

Knoxville Campus Policy: IT00007-K Wireless Network	
Version 1	Effective Date: 06/14/2018

## Office of Information Technology

### Wireless Network

### Guidelines for the use of the 2.4 and 5 GHZ Radio Frequency

#### OBJECTIVE:

The Office of Information Technology (OIT) has been given primary responsibility for the design, installation, and operation of the wireless network environment on the Knoxville Campus. This system will allow campus users to access all campus information technology resources only from mobile or portable computers. However, in order to achieve a robust and stable wireless infrastructure and prevent unintended interference to FCC licensed services, OIT must maintain administrative control of the radio frequency spectrum that wireless devices utilize as their base transport mechanism.

To this end, certain computing policies now apply to that segment of the radio frequency spectrum on campus. This document alerts members of the university community to the potential problems that could result from devices using the same radio frequency.

802.11b wireless local area networking uses the FCC unlicensed 2.4 GHz Industrial, Scientific, Medical (ISM) band. 802.11a wireless uses the FCC unlicensed 5 GHz unlicensed National Information Infrastructure (U-NII) band. Certain other “wireless” devices exist in the market place that also employ the same 2.4 or 5 GHz frequency band and can cause interference to users of the wireless service. These devices include, but are not limited to other wireless LAN devices, cordless telephones, cameras, keyboards, mice, audio speakers, ad-hoc (peer-to-peer) networks, and computers or other device equipped with a wireless card and software to act as an access point.

In order to assure the highest level of service to the users of wireless network, OIT needs help from all members of the campus community in minimizing the potential interference from those devices. OIT requests that use of all other 2.4 and 5 GHz devices be discontinued in university-owned buildings. In cases where the device is being used for a specific teaching or research application, OIT will work with faculty to determine whether there are circumstances under which use of the device may still be accommodated without causing interference to the wireless community.

OIT will approach the shared use of the 2.4 and 5 GHz radio frequency in the same way that it manages the shared use of the wired network. While it will not actively monitor use of the airspace for potential interfering devices, we will seek out the user of a specific device should we find it causing harmful interference to the campus network or other FCC licensed service. In these cases, OIT reserves the right to restrict the use of all FCC licensed Part 15 ISM and U-NII devices in university-owned buildings and all outdoor spaces on the Knoxville Campus. See the OIT Computing AUP for information on the campus



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computing policies, including those related to responsible use of shared resources, such as the campus airspace in this case.

If you think you have an existing system that may use 2.4 GHz radios for transmission or you are planning to purchase a wireless system and you are uncertain if it employs 2.4 GHz radios, please contact the OIT HelpDesk at 974-9900 or send mail to [helpdesk@utk.edu](mailto:helpdesk@utk.edu). The Help Desk can assist in determining if such devices will cause interference to the wireless network.