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Chapter 1: Telecommunications Management

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1.1 **Purpose.** This chapter establishes policies and assigns responsibilities for the management and use of telecommunications systems, networks, equipment, and services within the Department of the Interior. It prescribes regulations, procedures, and responsibilities for telecommunications management.

1.2 **Background.** Expanding user requirements, increasing expenditures, advancements in technology, competition, and legislative and regulatory actions require the effective management of telecommunications resources within the Federal Government.

1.3 General Principles.

A. Departmental Perspective. The primary objective of telecommunications is to support the mission of the Department and its bureaus. When acquiring telecommunications resources, bureaus must consider all viable alternatives and the need and opportunity for interoperation and compatibility with other Departmental and Government telecommunications systems and services. Telecommunications support and services shall be provided at a minimum total cost consistent with requirements for capacity, interoperability, and reliability.

B. Sharing. Bureaus are responsible for determining whether their telecommunications requirements can be satisfied by using existing resources. When it is cost effective, bureaus shall share telecommunications systems, services, and facilities with other bureaus and agencies to the maximum extent practical.

(1) Radio Frequencies. Radio frequencies are assigned to avoid harmful interference and to permit and encourage the most beneficial use of the radio frequency spectrum. The assignment of a radio frequency does not guarantee its exclusive use and intra or interagency sharing may be required.

(2) Microwave Baseband. Sharing excess baseband channels with Federal Communications Commission (FCC) licensees on their non-government microwave system is expressly prohibited in the FCC Rules and Regulations (47 CFR 94.17(b)) unless a waiver is obtained by the non-government licensee from the FCC prior to the start of operations. Bureaus and offices are authorized to share excess channel capacity on Federal Government owned and

operated microwave systems with State and local governments or other Federal agencies where there is a mutual need. However, the Federal requirement for the Federal Government spectrum (number of channels) must be substantially greater than the non-federal need.

(3) Voice and Data Integration. The Governmentwide FTS2000 network and the advent of Integrated Services Digital Network (ISDN) services provide economic and technical opportunities for the sharing of telecommunications resources. Bureaus shall combine voice and data systems and services whenever practical and cost effective.

1.4 **Definitions.** Listed below are definitions for some terms used in this chapter. Definitions from Federal Standard 1037B and Federal Information Resources Management Regulation 201-4.001 were used whenever possible.

A. Bureaus. All independent offices within the Office of the Secretary and all organizations under the jurisdiction of an Assistant Secretary, even though the organization is titled other than "bureau."

B. Bureau-Managed Telephone System. Local telecommunications service or equipment acquired and managed by a bureau. A telephone system connected to a local telephone company central office that is independent of the GSA consolidated local telecommunications service.

C. Federal Information Processing (FIP) Resources. Automatic data processing equipment (ADPE) as defined in Public Law 99-500 (40 U.S.C. 759(a)(2)) and Federal Information Resources Management Regulation 201-4. FIP resources include any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. The term, FIP resources, includes FIP equipment, software, services, support services, maintenance, related supplies, and systems. FIP telecommunications resources are systems, facilities, and services used to satisfy telecommunications requirements.

D. Formal Procurement Document. A solicitation document or Commerce Business Daily (CBD) synopsis of the availability of a solicitation document but excludes sources sought synopses, notices of intent to award to a particular source, requests for information, and requests for comment.

E. GSA-Consolidated Local Telecommunications Service. Local telecommunications service provided by the General Services Administration (GSA) to Federal agencies in a building, complex, or geographical area.

F. Local Area Network (LAN). A non-public data communications system within a limited geographical area, designed to allow a number of independent devices to communicate with each other over a common transmission-interconnection topology. LANs are usually restricted to a relatively small geographical area, e.g., rooms, buildings, or cluster of buildings, and use fairly high data rates.

G. Radio Communications. Intentional telecommunications by means of radio waves.

H. Telecommunications Facilities. The equipment used for such modes of transmission as telephone, data, facsimile, video, radio, audio, and such corollary items as switches, wire, cable, access arrangements, and communications security facilities.

I. Telecommunications Services. The transmission, emission, or reception of signals, signs, writing, images, sounds, or intelligence of any nature, by wire, cable, satellite, fiber optics, laser, radio, or any other electronic, electric, electromagnetic, or acoustically coupled means. The term includes the telecommunications facilities necessary to provide such services.

J. Telecommunications System. A collection of individual networks, transmission systems, relay stations, tributary stations, and terminal equipment capable of interconnection and interoperation to form an integral whole for the purpose of electrical/electronic information transfer.

K. Television Equipment. Any equipment (both transmission and reception) used for the conversion of transient visual images into electrical signals that can be transmitted by radio or wire to distant receivers where the signals can be reconverted to the original visual images. This does not include such items as monitors for computers, computer terminals, or video conferencing equipment.

L. Total Contract Cost. The total dollar amount that can be spent if all aspects of the contract were exercised. When ordering from a pre-existing contract such as a non-mandatory GSA Schedule Contract for FIP resources, it is the maximum dollar amount the bureau expects to procure from the Schedule. When using a contract from another bureau or Government agency, it is the maximum dollar amount the bureau expects to procure from the contract.

M. Wide Area Network (WAN). A network that provides data communications capabilities in geographic areas larger than those served by local area networks.

1.5 Responsibilities.

A. Office of Information Resources Management (PIR). PIR is responsible for overseeing and guiding the acquisition, development, management, and use of information resources Departmentwide. The PIR Telecommunications Systems Division (TSD) is responsible for developing and implementing Departmentwide telecommunications policies, standards, and guidelines as well as advising and providing technical assistance to bureaus and offices in the acquisition, operation, and use of telecommunications facilities and services.

B. Heads of Bureaus. Heads of bureaus are responsible for designating bureau telecommunications managers and implementing a program that will ensure compliance with Departmental policies.

C. Information Resource Management (IRM) Coordinators. Bureau IRM Coordinators are responsible for performing all IRM program coordination functions for their respective bureaus. The Bureau IRM Coordinator also serves as the primary liaison with the Office of Information Resources Management.

D. Telecommunications Manager. A bureau telecommunications manager is the primary national point of contact for telecommunications matters between the Department and bureau. This person is responsible for the nationwide planning of bureau telecommunications requirements, providing guidance on budget formulation and execution, reviewing and submitting bureau requests for Departmental approvals, and nominating bureau FTS2000 Designated Agency Representatives.

E. Telephone System Coordinator. A local telephone system coordinator is responsible for providing bureau employees with information on the availability and use of telephone services. A coordinator processes and coordinates requests for telephone services and maintenance, conducts telephone system inventories, ensures correctness of telephone bills, and maintains records of telephone equipment, services, and directory listings.

F. FTS2000 Designated Agency Representatives (DARs). DARs are bureau points of contact with the FTS2000 contractor for all ordering of FTS2000 network services and features, and are the only bureau personnel authorized to place service requests with the contractor. In addition, DARs are responsible for overseeing service acceptance, verification of usage, account reconciliation, monitoring of network quality, escalation of complaints, financing, and forecasting future telecommunications needs and costs.

G. FTS2000 Local Government Contacts (LGCs). LGCs provide support and assistance to the DARs at a specific location. LGCs are responsible for providing detailed requirements, technical system descriptions, inventory information, and contractor access to the facility. LGCs will ensure needed equipment is procured and installed and site preparations completed prior to cutover. LGCs will provide assistance during FTS2000 cutovers by testing and verifying service delivery.

H. Radio Liaison Officers. A radio liaison officer represents the bureau in all matters pertaining to radio communications and frequency management. The Radio Liaison Officer must possess, or be capable of obtaining, a SECRET level security clearance.

I. Data Communications Managers. Data communications managers have national responsibility for the overall management of data communications within a bureau. They are responsible for strategic planning, acquiring and implementing data communications services, and ensuring compliance with Federal regulations, standards, and Departmental policies.

J. Data Network Managers. Data network managers are responsible for the operation of local and wide area data communications networks. Their responsibilities include: providing operations management support, network planning and design, ordering services, establishing and updating network documentation, monitoring network performance, establishing

backup and maintenance procedures, maintaining current software licenses and releases, verifying and reconciling billing accounts, and monitoring network operations and security. They must ensure that newly acquired and implemented networks comply with Federal Information Processing Standards Publication (FIPS PUB) 146-1, Government Open Systems Interconnection Profile (GOSIP).

1.6 Policies on Use of Telecommunications Systems and Services.

A. GSA Mandatory-for-Use Programs.

(1) FTS2000 Services. Unless an exception has been authorized, bureaus shall use the FTS2000 services to satisfy long distance voice, data, and video telecommunications requirements which are within the scope of the FTS2000 network. FIRMR 201-24.101 and FIRMR Bulletin C-18 provide policy and procedures regarding the use of FTS2000 services including information on how to obtain exceptions to the mandatory use of FTS2000. Requests for exception to use FTS2000 services are to be submitted to TSD.

(2) GSA-Consolidated Local Telecommunications Service. Bureaus shall use GSA provided local telecommunications service in mandatory consolidated service locations. FIRMR 201-24.102 and FIRMR Bulletin C-15 describe consolidated local telecommunications service, how to order it, and how to obtain a current listing of service locations. Customer premise equipment connected to GSA service must be coordinated with the local GSA telephone system manager prior to installation. Requests for exception to use GSA consolidated service are to be submitted to TSD.

(3) Purchase of Telephones and Services (POTS) Program. POTS' contracts provide for the purchase, installation, maintenance, repair, removal, and relocation of telephone equipment. POTS' contracts are mandatory sources of supply at some locations where GSA provides consolidated local telecommunications service. These contracts are available for optional use at other locations.

B. Telephone Systems.

(1) Authorized Use of Long Distance Telephone Services. Telephone calls placed over Government-provided and commercial long distance systems that will be paid for or reimbursed by the Government shall be used to conduct official business only. To the maximum extent practical, Federal employees shall place official calls on Government-provided long distance telephone systems and services instead of using commercial toll services.

(a) FIRMR 201-21.601 and FIRMR Bulletin C-13 describe policies and procedures on the use of Government-provided long distance telephone service paid for by the Federal Government.

(b) Employees on overnight travel status are allowed to make a brief (5 minutes or less) daily call to their residence. If it is advantageous to the Government, calls longer than 5 minutes may be reimbursed. For example, an employee may be reimbursed for

one 15-minute call over several days in lieu of a one 5-minute call each day during the travel period. Employees on travel status outside the 50 States and the District of Columbia are allowed to make a brief call to their residences every third day of travel.

(c) Employees making unauthorized long distance or cellular radio calls are to be charged for the cost of the call, rounded to the nearest dollar, plus \$5.00 per call to cover the administrative cost of determining the call was unauthorized and processing the collection. Reimbursements shall be made by personal check or money order, payable to the Department of the Interior, and forwarded to bureau finance offices for deposit. Reimbursing the Government for unauthorized calls does not exempt an employee from appropriate administrative, civil, or criminal action.

(d) Commercial long distance telephone bills must be certified in accordance with 31 U.S.C. 1348.

(2) Call Detail Report (CDR). Call detail reports provide information which can help telecommunications managers choose efficient and effective telecommunications services, make decisions about acquiring hardware, software, or services, develop management strategies for using existing telecommunications capacity more efficiently, and verify the use of billed services. Guidance on the use of CDR is provided in FIRMR Bulletin C-13. CDRs are to be reviewed by bureau managers to effectively manage and monitor the use of telecommunications services and to report discrepancies to the service provider for record and billing reconciliation.

(a) CDRs may contain such technical information as the originating telephone number, destination number, city and State, date and time of day a call was made, the duration of the call, and actual or estimated cost of the call. No monitoring of conversations takes place during or after the collection of data for this report. The report may be provided by a telephone company, FTS2000 contractor, or originate from GSA consolidated or bureau-managed telephone systems.

(b) A 1-month CDR is to be distributed to line supervisors for review at least semiannually to identify misuse and abuse of long distance telephone services. More frequent distribution is encouraged if misuse or abuse is found or suspected.

(c) Supervisory, administrative, and telecommunications management personnel must ensure that CDRs are safeguarded in accordance with the provisions of the Privacy Act. Bureaus should be familiar with the Office of Management and Budget (OMB) "Guidance on the Privacy Act Implications of Call Detail Programs to Manage Employees' Use of the Government's Telecommunications Systems" (52 Federal Register 12990, April 20, 1987). As suggested by OMB, the Department published a notice in the Federal Register describing a system of records entitled "Telephone Call Detail Records - Interior, Office of the Secretary-36" (53 FR 45394, November 9, 1988).

(d) In accordance with National Archives and Records Administration General Records Schedule 12, Item 4, CDR records must be retained for 3 years and thereafter

destroyed. If an electronic record is the official CDR record, paper reference copies may be destroyed when no longer needed or when 3 years old, whichever comes first.

(e) CDRs shall not be used for any purpose other than the management of Government telecommunications services.

(3) Telephone Management Systems. Bureaus are encouraged to use telephone management systems to control costs on bureau-managed systems. These systems can facilitate a variety of management functions including: optimization of facilities, inventory control, cable plant management, and overseeing system usage. Many telephone management systems can be operated on microcomputers.

(4) Listening-in or Recording Telephone Conversations. Bureau personnel are prohibited from listening-in or recording telephone conversations except under limited circumstances. FIRMR 201-21.603 describes Federal policies and procedures regarding listening-in or recording telephone conversations.

(a) Listening-in or recording telephone conversations is permissible only when all parties to a conversation give consent. If speaker-phones or other audio teleconference equipment are used, all parties shall be informed of the names or number of persons listening-in. Use of tape recorders or verbatim recording of conversations is prohibited without the unanimous consent of all parties.

(b) Bureaus with a requirement to listen-in or record conversations for reasons of public safety, public service monitoring, or to assist disabled employees shall submit the information required in FIRMR 201-21.603 to TSD 45 days prior to operation. The information will be forwarded by TSD to GSA. Bureaus using listening-in or recording devices must comply with the procedures set forth in FIRMR 201-21.603. Each requirement must be reviewed at least every 2 years.

(5) Telephone Calling Cards and FTS2000 Authorization Codes. Telephone calling cards, including FTS2000 authorization codes, shall be issued on a controlled basis to employees whose duties require the placement of long distance calls from locations where Government-provided telephone service is not available. Holders of calling cards are responsible for all calls charged to their card. Call records are to be reviewed to ensure all calls were made to conduct official business.

(a) Calls placed using a calling card incur an additional surcharge and are not to be used at the regular work location for administrative control purposes such as sectional billing of toll calls.

(b) FTS2000 Authorization Codes are to be used to place domestic long distance calls and commercial telephone calling cards are only to be used to make international calls.

(c) FTS2000 Authorization Codes may also be used to enable a user to

activate features and services not normally allowed from a restricted telephone station.

(d) Telephone system coordinators are responsible for the collection and cancellation of cards no longer required.

(6) Telephone Access for Hearing and Speech Impaired. Bureaus shall provide telecommunications access to hearing and speech-impaired individuals to the extent present and future needs are identified in a requirements analysis. As appropriate, bureaus shall include specifications for telecommunications accessibility in bureau solicitations. FIRMR 201-20.103-7 and FIRMR Bulletin C-8 provide Federal Government policies, procedures, and guidance regarding telecommunications accessibility of hearing and speech-impaired individuals.

(a) Bureaus shall publish access numbers for telecommunications devices for the deaf (TDD) and TDD-related devices in bureau telephone directories and provide such information to TSD for inclusion in the Federal TDD directory published by GSA.

(b) Bureaus shall display in their buildings or offices the standard logo specified by GSA for indicating the presence of TDD or TDD-related equipment.

(7) Telephone Service in Private Residences. 31 U.S. Code 1348 prohibits the installation of telephone service in private residences. This statute states, in part, that ". . . Except as provided in this section, appropriations are not available to install telephones in private residences or for tolls or other charges for telephone service from private residences. . . appropriations of an agency are available to pay charges for a long distance call if required for official business and the voucher is sworn to by the head of the agency . . ." Therefore, unless otherwise authorized by statute, the installation of telephone service in private residences is prohibited.

(8) Equal Access. The FCC requires most local exchange carriers to provide equal access to all interexchange carriers from local telephone central offices. Bureaus shall select a primary interexchange carrier (PIC) for commercial long distance service at each bureau-managed telephone system. The PIC is to be used for international and domestic long distance calling when FTS2000 services are not available. A PIC shall also be selected for public pay telephones located at Government facilities managed by the Department.

C. Radio Systems.

(1) Licenses Required for Radio Systems. As a general policy, all emitters of radio energy shall be authorized prior to acquisition.

(2) Profane or Obscene Language. Transmission of obscene, indecent, or profane language by means of radio communications is prohibited.

(3) Unauthorized Interception, Divulgence, or Publication of Communications by Radio. The interception, divulgence, or publication of radio communications is prohibited by Public Law 99-508, October 21, 1986, "The Electronic Communications Privacy Act of

1986." This includes the unauthorized interception or monitoring of any communication by radio, including radiotelephone and radiotelegraph communications, and the unauthorized divulgence or publication of the existence, contents, substance, purport, effect, or meaning of any communication (or part thereof) received or transmitted by radio, and not intended for the use of the general public.

(4) Use of Microwave Radio Systems to Support Voice or Data Requirements. Commercial telecommunications facilities shall be used in providing telephone and data services to Government offices whenever practical. By-pass of commercial common carrier services by Government owned and operated microwave networks must be supportable and documented. By-pass approval may be obtained if a complete cost benefit analysis shows: (a) definite economic advantage, sufficient to sustain an OMB Circular A-76 scrutiny; (b) FTS2000 regulations are not circumvented; and, (c) State Public Utility Commission objection to the proposed intrastate by-pass network is unlikely. Prior approval is required from TSD before installing or modifying microwave networks for by-pass.

(5) Trunking. Federal agencies may contract with local Specialized Mobile Radio (SMR) Service providers for access to existing trunking systems in non-government bands. Bureaus must obtain frequency authorizations from TSD to operate on SMR trunked radio systems. Private sector SMR trunking services must be used in lieu of bureau-owned and operated systems where practicable.

(6) Common Carrier Mobile Telephone Service. The use of non-government common carrier (telephone company) radio frequencies by mobile stations when communicating with or through a base station in the Domestic Public Land Mobile Radio Service is authorized without further frequency assignment provided such use is in conformity with applicable FCC rules, and the mobile stations are included among those authorized by the FCC to the licensee providing the service. This includes Improved Mobile Telephone Service (IMTS), Radio Telephone Service (RTS), and cellular service provided by an FCC licensee where the Federal Government is an authorized user.

(7) Fixed Point-to-Point Systems. To ensure sufficient frequencies are available to meet essential Federal operations for services which cannot be operated adequately in higher bands, bureaus shall accommodate fixed operations in the highest band technically feasible, commensurate with the operational requirement.

(8) Citizens Band Radio. Bureaus may obtain an authorization to utilize frequencies allocated to the Citizens Band (CB) Radio Service authorized by 47 CFR 95, Subpart D of the FCC Rules, if an appropriate justification is provided demonstrating that such an assignment is necessary for intercommunications with non-government stations. Transmitters shall only be operated by Department of the Interior employees and only for the purpose of communicating with non-government entities to coordinate essential and mutual activities. Communications between Federal Government entities are expressly prohibited.

(9) Wireless Microphones. Wireless microphones used to transmit a speaker's voice by radio to a nearby receiver for amplification, to address an audience, are

allowed and may be operated without an authorization on non-federal frequencies if operated in accordance with all applicable FCC regulations for such devices. All wireless microphones must be FCC-type accepted.

(10) Unlicensed Transmitters. All emitters of radio energy shall be authorized through the National Telecommunications and Information Administration (NTIA) prior to being put into operation. This includes all devices capable of transmitting in either Federal Government or non-government bands. This applies even if the proposed device is otherwise permitted by 47 CFR 15 of the FCC Rules regarding the operation of radio frequency devices without an individual license.

(11) Satellite Communications.

(a) Very Small Aperture Terminal (VSAT) Service. VSATs are designed primarily to transmit and receive short bursts of interactive data rather than continuous streams. The term "VSAT" refers to the size of the satellite dish, less than 6 feet in diameter. Configurations can be in one of two bands: 4/6 GHz (C-band) and 12/14 GHz (Ku-band). VSATs are most effective when used with geographically dispersed sites, with data traffic generating large leased-line access charges, and with applications requiring quick response times from a central data base. Because VSATs cannot always be protected from harmful interference to or from other microwave systems, all proposals must be reviewed for compliance with applicable NTIA and FCC licensing requirements before funds are obligated.

(b) International Maritime Satellite (INMARSAT) Mobile Radio. The INMARSAT organization provides worldwide telephone and low speed data service to mobile (primarily shipboard) satellite radio users. Ship and land-based transportable earth stations which operate with this system must conform to INMARSAT requirements. Equipment must be type approved by INMARSAT before it can be utilized within the network. Commissioning tests must be witnessed by a duly authorized representative of INMARSAT. Copies of the commissioning application forms can be obtained from TSD. Land-based transportable earth stations are secondary to ship-based stations. A radio frequency authorization is required for operation of INMARSAT satellite radio terminals.

(12) Basic Exchange Telecommunications Radio Service (BETRS). BETRS makes use of radio frequencies to bring basic telephone exchange service to rural areas where the cost of running wire lines is prohibitive. BETRS installed and operated by a common carrier company is regulated by the FCC and does not require prior authorization from TSD. If a BETRS installation is planned for a Government office or facility utilizing Federal Government radio frequencies, a request for radio frequency authorization must be submitted through approved channels to TSD.

(13) Power Line Dependent Telephone Systems (PLDTS). Electric power distribution lines are an alternative means of providing low-cost telecommunications to remote locations. PLDTS can be used to provide spurs for microwave systems where economically feasible. Use of PLDTS may be authorized where no common carrier exists and associated regulatory, technical, and contractual obligations are satisfied.

D. Data Communications Systems.

(1) Authorized Use of Data Communications Services. Government-provided data communications circuits, equipment, services, and networks shall be used for authorized official Government business only.

(2) Digital Connectivity. When practical and cost effective, all new dedicated data communications circuits shall be digital. Bureaus should ensure that digital data communications systems and services are identified in their strategic plans.

(3) Departmental Systems Access. All Departmental computer systems that serve as host systems requiring remote communications access shall provide and support FTS2000 services. It is the responsibility of the host site to coordinate and assist the bureaus with optimizing access and designing and implementing new communications services.

(4) Bureau Provided Traffic Management Services. All wide area data communications networks shall provide performance monitoring for the purpose of collecting traffic usage information. This includes the monitoring of dedicated circuits through bureau-provided traffic monitoring equipment.

(5) Security for Data Network Access. Each bureau shall ensure that proper network access procedures are implemented on LANs and WANs. The "scripting" of passwords is permitted only for network access. Before implementing scripting, bureau personnel should review and comply with appropriate ADP and information security policies.

(6) Radio LANs. Radio LANs in certain microwave bands are allocated on a secondary, non-interference basis. Radio LANs must accept interference from licensed stations and cannot cause interference to stations in the primary service. Radio LANs must be reviewed and approved by TSD.

(7) Facsimile Equipment and Services. Facsimile equipment and services acquired must comply with applicable Government standards, FIPS Pub 147-150.

(8) Electronic Mail Systems. The Departmental policy on electronic mail systems is provided in 385 DM 7.

E. Television Services.

(1) Cable Television (CATV). Cable service is the one-way transmission of video programming to subscribers. Service providers in the Cable Television Service are regulated by the FCC. Bureaus are prohibited from providing CATV distribution where cable service is locally available. Direct off-the-air reception and cable distribution of VHF (channels 2-13) and/or UHF (channels 14-80) television signals is allowed where a local CATV service provider does not exist.

(2) Television Receive Only (TVRO). TVRO satellite dishes are aimed at satellites in the geostationary orbit and provide hundreds of channels to viewers intercepting their transmissions. While interception of signals by the public for personal use is generally condoned, re-transmission to others is prohibited by the Satellite Home Viewer Copyright Act of 1988. Unless statutorily allowed, bureaus are prohibited from redirecting or distributing the received signal(s) from the primary point of presence.

1.7 Departmental Review and Approval.

A. Submission of Requests. Requests for Departmental approval to acquire FIP telecommunications resources or radio systems and services are to be submitted in writing to the Chief, Telecommunications Systems Division (TSD), Office of Information Resources Management (PIR). When automatic data processing (ADP) resources are required in conjunction with the acquisition of FIP telecommunications resources, information required by 376 DM 4, ADP Acquisition, and this chapter shall be submitted to the Director, PIR.

B. FIP Telecommunications Resources. Bureau requests for approval to acquire FIP telecommunications resources shall include, at a minimum, a description of the FIP resource to be acquired, estimated contract life, estimated total contract cost, major milestones and dates, and a description of the acquisition strategy planned. Requests that require GSA approval must also include the information described in FIRMR 201-20 and FIRMR Bulletin C-5.

(1) Prior to submitting a request to TSD for approval and commensurate with the size and complexity of the procurement, bureaus shall complete a requirements analysis, an analysis of alternatives, and an implementation plan in accordance with FIRMR 201-20. A copy of each analysis and plan shall be retained in bureau files for the system life.

(2) Departmental approval is required for FIP telecommunications resources and support services, including network design studies, when the total estimated contract cost exceeds \$250,000 for full and open competition, or \$100,000 for a specific make and model specification, or for requirements available from only one responsible source. Departmental approval must be obtained before formal procurement documents are issued. The following FIP telecommunications resources require Departmental approval regardless of dollar threshold:

(a) Exceptions to the mandatory use of FTS2000 network services, GSA consolidated local telecommunications service, or the GSA Purchase of Telephones and Services program.

(b) Acquisition or installation of any bureau-managed telephone system, including the installation, relocation, replacement, or removal of a private branch exchange (PBX), computerized branch exchange, electronic automatic branch exchange, Centrex service, or electronic key telephone system.

(c) Acquisition, installation, relocation, replacement, or removal of video teleconference service.

(d) Acquisition or installation of listening-in and recording devices.

(e) Acquisition and implementation of switched multi-megabit data service; frame relay service provided by local exchange carriers; public television in-band broadcasting service; or other high capacity telecommunications facilities and services.

(f) Acquisition and implementation of radio-based local area networks.

(g) Non-government use of Department of the Interior FIP telecommunications resources.

(3) Bureaus may apply for a waiver from requesting approval for specific categories of FIP telecommunications resources. Bureaus granted a waiver do not have to submit individual requests for Departmental review and approval, but will periodically be required to provide reports, information, and synopses of actions exercised under the waiver.

C. Radio Systems and Services. Bureaus are required to keep all radio frequency assignments current, reflecting actual installed operations. When a change is made to an existing station or service, all affected radio frequency assignments must be updated. The bureau radio liaison officer shall provide justification for all requested changes. If a new frequency is requested, the applicant must demonstrate why existing resources cannot be shared and provide a system drawing for each system in the fixed service operating above 30 MHz and each system in the mobile service with three or more land stations.

1.8 Guidelines and Procedures.

A. Reporting Annoying, Obscene, or Threatening Telephone Calls. Annoying, obscene, or threatening telephone calls are to be reported immediately to the Department security office at FTS 268-5111 or 202-208-5111.

B. Telecommunications Handbooks. 377 DM 2, Telecommunications Handbooks, addresses the purpose, authority, issuance, availability, and description of telecommunications handbooks for use in the Department of the Interior. These handbooks expand on the general policies and procedures stated in this chapter.

C. Life Cycle Management (LCM). LCM is a management approach which provides a structured process for planning and control of an information resource from inception to replacement or termination. Bureaus shall follow an LCM approach in planning, developing, enhancing, acquiring, and using telecommunications resources. Departmental policy on LCM is provided in 375 DM 6, Information Resources Life Cycle Management, and 376 DM 10, Automated Information Systems Life Cycle Management.

D. Telecommunications Service and Equipment Inventories. To ensure cost effective use of telecommunications equipment, each bureau shall survey annually customer premise equipment that has a recurring charge. FIRMR 201-21.203 provides procedures for

conducting surveys.

(1) Bureaus with GSA consolidated service will receive annually from GSA regional offices a computerized listing of telephone service as posted in GSA records. Bureaus shall validate this listing and return it to the office specified.

(2) Survey documentation shall be maintained in the bureaus' files until superseded.

E. Training. Bureaus shall ensure telecommunications personnel receive training to accomplish assigned duties and responsibilities.

1.9 Planning and Reporting.

A. Strategic Plans. The objective of strategic planning is to establish the long term direction to be followed by the Department and bureaus for cost effective use of telecommunications resources in support of missions and programs. Bureaus shall include telecommunications as part of their information resources management (IRM) strategic planning process. The IRM strategic planning process is described in 375 DM 4. Telecommunications should be addressed as a separate component in the IRM strategic plan. Current capabilities should be identified annually with a strategy for meeting changing mission requirements and technological developments.

B. Budget Estimates for Information Technology. OMB Circular A-11 requires Federal agencies to submit annually budget estimates for information technology. Budget estimates for FIP telecommunications resource acquisitions are to be included with bureau submissions.

C. Implementation Plans. Telecommunications implementation plans are required for developing and maintaining current capabilities in support of bureau mission requirements. Implementation plans normally address specific actions which will be taken as a result of a need identified in the strategic planning process. Plans should assign responsibilities and cite objectives, milestones, time frames, and costs.

D. Periodic Review of Radio Frequency Authorizations.

(1) The National Telecommunications and Information Administration (NTIA) requires all radio frequency authorizations be reviewed at least every 5 years unless the authorization carries an earlier expiration date. The objectives of this program are to ensure that frequency assignments are in current use and are correctly reflected in the Government Master File of Radio Frequency Assignments.

(2) With the exception of authorized intra-bureau sharing arrangements, a bureau requesting an update of a shared radio frequency authorization must submit a new letter of concurrence or memorandum of understanding from the cooperating entity each time the authorization is updated. A current system drawing (functional diagram) shall be provided at

the time of review for systems above 30 MHz.

E. Periodic Review of Data Systems and Services. Each bureau shall establish internal review procedures for data communications networks. A 5-year review of all data communications systems is required for systems that exceed 5-year life cycle costs of \$3 million dollars. The purpose of this review is to ensure that existing networks are managed effectively, economically, and at a high performance standard.

F. Toll-free Telephone Service. FIRMR 201-21.604 requires agencies to provide information to GSA on the use of toll-free telephone service. Each bureau requiring toll-free telephone service shall forward the information specified in FIRMR 201-21.604 to TSD at the time service is ordered. TSD will forward the information to GSA.

1.10 **Communications Security and Emergency Services.**

A. National Security and Emergency Preparedness (NS/EP) Telecommunications. Telecommunications services that are used to maintain a state of readiness or to respond to and manage any event or crisis (local, national, or international) that causes or could cause injury or harm to the population, damage to or loss of property, or degrades or threatens the NS/EP posture of the United States.

B. National Communications System (NCS). The NCS provides for the execution of NS/EP telecommunications functions. NCS assets consist of the telecommunications resources of 23 member organizations, including the Department of the Interior. The NCS ensures that the national telecommunications architecture: (1) responds to the NS/EP needs of the President and Federal organizations, including telecommunications to support national leadership and continuity of Government; (2) is capable of satisfying priority telecommunication requirements under all circumstances through use of commercial, Government, and privately owned telecommunication resources; and (3) incorporates the necessary combination of hardness, redundancy, mobility, connectivity, interoperability, restorability, and security to ensure the survivability of NS/EP telecommunications in all circumstances.

C. Radio Spectrum Management NS/EP. NTIA Federal Radio Spectrum Management Circular No. 1 advises Federal departments and agencies of planning requirements for NS/EP telecommunications systems dependent upon the radio spectrum for their operation.

D. Telecommunications Service Priority (TSP) System. The TSP System is the regulatory, administrative, and operational system authorizing and providing for priority treatment to provision and restore NS/EP telecommunications services. Under the rules of the TSP System, telephone companies are authorized and required to provision and restore services with TSP assignments before services without such assignments. TSP assignments must be coordinated with TSD.

E. Nationwide Emergency Telecommunications Service (NETS). NETS is a NCS program to provide authorized Government users with a nationwide NS/EP voice and low speed data communications service by using public switched network resources. NETS provides highly survivable voice and low speed data communications service; distributed call control

capability embedded in the public switched network; and enhanced routing, signaling, and access to surviving public switched network resources for NS/EP calls.

F. NCS High Frequency Shared Resources (SHARES) Program. In emergency situations requiring a coordinated Federal response, the telephone system is expected to experience disruption and traffic congestion. Contingency communications must be available in such circumstances. The large number of fixed and transportable high frequency (HF) radios operated by the Federal Government offers a capability to meet NS/EP requirements. The SHARES Program provides a single, interagency, emergency message handling system by bringing together the HF radio resources of participating Federal departments and agencies. Bureaus participating in the NCS SHARES Program must obtain prior approval from TSD.

G. Encryption of Radio Communications. National policy on telecommunication and automated information systems security was promulgated by National Security Decision Directive No. 145 (NSDD-145). Its purpose is to prevent exploitation through interception, unauthorized electronic access, or related technical intelligence threats, and to ensure authenticity. Microwave systems are particularly vulnerable to these threats. Protection can be achieved by the application of cryptologic, transmission, or emission security measures to sensitive radio networks. NSDD-145 provides an organizational structure directed toward safeguarding systems which process or communicate sensitive information from hostile exploitation.

H. Secure Telephone Unit (STU III). STU III is a sophisticated voice terminal designed for clear and encrypted voice/data communications over 2 and 4-wire telephone lines. Bureau security offices should be contacted for information on the availability of STU III equipment.

1.11 **Regulations, Standards, and Authorities.**

A. Executive Orders.

(1) Executive Order 12046. Executive Order 12046, March 27, 1978, "Relating to the Transferring of Telecommunications Functions," abolished the Office of Telecommunications Policy (OTP) and reassigned its responsibilities to the National Security Council (NSC); to the Director, Office of Science and Technology Policy (OSTP); and the National Telecommunications Information Administration (NTIA). NTIA has the authority and responsibility for administering that portion of the radio spectrum allocated to the Federal Government. It is empowered to authorize frequencies to Federal agencies demonstrating the operational need and meeting essential requirements to use the spectrum.

(2) Executive Order 12472. Executive Order 12472, April 3, 1984, "Assignment of NS/EP Telecommunications Functions," assigns specific National Security and Emergency Preparedness (NS/EP) telecommunications functions to the National Communications System (NCS) and the NTIA, and mandates interagency coordination to implement the Executive Order. Section 3(a) relates to the assignment of NS/EP telecommunications functions. In response to E.O. 12472, the NTIA has developed "The Emergency Readiness Plan for the Use of the Radio Spectrum (ERP)." The ERP establishes a

system of priorities referred to as Spectrum Priority Indices (SPI) and a plan for emergency spectrum use.

(3) Executive Order 12656. Executive Order 12656, November 18, 1988, "Assignment of Emergency Preparedness Responsibilities," ensures that all levels of government have sufficient capabilities to meet essential defense and civilian needs during any national security emergency. A national security emergency is any occurrence, including natural disaster, military attack, technological emergency, or other emergency that seriously degrades or seriously threatens the national security of the United States.

B. Regulations.

(1) Federal Information Resources Management Regulations (FIRMR). The FIRMR provides Governmentwide regulations governing agency information activities regarding the management, acquisition, and use of certain automatic data processing, records, and telecommunications resources. The FIRMR is prepared, issued, and maintained by the Administrator of the General Services Administration (GSA) under the Federal Property and Administrative Services Act of 1949, Public Law 152, 81st Congress (63 Stat. 377), as amended (the "Property Act"), particularly Sec.205(c) (40 U.S.C. 486(c)), sec. 101(f) (40 U.S.C. 751(f)), and other authorities cited. The FIRMR does not apply to radar, sonar, radio, or television equipment, except that the FIRMR is used by GSA to implement Federal Standards for radio equipment.

(2) National Telecommunications and Information Administration (NTIA). Within the jurisdiction of the United States Government, use of the radio frequency spectrum for radio transmissions for telecommunications or for other purposes shall be made only as authorized by the NTIA. The "Manual of Regulations & Procedures for Federal Radio Frequency Management" (NTIA Manual) provides basic information on authorized usage and technical standards applicable to Federal Government radio communications equipment and systems.

(3) Federal Communications Commission (FCC). The FCC rules and regulations are contained in Title 47 of the Code of Federal Regulations (47 CFR). Operation of radio equipment and systems by bureaus in exclusive non-government bands are governed by FCC rules and regulations. However, authorization to operate in non-government bands shall be obtained from TSD before purchasing equipment or implementing cooperative agreements where use of non-government radio frequencies and/or equipment is required.

(4) International Telecommunication Union (ITU). ITU regulations are binding on all U.S. radio stations once ratified by Congress. ITU regulations, the associated allocation table, and related footnotes have treaty status. They cannot be abrogated without the consent of Congress. ITU rules and regulations form the basis for FCC and NTIA regulations. Exceptions to international rules and regulations are permitted by ITU where such domestic changes do not adversely affect the rights of sovereign states. The U.S. domestic table of frequency allocations is contained in Chapter 4 of the NTIA Manual.

(5) Office of Management and Budget (OMB).

(a) OMB Circular No. A-104 mandates agencies conduct a lease-versus-buy analysis when the use of capital assets is required. OMB policy guidance on lease-purchase arrangements, referencing the Anti-Deficiency Act (31 U.S.C. 1341), is contained in their memorandum M-89-01 dated October 19, 1988.

(b) OMB Circular No. A-11 specifies in Section 12.4, "Estimates for the development or procurement of major communication-electronics systems (including all systems employing satellite (space) techniques) will be submitted only after certification by the National Telecommunications and Information Administration, Department of Commerce, the radio frequency required for such systems is available."

(6) Federal Acquisition Regulations (FAR). The FAR (48 CFR Chapter 1) contains general Federal Government acquisition regulations. FIRMR 201-39 contains Governmentwide policies and procedures unique to the acquisition of FIP resources by contracting. The FIRMR relies on the FAR for general policies and procedures to be used in acquiring FIP resources.

(7) Communications Act of 1934. Subsection 305(a) of the Communications Act of 1934 (47 U.S.C. 305(a)) as amended, authorizes the NTIA to assign frequencies to, and amend, modify, and revoke frequency assignments for radio stations belonging to and operated by the United States Government, subject to the disposition of appeals by the Director, Office of Management and Budget, and to make frequency allocations.

C. Standards.

(1) Federal ADP and Telecommunications Standards. GSA publishes a handbook titled "Federal ADP and Telecommunications Standards Index" providing guidance to agencies on the use of Federal standards. The index also provides optional terminology that may be used to incorporate standards in solicitations and a "Standards Checklist" that can be included in the solicitation to incorporate applicable Federal standards. Copies of the index can be purchased from: U.S. Government Printing Office, Superintendent of Documents, Washington, DC 20402. FIRMR Bulletin C-3 contains additional information about the index.

(2) Federal Information Processing Standards (FIPS). The Department of Commerce issues FIPS under the Federal Property and Administrative Services Act, as amended by the Computer Security Act of 1987 for Federal computer systems. The National Institute of Standards and Technology (NIST) recommends FIPS for approval by the Secretary, Department of Commerce. Telecommunications equipment and services are included in the definition of the term "Federal Information Processing (FIP) resources" in the FIRMR. Thus, with the notable exceptions of radio, command control systems, and a few other technologies, NIST has become a primary telecommunications standards approval body. Many Federal standards have been reissued as FIPS Publications. The telecommunications-related standard FIPS Publication 146, Government Open Systems Interconnection Profile (GOSIP) became mandatory for new acquisitions on August 15, 1990.

(3) Federal Standards (FED-STDS). GSA administers, issues, and promulgates Federal Standards under the Federal Property and Administrative Services Act as amended. The Federal Telecommunications Standards Committee (FTSC) of the National Communications System develops Federal telecommunications standards and forwards proposed standards to GSA. FED-STDS relating to ADPE that were in existence when Public Law 99-500 was enacted are covered by the modified definition of ADPE in Public Law 99-500 and fall under the authority of NIST. These standards were redesignated as FIPS by NIST.

(a) Federal Standard 1037B provides Federal agencies a comprehensive source of definitions of terms used in telecommunications and directly related fields. The use of this standard by all Federal agencies is mandatory.

(b) A current listing of GSA-promulgated Federal standards applicable to radio communications equipment or systems is available from TSD.

(4) National Telecommunications and Information Administration (NTIA) Standards. NTIA standards are incorporated throughout the NTIA Manual for Regulations and Procedures for Federal Radio Frequency Management (NTIA Manual). Most standards applicable to radio transmitting and receiving devices, e.g., frequency tolerances or emission criteria, are contained in chapter 5 of the NTIA Manual. The NTIA Manual is incorporated by reference in 47 CFR 300.

D. References.

(1) GSA Handbooks and Reference Guides.

(a) Handbook for Life Cycle Management of Telecommunications Systems (February 1987).

(b) FTS2000 Agency Reference Guide.

(2) Federal Systems Integration and Management Center (FEDSIM) Publications.

(a) Designing Data Communications Networks (March 1989).

(b) Using Integrated Services Digital Network Technology (June 1990).

(c) Planning for and Acquiring Data Communications Networks (January 1988).

(d) Guide for Using Satellite Communications Networks in the Government (May 1989).

(3) Radio Frequency Radiation Protection Guidelines

(a) Environmental Protection Agency (EPA) Guidelines. The EPA is developing final radio frequency radiation protection guidelines for implementation by Federal agencies. Once finalized, Federal agencies will be responsible to EPA for meeting the new guidelines. At present no single Federal agency can compel all Federal agencies to adopt any specific radiation protection guideline. Questions concerning non-ionizing radiation standards may be referred to the Chief, Electromagnetic Radiation Analysis Branch, Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

(b) Occupational Safety and Health Administration (OSHA). OSHA is responsible for enforcing non-ionizing radiation standards to protect workers in the private sector. Applicable OSHA standards are published in 29 CFR 1910.97.

(c) American National Standards Institute (ANSI). The ANSI standard (ANSI C95.1 1982) is currently used by NTIA. ANSI standards are consensus documents and have no binding legal or legislative authority. Only if EPA decides to make the present voluntary standard mandatory under 42 U.S.C. 2021, will it become enforceable. The EPA (not NTIA) has jurisdiction in matters related to exposure of the general public to radio frequency radiation unless otherwise delegated by competent authority. NTIA guidance on radiation hazards is contained in Section 8.2.28 of the NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management.

(d) Department of the Interior. Bureaus of the Department presently meet their obligations under the National Environmental Policy Act (1969) by certifying that operations authorized on Federal lands will not "significantly affect the quality of the human environment." The Department accepts recommendations and conclusions based on the ANSI C95.1 1982 standard as a minimum criterion until superseded by EPA guidelines. Questions may be referred to the Director, Office of Environmental Affairs, Department of the Interior (MS 2340-MIB), 1849 C Street, NW., Washington, DC 20240.

(4) Federal Aviation Administration (FAA) Circulars.

(a) FAA Advisory Circular 70/7460-2G provides advice and guidance to anyone proposing to erect or alter an object that may affect the navigable airspace of the U.S. and thus require notification to the FAA. The circular also contains the addresses of the FAA regional offices and availability of associated publications.

(b) FAA Advisory Circular AC 70/7460-1F, "Obstruction Marking and Lighting," describes the marking and lighting of structures which could pose a hazard to air navigation.

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