR codes)~~, and some current generation projectors to name but a few. Receivers are devices such the lens and image sensors typically found in a mobile device camera ~~or mobile device~~ as well as other light sensors that may be present in these or other kinds of devices. ~~Techniques are put forward which do not require any hardware modifications for many classes of applications in existing mobile and/or other devices such as those defined above, as well as techniques which may require some level of hardware modification to support new capabilities.~~

**Edited Amendment PAR 8.1**

Techniques are put forward which do not require anyhardware modifications for many classes of applications in existing mobile and/or other devices such as those defined above, as well as techniques which may require some level of hardware modification to support new capabilities.