

# **Policies for Wireless Communications at NCI-Frederick**

## **Intent**

The proliferation of wireless communications products and the resulting likely-hood of security vulnerabilities and interference between devices and services using wireless technology makes it essential that wireless activities on the NCI-Frederick campus be fully coordinated through the LAN Office.

This document demands the level of cooperation that will encourage an organized approach to uniform 802.11 wireless data networking in general access and departmental areas of NCI-Frederick.

This document is presently a compilation of issues and concerns that involve wireless services. As the technology matures, expect changes to these guidelines.

## **Policies and Guidelines**

1. Wireless network equipment (Airports, Station Adapters, Access Points, etc.) intended for use within the NCI-Frederick Radio Frequency (RF) boundary must be registered with and the installation of coordinated through the NCI-Frederick LAN Office. Network ESSID's, Hopping sets, frequency settings, and WEP levels are approved and registered through the NCI-Frederick LAN Office.
2. Wireless network adapters (NIC's) must be registered as well as installed following the same NCI-Frederick policies for setting up any network adapter. (IP's and Property Numbers are approved and registered through the NCI-Frederick LAN Office.)
3. Any conflicts between wireless devices will be resolved in favor of fully coordinated and registered installations. Private equipment must be adjusted or removed when it interferes with any general or specific facility wireless infrastructures (example: 539 Animal Facility) even if the general or specific access equipment is installed at a later time.
4. A cooperative effort to eliminate interference in the NCI-Frederick wireless community is preferred. Any unapproved installations will be dealt with accordingly.
5. In addition to these policies, wireless services are subject to the same rules and policies that govern any other communications services at NCI-Frederick.
6. Only NCI-Frederick LAN Office-approved network wireless equipment is allowed to operate within the NCI-Frederick wireless boundaries. Unapproved wireless equipment may be removed at the LAN Office's discretion.

7. A list of wireless technology standards will be made available to the NCI-Frederick community. These will include such items as approved devices, security measures, access point placement suggestions, and other general configuration standards. Only WECA Wi-Fi (Wireless Fidelity) rating certified equipment is allowed.
8. Wireless networks are to be IP only. Other protocols can either create extensive broadcast traffic or be inherently insecure.
  - a. IP addresses are only to be assigned via normal current procedures with the NCI-Frederick LAN Office.
  - b. In certain situations wireless networks may be allowed to run other necessary protocols with the permission and coordination of the NCI-Frederick LAN Office.
9. At this time, data security is the sole responsibility of the applications rather than the network. The NCI-Frederick LAN Office will not be responsible for any data loss or theft due to the inherent poor quality of wireless security.
10. Usage of a 128-bit WEP (wireless encryption protocol) may become the NCI-Frederick standard for wireless network security until the technology is improved upon or until a better alternative solution is implemented (VPN's, firewalls, etc.). Any installed wireless devices not compliant with this standard will be cause for the immediate removal of such devices.
11. Eventually there may be a VPN endpoint or some other central means of securing wireless links at NCI-Frederick to assist in network security.
12. Consistent free mobility is to be expected only within the normal boundaries of your wireless access point.
13. Intentional interference or disruption of other authorized communications or unauthorized interceptions of non-related authorized traffic are violations of NCI-Frederick policy and may be grounds for dismissal and/or possible criminal prosecution.
14. Equipment must be installed so as to minimize interference with other facility RF activities. All wireless equipment must be placed in locations and set to frequencies that coordinate reasonably with any other NCI-Frederick facilities as mandated by the LAN Office.
15. NCI-Frederick LAN Office will maintain a registry of approved wireless devices that will include the following data elements.
  - a. Location
  - b. Hopping Sequences (802.11 frequency hopping)
  - c. SSID's or ESSID's

- d. Specifications of intended wireless coverage as well as the actual coverage
- e. Technology (802.11, 802.11b, 802.11a)
- f. Responsible parties both Administrative and Technical

### **Registration Mechanism**

Until further notice all wireless equipment and intended applications will be dealt with by the NCI-Frederick LAN Office on a case-by-case basis and it is mandatory to coordinate any installations ahead of time through the NCI-Frederick LAN Office before purchasing and/or installing any wireless network equipment.

### **Privacy Warning**

Wireless technologies are relatively new, incompatible, and insecure. A number of different technologies utilize the 2.4GHz communications band including wireless computers, cellular telephones, and microwave ovens. You should therefore anticipate periodic instability. Expect that others could intercept your communications including, but not limited to, passwords, research, or E-mail normally protected by FERPA laws.

# NCI-Frederick Wireless Communications Application

Please complete the following information and return this form to the NCI-Frederick LAN Office. You may fax it to 301-846-5762 or mail/deliver it to LAN Office, Building 430. If you have any questions or need assistance, please contact the ABCC Helpdesk at 301-846-5555.

Applicant's Name: \_\_\_\_\_ Phone #: \_\_\_\_\_

Building / Room: \_\_\_\_\_ Email: \_\_\_\_\_

Organization / Lab: \_\_\_\_\_

Contract Affiliation: \_\_\_\_\_

Intended Wireless Coverage Area: \_\_\_\_\_

Technology:	802.11	802.11a	802.11b	
Access Points (Model and Location)			ESSID / SSID	Hopping Seq. (802.11 only)

Administrative Responsible Party: Name: \_\_\_\_\_  
Title: \_\_\_\_\_ Phone #: \_\_\_\_\_

Technical Responsible Party: Name: \_\_\_\_\_  
Title: \_\_\_\_\_ Phone #: \_\_\_\_\_

By signing this application, I confirm that I have read, understand, and agree to follow the NCI-Frederick Policies for Wireless Communications. I understand the security risks associated with wireless communications as outlined in the policies and agree that the NCI-Frederick LAN Office is not responsible for any data loss or theft.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Supervisor's Printed Name: \_\_\_\_\_