

DOE 5300.1C
6-12-92

THIS PAGE MUST BE KEPT WITH DOE 5300.1C, TELECOMMUNICATIONS.

DOE 5300.1C, TELECOMMUNICATIONS, HAS REVISED DOE 5300.1B
TO REFLECT ORGANIZATIONAL TITLE, ROUTING SYMBOL, AND
OTHER EDITORIAL REVISIONS REQUIRED BY SEN-6. NO SUBSTANTIVE
CHANGES HAVE BEEN MADE. DUE TO THE NUMBER OF PAGES AFFECTED
BY THE REVISIONS, THE ORDER HAS BEEN ISSUED AS A REVISION.

6-12-92

SUBJECT: TELECOMMUNICATIONS

1. PURPOSE. To establish policies, responsibilities, and guidance for the planning, acquisition, coordination, management, review, engineering, and use of telecommunications services, including voice, data, facsimile, narrative message communications facilities, radio communications, and electromagnetic spectrum resources under normal and emergency conditions for the Department of Energy (DOE).
2. CANCELLATION. DOE 5300.1B, TELECOMMUNICATIONS, of 12-2-88.
3. SCOPE. The provisions of this Order apply to all Departmental Elements, contractors, and subcontractors performing work for the Department whose telecommunications costs are direct charges to the Department under cost reimbursement contracts as provided by contract and as implemented by the appropriate contracting officer.
4. EXCEPTIONS. Telecommunications facilities and equipment not covered by this Order are operational communications requirements, other than spectrum-dependent requirements, of the Power Marketing Administrations.
5. BACKGROUND.
 - a. This Order recognizes that the telecommunications industry is changing in its character and that two significant factors are continuing to affect DOE telecommunications services. These are the aftermath and repercussions from deregulation and divestiture of American Telephone and Telegraph and the convergence of technology. The former has created new opportunities and acquisition strategies for telecommunications services; the latter is rapidly obliterating the distinction between voice and data communications services.
 - b. This Order also implements the "National Telecommunications and Information Administration Manual of Regulations and Procedures for Federal Radio Frequency Management" and applicable Federal Communications Commission rules and regulations; provides for DOE representation in those bodies formulating national and international frequency management policy, plans, and standards; and provides for Department compliance with such policies, plans, and standards, as applicable.

DISTRIBUTION:

All Departmental Elements

INITIATED BY:

Office of Information
Resources Management

c. Finally, this Order acknowledges that:

- (1) Telecommunications resources are essential elements to effective national security emergency preparedness. DOE is classified as a Category A agency by the "Federal Emergency Plan" (classified report, title unclassified), Annex C-XI, Telecommunications. As a result, the Department must have telecommunications resources that are capable of providing essential and emergency telecommunications to support Departmental statutory functions in war, operational, or energy emergencies.
- (2) By Executive Order 12472, the President has established the framework for planning, developing, and exercising Federal Government telecommunications assets to satisfy essential national security emergency preparedness needs, and has established the National Communications System to ensure that a national telecommunications infrastructure is developed.

6. REFERENCES. See Attachment 1.

7. POLICY AND OBJECTIVES.

a. Policy. It is the policy of the Department to provide adequate, efficient, economical, and reliable services that support the Department's mission under normal and emergency conditions.

b. Objectives.

(1) General.

- (a) Promote the acquisition of systems that will satisfy present and future requirements; complement the planning for national security emergency preparedness; accommodate the full-scale integration of telecommunications disciplines; and provide the required degree of reliability, capacity, and interoperability.
- (b) Procure telecommunications systems and services through full and open competition except as fully justified according to applicable acquisition laws and regulations, and take advantage of opportunities to control costs through development of acquisition strategies for a deregulated marketplace.
- (c) Develop service requirements for local telecommunications service with consideration for the following:

- 1 Encouraging competitively obtained fixed price contractual arrangements rather than cost reimbursable or tariffed services;
 - 2 Performance specifications emphasizing service in lieu of design specifications;
 - 3 Mature, reliable technologies which can provide an orderly transition from today's technology to take advantage of future services such as may be provided by Federal Telecommunications System (FTS) 2000 and the Integrated Services Digital Network; and
 - 4 Lease versus purchase strategies.
- (d) Provide telecommunications facilities and services which fulfill communications security (COMSEC) requirements under normal and emergency conditions.
 - (e) Strengthen the capabilities of telecommunications managers throughout the Department so they may have the skills necessary to function in a deregulated competitive environment.
 - (f) Provide interconnectivity and interoperability between networks where feasible, - cost-effective, and consistent with a high level of services for users.
 - (g) Use FTS for intercity DOE voice traffic unless it can be demonstrated that technical, operational, or economic efficiencies will result from the use of an alternative carrier. Prior approval must be obtained from DOE Headquarters for use of an alternative carrier.
 - (h) Use commercial services where they are most economical and satisfy mission requirements.
 - (i) Use General Services Administration (GSA) provided area-wide contracts for telecommunications services, such as value-added networks, to the extent practicable. These services should be considered in the planning process, and recommended use of such service should be included in proposals based on availability, quality, and costs.
 - (j) Limit, under normal circumstances, acquisition of telecommunications capabilities to commercially available circuits, equipment, and services.

- (k) Implement restriction techniques when feasible and cost-effective. At a minimum, all telephone system managers or the designated representatives are instructed to obtain a supervisor's authorization on all new service requests to establish the official need for FTS access and/or direct access to commercial long distance services.
 - (l) Establish procedures and cost guidelines to assure that installed, but temporarily unused, telecommunications facilities and services are managed in the most effective and economical manner in accordance with Chapter III, paragraph 7f of this Order. Procedures should include ascertainment from administrative and/or program officers of an estimate for a duration of nonusage and appropriate and timely removal, storage, and reuse procedures. Cost guidelines should be based on algorithms that reflect all related costs, present value analysis, and determine the maximum number of months that all types of terminal equipment and/or all types of circuits may be kept in service while unused.
- (2) Electromagnetic Spectrum.
- (a) Utilize prudently the electromagnetic spectrum when other means (landlines or commercial service) cannot provide the required support in an efficient, economical manner with the required level of reliability, or when other means are not available or feasible. This includes traditional spectrum use for telecommunications purposes, as well as advanced energy research, development, and demonstration projects.
 - (b) Promote the Federal Government policy of reliance upon the private sector when feasible and practical for telecommunications services. This includes design, engineering, systems management and operations, maintenance, and logistical support for spectrum-dependent systems. Spectrum support will be approved only if private sector commercial services are:
 - 1 Not available to the user during the time needed;
 - 2 Not adequate from either a technical and/or operational standpoint; or
 - 3 Significantly more costly.

- (c) Ensure that all DOE, joint interagency, and Departmental contractor and subcontractor operations utilizing spectrum resources within the United States and its possessions are conducted under Department authorizations. The licensing authority of another Government agency or the Federal Communications Commission is not valid for Department operations, unless approved by the Office of IRM Policy, Plans, and Oversight (AD-24). This provision does not apply to contractors and subcontractors in instances where they are:
 - 1 Providing radio communications services to the Department or to its contractors and subcontractors under established common carrier tariffs; and
 - 2 Using spectrum-dependent equipment procured with funds provided by other than the Federal Government.
- (d) Ensure that funds are not obligated for research, development, construction, modification, enhancement, expansion, lease, or procurement in support of any Departmental frequency-dependent program, including devices capable of interfering with, or being disrupted by, authorized radio services, until certification by the National Telecommunications and Information Administration that spectrum support has been obtained.
- (e) Only AD-24 may negotiate with the National Telecommunications and Information Administration, Federal Communications Commission, Department of State, or other Government agencies for frequency authorizations unless specifically authorized by the Director of AD-24.
- (f) Promote and obtain recognition to accommodate DOE spectrum-dependent systems or programs that are not provided for in the national or international radio regulations. These systems and programs include, but are not limited to:
 - 1 Carrier current systems used principally by utilities and for which the Federal Communications Commission and National Telecommunications and Information Administration have established a special procedure; and

- 2 Equipment radiating electromagnetic waves not used for telecommunications and not in accordance with the national allocations and provisions for industrial, scientific, and medical equipment use.

(g) Require adherence to national standards and discourage waivers. Exceptions requiring waivers will be submitted to the Director of AD-24 for evaluation and submission to the Administrator, National Telecommunications and Information Administration, for approval.

(3) National Security Emergency Preparedness Telecommunications.

(a) Ensure compliance with national security emergency preparedness telecommunications policy and planning, since the Nation's domestic and international telecommunications resources are essential elements of U.S. national security policy and strategy.

(b) Adhere to the national telecommunications emergency preparedness concept delineated in Executive orders, which includes the broad spectrum of crisis management from natural disasters to international conflicts, including nuclear warfare as threats to U.S. national security.

8. DEFINITIONS. Unless specifically stated herein, definitions are those contained in Federal Standard 1037A and in the "Manual of Regulations and Procedures for Federal Radio Frequency Management."

a. National Security Emergency Preparedness (Telecommunications generic definition. Those telecommunications services which are used to maintain a state of readiness or to respond to and manage any event or crisis (local national, or international) which causes or could cause injury or harm to the population, damage to or loss of property, or degrades or threatens the national security emergency preparedness posture of the United States. Two specific categories of telecommunications services that fall within this definition are emergency national security emergency preparedness telecommunications services and essential national security emergency preparedness telecommunications services.

(1) Emergency national security emergency preparedness telecommunications services are new telecommunications support rendered during Presidentially declared emergencies or involving national survival or well being.

(2) Essential national security emergency preparedness telecommunications services are existing telecommunications support which warrant assignment of National Communications

System/Federal Communications Commission-approved restoration priorities or are essential for the safe conduct and support of exercises.

b. Special Purpose Telecommunications Services are:

- (1) Telecommunications services in support of activities conducted pursuant to the Foreign Intelligence Surveillance Act;
- (2) Telecommunications services in support of the President or Vice President; and
- (3) Telecommunications services in direct support of the conduct of foreign affairs (e.g., visiting foreign heads of state or similar dignitaries, permanent diplomatic and consular missions in the United States, and significant international conferences, meetings, or events held in the United States) as certified by the Secretary of State.

9. RESPONSIBILITIES AND AUTHORITIES.

- a. The Secretary of Energy by direction of the President in Executive Order 12472, shall determine the Department's essential national security requirements.
- b. Director of Administration and Human Resource Management (AD-1) shall have the overall responsibility for telecommunications policy and management for the Department, and shall assure compliance with national and international regulations.
- c. Director of Information Resources Management (AD-20) shall, through the:
 - (1) Director of IRM Policy, Plans and Oversight (AD-24).
 - (a) Establish objectives, principles, policies, procedures, and standards for the planning, development, acquisition (other than acquisition policies, procedures, and directives under the authority of the Director of Procurement, Assistance and Program Management (PR-1)) management, and operation of Department telecommunications systems, including electromagnetic spectrum-dependent programs and systems.
 - (b) Provide policy, management guidance, and approve Departmentwide telecommunications switching and network systems.

- (c) Plan, develop, coordinate, and manage all telecommunications facilities and services in support of the Department national security emergency preparedness programs and assure that such programs are consistent with national directives.
- (d) Review and provide functional direction for the application by field elements, contractors, and subcontractors through the cognizant contracting officer of established objectives, principles policies, procedures, and standards in the area of telecommunications.
- (e) Review and concur on telecommunications proposals and proposed contract actions pertaining to telecommunications projects, including national security emergency preparedness, to evaluate the consistency of the proposed facility, services, or equipment with Departmental long-range telecommunications planning and objectives. Ensure that all current and future telecommunications assets are compatible with national security emergency preparedness requirements and advise the Manager, National Communications System, of those requirements.
- (f) Provide staff advice and assistance to all organizational elements on application of engineering standards, design criteria, policies, and procedures concerning telecommunications facilities and services, Departmental emergency response programs, and spectrum-dependent programs.
- (g) Coordinate and obtain approvals for telecommunications proposals from GSA and other agencies, as appropriate.
- (h) Coordinate and obtain authorization for the use of radio frequencies by the Department and its contractors and subcontractors.
- (i) Review adequacy, effectiveness, and efficiency of telecommunications functions and facilities (including crypto-facility operations and emergency facilities) through surveys, onsite audits, tests, and appraisals. Conduct studies and analyze the economic efficiency and technical effectiveness of telecommunications policies, plans, and operations at Headquarters and field elements.
- (j) Provide, on a reimbursable basis, the services of Government, contractor, or subcontractor telecommunications specialists to assist in the acquisition,

installation, and management of telecommunications services.

- (k) Designate, as appropriate, accredited individuals to represent the Department with other Federal and State agencies and with industry on telecommunications policy matters and on activities related to the National Telecommunications and Information Administration, National Communications System, GSA, and Departmentwide telecommunications projects and programs and ensure that approved Departmental policy and requirements are considered at the national and international levels.
- (l) Review and determine the applicability of Federal regulations, including Federal Information Resources Management Regulations, procedures (not including procurement regulations, policies, or procedures properly within the responsibility of the Procurement Executive), and Orders pertaining to Federal Government telecommunications, and issue supplementary material and authorize deviations, if warranted.
- (m) Represent or advise the Department, its contractors, and its subcontractors in dealing with foreign governments or industrial firms pertaining to telecommunications services outside the United States.
- (n) Represent the Department with the telecommunications industry on policy matters and on related committees and activities.
- (o) Provide Departmentwide direction, administration, and coordination of the Department COMSEC program essential to national security emergency preparedness planning.
- (p) provide information on proposed Departmentwide telecommunications activities to assist the Chief Financial Officer in developing operating plans and budgets.
- (q) Consolidate Department telecommunications requirements, including expenditure information that may be required for intraagency and interagency reporting.
- (r) Prepare policies, plans, and procedures to ensure that telecommunications assets under DOE management or operational control are capable of satisfying the Federal Government national security emergency preparedness needs under crisis or emergency conditions.

- (s) Supply information to and consult, as appropriate, with the Manager, National Communications System, regarding all Department telecommunications assets.
 - (t) Provide staff support to the Manager, National Communications System, and other Federal departments in the national execution of national security emergency preparedness functions, furnishing such information, support, and assistance as may be required by the President.
 - (u) Identify and provide policy guidance and direction for those DOE telecommunications assets which include radio communications required during national, regional, or local emergencies and ensure that Departmental emergency telecommunications systems are operational and responsive to DOE emergency planning, preparedness, and response programs, and that they compliment the planning of the Manager, National Communications System, national security emergency preparedness programs.
 - (v) Ensure that procedures are developed with each Lead Program Secretarial Officer which describe the process for interface and communicating with their DOE Field Offices.
- (2) Director, Office of Information Technology Services and Operations (AD-25).
- (a) Plan, design, request procurement of, manage, and operate Headquarters and multiuser nationwide telecommunications systems.
 - (b) Certify that goods and services ordered have been received so that authorization for payment of invoices can be accomplished.
- d. Contracting Officers shall:
- (1) Ensure that the requirements of this Order are included in solicitations and contracts in which the acquisition of telecommunications supplies and/or services are required and when those supplies or services will be acquired as a direct charge to the Department.
 - (2) Ensure that cost reimbursement contractors acquire telecommunications services in accordance with the terms and conditions (including any requirements for competition) of the governing contract.

- e. Director of Administrative Services (AD-60) shall:
 - (1) Determine requirements for and obtain, install, maintain, and test radio, electronic, and public address facilities serving Headquarters.
 - (2) Determine requirements, budget, request procurement of, and maintain all Headquarters radio communications, wireways, and alarm circuitry.
- f. Director of Security Affairs (SA-1) shall, in consultation with AD-24, establish policies, procedures, and standards for personnel and physical security aspects of telecommunications,
- g. Chief Financial Officer (CR-1) shall coordinate with the Director, AD-24, those portions of the Headquarters and field budgets that contain funds for reimbursable and national security emergency preparedness telecommunications.
- h. Heads of Headquarters Elements shall:
 - (1) Ensure compliance with objectives, principles, policies, procedures, and standards related to the planning, acquisition (other than acquisition policies, procedures, and directives under the authority of PR-1), management, and operation of the Department telecommunications systems.
 - (2) Determine requirements and provide management oversight for telecommunications services; develop related plans, schedules, budgets, and proposals; and provide adequate facilities and services to meet programmatic and national security emergency preparedness requirements, to include operating nationwide systems for which approval has been obtained from AD-24.
 - (3) Ensure that telecommunications proposals, plans, schedules, and budgets are submitted to AD-24, as required, for Headquarters concurrence and action. The Energy Information Administration shall submit its data communications plan and telecommunications budget to AD-24 as part of its annual information technology resources long-range site plan.
 - (4) Assure that all DOE spectrum-dependent programs requiring radio support or otherwise impacting the electromagnetic spectrum are referred to AD-24, who will obtain national operational authority or certification of spectrum availability, as appropriate. Spectrum authority or certification will be requested concurrently with program budget submission, and will be required prior to expenditure of funds for electromagnetic equipment.

- (5) Coordinate with AD-24 Programs requiring telecommunications in support of the DOE emergency planning and preparedness.
- (6) Submit reports to AD-24 as required.
- (7) Initiate requests for specific deviations from codes and standards, and submit recommendations for supplementing or modifying such codes and standards to AD-24.
- (8) Request exemptions from specific provisions of Federal regulations and orders from AD-24 where such action appears necessary to the conduct of Department programs.
- (9) Designate key personnel who should be provided essential telecommunications service during emergencies.
- (10) Designate administrative representatives who will be responsible for requesting, coordinating, and verifying telephone services.
- (11) Ensure that complete long-range plans are compiled and submitted annually in response to the information technology resources long-range site plan call issued by AD-24. Major changes or additions to these plans are to be submitted to AD-24 throughout the year.
- (12) Ensure that cost reimbursement type contractors plan, develop, and manage telecommunications services acquired under their contracts in accordance with the policies and procedures set forth in this Order, including initiating and submitting proposals, plans, schedules, budgets, and requirements determinations to AD-24 for review and approval.

i. Program Secretarial Officers and Heads of DOE Field Offices shall:

- (1) Ensure that telecommunications proposals are submitted to the Office of IRM Policy, Plans, and Oversight (AD-24) as required.
- (2) Ensure that acquisitions are conducted in accordance with applicable requirements and that procedures are established for reviewing contractor acquisitions under the \$1 million threshold.

d. Heads of Field Elements shall:

- (1) Ensure compliance with objectives, principles, policies, procedures, and standards related to the planning, acquisition (other than acquisition policies, procedures, and

directives under the authority of PR-1), management, and operation of the Department telecommunications systems.

- (2) Ensure that existing and proposed systems conform to and operate in compliance with applicable directives and national and international regulations.
- (3) Determine requirements and provide management oversight for telecommunications services; develop related plans, schedules, budgets, and proposals; and provide adequate facilities and services to meet programmatic and national security emergency preparedness requirements, to include operating nationwide systems for which approval has been obtained from AD-24.
- (4) Ensure efficient and effective management of telecommunications facilities, services, and assigned spectrum resources.
- (5) Assure that complete coordination and planning are accomplished prior to the submission of proposals or spectrum-dependent requirements to AD-24 for appropriate action at the Headquarters, national, or international levels.
- (6) Ensure that telecommunications proposals, plans, schedules, and budgets are submitted to AD-24, as required, for Headquarters concurrence and action.
- (7) Assure that modification to, or purchase of, new telecommunications systems considers requirements for national security emergency preparedness operations in support of local and national emergencies.
- (8) Approve local telecommunications falling below the thresholds contained in Chapter II, provided:
 - (a) The validity of the requirement has been documented and justified;
 - (b) The communications design or services meets the requirement in the most efficient and cost-effective manner compatible with existing services; and
 - (c) The proposed telecommunications systems satisfy national security emergency preparedness requirements.
- (9) Ensure that all cost-reimbursement type contractors plan, develop, and manage telecommunications services acquired under their contracts in accordance with the policies and

procedures set forth in this Order, including initiating and submitting proposals, plans, schedules, budgets, and requirements determinations to AD-24 for review and approval.

- (10) Submit reports to AD-24, as required, regarding telecommunications facilities and services.
- (11) Ensure that complete long-range plans are compiled and submitted annually in response to the AD-24 information technology resources long-range site plan call. Major changes or additions to these plans are to be submitted to AD-24 throughout the year.
- (12) Initiate requests for specific deviations from codes and standards, and submit recommendations for supplementing or modifying such codes and standards to AD-24.
- (13) Request exemptions from specific provisions of Federal regulations and orders from AD-24 where such action appears necessary.
- (14) Conduct telecommunications field appraisals of subordinate elements, contractors, and subcontractors.
- (15) Designate a responsible manager, a representative of the telecommunications staff at each field element, who shall be responsible for the following:
 - (a) Forecasting requirements, including those with national security emergency preparedness requirements;
 - (b) Developing programs for services to meet telecommunications requirements;
 - (c) Advising and assisting in the control and distribution of costs;
 - (d) Managing telecommunications services, as appropriate, and monitoring contractor and subcontractor performance; and
 - (e) Providing management services, which include:
 - 1 Providing employees of each location with local procedures on the availability and use of telecommunications services;
 - 2 Maintaining records of equipment, services, and information listings, including narrative

descriptions and block diagrams of all existing and planned telecommunications systems;

- 3 Coordinating preventive maintenance and requests for repair of telecommunications facilities, including national security emergency preparedness telecommunications facilities.
- 4 Processing and coordinating requests for facilities, services, and equipment;
- 5 Preparing data for telephone directories; and
- 6 Certifying bills for telecommunications facilities and equipment.

10. ENGINEERING, SECURITY, AND TECHNICAL STANDARDS.

- a. General Guidelines. Facilities, services, and equipment will be engineered to perform their required functions with efficiency and economy. Where new capability is to be added to an existing service or system, it must be capable of interfacing with the equipment, circuits, and procedures in effect to ensure interoperability, as well as security and national security emergency preparedness considerations. Exceptions to this guidance must be fully justified and documented in a proposal submitted to AD-24 in accordance with Chapter III of this Order. Acquisition of these services or systems shall be in accordance with applicable procurement regulations. Standards and procedures for unclassified operations will be in accordance with existing Orders dealing with unclassified computer systems and networks.
- b. Facilities, Services, and Equipment.
 - (1) Classified Operations. Standards and procedures for classified operations will be in accordance with existing Orders dealing with communications security.
 - (2) Unclassified Operations. Unclassified data communications facilities and those facilities processing sensitive unclassified information will be engineered in accordance with Orders dealing with communications security and shall meet at least the following additional criteria:
 - (a) Physical size should be sufficient to accommodate current and projected needs for expansion over the next 5-year period.

- (b) Equipment to be initially installed should be capable of handling projected traffic loads over a 5-year period.
 - (c) Power, heating, air conditioning, lighting, and wiring should be of sufficient capacity to provide for necessary expansion and additions over the next 5 years.
 - (d) Facilities design should meet current Departmental and GSA standards for construction.
- c. Technical Standards. Federal automatic data processing and telecommunications standards shall be used for the acquisition of telecommunications equipment and services as prescribed by Federal Information Resources Management Regulation 201-8. Telecommunications equipment and services acquisitions by management and operating contractors and subcontractors should be acquired using the "Federal Norm."
- d. Emission Security (TEMPEST) Standards. Any communications equipment engaged in the processing of classified information in clear text must meet current TEMPEST standards, as described in DOE 5300.2D.
- e. Special Requirements. Any special requirement which, by virtue of its unique characteristics, requires deviation from current standards should be justified and documented in a proposal submitted to AD-24.
- f. Maintenance. Maintenance, repair, and replacement of communications facilities, services, and equipment are accomplished through Department, contractor, and subcontractor technicians, GSA technicians, and carrier, manufacturer, or vendor services, depending on availability of personnel and the status of the service involved, whether owned, furnished, or leased by the Government.
- g. Spectrum-Dependent Telecommunications Systems. All spectrum-dependent telecommunications systems shall comply with engineering security standards stated in Chapter 5 of the "NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management." Spectrum-dependent telecommunications systems handling information requiring protection shall comply with engineering security standards stated in DOE 5300.3C.

11. PROCEDURES.

- a. Procedures for the planning, engineering, acquisition, management, and operation of voice/data communications systems are contained in Chapter II.
- b. Implementing instructions for spectrum-dependent planning, acquisition of equipment, coordination and operation, and the reporting requirements are contained in the "DOE Radio Services Procedural Guide."

12. USAGE.

- a. All voice/data telecommunications systems shall conform to the policies and procedures outlined in Chapter III in this Order.
- b. All spectrum-dependent telecommunications systems shall conform to the policies, rules and regulations, and procedures for the use of electromagnetic spectrum resources stated in the "NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management" and the "DOE Radio Services Procedural Guide."

BY ORDER OF THE SECRETARY OF ENERGY:



DONALD W. PEARMAN, JR.
Acting Director
Administration and Human
Resource Management

REFERENCES

1. GENERAL.

- a. DOE 1000.3B, INTERNAL CONTROL SYSTEMS, of 7-5-88, which prescribes policies and standards for internal control systems in the DOE and assigns responsibility and accountability to managers for establishing, evaluating, improving, and reporting on internal controls for their respective programs and administrative functions.
- b. DOE 1360.2 [], UNCLASSIFIED COMPUTER SECURITY PROGRAM, of 5-18-92, which establishes requirements, policies, responsibilities, and procedures for developing, implementing, and sustaining a Department of Energy unclassified computer security program.
- c. DOE 4300.1C, REAL PROPERTY MANAGEMENT, of 6-28-92, which establishes Departmentwide policies and procedures, and assigns responsibilities for site development and facility utilization planning.
- d. DOE 5300.211, TELECOMMUNICATIONS: EMISSION SECURITY (TEMPEST) of 5-18-92, which establishes the Departmental program for emission security and implements the provisions of the national policy that are applicable to emission security.
- e. DOE 5300.3C, TELECOMMUNICATIONS: COMMUNICATIONS SECURITY, of 5-18-92, which establishes policy, responsibilities, and guidance concerning the aspects of telecommunications services, and implements national policy on telecommunications and automated information systems security.
- f. DOE 5636.1A, PROHIBITIONS ON ILLICIT WIRETAPPING AND EAVESDROPPING, of 6-12-92, which specifies the Department policy of prohibiting the procurement of devices designed specifically for wiretapping or eavesdropping and the installation and use of such equipment.
- g. Federal Information Resources Management Regulations, Part 201, which provides policies and procedures governing the utilization by executive agencies of telecommunications services, and is published by the General Services Administration (GSA).
- h. Federal Standard 1037B, "Glossary of Telecommunications Terms," which provides definitions of terms used in telecommunications and directly related fields, and is published by the GSA.
- i. The Communications Act of 1934 (as amended) which provides for the regulation of interstate and foreign communication by wire or

radio and for other purposes; and, in particular, section 305(a), which establishes Presidential statutory authority to authorize operations of radio stations belonging to, or operated by, the U.S. Government; and section 606, which establishes the war emergency telecommunications powers of the President.

- j. Public Law 89-306, The Brooks Act, of 10-30-65 (as amended by Continuing Appropriations Act, 99-500) which provides for the economic and efficient purchase, lease, maintenance, operation, and utilization of automatic data processing equipment by Federal departments and agencies.
- k. Office of Management and Budget Circular A-76 (revised) "Performance of Commercial Activities," of 8-4-83, which establishes policies for acquiring commercial or industrial products and services needed by the Government.
- l. Office of Management and Budget Circular A-n, "Preparation and Submission of Budget Estimates," issued annually, which provides guidance regarding the preparation and submission of budget estimates, including that portion which prohibits the obligation of Government funds without a certification of availability of spectrum support.
- m. National Communications System Manual 3-1-1, of 7-9-90, which provides procedures to implement the Telecommunications Service Priority (TSP) System for National Security and Emergency Preparedness (NS/EP) as prescribed in NCSD 3-1. It provides direction to all Federal Agencies participating in the TSP System. It also provides direction to those organizations outside the Federal Government that wish to participate in the TSP System as TSP Service Users.
- n. "The Guidelines for Determining Telecommunications System and User Requirements," of 10-85, which provides guidance to telecommunications project managers in gathering the required information for the preparation of a technical specification and a statement of work, available from the Office of Information Technology Services and Operations (AD-25).
- o. "Model Specification for an Information Exchange," of 6-84, and "Developing the Technical Content of a Telecommunications Solicitation for Local Switching Systems," of 11-84, which provide guidance regarding the development of solicitations, available from the Office of Information Technology Services and Operations (AD-25).
- p. "Implementation and Cutover Planning Guide," of 1-86, which provides guidance on evaluating vendor plans associated with the implementation of an Information Exchange (IX) system and coordinating and monitoring the actual installation and cutover of the system, available from the Office of Information Technology Services and Operations (AD-25).

- q. "The Department of Energy RED\BLACK Design/Implementation Procedural Guide," of 4-1-91, published by AD-24, and periodically revised, which implements procedures in support of national and Departmental TEMPEST policy requirements as directed by DOE 5300.2D, TELECOMMUNICATIONS: EMISSION SECURITY (TEMPEST) .
- r. "The Department of Energy (DOE) Communications Security (COMSEC) Procedural Guide," which implements procedures in support of national and Departmental COMSEC policy requirements as directed by DOE 5300.3C, TELECOMMUNICATIONS: COMMUNICATIONS SECURITY.

2. SPECTRUM MANAGEMENT.

- a. Executive Order 12046, "Relating to the Transfer of Telecommunications Functions," of 3-27-78, which delegates the Presidential responsibilities for management of the electromagnetic spectrum to the Secretary of Commerce, and provides for the continuation of the Interdepartmental Radio Advisory Committee to assist the Secretary in the exercising of the delegated Presidential authority, Federal Register, 43, No. 61, 3-29-78.
- b. "National Telecommunications and Information Administration Manual of Regulations and Procedures for Federal Radio Frequency Management, of 1-1-91, which prescribes Government policies and procedures pertaining to the utilization by executive agencies of spectrum-dependent systems or of programs, available from the U.S. Government Printing Office, Washington, DC.
- c. Department of Commerce Organization Order 10-10, of 5-9-78, which establishes the National Telecommunications and Information Administration, redelegate the Presidential responsibilities for the management of the electromagnetic spectrum to its Administrator, and establishes the Administrator's authority and responsibility for all radio communications operated by the Federal Government, available from the Administrator, National Telecommunications and Information Administration, Department of Commerce, Herbert C. Hoover Building, 14th and Constitution Avenue, NW., Washington, DC 20230.
- d. "The Department of Energy Radio Services Procedural Guide," published by the Office of Information Resources Management (AD-240), and periodically revised, which implements national policy and spectrum-dependent services within the Department. Distribution of this document is controlled by AD-20, since certain information contained within this guide is Unclassified Sensitive Nuclear Information, available from AD-20.

3. NATIONAL SECURITY EMERGENCY PREPAREDNESS.

- a. "Federal Emergency Plan" (classified report, title unclassified), Annex C-XI, Telecommunications, sets forth national-level doctrine and concepts for management of Government-owned and Government-leased telecommunications resources during war emergencies, operational emergencies, or energy emergencies, available from the Manager, National Communications System, Washington, DC 20305-2010.
- b. Executive Order 12656, of 11-18-88 (as amended), Assignment of Emergency Preparedness Responsibilities. The purpose of this Order is to assign national security emergency preparedness responsibilities to Federal departments and agencies. These assignments are based, whenever possible, on extensions of the regular missions of the departments and agencies.
- c. Executive Order 12472, of 4-3-84, Assignment of National Security and Emergency Preparedness Telecommunications Functions, provides for the essential national security emergency preparedness telecommunications needs of the Federal Government and provides guidance to State, local government, and private organizations for all conditions of crisis or emergency, Federal Register, 49, No. 67, 4-5-84.
- d. National Security Decision Directive Number 47, of 7-22-82, "Emergency Mobilization Preparedness," directs emergency communications planning and establishes the requirement for programs that ensure transition from normal to emergency operations, available from the National Security Council, Washington, DC 20508.
- e. National Security Decision Directive Number 97 (unclassified version), of 8-3-83, "National Security Telecommunications Policy," establishes the policy for integrating all of the Nation's telecommunications resources essential to national survival, and directs compliance by all Federal Government agencies when modifying current telecommunications assets or planning new ones, available from the National Security Council, Washington, DC 20508.
- f. National Security Directive Number 42 of 7-5-90, which establishes a National Committee Structure to protect classified information during electronic processing.
- g. White House NS/EP Funding Policy Memorandum, dated April 30, 1991. Established the policy for funding of telecommunications and requires the Manager, National Communications System, to submit annually, by 6-1, the national security emergency preparedness

telecommunications program and required funding levels based upon each organization's share of national security emergency preparedness telecommunications requirements.

- h. National Communications System Directive 3-1, Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NS/EP) of 7-5-90. This directive implements policy, explains legal and regulatory basis, assigns responsibilities, and prescribes procedures for the Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NS/EP).
- i. National Telecommunications and Information Administration "Emergency Readiness Plan for the Use of the Radio Spectrum" (classified), of 10-85, identifies spectrum resources for military operations and civil functions that are essential during national emergencies, available from the Administrator, National Telecommunications and Information Administration, Department of Commerce, Herbert C. Hoover Building, 14th and Constitution Avenue, NW., Washington, DC 20230.

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CHAPTER I

TELECOMMUNICATIONS LONG-RANGE PLANNING PROCESS

1. BACKGROUND. The Department has instituted an annual information technology resources long-range planning process of which telecommunications is a part. This process was established to set priorities for anticipated technology initiatives, to analyze automation opportunities, to determine the information needs of Departmental components, and to provide a vehicle to collect data to meet the requirements of Office of Management and Budget Circular A-n. For telecommunications planning, the basic objectives of the process are as follows:
 - a. Promote better comprehension of the field telecommunications capabilities, requirements, environment, plans, issues, strategies, and cost of operations.
 - b. Minimize the need to solicit data from Departmental and field elements in support of various routine and ad hoc reporting requirements.
 - c. Provide information for improved decisionmaking.
 - d. Develop a strategic plan to accompany budget submissions to the Office of Management and Budget.
 - e. Provide quantitative projections of telecommunications requirements along mission/program lines.
 - f. Provide early identification of requirements for integrated, common-use telecommunications systems or services and proposed major procurements for telecommunications equipment.
 - g. Identify costs associated with telecommunications systems operation in DOE and the impact of planned acquisitions and developments using cost profiles.
 - h. Ensure that the COMSEC planning within the Department is adequate, complies with all applicable national directives and Executive orders, and has the necessary cost and budget justifications.
 - i. Ensure that national security emergency preparedness planning within the Department is current; complies with applicable Public Laws, national directives, and Executive orders; and that the Department is accomplishing its national security emergency preparedness telecommunications responsibilities as a cabinet-level organization.

2. LONG-RANGE PLANNING - ANNUAL CYCLE.

- a. Call for Information Resources Management Site Plans. The primary vehicle for obtaining information to be used in all areas of the budget and planning process is the annual "Call for Information Resources Management Long-Range Site Plans," which is issued annually by the Director of Administration and Human Resource Management (AD-1). This call identifies those sites required to submit information system plans and automatic data processing plans and telecommunications plans to the Office of IRM Policy, Plans, and Oversight (AD-24). It contains instructions on format, content, and reporting requirements. The process culminates each year with the publication of the "DOE Information Resources Management Long-Range Plan." The planning process is designed to be not only forward looking, but also used as a means to track continuing efforts; therefore, it is necessary to deal with existing and continuing systems, as well as new initiatives.
- b. Telecommunications Long-Range Plan Requirements.
 - (1) "The Telecommunications Long-Range Plan Call" requires submissions in narrative form, block diagrams, tabular resource reports, and discussion of major accomplishments in the specific functional areas reported. As reporting requirements may change, specific instructions for submission of plans are constantly being reevaluated. Instructions for completing each year's required telecommunications plans are included with the annual call. Generally, field elements are required to submit telecommunications plans by functional areas as follows:
 - (a) Voice communications;
 - (b) Data communications;
 - (c) Frequency spectrum-dependent communications;
 - (d) Teleconferencing;
 - (e) Safety, surveillance, and energy conservation;
 - (f) Communications security; and
 - (g) National security emergency preparedness.
 - (2) In order to provide a long-range perspective of programmatic requirements and planned resources of a site, the planning data spans an 8-year period beginning with actual data for the past fiscal year and budget estimates for the current through the next 6 fiscal years. This approach provides for identification and review of site requirements for additional

major resources during the following planning cycles before an acquisition needs to be included in the budget. Normally there is time, during the subsequent planning cycles, to reconfirm the validity of the requirement and to investigate and evaluate all of the alternative methods of acquiring the needed resources before actual budgetary decisions are required. Resource planning at the site level involves:

- (a) Determining the telecommunications support required for each program at the facility;
- (b) Comparing these requirements to the capacity and/or capabilities available to the site; and
- (c) Developing plans and strategies to provide additional sources, if needed, to meet these requirements.

(3) Critical to the success of this process is adequate rationale supporting proposed major acquisitions of telecommunications resources. Proper consideration and support of these requirements can be made by management, along with other competing program priorities, during the internal/external budget formulation process. Also required is a reconciliation to the previous year plan and a narrative statement of major accomplishments for the current year.

- c. Long-Range Site Plan Submissions. The site plans are used by program organizations during program planning and internal review budgeting cycles. They have an impact on program decisions regarding the profile for budget year and out-year funding tables. They are a valuable reference document when adjudicating programmatic issues and also become the basis for the submission of several budget exhibits required by the Office of Management and Budget. Site planning data is used in the preparation of tables as backup to the Presidential Budget, which is submitted to Congress early in the calendar year, and to prepare for authorization and appropriations committee hearings normally held in the March to May timeframe by the Senate and House of Representatives' committees and their staffs. In addition, site plans are used to respond to ad hoc inquiries and briefing requests from Congress, the Office of Management and Budget, and other cabinet-level organizations, as well as senior management officials within DOE. The telecommunications site plans deal with strategies, methods, and resources (services, facilities, personnel) required to provide interconnection, interoperability, networking, and access in support of the gathering, storage, and transfer of information, and encompasses the full range of support in all functional areas of telecommunications technology. Tangible and intangible resources are connected with the planning process. Voice systems require instruments, circuits, and switching facilities necessary to complete telephone calls; data communications involves

interconnection of computers and hard copy devices to provide record copy; and the frequency-spectrum and national security emergency preparedness areas necessitate interaction with regulatory and directive entities to assure that required frequency allocation and necessary survivable functions are identified and available.

CHAPTER 11

ACQUISITION OF VOICE/DATA TELECOMMUNICATIONS SERVICES AND EQUIPMENT

1. GENERAL. This chapter describes the methods of analyzing and determining requirements and procedures to obtain approval from the Office of IRM Policy, Plans and Oversight (AD-24) for the acquisition of voice/data telecommunications services and equipment.
2. DETERMINING NEW REQUIREMENTS.
 - a. Voice or Integrated Voice/Data Communications Systems. The responsible manager or designated representative will determine requirements for the site or organization by following the procedures outlined in "The Guidelines for Determining Telecommunications System and User Requirements."
 - b. Data Communications.
 - (1) The responsible manager or designated representative will determine the basic parameters of the requirements and evaluate the alternative methods of satisfying these requirements.
 - (2) Issues to be addressed in determining requirements include:
 - (a) When data communications are required;
 - (b) Type of facility, service, or equipment (data, facsimile, or narrative);
 - (c) Volume of traffic on a daily and peak-hour basis and type of traffic (interactive, file transfer);
 - (d) Hours of operation;
 - (e) Projected growth (1-, 2-, and 5-year increments);
 - (f) Security, privacy, and protection considerations; and
 - (g) National security emergency preparedness considerations.
 - (3) Following quantification, the requirement should be assessed against existing capabilities to determine the interoperability and ability to accommodate greater traffic volumes, the level of expansion that may be accomplished to satisfy the requirements, or the definition of a new level of capability to be established.

- (4) If the evaluation of a new requirement indicates that classified traffic will be sent or received, the facility must be provided with physical and electronic protection in accordance with DOE 5300.3C.
- (5) New requirements that involve unclassified information must be coordinated and approved by the Computer Protection Program Manager in accordance with DOE 1360.2B.

3. PROCEDURES

- a. A telecommunications proposal must be submitted to the Office of IRM Policy, Plans, and Oversight (AD-24) for Federal acquisitions under the following circumstances:
 - (1) Acquisitions of local voice, integrated voice/data telecommunications or data communications equipment, facilities and services, with a life cycle cost of \$1,000,000 or greater.
 - (2) Planned new intercity data or video teleconferencing networks and interconnections to networks operated by other agencies. An intercity network is defined as a group of locations which are connected by intercity circuits. Networks previously approved in response to a telecommunications proposal, for example Energy Sciences Network (ESNET), Department of Energy Nationwide Telecommunications Services (DOENTS), and the Secure Automatic Network (SACNET), do not need to resubmit a proposal for minor enhancements. However, significant deviations from originally approved proposals shall be reviewed and approved by AD-24 prior to implementation to ensure that both internal policies and externally imposed requirements are met.
 - (3) Exceptions to the mandatory use of Federal Telecommunications System (FTS) 2000 voice, data, and video services in satisfying intercity procurement requirements or to the mandatory use of General Services Administration (GSA) consolidated local telecommunications service. The requirements of FIRMR Bulletin C-18 should be addressed in preparing the submission.
 - (4) Deviations from DOE adopted standards (e. g., H.261 for video teleconferencing). If a waiver from Federal Information Processing Standards (FIPS) Publications is required, then the waiver process must be followed instead of submitting a telecommunications proposal.

- (5) Any exceptions to the use of Departmentwide telecommunications network (e.g., DOENTS Satellite Backbone, SACNET) where use of these networks has previously been required.
 - (6) Major experimental research and development efforts.
 - (7) In addition to any requirements for a DOE telecommunications proposal, if the life cycle of a competitive telecommunications acquisition exceeds \$2.5 million or \$250,000 for a sole source/specific make and model, an Agency Procurement Request (APR) must also be prepared in accordance with the format outlined in FIRMR Bulletin C-5.
- b. A telecommunications proposal must be submitted to AD-24 for contractor acquisitions under the following circumstances:
- (1) Acquisitions of local voice, integrated voice/data telecommunications or data communications equipment, facilities and services, with a life cycle of \$1,000,000 or greater.
 - (2) Proposed new intercity data or video teleconferencing networks and interconnections to networks operated by other agencies. An intercity network is defined as a group of locations which are connected by intercity circuits. Networks previously approved in response to a telecommunications proposal, for example, ESNET, DOENTS, and SACNET, do not need to resubmit a proposal for minor enhancements. However, significant deviations from originally approved proposals shall be reviewed and approved by AD-24 prior to implementation to ensure that both internal policies and externally imposed requirements are met.
 - (3) Exceptions to the use of FTS 2000 voice, data, and video services or to the use of GSA consolidated local telecommunications service. Although the use of FTS 2000 is not mandatory by law for contractors, DOE requires contractors to use FTS 2000, unless it has been justified in a proposal that FTS 2000 cannot satisfy the requirement or alternative service is significantly less expensive. Departmental Elements should satisfy the requirements of FIRMR Bulletin C-18 when preparing their submissions.
 - (4) Deviations from DOE adopted standards (e.g., H.261 for video teleconferencing). If a waiver from FIPS Publications is required, then the waiver process must be followed instead of submitting a telecommunications proposal.

- (5) Any exceptions to the use of Departmentwide telecommunications networks (DOENTS Satellite Backbone, SACNET) where use of these networks have previously been required.
 - (6) Major experimental research and development efforts.
- c. Telecommunications proposals are not required for either contractor or Federal acquisitions of the services outlined below. However, when services ordered are extensions or enhancements to a network approved by AD-24 in response to a telecommunications proposals, an updated diagram of the network configuration must be submitted to AD-24 and the Office of Information Technology Services and Operations.
- (1) FTS 2000 switched voice service.
 - (2) FTS 2000 switched digital integrated service.
 - (3) FTS 2000 integrated services digital network.
 - (4) FTS 2000 point-to-point dedicated or switched data services.
 - (5) FTS 2000 video teleconferencing services.
 - (6) Local service; i.e., within a 25-mile radius, intra-LATA, or within a metropolitan area.
- d. In preparing telecommunications proposals, the responsible manager or the designated representative will include information in the following format:
- (1) General Description. Include the size and scope of the change or installation.
 - (2) Justification of Basic Need. Explain the need for the service change or installation. Include an analysis of benefits and costs for the proposed acquisition. Provide a lease versus purchase analysis for equipment, including a complete analysis form.
 - (3) Preliminary Plans. Use block diagrams, as necessary, to illustrate preliminary plans for the change or installation.
 - (4) Specifications. Outline major factors influencing type, size, and principal features of the changes service or the new installation. An item to be included within the specifications is national security emergency preparedness requirements.

- (5) Operating and Maintenance Procedures. Provide information about the organization, staffing, administrative controls, and hours of operation.
- (6) Estimated Costs. Provide estimated costs for major service and facility components.
- (7) Implementation Schedules. Propose target dates and schedules for implementing the change or new installation.
- (8) Points of Contact. Provide name, title, organization, mailing address, and commercial and FTS telephone numbers of individuals to whom questions should be directed.
- (9) System Reliability Objectives. Specify and justify the appropriate circuit restoration priority objectives for system components and circuits.
- (10) Method of Procurement. A telecommunications proposal contemplating the use of other than full and open competition shall set forth a brief summary of the reasons for the use of other than full and open competition. This summary and the rationale contained therein shall not be construed as the justification for other than full and open competition required in accordance with FIRM Chapter 201, because the rationale in and of itself may not satisfy the requirements for the use of other than full and open competition. Proposals submitted to AD-24 that advocate sole source procurement shall contain a copy of the signed statement of findings and determination. This signed statement shall document the requirement for sole source procurement and address the specific area defined in FIRM Chapter 201. Although the FIRM does not apply to management and operating (M&O) contractors, these definitions are appropriate to be followed in the "Federal Norm" acquisitions by M&O contractors and subcontractors of telecommunications facilities, equipment, and services.
- (11) Competitive Acquisition. The following milestones must be established in developing a competitive acquisition package:
 - (a) Requirements definition.
 - (b) Acquisition strategy.
 - (c) Functional specifications.
 - (d) Implementation plan.
 - (e) System management plan.

- e. If a proposal concerns the replacement or installation of a complete system, the responsible manager or the designated representative must discuss all (leased and Government-owned) onsite systems. This is to assure consideration of consolidation of systems when technically feasible and cost-effective.
- f. Proposals will be evaluated based on the following criteria:
 - (1) Cost-effectiveness.
 - (2) Capability to interface with existing equipment, circuits, and procedures in effect.
 - (3) Rationale for use of incompatible interfaces to existing equipment and circuits.
 - (4) Rationale for deviation from normal operating or engineering practices or standards.
 - (5) Rationale for nonexperimental systems involving data communications, which are developmental, rather than off the shelf.
- g. AD-24 will respond to proposals within 20 working days of receipt, unless the acquisition requires submission of an APR to GSA. If an APR is required, GSA procedures require that action be taken within 20 working days of receipt of the APR.
- h. AD-24 personnel are cleared to handle classified proposals. Those offices with classified requirements should consult with AD-24 in advance regarding the level of classification to ensure that the proposal can be handled in accordance with DOE directives.

CHAPTER III

FIELD APPRAISALS AND REPORTS

1. GENERAL. This chapter outlines the procedures which are used by the Office of IRM Policy, Plans, and Oversight (AD-24) for conducting field appraisals of the telecommunications programs at the DOE. The purpose of such appraisals is to ensure that adequate internal controls are in place, improve the overall performance, achieve cost savings, and promote measures for the avoidance of waste, fraud, and abuse. This chapter also describes requirements regarding the conduct of surveys and submission of reports as well as other procedures which promote effective management of telecommunications systems.
2. FIELD APPRAISALS.
 - a. Appraisal. These will be conducted every 3 years for each telecommunications program area. Program/site selection schedules will be developed each year prior to the beginning of the fiscal year based on perceived priorities and deficiencies. These programs/site selection schedules will be provided to the field elements at the beginning of each fiscal year.
 - b. Procedures. AD-24 will coordinate with the telecommunications manager and the assistant manager for administration at the field element site to set the exact date and to determine the scope of the review.
 - (1) An official notification will be prepared for AD-24 signature and sent to the site manager. This memorandum will set the dates for the review, outline the purpose and the functional areas to be covered, specify the documents to be reviewed, and indicate who will be conducting the review.
 - (2) A general work plan for each review will be developed which outlines:
 - (a) Scope;
 - (b) Objectives and rationale;
 - (c) Review schedule; and
 - (d) Criteria or standards against which performance will be measured.
 - (3) AD-24 will coordinate with the field element representative to establish the actual agenda for the review. Backup

materials will be assembled, and additional information will be requested from the field element in advance, as necessary.

- (4) At the beginning of the review, AD-24 will meet the assistant manager for administration and the telecommunications manager.
- (5) The actual review will consist of inspections and observations, interviews, review of documents, and gathering or developing data for analytical computations and comparisons. Generic topics which will be covered will include the following:
 - (a) Assessment of compliance with Headquarters policies;
 - (b) Assessment of compliance with DOE or other applicable directives, as well as compliance with Federal regulations and policies;
 - (c) Assessment of the field elements oversight of subordinate offices and Government contractor's and subcontractor's telecommunications programs. This may require contractor or subcontractor participation;
 - (d) Evaluation of long-range planning and budgeting;
 - (e) Evaluation of program operations by functional area: voice, data, radio, and national security emergency preparedness telecommunications; and
 - (f) Organization and staffing.
- (6) Findings and recommendations will be developed and discussed with the telecommunications manager.
- (7) An exit interview will be conducted with the assistant manager for administration and the telecommunications manager.
- (8) After the review has been conducted, findings will be prepared which outline the conditions that exist, the criteria against which performance was measured, the effect of the condition, its probable cause, and recommendations for resolving the problem.
- (9) These findings will be incorporated into a draft report which will be circulated to the assistant manager for administration and the telecommunications manager with comments due in 30 days, and will include the following:

- (a) Scope of the review;
 - (b) Objectives;
 - (c) Findings;
 - (d) Summary of strengths and weaknesses;
 - (e) Recommendations and proposed remedial actions;
 - (f) Statements of pertinent officials; and
 - (g) Issues requiring further study or consideration.
- (10) The final report will be completed within 90 days and will be submitted to the assistant manager for administration and AD-24.
- c. Internal Controls. AD-24 will establish a central internal system to track recommendations and specific followup actions taken to correct deficiencies.
- d. Reports. Reports generated through this appraisal program will be maintained centrally by AD-24. An annual consolidated report will be prepared and submitted to AD-24 which summarizes appraisals conducted each year, major program strengths and weaknesses, and documents actions taken to correct deficiencies.

3. SURVEYS.

- a. Annual Surveys. Headquarters and field elements will maintain a program to conduct equipment effectiveness surveys and will submit the reports listed below.
- (1) For Headquarters and field elements where service is provided by the Department (from non-General Services Administration (GSA) operated switchboards) and the cost of Federal Telecommunications System (FTS) access line termination equipment is billed to the Department, the responsible manager or the designated representative will survey and inventory FTS line termination equipment on a yearly basis.
 - (2) For Headquarters and field elements where telephone service is being provided by a GSA-operated facility, the responsible manager or the designated representative will receive a listing of telephone services as posted in GSA records as of 3-31 of each year. The responsible manager or the designated representative will be responsible for validating this listing and returning it to GSA by 6-30 of each year.

- (3) The responsible telecommunications manager or the designated representative at Headquarters and field elements, where service is provided by Department-operated systems, will conduct a survey of all equipment and services on a triennial basis.
 - (4) For the above surveys and inventories, the responsible manager or the designated representative will:
 - (a) Use the results to control and assure that only station equipment and features necessary to carry out assigned missions are installed; and
 - (b) Use the results to assure corrections of any deficiencies.
 - b. Facility Surveys. A physical survey of all data communications equipment, facilities, and services at each field element should be conducted at least every 3 years by the responsible telecommunications manager, unless new requirements necessitate more frequent surveys. This is necessary to reconcile reports, determine continuing need, and evaluate suitability of services. The results of the surveys form the basis for responding to long-range plans and programs, as well as generation of service requests, terminations, and proposals for expanded or enhanced services. A survey report shall be written at the conclusion of each survey, and copies shall be retained by the responsible manager and the surveyed location.
4. REPORTS. The following information shall be included in a summary report to AD-24 as of 9-30 of each year and should be received no later than 10-20. For Headquarters and field element organizations where service is provided from Department-operated switchboards and the cost of the FTS access line terminal equipment is billed to the Department, the responsible manager or the designated representative will include the information listed below:
- a. FTS Access. Terminal equipment by type and quantity, its installations or removal dates, as well as the dates when rate changes will occur, if any.
 - b. Yearly costs. The total yearly costs of FTS terminal equipment, including recurring, service connection, or change costs, as well as moves and modifications. AD-24 will submit the consolidated annual billing to the GSA for reimbursement to AD-24 or the field element directly, as appropriate.

5. CIRCUIT RESTORATION REPORT. Under National Communications System Instruction 55-4, a record of all circuits included in the circuit restoration report will be provided to the field by Headquarters. An updated field report will be submitted to AD-24, either quarterly or as required.
6. LIST OF INTERCITY TOLL-FREE TELEPHONE NUMBERS. For Headquarters and field elements having incoming intercity toll-free telephone services, the responsible manager or the designated representative will be responsible for providing a list of all telephone numbers to the Voice Networks Engineering and Circuit Management Branch on an annual basis, in accordance with Federal Information Resources Management Regulations, 201-38.008.1.
7. USAGE. The responsible manager or the designated representative will provide the following instructions, principles, and procedures to all personnel involved in the use and operation of the voice communications services.
 - a. Control and Use of FTS. Each employee and supervisor is personally responsible for control of commercial and FTS long distance usage and reduction in costs as follows.
 - (1) Place official outgoing long distance telephone calls through the FTS, unless the site has obtained approval from DOE Headquarters for use of an alternative carrier for intercity calls. Use commercial long distance telephone service only when the call cannot be completed through FTS or other leased lines.
 - (2) Use voice teleconferencing in lieu of travel to the extent feasible.
 - (3) Authorize and accept incoming collect calls when required for official business purposes.
 - (4) Maintain records of authorized toll calls, subparagraphs (2) and (3) above, and be prepared to verify the bills for such services as official and essential.
 - (5) Limit the use of credit card or third number billing procedures for placing calls through commercial long distance toll facilities to essential officials. Telephone credit cards are now very expensive; therefore, their use must be controlled.
 - b. Call Detail Recording.
 - (1) Any call detail recording system will have a capacity for collecting information on usage, thus providing data to

measure the efficiency and cost of a system. This management tool will pinpoint areas for achieving economies, help maintain a quality communications system, assist in the certification of tool charges, and provide data to help satisfy reporting requirements of DOE and other Government agencies.

- (2) The system provided will have digital traffic recording capability, i.e., origin and destination, to determine traffic flow and volume to maintain an adequate level of service and to determine usage for management evaluation. not record conversations, nor will it have that capability. The information provided by the system will consist of the calling station number, the month and day, the time the call originated, the duration of the call, and the called number. Similar information will be provided on incoming calls except instead of the calling number, the incoming trunk group and trunk number will be recorded.
 - (3) The information collected will be placed on magnetic tape for further processing and generation of reports. The reports that will be utilized primarily are the station summary report and the trunk report. With the use of these reports, it will be possible to determine if the number of trunks are adequate for system efficiency and to identify those stations or line groups that will require some administrative instruction/guidance or engineering changes to obtain the most cost-efficient operation on the DOE systems.
- c. Wiretapping and Eavesdropping. In accordance with DOE 5636.1A, the procurement, installation, and use of wiretapping or eavesdropping devices is specifically prohibited on Government-owned or Government-leased property or in conjunction with Government-owned or Government-leased systems. Deviations from this requirement are to be processed in accordance with DOE 5636.1A.
- d. Preventive Maintenance. The responsible manager or the designated representative will assure that the following measures are taken:
- (1) Avoid or correct conditions that are hazardous to services;
 - (2) Schedule inspections and preventive maintenance of Government-owned pole lines, duct and conduit systems, switch and equipment areas, and other supporting facilities; and
 - (3) Maintain records of intercity leased private lines that have been certified for priority resumption of service in emergencies.

equipment, circuits, and other plant materials to the organization responsible for coordinating repair services.

- f. Implementation of DOE-Wide Policy on Termination of Unused Telecommunications Services. The following addresses procedures for both terminal equipment (telephones, modems, voice/data terminals, Facsimile machines) and circuits (data and voice).
- (1) A procedure should be established to ascertain from administrative or program officers that expected duration of nonuse of telecommunications services. In the absence of any such information, past records should be researched to determine an average duration of temporary nonuse for that location or organization.
 - (2) Locations of services should be classified according to the threat of service abuse or equipment theft. In "high danger" areas, equipment and/or circuits should be removed and terminated immediately. In "nondangerous" areas, terminals and circuits should be left in place or disconnected based on cost guidelines.
 - (3) It is advisable to retain a small number of circuits for quick reassignment in situations where some service requests require very quick action. The number of retained circuits should be based on past requirements at a given location.

(a) Circuit Connect/Disconnect Algorithm.

- 1 This algorithm should compare all the costs of disconnecting and reconnecting a circuit (including order costs; software costs; and, for Centrex lines, possible higher future access charges) to the monthly cost of the circuit. For a tariffed line, the monthly cost is the monthly service charge. For a non-tariffed line, the monthly cost might be a monthly maintenance cost per circuit. However, it is possible that there are no avoidable monthly costs for a nontariffed circuit. In that case, there is not reason to disconnect the circuit, other than to prevent some abuse.
- 2 Comparing these two costs should indicate the maximum number of months that the circuit should be left in service while unused. Up to this point, it will be less expensive to keep the circuit in service; but after that point, disconnecting and later reconnecting the circuit will be less expensive than the

accumulated monthly cost of keeping it in service. Ideally, all costs should be reduced to present value.

(b) Terminal Connect/Disconnect Algorithm

- 1 This algorithm is essentially the same as the circuit connect/disconnect algorithm. It should determine that maximum number of months that terminal equipment should be left unused in place, instead of returning it to inventory for reuse by others.
- 2 The algorithm should sum all the costs of removing and reinstalling this type of equipment. This figure should be compared to the monthly cost of the equipment. Up to a certain number of months, it will be more expensive to remove the equipment. But, at some point, it will become cheaper to remove the equipment and reinstall similar equipment later.
- 3 Monthly cost can be the purchase price of the equipment divided by the average useful life. For most digital equipment, 48 months is considered an average useful life. Longer than that, the equipment is obsolete. Ideally, all costs should be reduced to present value.

