

**Forest Service Manual  
National Headquarters - Washington Office  
Washington, DC**

**Forest Service Manual 6600 – Systems Management  
Chapter 6640 - Telecommunications**

**Amendment:** 6600-2001-1

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**Approved by:** Gloria Manning, Associate Deputy Chief

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**Responsible Staff:**

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**Superseded Document(s):** 6640 Contents, Amendment 6600-95-6, May 26, 1995; 6640, Amendment 6600-95-7, May 26, 1995

**Digest:** Following is an explanation of the changes throughout the directive by section.

This amendment makes minor editorial and formatting changes throughout FSM 6640; changes the staff name from Information Systems and Technology to the current Information Resources Management Staff; deletes references to FTS 2000; and changes references from FTS 2001 to GSA FTS.

**6640.1:** Adds entries to the Authority section for Executive Order 13011; the Clinger-Cohen Act; the Computer Security Act; and Federal Property Management Regulations (FSH 6409.31-FPMR 101-35.301). Removes obsolete references to Public Law 100-440 and the Federal Information Resources Management Regulation (former FSH 6309.33-FIRMR).

**6640.2:** Adds new objectives related to sharing of network access services and equipment (para. 7); connectivity for all Forest Service sites (para. 8); and safeguards for all data (para. 9)

**6640.3:** Changes the term Government Open Systems Interconnection Profile (GOSIP) to Profiles for Open Systems Internetworking Technologies (POSIT) and makes changes to direction on technical approvals and waivers.

**6640.41a:** Adds telecommunications security to the responsibility of the Chief Information Officer.

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**6640.41b:** Adds management of Forest Service network backbone and telecommunication security policies to the responsibility of the Director, Information Resources Management Staff.

**6640.41f:** Adds Telecommunication Mission Area Control Officer (TMACO) responsibilities.

**6640.41g - 6640.41h:** Separates the responsibilities of the Designated Agency Representative (DAR) into those for dedicated services (DAR/D) and nondedicated services (DAR/N).

**6640.42a:** Adds additional responsibilities for Regional Foresters, Station Directors, the Area Director, and the Institute Director.

**6640.42b:** Separates the responsibilities of the unit Designated Agency Representative (DAR) into the DAR for nondedicated services (DAR/N, FSM 6640.42b) and for review of records (DAR/V, FSM 6640.42f).

**6640.42c:** Recodes the responsibility of the Regional Incident Communications Coordinator (formerly FSM 6640.42d) to FSM 6640.42c.

**6640.42d:** Removes the responsibility of Telecommunications Managers (formerly FSM 6640.42c) and adds the Designated System Manager for Call Detail Records at FSM 6640.42d.

**6640.42e:** Recodes the responsibility of the Frequency Manager (formerly at 6640.42a) to FSM 6640.42e.

**6640.42f:** Adds the responsibilities of the Designated Agency Representative for Review of Records (DAR/V).

**6640.6:** Changes requirements from the former 10-year National Telecommunications Strategy and the 10-year strategic plans to the annual Telecommunications Plan.

**6640.63:** Adds new direction on inventories of telecommunications resources.

**6642 - 6642.28:** In the sections on Voice Communications, recodes and revises direction and adds direction on Planning (FSM 6642.11); Procurement (FSM 6642.12); Maintenance and Repair (FSM 6642.21), Centralized Billing (FSM 6642.13); Federal Calling Cards (FSM 6642.14); Cellular Phones (FSM 6642.26); Listening-In or Recording of Telephone Conversations (FSM 6642.27); and Installation of Government Telecommunications Resources in Private Residences (FSM 6642.28).

**6643 - 6643.57b:** Revises and recodes direction and adds new direction for Data Communications on Planning (FSM 6643.1); Procurement (FSM 6643.2); Maintenance and

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Repair (FSM 6643.3); Standards (FSM 6643.4); and Security (FSM 6643.5), including Network Security (FSM 6643.51), Network Connections to the Forest Service Network (FSM 6643.52), Remote Access Security (FSM 6643.53), Authentication (FSM 6643.54), Modem Usage (FSM 6643.55), Local Area Network (LAN) and Wide Area Network (WAN) (FSM 6643.56), and Firewalls (FSM 6643.57).

**6643.05:** Adds a Definitions section.

**6645.03:** Revises the Policy section for Telecommunications Technical Approvals.

**6645.04:** Revises the Responsibility section to conform with revised policy.

**6646:** Adds direction on the Internet/World Wide Web and cross-references additional direction in chapter FSM 6650.

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This chapter provides direction for the management and administration of telecommunications technology and services.

**6640.1 - Authority**

1. Executive Order 13011, Federal Information Technology, dated July 16, 1996. This order requires that agencies significantly improve the management of their information systems, including the acquisition of information technology, by implementing the provisions of the Paperwork Reduction Act of 1995 (Public Law 104-13; 44 U.S.C. 101), the Information Technology Management Reform Act of 1996 (Public Law 104-106; 41 U.S.C. 251), and the Government Performance and Results Act of 1993 (Public Law 103-62; 107 Stat. 285).

2. Clinger-Cohen Act, formerly known as the Information Technology Management Reform Act of 1996 (ITMRA). (41 U.S.C. 251). This act repeals the Brooks Act (40 U.S.C. 759) and abolishes the Federal Information Resources Management Regulation (FIRMR).

3. Departmental Regulations Concerning Telecommunications Technology and Services. The following directives cover Departmental organizational authorities and responsibilities, policies, and procedures as they apply to technical approvals for information resources management products and services, the management of telecommunications programs, the security of telecommunication networks and information, and the management and use of call detail records. Although these Department Regulations (DR's) are the guiding Departmental authorities for the direction in this chapter, the Forest Service Master Agreement takes precedence in direction on employee reimbursement for telephone calls to home while in travel status.

- a. DR 3130-1, Technical Approval for Information Resources Management (IRM) Products and Services;
- b. DR 3300-1, Telecommunications, USDA Telecommunications Network Stabilization and Migration Program of 1997 (TNSMP);
- c. DR 3140-1, Security Policy;
- d. DR 1710-2, Inception and Monitoring of Telephone and Non-telephone Conversations;
- e. DR 2300-3, Authorized Telephone Calls of a Personal Nature During Official Travel; and
- f. DR 3040-2, Call Detail Records.

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4. National Telecommunications and Information Administration (NTIA) Manual of Regulations and Procedures for Federal Radio Frequency Management (47 CFR 80). This manual contains the regulations and procedures for Federal radio spectrum management and for radio frequency assignments (RFA). Copies are available from the Washington Office, Information Resources Management Staff, and through Regional Radio Frequency Managers.

5. General Services Administration (GSA), Federal Property Management Regulations (FSH 6409.31-FPMR), section 101-35.301, Federal Technology Service (FTS) Long Distance Network. This section requires the use of GSA's FTS long-distance network and the GSA FTS acquisition vehicle by Federal agencies for all telecommunications services to satisfy core service requirements. Core services are defined as mandatory offerings until minimum revenue guarantees are met and include switched voice, circuit switched data, toll-free service, frame relay, asynchronous transfer mode, dedicated transmission, and compressed video.

6. Forest Service National Radio Contract. This contract sets out mandatory requirements for procurement of frequency modulated land-mobile radios (FM LMR) and limited associated equipment.

7. Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2100). This law provides authority and guidance for the cooperative assistance between the Secretary of Agriculture and non-Federal government agencies.

8. Telecommunications Accessibility Enhancement Act of 1988, and Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794). These laws require Federal agencies to acquire and manage Federal information processing resources in a manner ensuring that employees with disabilities have access to computer and telecommunications products and services and that persons with disabilities have access to public information services.

9. Americans with Disabilities Act of 1990 (42 U.S.C. 12101-12213) and Implementing Regulations at 28 CFR Part 36. This act prohibits discrimination on the basis of disability by private entities in places of public accommodation, requires that all new places of public accommodation and commercial facilities be designed and constructed so as to be readily accessible to and usable by persons with disabilities, and requires that examinations or courses related to licensing or certification for professional and trade purposes be accessible to persons with disabilities.

10. Title 7, Code of Federal Regulations, section 2.60(a)(27) (7 CFR 2.60 (a)(27)). This regulation sets out the delegation to the Forest Service to administer radio spectrum management for USDA.

11. Computer Security Act of 1987 (40 U.S.C. 1441). This act provides for information technology (IT) security in Federal agencies and establishes the framework for Federal agencies to improve the security of their computer systems.

## **6640.2 - Objectives**

To ensure that Forest Service telecommunications systems, services, and activities accomplish the following:

1. Contribute to employee and public safety.
2. Aid the public in emergencies and national disasters.
3. Aid in fire prevention, detection, suppression, and rehabilitation efforts.
4. Aid in the enforcement of laws and regulations that the Forest Service is empowered to enforce.
5. Provide reliable, cost-effective telecommunications services to support the day-to-day administrative and resource management activities of the Forest Service.
6. Provide user-friendly access to Forest Service telecommunications systems and services, such as text telephones (FSM 6642.6).
7. Facilitate opportunities for sharing existing or planned dedicated network access service and equipment where cost-effective and in accordance with DR 3300-1, Appendix G.
8. Provide connectivity to all Forest Service sites to facilitate the processing of Forest Service mission-dependent information.
9. Protect Forest Service data residing on and passing through components of the network.

## **6640.3 - Policy**

1. Program Plans. Manage telecommunications as a planned program based on requirements of, and support to, Forest Service activities.
  - a. Do not provide telecommunication services to non-Federal governments or to the private sector, except as provided by the Cooperative Forestry Assistance Act (FSM 6640.1) or other appropriate laws and regulations.
  - b. Ensure that the Forest Service, as a user of telecommunications services, does not provide its own services unless covered under one or more of the following exceptions:
    - (1) If the needed service is not available from outside sources.
    - (2) If the needed service is not adequate from outside sources.



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(3) If the needed service is significantly more costly from outside sources. To provide its own services under the preceding exemptions a Forest Service unit must obtain the approval of the Washington Office, Director of Information Resources Management.

c. Encourage sharing of telecommunications services with other Federal Government agencies when one or more of the criteria in paragraph 1b are met. To share services with other Government agencies, ensure that a memorandum of agreement (MOA), a memorandum of understanding (MOU), or an interagency agreement outlines the services and benefits to be provided or received. Such agreements must be approved by the Forest Service, USDA, and the receiving organization.

d. Comply with the prohibition on shared use of a Forest Service microwave system by a non-Federal entity, except where such service is specifically covered under a cooperative agreement and such use is approved by the Washington Office, Director of Information Resources Management.

e. Ensure that use by the Forest Service of non-Federal government networks (such as direct access to the Internet) has been authorized by the appropriate required approvals from the USDA Office of Chief Information Officer (OCIO), the Forest Service Chief Information Officer, and the General Services Administration (GSA). The trading of services does not constitute an exemption.

f. Obtain prior approval from the Washington Office, Director of Information Resources Management, before entering into formal agreements with USDA, OCIO, Telecommunications Services Division (TSD), which may obligate or commit the Forest Service to telecommunication services or resources.

g. Do not authorize other agencies or entities to represent the Forest Service in any aspect of telecommunications, except as expressly authorized by the Washington Office, Director of Information Resources Management, or this chapter.

h. Ensure that telecommunications products and services have appropriate auxiliary aids and are accessible for use by individuals with disabilities.

i. Investigate the use of emerging technology where there is a demonstrated need and where it can provide cost-effective communications.

j. Use GSA FTS contract services for all interLATA and interstate communications unless a waiver has been granted by the Department.

2. Profiles for Open Systems Internetworking Technologies (POSIT). Develop and maintain compatibility between systems and networks through adherence to Government-wide standards and the POSIT.

3. Technical Approvals and Waivers.

- a. Obtain technical approvals and waivers as required in FSM 6645.
- b. Ensure that radio procurements are made from the national radio contract. Special requirements or emergency needs must be approved by the Washington Office, Director of Information Resources Management (FSH 6609.14, sec. 21.2).

4. Acquisitions. Acquire telecommunications services, hardware, and software in adherence to the direction in FSH 6609.14. The USDA provides Internet service for all Forest Service units. Units having special requirements for Internet access that cannot be met by the USDA Internet access must receive a waiver from USDA, OCIO.

**6640.4 - Responsibility**

**6640.41 - Washington Office**

**6640.41a - Chief Information Officer**

It is the responsibility of the Forest Service Chief Information Officer (CIO) to:

1. Establish and maintain effective verbal communications with the National Leadership Team on telecommunications management.
2. Provide national leadership in telecommunications activities and management.
3. Approve telecommunications plans.
4. Develop and maintain a comprehensive and effective telecommunications security policy that ensures compliance with established Federal standards and Departmental policies.

**6640.41b - Director, Information Resources Management Staff**

It is the responsibility of the Director, Information Resources Management Staff, to:

1. Develop and administer Service-wide telecommunications policy and standards.
2. Oversee the overall planning and management of Service-wide telecommunications programs (for example: voice, data, radio, and video) and assign a national program manager to each program area.
3. Carry out the responsibilities delegated in 7 CFR 2.60 (a)(27) and USDA DR 3300-1 by designating a representative as the Interdepartment Radio Advisory Committee (IRAC) representative for USDA along with representatives to the primary IRAC subcommittees, their associated ad hoc and working groups, and other related committees.

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4. Oversee management of Forest Service Wide Area Network (WAN) backbone circuits and routers.

5. Implement established telecommunication security policies, and promote security awareness and the ethical use of telecommunication resources.

**6640.41c - National Telecommunications Manager**

The National Telecommunications Manager (FSM 6640.41b, para. 2) designated by the Chief Information Officer has the responsibility to coordinate Service-wide telecommunications activities and to coordinate with Region, Station, Area, and Institute telecommunications staff managers on telecommunications issues. The National Telecommunications Manager also has the responsibility to designate the Spectrum Management Liaison Office Frequency Manager, Telecommunication Mission Area Control Officer, Designated Agency Representative for Dedicate Services, and Designated Agency Representative for Nondedicated Services.

**6640.41d - Spectrum Management Liaison Officer**

It is the responsibility of the Spectrum Management Liaison Officer to serve as the principal point of contact to represent the Forest Service on all matters related to wireless communications and frequency management (DR 3300-1).

**6640.41e - Frequency Manager**

It is the responsibility of the Service-wide Frequency Manager to manage all frequencies used by the Forest Service.

**6640.41f - Telecommunication Mission Area Control Officer (TMACO)**

It is the responsibility of the TMACO to lead the Forest Service's efforts to achieve the goals of DR-3300-1, Telecommunications Network Stabilization and Migration Program (TNSMP). The TMACO is the spokesperson for the Forest Service on matters relating to the TNSMP and acts as the USDA OCIO's single point of contact. The TMACO has the sole authority to approve ordering of network access equipment and services and has the responsibility to facilitate the engineering of network access arrangements; provide oversight and management of the content of the Forest Service's forecast database; approve all sharing agreements between Forest Service and other departments or agencies; analyze opportunities for sharing existing and planned Forest Service network access services and equipment; provide oversight to the Forest Service designated agency representatives (DAR's) (FSM 6640.41g and 6640.41h); and maintain the cost/benefit analyses and all documentation pertinent to the Forest Service's decision for implementing the most cost-effective solution for telecommunications services and equipment.

**6640.41g - Designated Agency Representative for Dedicated Services (DAR/D)**

It is the responsibility of the DAR/D to order the GSA FTS and commercial dedicated network access equipment and services upon approval by the TMACO and to review bills associated with the dedicated services. Dedicated services include voice on-net, switched data services, integrated services digital network basic and primary rate interface, switched voice services, switched digital integrated service for voice and data, packet services, frame relay, asynchronous transfer mode, compressed and switched video, dedicated transmission service, and international data service. Dedicated network access equipment includes, but is not limited to, routers, private branch exchanges, channel banks, telephone key systems, and csu/data set units.

**6640.41h - Designated Agency Representative for Nondedicated Services (DAR/N)**

(For additional direction, see FSM 6645.03.) It is the responsibility of the DAR/N to order the GSA FTS and commercial nondedicated network access services upon approval by the TMACO, to review bills associated with the nondedicated services, and to keep an accurate inventory of all telecommunication equipment, access, services and links. Nondedicated services include presubscribed interexchange carrier charge (PICC), voice calling cards, cellular services, international voice, and 1-800 toll-free telephone service.

**6640.42 - Field Units**

**6640.42a - Regional Foresters, Station Directors, Area Director, and Institute Director**

In addition to the following responsibilities in paragraphs 1 to 7, Regional Foresters also have the responsibility to designate a Regional Incident Communications Coordinator (RICC) (FSM 6640.42c). It is the responsibility of Regional Foresters, Station Directors, Area Director, and Institute Director to:

1. Develop and administer Region, Station, Area, and Institute-wide telecommunications policy and standards.
2. Provide secure access to Forest Service systems and protect Forest Service information by planning and implementing appropriate network security.
3. Review and approve all telecommunications plans and designs under their authority.
4. Designate a GSA FTS Designated Agency Representative for nondedicated services (DAR/N) who orders nondedicated data and voice services for the unit (FSM 6640.42b) and a Designated Agency Representative for Review of Records (DAR/V) in the unit.
5. Designate a Unit System Manager for Call Detail Records (CDRs) (FSM6640.42d).
6. Designate a Unit Frequency Manager (FSM 6640.42e).

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7. Oversee the overall planning and management of unit-wide telecommunications programs (for example: voice, data, radio, and video).

**6640.42b - Designated Agency Representative for Nondedicated Services (DAR/N)**

(For further direction, see FSM 6645.03.) The DAR/N is responsible for:

1. GSA FTS network planning, design, and analysis,
2. GSA FTS billing hierarchy accuracy,
3. GSA FTS nondedicated service ordering,
4. GSA FTS service acceptance,
5. Verification of GSA FTS usage,
6. Account reconciliation,
7. Monitoring of service quality,
8. Escalating complaints to higher levels as appropriate,
9. Implementation of the DR-3300 TNSMP process, and
10. Disconnection of GSA FTS services when appropriate.

**6640.42c - Regional Incident Communications Coordinator (RICC)**

It is the responsibility of the RICC to assign the frequencies to be used on incidents when conditions indicate the potential for multiple adjacent incidents and/or when a multiple agency coordination (MAC) situation exists.

**6640.42d - Designated System Manager for Call Detail Records**

The Designated System Manager for Call Detail Records has the responsibility to:

1. Ensure that call detail records are safeguarded in accordance with the provisions of the Privacy Act and are used in accordance with the established Privacy Act System of Records (FSM 6280, FSH 6209.13).
2. Respond to requests for call detail records (CDF) under provisions of the Freedom of Information Act (FOIA) (FSM 6280, FSH 6209.13).

#### **6640.42e - Unit Frequency Manager**

In addition to the following responsibilities in paragraphs 1 through 3, Regional Frequency Managers have the responsibility to act as Frequency Manager for any Station, Area, Institute, or Forest Service units within the Region and provide guidelines to the Forests in proper use of citizens band radio frequencies (FSH 6609.14, ch. 40). The Unit Frequency Manager shall possess a secret level security clearance and shall receive adequate training in frequency management. See FSH 6609.14 for direction on required training. It is the responsibility of the Unit Frequency Manager to:

1. Ensure that adequate storage and security of information is provided as directed in DM 3440-1, Classification and Declassification: Safeguarding Classified Information, and the Security Classification Guide for Frequency Assignment Records (NTIA-1-1982).
2. Manage all frequencies used by the Forest Service within the unit, including oversight and guidelines with regard to programming and frequency changes in Forest Service radios (FSM 6641.36).
3. Prepare and submit required annual radio requirements and input (FSH 6609.14, ch. 40).

#### **6640.42f - Designated Agency Representative for Review of Records (DAR/V)**

The DAR/V has the responsibility for on-line review of the unit's GSA FTS bills and the FTS status orders. For Regional DAR/V positions, this responsibility may be delegated to the Forest level.

#### **6640.42g - Forest Supervisors**

Forest Supervisors have overall responsibility for Forest telecommunications program management. Forest Supervisors may delegate the authority to program or change frequencies for which they are responsible to those employees who have been trained in frequency management and understand radio frequency assignments (RFA) (FSM 6641.36)

#### **6640.5 - Definitions**

See FSH 6609.14, section 05, for definitions. Also refer as needed to the Federal Standard Glossary of Telecommunications Terms (FED-STD 1037B), published by GSA and available through the Superintendent of Documents, Government Printing Office.

#### **6640.6 - Plans and Acquisitions**

The Washington Office, Director of Information Resources Management ensures that any telecommunications strategy is consistent with the accomplishment of the Forest Service mission.

Regional Foresters, Station Directors, the Area Director, the Institute Director, and Forest Supervisors shall address their requirements in an annual telecommunications plan that is consistent with the national strategy. Plan and manage all telecommunications systems and activities to ensure reliable, cost-effective systems, services, and activities. Annual telecommunications plans shall be the basis for budget out year planning, telecommunications forecasts, acquisition, and implementation. All telecommunications capital investments shall tie to agency program business requirements. See FSH 6609.14, chapter 10, for additional direction.

#### **6640.61 - Plans**

Analyze the benefits and costs of commercial facilities and services in planning and designing telecommunication systems. Base selection of alternatives on the benefit and cost analysis of the considered alternatives. Do not use Forest Service telecommunications systems solely for the purpose of bypassing local telephone companies and/or common carriers. The annual telecommunications plan drives the budget formulation and execution for telecommunication systems through the USDA Information Technology Investment Portfolio System (ITIPS). The annual plans provide units the means to forecast their telecommunication needs into the USDA Forecast, Inventory and Reporting (FIR) database and to develop a replacement plan over the equipment's life cycle or to meet a mandated requirement (such as radio narrow banding requirement).

#### **6640.62 - Acquisitions**

Ensure that the acquisition of telecommunications systems and services is in accordance with approved plans and subject to all applicable Federal regulations, laws, and directives (FSH 6609.14) and the Departmental moratorium on all information technology investments.

#### **6640.63 - Inventories**

Maintain inventories of all telecommunication resources to ensure adequate and appropriate telecommunications resources to support the agency mission, identify outdated resources, serve as basis for replacement planning, ensure the agency is paying for only those services that it is using, and account for Government property. USDA mandates that the Forest Service use the Telecommunications Inventory Module of the Telecommunications Ordering, Billing and Inventory System to keep an accurate and up-to-date inventory of voice and data equipment and services. Radio equipment inventory is kept at the National Finance Center by using the national radio contract (FSM 6640.1).

#### **6641 - Radio Communications**

##### **6641.1 - Radio Procurement**

###### **1. General Requirements.**

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- a. Use Continuous-Tone-Controlled-Squelch-System (CTCSS) on all FM LMR communications systems with the exception of Air Guard and Air Tactical, and National Incident Radio Support Cache receivers.
  - b. Obtain a Radio Frequency Assignment (RFA), or assurance of spectrum support from the Washington Office, Director of Information Resources Management before obligation or expenditure of funds for procurement.
  - c. Ensure that all FM LMR's procured meet Forest Service LMR specifications.
  - d. Ensure that Forest Service radio systems do not radiate more power than necessary to ensure satisfactory service.
2. National Radio Contracts. Purchase all FM LMR's from one of the national Forest Service radio contracts, except as provided in the following paragraph b.
- a. Requirements Survey. Field requirements for radio equipment to be included in the annual consolidated solicitation are due to the Washington Office, Director of Information Resources Management by September 1 of each year. Include all requirements for FM LMR equipment, providing realistic estimates of "best-guess" quantities for the years(s) covered.
  - b. Exceptions. Radios and associated equipment requested in the requirements survey, but not awarded in a national contract, could normally be given a waiver by the Washington Office, Director of Information Resources Management, for local procurement under standard requirements of the Federal Acquisition Regulation (FSH 6309.32 - FAR). Regions do not have to request waivers for equipment that fits into this category. The Washington Office, Director of Information Resources Management, provides waivers automatically once final awards are made. Such equipment must have radio frequency assignment (RFA) assurance and must meet Forest Service standards.
- All exceptions to procurement of items covered by the national radio contracts must receive technical approval from the Washington Office, Director of Information Resources Management (FSH 6609.14).

**6641.2 - Maintenance and Repair**

Conduct operational performance testing of radio equipment at least annually.

In the case of backbone systems, units responsible for maintenance and repair shall have established procedures to prevent avoidable interruptions to critical communications links during emergency conditions.



Do not make modifications to transmitters, other than those recommended by the Washington Office, Director of Information Resources Management, that affect modulation, frequency, or power output.

### **6641.3 - Frequency Management**

The radio frequency spectrum is a limited resource. Forest Service use of and requirements for the radio spectrum are identified, authorized, and protected through Departmental representation on the Interdepartmental Radio Advisory Committee (IRAC) of the National Telecommunications and Information Administration.

Regional Foresters, Station Directors, the Area Director, the Institute Director, and Forest Supervisors shall maintain copies of all frequency assignments within their jurisdiction.

#### **6641.31 - Frequency Assignment Requirements**

Any device that transmits electromagnetic waves through free space must be authorized prior to development, procurement, or use (except as specified in the National Telecommunications and Information Administration (NTIA) Manual; FSM 6640.1). Operations on an assigned frequency must conform with the terms of the frequency assignment.

Systems having a major impact on the available spectrum require a system review (SRV) by the Spectrum Planning Subcommittee of the IRAC. This review must be accomplished prior to receiving any frequency assignments. Systems that must be submitted for SRV are:

1. All new microwave systems consisting of three or more pairs of frequencies.
2. Use of microwave to enlarge, replace, or modernize existing radio systems when the cost exceeds 30 percent of the total capital investment or 30 percent of the personnel and material costs.
3. Other systems determined to have major impact on the spectrum, such as upgrading or expansion.

#### **6641.32 - Requests for Frequency Assignments**

Submit formal applications for frequency assignments to the Washington Office, Director of Information Resources Management, to process and forward to the Interdepartment Radio Advisory Committee (IRAC). These applications are coordinated with all other Federal Government agencies through the IRAC coordination procedures.

Plan new systems or major upgrades in advance. These quite often require substantial additional coordination with IRAC member agencies. Requests for frequency assignments should be forwarded to the Washington Office, Director of Information Resources Management, at least 1 year prior to planned procurement.

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New and additional networks may be justified only after compliance with FSH 6609.14, chapter 10.

Requests for frequency assignments from Forest Service field units shall be submitted to the Washington Office through the Regional Frequency Manager. A Regional Frequency Manager is responsible for the geographical area where the field unit is physically (not administratively) located (FSH 6609.14, ch. 20).

**6641.33 - Five-Year Review**

All RFA's must reflect the actual installed configuration. The NTIA requires that all RFA's be reviewed and updated within 5 years of the revision date on the assignment.

**6641.34 - Cooperative Communications**

All radio operations require either a frequency assignment from NTIA for Federal Government stations or licenses from the Federal Communications Commission (FCC) for non-Federal stations. This section pertains to frequency assignments only.

Arrangements permitting cooperative communications, of mutual benefit, between agencies on each other's valid assigned or licensed radio frequencies may be made by one of the following methods (FSM 1580; FSH 1509.11; and 6609.14). A frequency assignment is required in all cases except in an emergency. (See the definition of emergency in FSH 6609.14, sec. 05.)

1. Memorandum of Understanding (MOU). An MOU shall be used between two Federal Government units. Do not use MOU's between Regions without approval of the Washington Office, Director of Information Resources Management. However, arrangements between adjacent Forests of adjoining Regions is permitted.

2. Cooperative Agreement. A cooperative agreement shall be used between a Federal Government unit and a non-Federal Government unit (FSH 6609.14, ch. 40).

3. Verbal Authorization. A verbal authorization given by a license or assignment holder for a short duration and specific purpose, such as an emergency, can be given only within the limits of the assignment or license.

4. Incident Communications Use. Communications Unit Leaders (COML's) may authorize certain frequencies of the National Incident Radio Support Cache, provided such use is authorized for the incident by the Regional Frequency Manager or Regional Incident Communications Coordinator (COMC).

Remove frequencies programmed under COML authorization from the radio equipment at the conclusion of the time authorized.

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Forward documentation of arrangements between the Forest Service and other agencies to the Regional Office for review. The Regional Office shall submit a copy of such arrangements to the Washington Office, Director of Information Resources Management, when RFA's are required.

**6641.35 - Interference**

(For further direction, see FSH 6609.14, ch. 40.)

**6641.36 - Programming and Frequency Changes in Forest Service Radios**

Individuals who reprogram or change the frequency-determining device in a Forest Service transmitter must have:

1. Written authorization to change or program specific frequencies (only those frequencies authorized to the unit), signed by a Forest Supervisor or higher line officer.
2. Knowledge of the terms and limitations of the assignment or license for each frequency being programmed or changed.

Limited exceptions are authorized for incident communications and for emergency communications under FSM 6641.34, Cooperative Communications. However, do not program equipment to operate outside the constraints of the applicable assignment, license, or arrangement.

**6641.37 - Freedom of Information Act (FOIA) Exemptions**

(For further direction on FOIA, see FSM 6270 and FSH 6209.13.) The majority of frequency assignments for the Forest Service are not exempt under the FOIA (5 U.S.C. 522). Law enforcement assignments, however, are exempt from the provisions of the act. Requests for information under the FOIA relevant to law enforcement frequencies, shall be denied under exemption 2 (high), 7E, and 7F (5 U.S.C. 522(b)(2) and (7)).

Do not release information regarding assignments classified as exempt under FOIA to the public without written authorization from the Director of the Washington Office staff through which the exemption was initially requested and the Washington Office, Director of Information Resources Management. Treat published lists that identify frequencies classified as exempt from the FOIA with confidentiality, and limit distribution to those employees having a job-related requirement to know.

Accompany applications for radio frequency assignments that are classified as FOIA exempt with a letter of authorization stating the specific exemption(s) under the FOIA.

Do not release frequency assignment information relating to other Federal Departments. Tell FOIA requestors to contact the appropriate Department or agency.

#### **6641.4 - Assistance to States and Other USDA Agencies**

As authorized in the Cooperative Forestry Assistance Act (FSM 6640.1), technical and procurement assistance for radio equipment may be provided to other USDA agencies and to State Foresters or equivalent State officials, and through them to other agencies and individuals. Assistance shall be for the prevention, control, suppression, and prescribed use of fires on non-Federal forestlands and other non-Federal lands.

#### **6641.5 - Communication Site Management**

Assist the Lands and Engineering Staffs in special use communication site management (FSH 2709.11).

#### **6642 - Voice Communications**

##### **6642.1 - Administration**

##### **6642.11 - Planning**

1. Ensure that Government voice telecommunications resources are shared, optimized, and consolidated where determined to be technically and economically feasible.
2. Out-year planning for voice procurements must have a cost/benefit analysis, be reported for the entire life cycle of the equipment, and be reported in the USDA ITIPS system.
3. Forest Service dedicated voice telecommunications business needs, as defined in DR-3300-1 (FSM 6640.1), must be forecast in the USDA FIR database. If not forecast, such needs must have approval from USDA by using the unplanned change waiver form.

##### **6642.12 - Procurement**

1. Government telephone systems (including cellular telephones and calls over commercial systems that are paid by the Government) are in place to conduct official business or limited personal use as outlined in DR 2300-3 (FSM 6640.1).
2. Any planned voice telecommunication item, equipment or service, with a life cycle cost over \$25,000 must have an information technology moratorium waiver from USDA.
3. All Forest Service dedicated voice telecommunications business needs, as defined in DR-3300-1, must be forecast in the USDA FIR database. If not forecast, such needs must have approval from USDA by using the unplanned change waiver form.
4. Use Government-wide contracts in accordance with established regulations interagency agreements, and USDA policy and direction, and make transitions to new contracts based on an economical decision-making process.

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5. Ensure that equipment approvals follow the direction in FSH 6609.14, chapter 20.

6. Annually review and provide the National Finance Center (NFC) with an updated Form AD-474, Transmittal-Telephone and Utilities, for telecommunications services or an updated Form AD-955, GSA Telephone Transmittal. Form AD-474 is used within USDA to establish telephone accounts, which involve recurring monthly charges. Form AD-955 is used for establishing and maintaining GSA-billed commercial telephone accounts paid through the Federal Telephone System Payments (FTSP).

7. Disconnect telephone services when an office closes, moves, or reorganizes or if unused lines are discovered. Review telephone services annually.

8. Use core services from the GSA FTS contract for all interLATA and interstate communications unless a waiver has been granted by the Department of Agriculture.

#### **6642.13 - Centralized Billing**

Centralized billing shall be the mandatory billing method for all GSA FTS and GSA niche service contracts.

#### **6642.14 - Federal Calling Cards and Budget/Prepaid Calling Cards**

The GSA FTS Federal calling cards shall be the only calling cards used in the Forest Service for domestic and international calling. There are three types of GSA FTS calling cards: regular calling cards, budget calling cards, and pre-paid calling cards. Regular cards are issued in an individual's name and have the standard calling card features. The budget card is a calling card that is good for a certain amount of time or up to a certain dollar amount. The prepaid calling card from the GSA FTS contract allows a unit to buy a calling card up to a certain amount and when the card's dollar amount is used, the card is no longer good or the card can be recharged to a certain amount. The Forest Service shall not obtain a commercial telephone credit card from a telephone service provider for employees' use. The use of all other commercial prepaid debit cards or telephone service for long-distance service (for example, 10-10-321) is not permitted.

The one exception to this policy is in situations of fire emergency when the calling card is needed immediately and the user cannot wait until a Government calling card is ordered. If a commercial calling card is purchased for a fire emergency situation, the dollar amount should be small (\$10.00 or less). Long distance calls made from cellular phones must use the GSA FTS calling card off-net procedures. Employees who have calling cards shall use the calling cards when on travel status. Employees who travel twice a year or more are authorized for a calling card (DR 2300-3).

## **6642.2 - Operations and Maintenance**

### **6642.21 - Maintenance and Repair**

Maintain voice equipment ensuring reliable telecommunication capabilities to obtain, access, and use critical information services for carrying out the Forest Service mission.

### **6642.22 - Security**

Configure telecommunications systems to prohibit unauthorized access and use. Limit physical access to telephone systems to those responsible for the systems management and authorized maintenance.

Direct Inward System Access (DISA) requires approval (FSH 6609.14, sec. 25).

### **6642.23 - Call Detail Records**

Call detail records (CDRs) for local, long-distance, and cellular phones, shall be used to monitor telephone usage to determine use and/or abuse of Government telephone systems, for usage verification, billing reconciliation, and network management. See DR-3300-1 and DR-3040-2 for policy and responsibility for the management and use of CDRs (FSM 6640.1). Forward requests for call detail records under the Freedom of Information Act to the CDR System Manager.

### **6642.24 - Text Telephones**

These devices are also known as Teletypewriter (TTY) or Telecommunications Device for the Deaf (TDD).

Ensure that a minimum of one text telephone (a device that transmits printed words through telecommunications lines) or an equally effective device is made accessible in Regional, Station, Area, Institute, and Forest Supervisors' Offices. Assess needs for all other administrative offices and install a text telephone, if required. Where telephone service is normally provided for public use, install a device with access to emergency services, including 911, where and when it is appropriate to provide such services for the public. Display the standard logo specified by the General Services Administration (GSA) indicating the presence of TTY/TDD or related equipment. See FSM 6133 for further direction on reasonable accommodation, the Telecommunications Accessibility Enhancement Act of 1988, and the Americans with Disabilities Act of 1990 (FSM 6640.1).

### **6642.25 - Voice Processing**

Voice processing systems may be customer premise equipment interfaced with the primary telephone switching equipment, such as a Private Branch Exchange (PBX), or a commercial service offering, such as that provided by the General Services Administration (GSA).

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All voice processing systems shall be configured to allow all incoming callers to be able to reach a human operator. See FSH 6609.14 for specific direction about system requirements and technical approvals.

**6642.26 - Cellular Phones**

Cellular telephones and service are in place for the conduct of official business and must be justified based on a cost-performance basis and a business need.

Use of cellular phones in moving vehicles by operators is prohibited if there is no hands-free attachment (see FSH 6709.11, sec. 12.3, for further direction on driving requirements).

The use of cellular technology does not preclude the Forest Service from inventory control, billing accountability, and appropriate acquisition justification.

**6642.27 - Listening-in or Recording of Telephone Conversations**

No officer or employee shall authorize, permit, or participate in the monitoring of telephone conversations from, to, or within the Forest Service or with respect to official business of the Forest Service, for any purpose unless prior and adequate notice is given to, and agreement received from, all participants to the conversation. This prohibits listening in for any reason without the prior approval of all parties to the conversation. DR 1710-1 clearly defines the specific circumstances and procedures to utilize these devices. Exceptions for monitoring may be authorized by the USDA Inspector General in criminal investigations.

**6642.28 - Installation of Government Telecommunications Resources in Private Residences**

Government telecommunication resources may be installed for the conduct of official Government business in private residences of USDA employees if the employee has been approved to work at home in accordance with OPM guidelines and Public Law 103-329, there are safeguards against private misuse, and flexi place guidelines established by GSA are followed. Government telecommunication resources must be disconnected if the employee's status changes. All 900 numbers shall be blocked and the long-distance carrier shall be the GSA FTS vendor.

**6643 - Data Communications**

**6643.05 - Definitions**

Authentication. The process of proving a system user's identity. The authentication process usually involves a combination of methods, requiring, at a minimum, network layer authentication prior to being permitted access.

Firewall. A computer architecture to prevent unauthorized access to a network.

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Interim Firewall. Public domain software consisting of firewall Toolkit and TCP wrappers installed in most Forest Service units until the final firewall architecture is provided for the Forest Service.

Key Encryption. An alphanumeric string that the firewall uses to encrypt data to a remote virtual network.

Trusted Network. A Forest Service Washington Office, Region, Station, Area, or Institute network supporting trusted users that is “inside” the Forest Service approved firewalls.

Trusted User. Any Forest Service Federal or contract employee or authorized representative conducting official Government business on Forest Service equipment.

Untrusted Network. A network “outside” the Forest Service security perimeter that requires authentication prior to being permitted access.

Untrusted User. A non-Forest Service employee or nonauthorized representative who would be denied access to the Forest Service’s network.

#### **6643.1 - Planning**

1. Maximum use of all Government-provided data telecommunications resources shall be made to achieve optimum configuration of services at each service delivery point.
2. Government data telecommunications resources shall be shared, optimized, and consolidated where determined to be technically and economically feasible.
3. Out-year planning for data network procurements must have a cost/benefit analysis, must be reported for the entire life cycle of the equipment, and must be in the USDA ITIPS system.
4. Planning for data network replacement and working capital fund usage must be conducted in accordance with direction described in the Working Capital Fund Accounting Operations Handbook (FSH 6509.11f), FSM 6580, and FSM 6610.
5. Forest Service units should utilize the Internet to support the mission of the Forest Service. Internet usage may be used for communication and exchange of data between cooperators, universities, and the public.

#### **6643.2 - Procurement**

1. Government data systems and equipment (including Government-owned facsimile machines, electronic mail, and interactive systems (Internet)) are in place for the use of employees for the conduct of official business or for limited personal use as outlined in DR 3300-1.



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2. Any data network telecommunication item, equipment, or service with a life cycle cost over \$25,000 must have an information technology moratorium waiver from USDA.
3. All Forest Service dedicated data telecommunications business needs as defined in DR-3300-1 must be forecast in the USDA FIR database.
4. Any non-forecast data business need as defined in DR-3300-1 must have approval from USDA by using the unplanned change waiver form.
5. Government-wide contracts shall be used in accordance with established regulations and interagency agreements, and transition to new contracts must be based on an economical decisionmaking process.
6. Equipment approvals must follow the direction in FSH 6609.14.
7. Network Usage Reports and FTS reports shall be used for usage verification, billing reconciliation, and network management and for monitoring usage to determine use and/or abuse of Government data network systems.
8. Units must annually review and provide the National Finance Center (NFC) with an updated Form AD-474, Transmittal-Telephone and Utilities, for telecommunications services or an updated Form AD-955, GSA Telephone Transmittal. Form AD-474 is used within USDA to establish telephone accounts which involve recurring monthly charges.
9. Data network services must be disconnected when an office closes or moves.
10. IntraLATA circuits may be procured from any vendor but must be forecast in the USDA FIR database and must have approval from the TMACO if designated part of the FS WAN backbone.
11. GSA FTS contract services must be used for all interLATA and interstate communications unless a waiver has been granted by the Department of Agriculture and has been approved by the TMACO.

**6643.3 - Maintenance and Repair**

Maintain data equipment that ensures reliable telecommunication capabilities to obtain access and use of critical information services for carrying out the Forest Service mission.

**6643.4 - Standards**

The standard protocol of the FS WAN backbone is OSPF; the standard network access validation tool is Cisco Secure; and the standard tools for network monitoring are Cisco Net view, Ciscoworks 2000, and Netsys.

### **6643.5 - Security**

The Forest Service network security program is built on the premise that all Forest Service system users play a major role in safeguarding and protecting all of the Forest Service information assets. All Forest Service system users, including contractors, should refer to the Department's network security policy guidance in DR-3140-2.

Telecommunications controls offer the first line of defense against unauthorized intrusions by individuals located outside the "local" environment. The implementation of telecommunications controls must always be weighed against the Forest Service need to openly communicate with Government agencies and the public.

1. Authorized use of network analysis software is restricted to officially designated system, network, or security administrators.
2. Unauthorized use of network analysis software may result in disciplinary action; unauthorized use includes use of a Network sniffer tool.
3. Except when approved by the network security administrator for the Washington Office, Region, Station, Area or Institute, no network analysis tool may remain connected to a network for an indefinite period.

#### **6643.51 - Network Security**

1. All units with dial-in access must have a secure dial-in access at each site for operations that allow Forest Service employees off-site connectivity. The dial-in network fills the backup requirements for the GSA FTS network. The Forest Service standard access validation tool is Cisco Secure.
2. All asynchronous modem communications sessions must be logged. All log records must be secured from unauthorized viewing or alteration.
3. All dial-in modem services connecting to Forest Service servers, systems, and/or networks must be implemented with unique user-ID/password protection for each individual dial-in service user. It is not acceptable to have a unit-wide password for dial-in services.
4. Modems in desktop personal computers (PC's) connected to a FS network via a local area network constitute a similar dial-in security risk. To manage this risk, local Information Resources Management staff shall identify the PC/modem units, validate the user requirement, and tightly manage the validated modems as controlled network gateway assets. The PC/modem units shall be restricted to dial-out configurations only, unless authorized by Washington Office, Region, Station, Area, or Institute Information Resources Management Staff Directors.
5. All authorized employees, volunteers, contractors, and co-operators who were issued a standard fixed password for remote access must replace the standard password with a new

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unique individual password. Fixed passwords are no longer accepted by the remote login server, and network access shall be prohibited.

6. Increasingly employees require remote access to perform their duties and maintain contact while absent from the office; however, access should be authorized only when clearly required for an employee's duties. Non-employees, specifically contractors and co-operators, may be granted remote access only when no other alternative exists for accomplishment of tasks (FSM 6162).

7. As an interim measure, field offices may continue using modems configured for outbound access only, until access and authentication servers are in place. These outbound-access-only modems must be disabled when not in use.

8. Field units may connect a dial-in modem to their internal networks for contingency planning, provided the following conditions are met:

- a. The intended use is for emergency, nonroutine maintenance of critical systems.
- b. The connection is password protected, documented, and authorized by the local Security Officer.
- c. Authorized users are identified, approved, and documented by the local Security Officer.
- d. The connection is immediately deactivated when not in use.
- e. The connection is documented as part of the site contingency plan.

9. All hosts actively attached to the Forest Service internal networks are prohibited from establishing direct asynchronous links to external networks unless authorized and documented by the local Security Officer

10. Outside cooperators connected directly to the Forest Service network must have a firewall in place; for example, States, universities, and other Government agency cooperators.

11. All external connections to the Forest Service internal networks from trusted networks must be authenticated or encrypted through an access server or firewall approved by the Washington Office, Director of Information Resources Management.

12. All external connections to the Forest Service internal networks from untrusted networks must be authenticated and encrypted through an access server or firewall.

13. All communications equipment shall be capable of displaying the standard Forest Service security-warning message.

### **6643.52 - Network Connections to Forest Service Network**

Connections by other agencies to the Forest Service network may be made only after the network manager, in close coordination with the network security manager, determines that adequate access control procedures are in place. To authorize the network connection, a cooperative agreement, a memorandum of agreement (MOA), or a memorandum of understanding (MOU) should be developed and signed by both agencies. As a minimum, an interagency agreement, MOA, or MOU should include the type of computer or communication equipment being connected between the two agencies, describe the security access control procedures in place, and list the roles and responsibilities of each agency (FSM 1580; FSH 1509.11).

### **6643.53 - Remote Access Security**

Requests for remote access to the Forest Service network shall be authorized by the network security manager and the user's supervisor. Passwords shall be changed if it is thought that the system has been compromised. Sensitive information shall not be accessible via remote access without tight security controls. All remote access passwords for trusted users shall be unique, alphanumeric strings with a minimum of 6 characters.

Except for Forest Service-provided publicly accessible Internet/World Wide Web services, the following controls are required when remote, dial-in access to the Forest Service network is provided:

1. All remote access users are required to register for access. As part of the registration process, remind users of their responsibilities to protect Forest Service information resources and the penalties for abusing their privileges.
2. Controls must be implemented at each access point to authenticate each user (unique user ID and password).
3. All standard access controls required for other Forest Service systems must also be implemented for dial-up (for example, minimum password length, automatic password expiration dates, limit failed log in attempts, encrypted password files, maintenance of access logs, and so on).
4. System description information in opening banners must be restricted to an absolute minimum.
5. The standard warning banner regarding unauthorized use and possible monitoring activities must be displayed.

### **6643.54 - Authentication**

Remote access to Forest Service systems shall require authentication, including the entry of a user ID and password at the time of log on. Responses to the request for entry of a password

shall be masked so that passwords are not displayed during their entry. The Forest Service standard access validation tool is Cisco Secure.

### **6643.55 - Modem Usage**

1. Modem Access. Modem access into the Forest Service internal networks provides an important tool for many Forest Service trusted users, including remote access for authorized users while away from the office. While the Forest Service promotes the use of this technology, special care must be exercised to protect Forest Service trusted networks against intrusions and unauthorized access. The approved external modem access to Forest Service internal networks is a secured and centralized asynchronous modem pool.

- a. All hosts actively attached to the Forest Service internal networks are prohibited from establishing direct links to external networks, such as modem connections to individual workstations including dial-in and dial-out, unless they use an approved network security system, firewall, and authentication server.
- b. Hosts that are isolated from the Forest Service internal networks by physical means are exempt from these requirements.
- c. Any workstation/PC on the Forest Service network shall not have a modem installed, because it provides a potential “back door” to the Forest Service network.

2. Exception. Units may connect a dial-in modem to their internal networks if the intended use is for emergency, nonroutine maintenance of critical systems, provided the following conditions are met:

- a. The connection is protected via a password documented and authorized by the local network Security Manager.
- b. Authorized users are identified and approved by the local network Security Manager.
- c. The connection is deactivated when not in use. This may be accomplished by powering off the modem, an A/B switch, or physical disconnection.
- d. The connection is documented as part of the site’s contingency planning.

### **6643.56 - Local and Wide Area Networks (LAN and WAN)**

The following minimum LAN/WAN security requirements must be implemented on all Forest Service networks. Specific applications that will be processed on a network (particularly sensitive system applications) require additional security measures, such as encryption for sensitive data.

1. Physical/Environmental Security. Network file servers and related local telecommunication equipment must be located in an area away from direct public and employee access.
2. Individual Accountability. Each network user shall have a unique user ID and password.
3. Audit Trail. If the network operating system provides for the logging of unsuccessful logon attempts, the feature must be activated. If sensitive data is being processed, an audit trail report must be provided periodically to the Security Manager for review.
4. File Access. Network access software controls shall be implemented to limit file access and read/write privileges to only those users requiring them.
5. Access Lists. The Forest Service minimum requirements for inbound access lists on router interfaces/firewalls must be followed to provide connections to the Internet/World Wide Web.

#### **6643.57 - Firewalls**

A “firewall” is a security mechanism used to protect an internal network from unauthorized access. Careful consideration must be given prior to implementing a firewall since they can severely restrict the normal flow of telecommunications traffic into and out of the Forest Service internal network. Prior to implementing a firewall, a unit access policy that defines exactly what services the organization makes available to entities outside the internal network must be established and approved by the Washington Office, Director of Information Resources Management.

#### **6643.57a - Firewall Guidelines**

Any installed firewall shall have the following attributes:

1. The firewall shall support (not impose) a policy of denying all services except those specifically permitted.
2. The firewall implementation shall be flexible to accommodate technological and organizational changes.
3. The firewall must employ filtering techniques to deny services to specific host systems.
4. No public access shall be allowed to Forest Service internal networks. Information for public access must reside outside the Forest Service firewalls.
5. The firewall must log traffic and suspicious activity.

6. Only a secured version of the firewall host's operating system shall be installed. It must be carefully configured to ensure that it cannot be broken into and used to penetrate Forest Service hosts.

7. All Forest Service gateways to the Internet/World Wide Web must provide filtering to minimize the threat of an outside host masquerading as a host with an internal IP address.

#### **6643.57b - Firewall Security**

1. Unrestricted access to the FS's trusted network may be provided only to trusted users on trusted networks. All other traffic shall be controlled or restricted.

2. All users on Forest Service trusted networks are considered trusted. It is the responsibility of the Director of Information Resources Management for each Region and Station, the Institute, and the Area to ensure that only trusted users are afforded access to their trusted networks.

3. Trusted networks connected to other trusted networks shall provide unrestricted access between their networks.

4. Trusted networks must authenticate trusted users from other networks that are not connected through encrypted links. Authenticated trusted users may then be provided unrestricted network access.

5. Outbound traffic to non-Forest Service networks from the Forest Service's trusted networks shall be permitted unless specifically prohibited by Forest Service directive.

6. Access decisions for trusted traffic entering the Forest Service internal networks shall be based on the following criteria:

a. Traffic between the Forest Service's trusted internal networks that is not encrypted (interim firewall) must be authenticated at the point of entry. After authentication, full network access shall be provided

b. Dial-up traffic from the Forest Service trusted internal networks entering the Forest Service trusted networks that is authenticated or encrypted may be permitted full network access. Dial-up traffic that is not authenticated or encrypted shall be denied access at the point of entry.

c. Traffic between the Forest Service trusted internal networks that is not encrypted must be authenticated and then may be provided full network access.

d. Traffic between the Forest Service trusted an internal network that is encrypted by an approved firewall (Smart Wall) shall be passed without further authentication.

7. Access decisions for untrusted traffic entering the Forest Service internal networks shall be based on the following criteria.

- a. Access to the Forest Service internal networks from untrusted networks shall be restricted to the minimum.
- b. Traffic from authorized users from known external networks that is authenticated through the firewall may be permitted restricted network access. This access must be authorized and documented through an external access form. Traffic that is not authenticated shall be denied access at the point of entry.
- c. Traffic from authorized users from unknown external networks that is authenticated through the firewall may be permitted restricted network access. This access must be authorized and documented through an external access form. Traffic that is not authenticated or encrypted shall be denied access at the point of entry.
- d. Dial-up traffic through the firewall from authorized users on external networks that are encrypted using an approved key encryption system and authenticated may be permitted restricted network access. This access must be authorized and documented through an external access form. Dial-up traffic that is not encrypted and authenticated through the firewall shall be denied access at the point of entry.

#### **6643.6 - Network Management and Monitoring**

The ability of Forest Service network managers to monitor the network and gather information on network performance, network security, and changes in the network topology and configuration is necessary to ensure that the services required by the Forest Service are being provided. The regional and national network managers must use a variety of tools to accomplish monitoring, troubleshooting, planning, and configuration management decisions. These tools allow them to watch the traffic passing over the networks and to determine where the traffic started, where it is going, and what type of traffic it is (that is, mail, Internet, data, and text).

The Forest Service shall utilize Cisco Netview, Ciscoworks 2000, and Netsys programs as tools that require Simple Network Management Protocol (SNMP) access to gather necessary information about network topology and health, to help integrate the routing protocols between Regional networks; to facilitate network sharing efforts with other agencies and bureaus currently underway at a number of locations; and to allow timely response to Departmental requests about the Forest Service WAN.

To ensure that SNMP access is not used as an entry point into the Forest Service network, as well to reduce potential impacts on bandwidth, a community string and access list shall be used to restrict access to a small group of monitoring stations. The Washington Office network team shall work with the units, which are running their own network monitoring tools, to limit duplicate polling and to integrate the monitoring efforts.



## **6644 - Video Communications**

Ensure that the installation of switched video transmission service is compatible with the technology currently in use at the Washington Office or Region, Station, Area, and Institute offices. Services available from the GSA FTS contract may be installed that allow different transmission speeds to communicate other forms of the service. New or upgraded video communications service or equipment requires approval through the Washington Office, Information Resources Management Staff, from the USDA Associate CIO for Telecommunications Services and Operations (DR-3300-1).

## **6645 - Telecommunications Technical Approvals**

A number of limitations and Federally prescribed procedures apply to the acquisition of telecommunications equipment, software, maintenance, supplies, and related services from sources outside the Forest Service.

### **6645.02 - Objective**

To obtain telecommunications services, equipment, maintenance, supplies, and software to meet Forest Service needs and requirements in the most economical and efficient manner within budget limitations and good management practices.

### **6645.03 - Policy**

Obtain authorization before acquiring telecommunications equipment or services. Units may acquire telecommunications equipment or services only after technical approval has been granted and the conditions of the approval, if any, have been fulfilled.

1. Acquisition of any telecommunication item, equipment, or services must receive technical approval based on the limits set out in FSM 6615.
2. All Forest Service telecommunications business needs as defined in the DR-3300-1 process for TNSMP must be forecast in the USDA FIR database.
3. Any non-forecasted business need as defined in DR-3300-1 must have approval from USDA by using the unplanned change waiver form from USDA (FSM 6640.41f).
4. Following is the policy regarding TMACO approvals:
  - a. InterLATA circuits can be ordered only from the GSA FTS provider, without a waiver from USDA, to extend the unit's transition from FTS 2000; such orders must have approval from the Forest Service Telecommunication Mission Area Control Officer (TMACO).

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- b. IntraLATA services can be procured from any vendor, but they must be forecast in the USDA FIR database and must have TMACO approval if the circuit is a Forest Service WAN backbone.
  - c. Local business phone lines, pagers, and faxes do not need TMACO approval.
  - d. Local area network equipment does not need TMACO approval.
5. Following is the policy regarding DAR responsibilities (FSM 6640.41g and 6640.41h):
- a. Responsibilities of the Designated Agency Representative for approvals (DAR) cannot be delegated.
  - b. No orders can be placed by anyone not designated by USDA as a DAR.
  - c. Forest Service network backbone orders (including new service and upgrades) must be authorized by the national data program manager and can be placed only by the DAR for dedicated services.
  - d. Any DAR not adhering to these guidelines may have the delegated DAR authority revoked.

**6645.04 - Responsibility**

1. Forest Service line managers at all organizational levels have the responsibility for providing telecommunications to support program activities.
2. Regional Foresters and Station, Area, and Institute Directors may grant technical approval for individual acquisitions up to the limits set out in FSM 6610. Determine these limits by the acquisition cost for each type of item or service. Factors that should be considered for acquisition of telecommunications equipment or services are as follows:
  - a. Compatibility of hardware and software in initial and subsequent procurements.
  - b. Adequate documentation and user instructions for all potential users of the facilities and services to be acquired.
  - c. Access control and other network security functions.

**6646 - Internet Services**

Further direction on Internet/World Wide Web usage, web service, and technology is in FSM 6650.

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USDA provides Internet service for all Forest Service units. Units having special requirements for Internet access that cannot be met by the USDA Internet access must receive a waiver from USDA, Office of the Chief Information Officer (OCIO). Forest Service use of non-Federal government networks (such as direct access to the Internet) requires appropriate approvals from the USDA, OCIO and the General Services Administration (GSA). The trading of services does not constitute an exemption.