

The National Science Foundation Polar Programs United States Antarctic Program

System Maintenance Policy

5000.20

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| Office of Primary Responsibility | National Science Foundation Geosciences Directorate Division of Polar Programs Antarctic Infrastructure and Logistics | Responsible Official | Primary Responsibility: Mr. Patrick D. Smith Technology Development Manager |
| Address | Suite 755 4201 Wilson Blvd Arlington, VA 22230 | Phone Fax Web | Security Responsibility: Ms. Desari Mattox USAP Information Security Manager 703.292.8032 703.292.9080 http://www.nsf.gov/div/index.jsp ?div=PLR |
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1 PURPOSE

This directive establishes the system maintenance policy for information systems supporting the National Science Foundation (NSF) United States Antarctic Program (USAP).

2 BACKGROUND

Federal law and Office of Management and Budget (OMB) directives require the establishment of a System Maintenance policy to protect USAP information and information systems.

3 GUIDING PRINCIPLES

In developing methods and processes for system maintenance, the program will follow these guiding principals:

- The USAP System Maintenance Program shall be developed in compliance with National Institute of Standards & Technology (NIST) guidelines and NSF/PLR directives.
- Maintenance activities may be documented through other processes (e.g., Change Control Board (CCB), Patch and Vulnerability Group (PVG)) so as to prevent duplication of effort
- The security controls in place for USAP maintenance personnel and maintenance conducted remotely on USAP systems are equally enforced for outside vendors performing remote work on USAP systems.

4 POLICY

It is USAP policy to protect the confidentiality, integrity, and availability of information and information systems during system maintenance activities.

System operators, managers, maintainers and providers of USAP information & communication systems shall:

- Implement processes and procedures to manage maintenance conducted by USAP personnel and Non-USAP vendors. These processes and procedures shall address controlled maintenance activities, including nonlocal (remote) maintenance, and personnel requirements.
- Develop timeliness standards for maintenance activities. These standards may be adjusted for operating locations or factors such as risk level of the information/information system.
- Define maintenance requirements for hardware and software resources. These requirements may vary based on operating location.

5 ROLES AND RESPONSIBILITIES

The following roles have specific responsibilities pertaining to system maintenance management. The sections below describe only the responsibilities for these roles as they relate to system maintenance management. Refer to USAP Information Security Policy 5000.01, *The USAP Information Security Program*, for the full description of the responsibilities for these roles.

5.1 Technology Development Manager, Antarctic Infrastructure & Logistics (AIL)

The AILTechnology Development Manager is the responsible official of the USAP System Maintenance Program.

5.2 USAP Information Security Manager (ISM)

The USAP Information Security Manager (ISM) oversees the System Maintenance program. The ISM coordinates the development and implementation of the system maintenance program with Supporting Organizations, System managers, and Administrators of USAP information systems to ensure timely and secure system maintenance.

5.3 Supporting Organizations

Supporting organizations are responsible for management of system maintenance processes, activities and implementation of security controls. Also ensure that system maintenance is in alignment with guidance from NSF/PLR. Personnel shall provide USAP participants with support and guidance with system maintenance.

5.4 Tenant Organizations

Tenant organizations with systems interconnected to the USAP enterprise network are responsible for system maintenance in accordance with this policy.

6 SCOPE AND COMPLIANCE

This policy applies to supporting organizations and tenant organizations within the USAP operating environment or connected to the USAP network. Compliance with this policy implementation is indicated in OMB M-06-16 – *Protection of Sensitive Agency Information*, National Institute of Standards and Technology (NIST) Special Publication 800-53 Revision 4, *Security and Privacy Controls for Federal Information Systems and Organizations*, and USAP Information Security Policy 5000.01, *The USAP Information Security Program*.

7 POLICY IMPLEMENTATION

7.1 Implementation

Each USAP supporting organization shall develop appropriate processes, and procedures to implement the USAP System Maintenance Program. Supporting organizations shall publish procedures as appropriate to implement this program and comply with this policy.

7.2 Policy Review

This policy is reviewed in conjunction with major changes to the USAP information infrastructure, or every two years.

8 AUTHORITY

Publication of this policy is in conformance with the authority of the National Science Foundation Act of 1950, as amended and extended, the Federal Information Security Management Act of 2002 and NSF Guidance.

> Brian Stone Section Head, NSF/GEO/PLR/AIL