

DOE 1360.1B
1-7-93

THIS PAGE MUST BE KEPT WITH DOE 1360.1B, ACQUISITION AND
MANAGEMENT OF COMPUTING RESOURCES.

DOE 1360.1B, ACQUISITION AND MANAGEMENT OF COMPUTING
RESOURCES, HAS REVISED DOE 1360.1A TO REFLECT ORGANIZATIONAL
TITLE, ROUTING SYMBOL, AND OTHER EDITORIAL REVISIONS
REQUIRED BY SEN-6. DUE TO THE NUMBER OF PAGES AFFECTED BY
THESE REVISIONS, THE ORDER HAS BEEN ISSUED AS A REVISION.

U.S. Department of Energy
Washington, D.C.

ORDER

DOE 1360.1B

1-7-93

SUBJECT: ACQUISITION AND MANAGEMENT OF COMPUTING RESOURCES

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1. PURPOSE. To establish Department of Energy (DOE) policies and procedures for the acquisition and management of computing resources.
 2. CANCELLATION. DOE 1360.1A, ACQUISITION AND MANAGEMENT OF COMPUTING RESOURCES, of 5-30-86.
 3. SCOPE. The provisions of this Order apply to all Departmental Elements and to management and operating (M&O) contracts, and those other contracts which call for acquisition, management, and/or use of computing resources, as provided by law and/or contract and as implemented by the appropriate contracting officer.
 4. COVERAGE. This Order covers computing resources as described below. (Except as described in paragraphs 4c and 4d below, this Order pertains to the acquisition and management of computing resources where title or the right to title vests with the Department.)
 - a. Except as noted in paragraph 5, covered equipment includes all general purpose computing resources regardless of cost, use, or how acquired. General purpose computing resources includes general management and special management applications and research computers.
 - (1) Various uses of general purpose computing resources include:
 - (a) Business;
 - (b) Scientific and engineering;
 - (c) Data acquisition, data reduction, and process control;
 - (d) Word and text processing;
 - (e) Personal computing; and
 - (f) Computer-aided design, engineering, and manufacturing applications.

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Office of Information
Resources Management

(2) Various ways of acquiring computing resources Include:

- (a) New acquisition;
 - (b) Reutilization of DOE-reassigned, Government-excess, or exchange/sale computing resources; and
 - (c) Used computing resources.
- b. The acquisition of automated data processing (ADP) services from other Government agencies or the private sector is covered by this Order.
 - c. Computing resources acquired by the Department or its management and operating contractors where title or the right to title vests with another Government agency is subject to modified acquisition approval as set forth on page II-8, paragraph 8.
 - d. Computing resources provided on a free-use basis is also subject to the acquisition approval procedures of this Order.

5. EXCLUSIONS. Computing resources not covered by this Order include:

- a. Special purpose computing resources.
- b. General purpose computing resources that are integrally embedded within the instrumentation associated with the experiment or other application. This includes computing resources embedded within a weapons system.
- c. General purpose computing resources that are not integrally embedded but are acquired as part of a larger non-ADP turnkey system provided under one contract and in which the selection or supplier chosen is not at the discretion of the Department or its cost-type contractors. This, for example, could include computing resources acquired as part of a fire alarm system or other physical security or environmental monitoring systems. However, Departmental Elements should not use this exclusion to avoid severing acquisitions of computing resources from larger procurements, in accordance with Federal Information Resource Management Regulation (FIRMR) 201-20.305, when it is operationally feasible to do so and when such action will promote economy and efficiency.
- d. Other unusual situations where waivers from this Order are approved by the Director of Administration and Management (AD-1).

6. REFERENCES.

- a. Public Law 89-306, The Brooks Bill, of 10-30-65, which provides for the economic and efficient purchase, lease, maintenance, operation, and utilization of computing resources by Federal departments and agencies.
- b. Public Law 96-511, The Paperwork Reduction Act of 1980, of 12-11-80, which is intended to reduce paperwork and enhance the economy and efficiency of the Government and private sector by improving Federal information policy making.
- c. Title 17, United States Code (U.S.C.), Copyright Law.
- d. Title 18 U.S. C. 1905, Trade Secrets Act, which provides criminal sanctions for Government employees who mishandle proprietary data.
- e. Public Law 98-369, Competition in Contracting Act, which requires, among other things, that full and open competition be utilized in the acquisition of supplies and services and that specifications not be unnecessarily restrictive of competition.
- f. The Office of Management and Budget (OMB) Circular A-11 "Preparation and Submission of Budget Estimates," which provides guidance for the preparation and submission of annual budgets and associated materials.
- g. OMB Circular A-94, "Discount Rates to be Used in Evaluating Time-Distributed Costs and Benefits," of 3-27-72, which advocates the use of the present value discount methodology In making economic analysts comparisons.
- h. OMB Circular A-127, "Financial Management Systems," of 12-11-84, which prescribes policies and procedures to be followed by Executive departments and agencies in developing, operating, evaluating, and reporting on Financial Management Systems (FMS).
- i. OMB Circular A-130, "Management of Federal Information Resources," of 12-12-85, which establishes policy for the management of Federal information resources.
- j. FIRMR, 41 Code of Federal Regulations (CFR), Chapter 201, established to publish and codify uniform policies and procedures pertaining to Information resources management activities by Federal agencies.
- k. Title 48 CFR Chapter 1, Federal Acquisition Regulation (FAR), which sets forth regulations that Federal agencies must follow in acquiring goods and *services*.

- l. Title 48 CFR Chapter 9, DOE Acquisition Regulation (DEAR), which implements the FAR.
- m. DOE Property Management Regulations (DOE PMR), which implement and supplement the Federal Property Management Regulations (FPMR, 41 CFR Chapter 101) issued by the General Services Administration (GSA).
- n. DOE 1330.1D, COMPUTER SOFTWARE MANAGEMENT, of 5-18-92, which establishes policies and responsibilities for computer software management.
- o. DOE 1360.2B, UNCLASSIFIED COMPUTER SECURITY PROGRAM, of 5-18-92, which establishes Departmentwide requirements, policies and procedures for developing, implementing, and sustaining an unclassified computer security program.
- p. DOE 1360.3C, INFORMATION TECHNOLOGY STANDARDS, of 10-19-92, which establishes responsibilities and policies for the implementation of Government-wide ADP standards and for the development and implementation of Departmentwide ADP standards.
- q. DOE 1360.7A, USE OF TERMINALS AND MICROCOMPUTERS/WORD PROCESSORS OFFSITE AS WELL AS PRIVATELY-OWNED ON- OR OFFSITE, of 6-12-92, which establishes DOE policy and procedures for the off-site use of Department-owned terminals and microcomputers/word processors and use of privately-owned terminals and microcomputers/word processors for DOE work on- or offsite.
- r. DOE 1360.8A, ANALYSES OF BENEFITS AND COSTS FOR INFORMATION TECHNOLOGY RESOURCES INITIATIVES, of 5-18-92, which establishes policies, responsibilities, and procedures for the use of analyses of benefits and costs during the decision making process, and the selection of the most cost-effective means of meeting the mission of DOE.
- s. DOE 1370.2A, COMPUTER-AIDED DESIGN, ENGINEERING, AND MANUFACTURING RESOURCES, of 6-12-92, which establishes DOE policies and responsibilities for the management and administration of such resources and associated technologies.
- t. DOE 1450.1C, ACQUISITION, UTILIZATION, AND ADMINISTRATION OF TELEPROCESSING SERVICES, of 9-3-86, which sets forth DOE policies and procedures for acquiring and utilizing teleprocessing services from commercial sources.
- u. DOE 4200.1C, COMPETITION IN CONTRACTING, of 1-9-87, which implements the Competition In Contracting Act and sets forth procedures and policies for justifications and approvals for acquisitions that are made on a basis other than full and open competition.

- v. DOE 4300.2B, NON-DEPARTMENT OF ENERGY FUNDED WORK (WORK FOR OTHERS), of 7-16-91, which establishes DOE policy, responsibilities, and procedures for authorizing and administering non-DOE-funded work performed under DOE contracts.
 - w. DOE 5100 series, which establish the policy, procedures, and responsibilities of DOE for budget formulation, execution, review, and analysis in accordance with executive, legislative, and internal management requirements.
 - x. DOE 5160.1B, REPROGRAMMING, RESTRUCTURING, AND APPROPRIATION TRANSFER PROCEDURES, of 5-18-92, which establishes policy, criteria, and procedures for initiating reprogramming, restructuring, and appropriation transfer actions.
 - y. DOE 5300.1C, TELECOMMUNICATIONS, of 6-12-92, which establishes policy and general guidance for the use, review, coordination, and provision of telecommunications services for Departmental Elements.
 - z. DOE 5639.6, CLASSIFIED COMPUTER SECURITY PROGRAM, of 9-15-92, which established uniform requirements, policies, responsibilities, and procedures for the development and implementation of a DOE Classified Computer Security Program to ensure the security of classified information in ADP systems.
 - aa. DOE 2200.12A, FINANCIAL MANAGEMENT SYSTEMS, of 5-14-92, which prescribes Departmental requirements and procedures to be followed in planning, developing, operating, evaluating, and reporting financial management systems.
7. DEFINITIONS. See Attachment 1.
8. POLICY. It is the policy of DOE that:
- a. Computing resources shall be acquired and used in the most efficient, effective, and economic manner consistent with the expeditious performance of approved programs.
 - b. Governmental and Departmental policies and procedures that address the management and use of computing resources shall be implemented and existing resources presently available to DOE managed in a manner that maximizes the effective use of those resources by the programs for which they are provided.
 - co Requirements for major items of ADP equipment shall be anticipated well in advance of actual need and documented in long-range plans so that accurate priorities can be established for the systematic use of these resources in the Department. The use of short-range site operational plans is encouraged but not required by this Order.

- d. Departmental contractors shall not be allowed to acquire computing resources for DOE that is not related to the performance of their contract.
- e. Computing resources shall be acquired by the method that offers the greatest advantage to DOE.
- f. Computing resources and related resources shall be acquired competitively unless fully justified in accordance with applicable procedures.

9. REQUIREMENTS.

- a. Major items of ADPE shall be Identified and justified in Departmental budget requests. Acquisition of major items of ADPE not included in Departmental budgets requires specific congressional notification.
- b. For major items of ADPE, implementation plans, and, when specifically requested, clearance documents shall be prepared and adequately reviewed at appropriate levels within DOE. Implementation plans shall be approved prior to the release of a solicitation document for an acquisition and, when requested, clearance documents shall be approved prior to award. Clearance documents are not required unless specifically requested by the Director of IRM Policy, Plans, and Oversight (AD-24) or by the organization to whom approval authority has been delegated.
- c. Options proposed to be exercised In future fiscal years are not a determining factor for the threshold level of a major item of ADPE. Logical groupings of computing resources should not be fragmented in any one fiscal year to avoid the threshold level for a major item of ADPE. For example, subsystems (tape, disks, and so forth) or a group of central processing units (CPU), CPU upgrades, or components (memory, storage, or output devices) that are intended to collectively upgrade the capacity of a computer system or network should not be fragmented nor should separate computers on a network be acquired incrementally to avoid this threshold.
- d. Significant deviations from approved implementation plans, acquisition plans, and clearance documents shall be reviewed and approved prior to implementation to ensure that both Internal policies and externally imposed requirements are being met.
- e. For non-major items of ADPE, acquisition plans shall be prepared, reviewed, and approved at appropriate management levels prior to release of a solicitation document for an acquisition, except when an acquisition, less than \$25,000, is covered under an approved statement of strategy. This exception may be revoked by managing authorities in cases where stated policies and approved strategies

are not followed. Clearance documents are not required unless specifically requested by managing organizations (see page 13, paragraph 10g). Alternative oversight mechanisms such as management reviews and reviews of procurement files are encouraged for non-major items of ADPE.

- f. Computing resources for FMS, including computing resources having an acquisition cost exceeding \$50,000 and primarily justified on the basis of FMS requirements or applications, must be identified in the current, approved FMS 5-year plan, per reference in paragraph 6aa.
- g. The amount and detail of documentation in implementation plans, clearance documents, and acquisition plans shall be commensurate with the dollar level of the proposed acquisition.
- h. A statement of strategy may be prepared that collectively or individually covers any or all of the site individual functional areas (e.g., microcomputers and word processors, office automation, data acquisition, or process control) or other logical groupings. If within the scope of an approved statement of strategy, a proposed individual acquisition of computing resources with a purchase equivalent value of less than \$25,000 does not require an approved acquisition plan or clearance document.
- i. Economic analyses shall be conducted at appropriate stages in the acquisition cycle to support the alternative approach being proposed to satisfy the requirement and the method of acquisition recommended. For major items of ADPE, such analyses shall be prepared during the budget formulation and clearance document cycles. (In situations where a sole source acquisition is being proposed, the economic analysis is also required in the implementation plan.) For non-major items of ADPE, economic analyses shall be conducted (for proposed acquisitions other than purchase) after equipment selection but prior to award. Non-major items of ADPE proposed for purchase do not require an economic analysis unless specifically requested,
- j. Economic analyses shall be based upon the present value discount methodology in OMB Circular A-94. Guidelines for conducting economic analyses are available from AD-24. (NOTE: The alternative method for conducting economic analyses contained in OMB Circular A-104, "Evaluating Leases of Capital Assets," shall not be used for economic analyses relating to the acquisition of computing resources.)

- k. Computer security and internal controls shall be given appropriate consideration in the acquisition and use of computing resources. (See DOE 1360.2B. Guidelines on ADP internal controls are available from AD-24. For classified computing resources, see DOE 5639.6.)
- l. Computing resources shall not be acquired until it is determined and appropriately documented that the requirement cannot reasonably be met through configuration adjustments to an existing system. Performance evaluation techniques shall be employed, where appropriate, to ensure that all existing systems are being used effectively.
- m. Computing resources shall not be acquired until it is first determined and appropriately documented that the requirement cannot be met effectively, economically, and efficiently by sharing installed computing resources-
- n. Sharing of excess computing resources capacity with other Governmental users shall be encouraged.
- o. Where' required or otherwise appropriate, application software conversion studies shall be conducted and documented to support computing resources acquisitions.
- p. Excess or reassigned computing resources shall be used only when it is the most cost-effective alternative over the system life cycle. Care should be taken to avoid built-in obsolescence.
- q. Appropriate consideration shall be given to the identification and replacement of obsolescent computing resources.
- r. Computing resources no longer needed for the purpose for which they were acquired shall be made available for reassignment by following Departmentwide circularization procedures. Computing resources shall be reassigned within the Department upon a fair and equitable basis to the requestor that has demonstrated the greatest need.
- s. Whenever possible, acquired software packages shall be used in lieu of creating new applications software.
- t. Computer software, including data and manuals, is typically copyrighted or proprietary and obtained under an agreement restricting use, disclosure, and reproduction. Government and contractor employees having access to such computer software should be advised that the conditions under which the software is obtained must be respected. The unauthorized use, disclosure, or reproduction of the software may constitute copyright infringement under the United States Copyright Law and may constitute unauthorized disclosure of proprietary data as well, possibly resulting in

both civil and criminal liability. U.S. Government employees may additionally be subject to criminal sanctions under the Trade Secrets Act, 18 U.S. C. 1905. Questions relating to the legality of software duplications, use, and disclosure should be directed to the local DOE patent counsel or to the Assistant General Counsel for Intellectual Property (GC-42).

- u. Adequate controls shall be established before uploading or downloading of data from centrally controlled or shared data bases is allowed. Permission for access to data shall be obtained from the appropriate organization responsible for the data base.
- v. Information about computing activities (successes, failures, and innovative approaches) should be disseminated widely and shared to the maximum extent practicable through users groups, newsletters, conferences, direct contacts, and other forms of rapid but informal communication at the working level.
- w. When conducting acquisitions of computing resources, appropriate consideration shall be given to the needs of handicapped personnel.

10. RESPONSIBILITIES AND AUTHORITIES.

- a. Director of Information Resources Management (AD-20) shall:
 - (1) Establish policies, principles, and procedures relating to the acquisition and management of computing resources in DOE as set forth in this Order.
 - (2) Issue an annual call for the preparation and submission of information technology resources long-range site plans, and issue the Departmental information technology resources long-range plan.
- b. Director of Information Resources Management (AD-20) through the:
 - (1) Director of IRM Policy, Plans and Oversight (AD-24) shall:
 - (a) Develop and implement policies, principles, and procedures relating to the acquisition and management of Departmental computing resources as set forth in this Order.
 - (b) Formulate and establish criteria relating to requirements in justifications of need for computing resources.
 - (c) As part of the information technology resources long-range planning process, formulate and establish criteria relating to the development of computing

resource site plans, and prepare the computing resources segment of the consolidated Departmental information technology resources long-range plan.

- (d) After coordination with the appropriate program office(s), review and approve/disapprove those implementation plans, clearance documents, and economic analyses selected for Headquarters review.
- (e) Implement the ADPE Data System--a GSA-required Inventory of computer systems greater than \$50,000 - purchase-equivalent value that are owned or leased by DOE and its contractors.
- (f) Provide recommendations to DOE Headquarters program offices regarding what major items of ADPE should be supported in the budget formulation process; take unresolved issues to higher level management authorities.
- (g) Prior to the beginning of each fiscal year, determine what major items of ADPE should require Headquarters approval of an implementation plan prior to acquisition and what items should be delegated for approval.
- (h) Prior to the beginning of each fiscal year, advise each appropriate Departmental Element regarding major items of ADPE that require Headquarters approval prior to acquisition and which items have been delegated for approval. (Major items of ADPE subsequently proposed for acquisition during that fiscal year require Headquarters approval unless specifically delegated by AD-24 at a later date.)
- (i) Review and approve/disapprove significant deviations to implementation plans or clearance documents for major items of ADPE that were approved or delegated to another Departmental Element.
- (j) Review and approve/disapprove requests to acquire major items of ADPE for another Government agency where title or the right to such title will vest with the other agency.
- (k) Approve or disapprove statements of strategy and updates for the Energy Information Administration, the Office of Information Technology Services and Operations (AD-25), and Heads of Field Elements.

- (l) Determine whether proposed procurements for ADP services or non-major items of ADPE should be submitted to Headquarters for approval prior to acquisition.
- (m) Establish criteria related to the economic analysis of alternative methods of acquisition and alternatives to meeting computing resource requirements.
- (n) Conduct management reviews of the effectiveness and efficiency of the information resources management (IRM) management activities of the field elements, the Headquarters Energy Information Computing Center, and the Headquarters Administrative Computing Center; and provide guidelines to field elements for reviewing subordinate activities.
- (o) Coordinate with the Office of Procurement, Assistance and Program Management (PR-1) regarding all proposed acquisitions of computing resources requiring an Agency Procurement Request (APR) to be submitted to GSA, pursuant to the FIRMR.
- (p) Implement OMB, GSA, and the General Accounting Office (GAO) issuances that influence the computing resource responsibilities of AD-20.
- (q) Provide staff advice and assistance on "computing resource matters to DOE organizations and to Departmental contractors through the appropriate field element.
- (r) Designate representatives to serve on various interagency committees and task forces in the area of computing resources.
- (s) Maintain a liaison with OMB, GAO, GSA, the National Institute of Standards and Technology (NIST), and other Federal agencies concerning computing resource matters.
- (t) Serve as the Department's official point of contact relating to the collocation or consolidation of computing facilities.
- (u) Establish criteria relating to computing resources use and resource-sharing reporting requirements.
- (v) Develop and maintain computing resources crosscut budget documents and provide reports on IRN activities to Government agencies, as required.

- (w) Review and approve/disapprove statements of strategy and updates for those organizations that require Headquarters approval.
 - (x) Ensure that procedures are developed with each Lead Program Secretarial Office which describe the process for-interface and communications with appropriate DOE Field Office(s).
- (2) Director of Information Technology Services and Operations (AD-25) shall manage the acquisition of teleprocessing services from commercial sources pursuant to DOE 1450.1C.
- c. Chief Financial Officer (CR-1). shall:
 - (1) Manage FMS activities pursuant to paragraph 6aa.
 - (2) Review and approve requests for the use of the GSA ADP fund.
- d. Director of Procurement, Assistance and Program Management (PR-1) shall:
 - (1) Review and approve or disapprove APRs to the GSA Office of Information Resources Management on applicable acquisitions (requests for delegation of procurement authority) and requests for use of the ADP fund after appropriate coordination with AD-24.
 - (2) Maintain a liaison with GSA and the Office of Federal Procurement Policy, OMB, on matters concerning procurement of computing resources.
 - (3) Ensure that contracting officers include the requirements of this Order in cost-reimbursement type contracts.
- e. General Counsel (GC-1), through the Assistant General Counsel for Procurement and Finance (GC-34), shall provide coordinated legal advice and assistance relating to acquisition, management, administration, and use of computing resources.
- f. Program Secretarial Officers shall:
 - (1) Review computing resource plans for sites under their cognizance and approve programmatic requirements as part of the information technology resources long-range site plans.
 - (2) Provide program planning information to AD-24, when required.

- (3) For sites under their cognizance, including multi-program sites, and with the appropriate assistance of AD-24, request budgetary authority for major items of ADPE that are supported by the Department, as described in Chapter I and in the DOE 5100 series.
- (4) Follow DOE 5160.1B when major items of ADPE are to be acquired out-of-cycle.
- (5) Ensure that the most appropriate method of acquisition is used. Approve and defend the rationale for selection of other than the most economical for acquisition of major Items of ADPE.
- (6) Ensure that documented studies and proposals to acquire computing resources and continuing plans for use of Government-held equipment are prepared with full consideration being given to economy, efficiency, and programmatic need for the work to be done.
- (7) Review and concur on approval/disapproval of implementation plans and clearance documents submitted for Headquarters review and approval.

g. **Heads of Field Elements:** the Administrator, Energy Information Administration, and the Director of Information Technology Services and Operations (AD-25) shall:

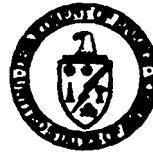
- (1) Obtain necessary approvals for the acquisition of teleprocessing services from commercial sources pursuant to DOE 1450.1C.
- (2) Delegate approval or review and approve the acquisition of ADP services (other than teleprocessing services pursuant to DOE 1450.1C) for their installation and sites under their cognizance.
- (3) Conduct management reviews of their sites' computing installations. Such reviews should ensure that continuing plans for the use of Government-held equipment give full consideration to economy, efficiency, and programmatic need for the work to be done.
- (4) Review and submit appropriate comments to Headquarters organizations on all computing resource plans for sites under their cognizance as part of the information technology resources long-range site plan process.

- (5) Review and recommend approval or disapproval to AD-24 and the appropriate program office(s) of implementation plans and clearance documents for major items of ADPE not specifically delegated.
- (6) Review and approve or disapprove implementation plans and clearance documents for the acquisition of major items of ADPE where such authority has been delegated by AD-24.
- (7) Determine the content and level of detail required in acquisition plans for non-major items of ADPE. Requirements vary depending on dollar value and acquisition complexity.
- (8) Review and approve or disapprove, or delegate approval authority for, acquisition plans for non-major items of ADPE. (Not required for acquisitions under \$25,000 when covered by an approved statement of strategy; however, this exception may be revoked in cases where stated policies and approved strategies are not followed.)
- (9) Ensure (via management reviews, clearance documents, economic analyses, concurrence in procurement actions, and so forth) that acquisitions of non-major items of ADPE are executed as proposed in acquisition plans and in the most cost-effective manner feasible.
- (10) Ensure that the policies and procedures for efficient and economical management of Government property, including the use and disposal of excess property, are applied to the management of computing resources.
- (11) Through such efforts as the sharing program and performance evaluation techniques, ensure the maximum effective use of existing ADP resources consistent with the expeditious performance of approved programs prior to the acquisition of additional resources at their installation and sites under their cognizance.
- (12) Promote appropriate sharing of computing resources within DOE and contractor organizations and with other Federal agencies.
- (13) Submit to AD-20 the reports required by this Order and other special reports as may be required.
- (14) Develop procedures to ensure that significant deviations to approved major items of ADPE are identified and brought to the attention of AD-24 and cognizant Headquarters programmatic organizations for approval prior to implementation.

- (15) Approve or disapprove significant deviations to approved acquisition plans and clearance documents for non-major items of ADPE.
- (16) Report sharing information to GSA, as required.
- (17) Review and request approval from AD-24 to acquire major items of ADPE for another Government agency where title or the right to such title will vest with the other agency.
- (18) Determine the level of information needed, review, and grant authority to acquire non-major items of ADPE for another Government agency where title or the right to such title will vest with another agency.
- (19) Provide advice and assistance concerning computing resources to sites under their cognizance.
- (20) Ensure that all cost-reimbursement type contractors are required to comply with the provisions of this Order, preferably by including such a requirement in the statement of work of the contract.
- (21) For all major items of ADPE at their installation and sites under their cognizance for which a clearance document is not required, ensure that economic analyses are conducted. Obtain approval from the Headquarters organization having programmatic responsibility for those other than the most cost-effective.
- (22) Where economic analyses are required for non-major items of ADPE other than purchase, grant approval in those situations when other. than the most cost-effective alternative is selected.
- (23) Request review and comment from cognizant Headquarters programmatic organizations and approval from AD-24 for the statement(s) of strategy and updates for their installations, as appropriate.
- (24) Review and approve or disapprove statements of strategy and updates for those sites under their cognizance.

- (25) Ensure that each site designates a senior management official(s) to be responsible for microcomputer and word processing activities. All acquisitions of microcomputers and word processors conducted by the site are to be authorized by the designated senior management official(s). Further, they either should be within the scope of an approved statement of strategy or approved under an appropriate acquisition plan or implementation plan.
- (26) Prepare and submit to PR-1 and AD-24 all APRs to be submitted to GSA.

BY ORDER OF THE SECRETARY OF ENERGY:



DOLORES L. ROZZI
Director of Administration
and Management

DEFINITIONS

1. ACQUISITION PLAN. Documentation supporting the acquisition of a non-major item of ADPE which must be approved prior to release of a solicitation document for an acquisition.
2. ADP SERVICES. The computation or manipulation of data by computers in support of administrative, financial, communicative, scientific, and other similar data processing applications. This term includes teleprocessing (including remote batch) and local batch processing.
3. ADP SUPPORT SERVICES. Services, except computing resources maintenance services, that are adjunct and essential to ADP activities but do not involve the actual computation or manipulation of data by a computer. This term includes source data entry, computer output microfilming, conversion, training, studies, facilities management of Government-furnished computing resources equipment, systems analysis and design, programming, equipment operation, and computer performance evaluation.
4. CLEARANCE DOCUMENT. Documentation supporting the completed results of an acquisition of computing resources which, when requested, must be approved prior to award.
5. COMPETITIVE PROCUREMENT. A "competitive procurement" means that the Government's requirements are set forth in the form of functional requirements, data systems specifications or equipment performance requirements, a combination thereof, or other unrestrictive specifications that allow full and open competition and are devoid of bias toward either a specific product or a specific offeror.
6. **COMPUTING RESOURCES**. **Includes** ADPE, hardware maintenance, and ADP services.
7. ECONOMIC ANALYSIS. A systematic approach to evaluating the relative worth of alternative ways to reaching an objective for a proposed project. The economic analysis is used to examine and relate the costs, benefits, and uncertainties of each alternative in order to determine the most cost-effective means.
8. **FREE-USE COMPUTER**. Computing resources supplied to the Department for use in either a research or production mode without financial obligation by the Government. A free-use computer may involve costs associated with hardware or software maintenance.
9. GENERAL MANAGEMENT COMPUTER. Any general purpose computer that is not a special management computer. General management computers include data base machines, front-end and back-end processors, and computers used for management information systems, scientific/engineering applications, network functions, office systems, computer-aided design, computer-aided engineering, and computer-integrated manufacturing.

10. GENERAL PURPOSE COMPUTING RESOURCES. All commercially available, mass-produced computing resources components and the hardware systems (digital and hybrid) created from them, regardless of use, size, capacity, or price, that are designed for a variety of applications and not for any specific application(s). (General purpose computing resources includes both general management and special management computers to distinguish between different reporting requirements, especially in the computing resource portion of the information technology resources long-range plan.)
11. IMPLEMENTATION PLAN. Documentation supporting the acquisition of a major item of ADPE which must be approved prior to release of a solicitation document for an acquisition.
12. LANDLORD PROGRAM. The Headquarters program having funding or institutional budget responsibility for general purpose equipment at a site.
13. LIMITED COMPETITION. A procurement that limits the type of equipment (e.g., plug compatible, software compatible, make and model) allowed to be bid in response to a solicitation.
14. MAJOR ITEM OF ADPE. A major item of ADPE refers to the acquisition of a computing resource component or group of components that has a purchase equivalent value of \$1,000,000 or more. The determining threshold level for a major item of ADPE is whether the purchase equivalent value is \$1,000,000 or more irrespective of the actual method of acquisition (purchase, lease, or lease/purchase combination) or the type of funding used. Thus, an Item of leased computing resources is a major item of ADPE if the purchase equivalent value is \$1,000,000 or more even if the annual lease costs are less than \$1,000,000.
 - a. For new Items of computing resources, the purchase equivalent value is based upon list, anticipated, or actual purchase price.
 - b. For used items of computing resources or reutilization of DOE-reassigned, Government excess, or exchange/sale computing resources, the purchase equivalent value is based upon the current best estimate market value.
15. MICROCOMPUTERS (Personal Computers). The smallest class of computers, using microprocessors for their central processing unit, which are capable of performing a wide variety of analytical , computational, and text processing applications and which are most typically operated directly by their end users.
16. MIE NUMBER. A unique code assigned to a major item of ADPE for long-range planning. It consists of the letter abbreviation of the site, separated by a dash from the last two digits of the fiscal year of proposed acquisition, followed by a dash and a sequential number (e.g., ANI-93-61).

17. NON-MAJOR ITEM OF ADPE. Any computing resources costing less than the specified dollar-level threshold criteria for a major item of ADPE.
18. OBSOLESCENT COMPUTING RESOURCES Computing resources that are no longer meeting program requirements in a cost-effective manner primarily because of aging technology. (Generally, computing resources over 8 years old, based on the delivery date of its first unit, should be examined to determine whether it is approaching obsolescence.)
19. OUT OF CYCLE ITEMS. New major items of ADPE which are planned to be acquired in a fiscal year and have not been identified and justified in that fiscal year's congressional budget request.
20. RESEARCH COMPUTER. A computer acquired and used predominantly for research into hardware and software technology advancements and not used for processing production jobs.
21. SHARING. The provision of available resources to users by an organization with no primary programmatic responsibility for supporting those users.
22. SIGNIFICANT DEVIATION. This includes: (a) changes in approved funding strategies for major items of ADPE (e.g., accelerated payments or buy-out of lease to ownership contracts, or purchase of leased items); (b) changes to the type of funds budgeted and approved for use with a specific major item of ADPE (capital, operating, or construction); (c) substantive changes in release dates of leased computing resources; (d) significant changes to the scope of items to be acquired; and (e) changes in the fiscal year in which the item is to be acquired.
23. SOLE SOURCE PROCUREMENT. A "sole source procurement" is one in which the Government's requirements are set forth in the form of specifications that are so restrictive that there is only one known supplier capable of satisfying the Government's requirement. Sole source procurements require a written justification and approval in accordance with DOE 4200.1C, COMPETITION IN CONTRACTING, of 1-9-87, or the contractors approved procurement procedures.
24. SPECIAL MANAGEMENT COMPUTER. A general purpose computer used in one of the following categories:
 - a. Control. Computing resources that are a vital part of a facility or larger complex of non-computing resources and has the primary purpose of real-time process control functions (including controlling, monitoring, analyzing, or measuring a process) for the facility or non-computing resources.
 - b. Data Acquisition. Computing resources that are an essential part of a facility or larger non-ADPE item or system and has the primary purpose of collecting data from the facility or equipment for further analysis.

- c. **Classified.** Computing resources whose physical location is classified information.
 - d. Mobile. Computing resources located on ships, planes, trains, or
25. **SPECIAL PURPOSE COMPUTING RESOURCES** A computer specially designed and not just configured to perform a special application or function.
26. **WORD PROCESSOR**. A microcomputer-based electronic device that normally consists of at least a keyboard, terminal, and printer used to display, store, retrieve, manipulate, and print textual information.

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CHAPTER I

LONG-RANGE PLANNING AND BUDGETING PROCESS

1. OVERVIEW.

- a. The Department's annual information resources management long-range planning process covers computing resources, telecommunications, software management, financial management systems (FMS), and related technologies.
- b. The computing resources portion of the information technology resources planning process is used to estimate future requirements along program lines and to project plans for the acquisition and use of major equipment resources to meet those requirements.
- c. This process has been designed to ensure that major computing resources requirements are identified well in advance of actual need and are systematically reviewed in the Department to establish adequate Departmental priorities.
- d. The computing resources planning process directly supports the budget formulation process by providing descriptions of the requirements from when needs are first identified to when, all other alternatives having been considered, the acquisition of computing resources becomes a part of the Departmental budget request. This process helps ensure that the requirements for each major item of ADPE in the Department's budget request have been fully justified, documented, and reviewed within the overall priorities of the Department.
- e. It is critical to the success of this process that the need for computing resources is adequately justified in the long-range planning and budget process. Then management can properly consider the need for computing resources in connection with other competing program priorities and can provide sufficient support during the internal and external budget formulation process. Justifications of need for computing resources should address the specific appropriate areas that are identified in the computing resources planning portion of the annual call for information resources management long-range site plans.

2. LONG-RANGE PLANNING

- a. The Office of Information Resources Management (AD-20) issues an annual call for the preparation of information resources management long-range site plans, including a section on computing resources. This call identifies those sites required to prepare plans and contains instructions on format, content, and reporting requirements.

- b. In order to provide a long-range perspective of a site's programmatic requirements and planned resources, computing resources planning data spans an 8-year period beginning with actual data for the past fiscal year, estimates for the current fiscal year and budget fiscal year, and requirements for the plan fiscal year and 4 subsequent fiscal years (out-years). This approach provides for identification and review of a site's requirements for additional major computing resources during as many as 5 annual 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 computing resources before actual budgetary decisions are required.
- c. Computing resources planning at the site level involves determining the computing support required for each program or project at the site, comparing these requirements to the capacity and capability of the computing equipment available to the site, and developing plans and strategies to provide additional computing resources, if needed, to meet these requirements.
- d. Each year the long-range site plans are reviewed and approved by site management and, if applicable, the cognizant DOE Field Offices. At Headquarters, both programmatic and IRM management reviews are conducted of the computing resources portion. The computing resources plans are examined by the cognizant Program Secretarial Officer (PSO) to assist in the formulation of their 5-year program and planning estimates. The programmatic review provides an examination of the estimated programmatic requirements among all pertinent sites and an analysis of the type of funds required based upon a review of economic analyses contained in the site plans. The PSOs evaluate the estimated requirements at each site, both individually and collectively, and then evaluate their priorities in allocating computing resource funding.
- e. The Director of IRM Policy, Plans and Oversight (AD-24) shall review the computing resources portion of the site plans, including the justification for the requirements and projected costs for providing the estimated resources, the results of the economic analyses, and the plan's consistency, completeness, and consideration of technical alternatives. As the data presented in the individual site plan is examined, issues are identified and resolved. Then the final aggregate data are summarized and consolidated into the computing resources portion of the Departmentwide information resources management long-range plan. The results of these reviews are also provided to the sites for appropriate consideration in the formulation of their next annual long-range site plan.

3. BUDGET FORMULATION FOR COMPUTING RESOURCES.

a. Type of Funding for Computing Resources by Method of Acquisition.

The following guidance is provided relative to the type of funding to be used for computing resources acquisitions and is applicable to those sites and organizations having multiple types of appropriations (i.e., operating or plant and capital equipment).

- (1) Purchase Not Related to a Construction Project. Computing resources for which DOE will retain title, that cost in excess of \$5,000, have an expected service life of more than 2 years, and are not required to complete a construction project, are to be budgeted as capital equipment not related to construction. Computing resources, less than \$5,000, must be budgeted from operating expenses.
- (2) Purchase Related to a Construction project Computing resources acquired as part of a construction project should be funded under the plant account.
- (3) Lease with Option to purchase The lease payments are budgeted as operating expenses. If the option to purchase is exercised, the net purchase price is to be budgeted as capital equipment not related to construction.
- (4) Lease to Ownership Funds for periodic payments (monthly, yearly, or otherwise) are to be budgeted under operating expenses. In the event that accelerated purchase prior to the last 12 calendar months of the lease to ownership contract occurs by paying the full amount of the remaining installments at one time, funds required to complete the purchase are to be budgeted as capital equipment not related to construction.
- (5) The type of funding budgeted for computing resources should be a programmatic decision taking into account programmatic requirements and economic analyses based upon marketing information available at the time. Since computing resources market conditions change frequently, however, acquisition strategies must be constantly re-evaluated. (For example, even though capital equipment funds may have been initially budgeted for a particular item, later information may result in a change of strategy, and it may be more appropriate to lease rather than purchase. DOE and contractor organizations reviewing justifications of need, implementation plans, or clearance documents for major items of ADPE should be alert to market changes and make necessary recommendations to AD-24 at any time during the acquisition process to take advantage of these changes.)

b. Budget Requirements for Major Items of ADPE.(1) Identification and Justification in Program Mainline Budget.

- (a) All major items of ADPE must be separately identified and justified in the appropriate budget narrative material of the funding or landlord program in both the OMB and computing resources proposed for the budget year, regardless of whether they are proposed for lease or purchase or whether they are to be funded by operating, capital, or construction funds.
- (b) In cases where a single program proposes the acquisition of a major item of ADPE from operating funds, the total acquisition cost for each appropriate fiscal year must be shown by the funding program. In those cases where major items of ADPE are to be funded by multiple programs under operating funds, the total fiscal year acquisition costs must be shown by the landlord program, the DOE program having budget responsibility for general purpose equipment at that location. Where appropriate, however, it should be noted that the actual costs will be shared programmatically according to a charge-back plan based upon use.
- (c) Information used by the Department to identify and justify these major items of ADPE is primarily obtained from data supplied in the computing resources portion of the information technology resources long-range site plans.

(2) Crosscut Computer Table.

- (a) In addition to the identification and justification of major items of ADPE in the mainline budget material, the Department prepares a separate crosscut summary computer table. This table specifically lists each major item of ADPE (excluding items funded from construction funds) requiring funds during either the past fiscal year, the current fiscal year, or the budget fiscal year. These crosscut summaries are provided to OMB and Congress at the time of the respective Departmental budget submissions.
- (b) Each funding or landlord program having a major item of ADPE, where the item requires budget authority, incurs obligations, or accrues costs during the past fiscal year through the budget fiscal year period,

prepares this crosscut summary. Each Program Secretarial Officer reviews and concurs on their respective crosscut summary prepared by AD-24.

(c) AD-24 consolidates and prepares the information for transmittal to OMB and the Congress.

c. Out of Cycle Major Items of ADPC

(1) Out of cycle major items of ADPE require specific . notification to the cognizant congressional authorization and appropriation committees before they can be approved for acquisition. In most cases, the Department expects that major items of ADPE will be identified and justified well in advance through the systematic and integrated computing resources planning and budgeting process. Therefore, there must exist compelling changes in programmatic, technical, or market conditions that were unforeseen at the time when long-range plans and budget requests were prepared for that fiscal year before the Department will agree to notify Congress that a major item of ADPE is planned to be acquired out of cycle.

(2) Overall policy, criteria, and procedures for requesting approval of out of cycle items are contained in DOE 5160.1B.

4. REPORTING COMPUTING RESOURCES COSTS TO OMB.

- a. Pursuant to the requirements of OMB Circular A-11 the Department is required to report annual cost information on information technology systems. This report includes information on computing resources costs.
- b. These reporting requirements relating to IRM costs are coordinated within the Department by AD-24. A substantial portion of the information required is prepared by AD-24 based on information contained in the computing resources portion of the individual information technology resources long-range site plans. However, in order to complete the various IRH reports required by OMB, AD-24 also requires assistance from Headquarters Program Secretarial Officers. For example, one report requires the identification of acquisitions planned during the period of the current fiscal year through budget fiscal year plus 4 years. This report will be prepared initially by AD-24 on the basis of information contained in individual site plans. Programmatic review and concurrence in these planned acquisitions are essential, however, before the report can be submitted to OMB as a consolidated Departmental submission.

5. **BUDGET EXECUTION.**

- a. Prior to the beginning of each fiscal year, AD-24, issues a memorandum to applicable Departmental Elements identifying, from the list of major items of ADPE explicitly identified in the Departmental congressional budget request, which major items of ADPE require the submission of an implementation plan for Headquarters review and approval and which have been delegated for approval.
- b. Factors used in determining whether to require Headquarters approval or delegate such approval include the cost involved, the proposed level of competition, the degree of scrutiny anticipated both internally and externally, and the performance of IRM management in the responsible field element.
- c. All major items of ADPE identified in the congressional budget request are separately identified in the Department's approved funding programs issued by the Chief Financial Officer. Major items of ADPE that require that an implementation plan and/or clearance document approved by Headquarters will be footnoted with an "H" after the amount of the item in these approved funding programs to denote that Headquarters approval is required prior to the obligation of funds.

CHAPTER II

ACQUISITION OF COMPUTING RESOURCES

1. GENERAL.

- a. This chapter describes the activities and documentation required to obtain approval to acquire computing resources. The acquisition process for a major item of ADPE generally requires that an implementation plan be approved prior to release of a solicitation document for an acquisition and that, when requested, a clearance document be approved prior to contract award.
- b. For non-major items of ADPE, the procedure dictates that an acquisition plan be approved prior to release of a solicitation document for an acquisition. The contents and level of detail of an acquisition plan are left to the discretion of the managing organization (see page 13, paragraph 10g). However, the level of detail and contents of an acquisition plan should be commensurate with the dollar level of the proposed acquisition. In fact, the level of detail for most acquisitions having a purchase equivalent of less than \$100,000 may be limited to 1 or 2 pages. A list of potential items to consider for inclusion in an acquisition plan is included on page II-5, paragraph 3b. Clearance documents are not required unless specifically requested. In lieu of the preparation and approval of clearance documents, the use of alternative methods (e.g., management reviews and concurrence in procurement actions) is encouraged for non-major items of ADPE to ensure that acquisition plans are executed as approved.
- c. An alternative procedure for acquisitions costing less than \$25,000 may be used. If, within the scope of an approved statement of strategy, a proposed Individual acquisition of computing resources with a purchase equivalent value of less than \$25,000 does not require the preparation and approval of an acquisition plan. A statement of strategy may be prepared that collectively or individually covers any or all of the site individual functional areas (e.g., microcomputers/word processors, data acquisition, process control) or other logical groupings. Statements of strategy must be approved by the next higher organizational level (see page 9, paragraph 10). Elements to be contained in the statement of strategy are described in Chapter III.
- d. The acquisition process described below for major items of ADPE assumes that the programmatic need for such computing resources will have been justified in the Department's planning/budgetary process. Implementation plans for out of cycle items (see page I-5, paragraph 3c) should contain a thorough justification of need consistent with the latest instructions issued by the Office of Information Resources Management (AD-20) in the annual call for information resources management long-range site plans.

2. IMPLEMENTATION PLAN.

- a. Overview. For each major item of ADPE, an implementation plan must be prepared and approved by the designated approving authority. Generally, the implementation plan should be submitted to the final approving authority at least 60 days before a solicitation is scheduled to be issued. Earlier submissions are encouraged. In fact, implementation plans can be prepared and reviewed prior to the start of the fiscal year for which the item is budgeted. Implementation plans may be approved prior to the start of the fiscal year in which budgeted with the specific approval of the Director of IRM Policy, Plans, and Oversight (AD-24) .
- b. Funding Source. The elements of an implementation plan described below include those acquisitions acquired either with DOE funds or with funds from another agency where the Department of Energy will retain title to the computing resources.
- c. Implementation Plan Elements The following are the required elements of an implementation plan for other than research computers/free-use computers.
 - (1) A brief statement of the need, including any changes since the preparation of the detailed justification of need in the long-range site plan. Refer to the site plan containing the justification of need and the applicable MIE number. The statement of need should discuss the following:
 - (a) The results of the validation of current workload and the workload forecast, which describes size and amount of the projected workload relative to the item being acquired.
 - (b) The results of the performance evaluation of the current equipment indicating the performance shortfalls that justify acquiring a new item.
 - (c) The efforts to share computing resources from another Government installation.
 - (2) A discussion of any implications relating to follow-on acquisitions associated with this acquisition, including whether this acquisition sets a de facto standard for future enhancements or additional related computing resources systems. Also include discussion of any implications from previously approved acquisitions in the proposed acquisitions.

- (3) A discussion of the level of competition being solicited (fully competitive; limited competition; sole source) and a clear and convincing explanation for other than full and open competition.
- (4) A discussion of the methods of acquisition alternatives (e.g., lease, purchase) under consideration, including factors that might eliminate any from consideration.
- (5) Major milestones including:
 - (a) Delegation of procurement authority from GSA (if required);
 - (b) Solicitation issuance;
 - (c) Vendor response;
 - (d) Contract award;
 - (e) Delivery; and
 - (f) Operational date.
- (6) The source of funds and estimated cost.
- (7) Specifications If other than sole source, the technical specification should closely reflect those that will be cited in the solicitation. Each specification must be clearly stated as mandatory or desirable. If sole source, provide a description of the main features of the specification that will demonstrate satisfaction of the requirement.
- (8) Evaluation criteria, methodology, and the relative weighing to be used for selection.
- (9) Criteria for proof of performance by the vendor or ability to perform (e.g., benchmarks, demonstrations, references, and acceptance testing).
- (10) An identification of where the equipment will be placed, including any site preparation efforts involved and the estimated cost.
- (11) If appropriate, a discussion of the duration of parallel operations or the migration to the new hardware system.
- (12) A summarized listing of any computing resources to be removed and anticipated removal date.

- (13) As appropriate, a summary of the results of application software conversion studies (see page IV-4, paragraph 7).
 - (14) A statement of any plans for developing in-house operating system software or significantly modifying vendor operating system software.
 - (15) A discussion of the strategy for hardware maintenance.
 - (16) A certification that the Computer Protection Program Manager (CPPM), per DOE 1360.26, or the proper accrediting official, as designated in DOE 5639.6, has reviewed the specification and is assured that appropriate protection requirements are included.
 - (17) In those situations where a sole source acquisition is being proposed, the results of the economic analysis.
- d. Implementation Plan Elements for Research Computers. The following list identifies the data needed when preparing an implementation plan for research computers.
- (1) Project purpose, justification, scope, and objectives.
 - (2) Expected benefits (qualitative and quantitative).
 - (3) Overall project milestones and evaluation methodology.
 - (4) A summary of responsibilities and functions of both the DOE site staff and the vendor relative to the research project, including relative roles on cost sharing.
 - (5) The proposed method of screening the activities to be conducted on the research computer.
 - (6) A description of the means and availability of access to research information and results and the mechanism for disseminating such information.
 - (7) Rationale for selecting specific hardware.
 - (8) Identification and cost of proposed hardware and operating system software and source of funds.
 - (9) Rationale for proposed method of acquisition (e.g., lease purchase).
 - (10) Explanation as to whether the computer will be used solely for research purposes or whether it will be used to satisfy some production computing requirements.

- (11) A certification that the CPPM or proper accrediting official, as designated in DOE 5639.6, as appropriate, is assured that the appropriate computer security requirements are included.
- e. Implementation Plan Elements for Free-Use Computers. The following list identifies the data needed when preparing an implementation plan for free-use computers.
 - (1) Purpose and scope of intended use.
 - (2) Benefit to the Department, program, or site.
 - (3) Equipment to be acquired and estimated purchase equivalent
 - (4) Duration of the agreement and any obligations, commitments, or responsibilities by the site.
 - (5) Implications on any future acquisitions.
 - (6) A certification that the CPPM or proper accrediting official, as designated in DOE 5639.6, as appropriate, is assured that the appropriate computer security requirements are included.

3. ACQUISITION PLANS.

- a. Acquisition plans are used for acquisitions of non-major items of ADPE. They are required for all non-major items except those costing under \$25,000 that are within the scope of an approved statement of strategy. (The under \$25,000 exclusion can be revoked by managing authorities if stated policies and approved strategies are not being followed.) Each Departmental Element is responsible for determining which acquisition plans must be approved by them and which can be delegated for approval to respective sites. The content and level of detail in acquisition plans are left to the discretion of the managing organization (see page 13, paragraph 10g). The elements required and the corresponding level of detail in acquisition plans should be commensurate with the dollar level and complexity of the proposed acquisition.
- b. Suggested Acquisition Plan Elements. The items listed below indicate the types of elements to consider when completing an acquisition plan.
 - (1) A justification of need for the proposed acquisition, including discussion of alternatives considered.
 - (2) Implications for follow-on acquisitions.

- (3) Competitiveness (e.g., full limited, sole source, or otherwise) and justification for anything less than fully competitive.
 - (4) The proposed method of acquisition (e.g., lease, purchase and so forth).
 - (5) Major milestones.
 - (6) The type and source of funds and estimated cost.
 - (7) Specifications.
 - (8) An evaluation model.
 - (9) A summarized listing of any computing resources to be removed and the anticipated removal date.
 - (10) A certification that the CPPM or proper accrediting official, as designated in DOE 5639.6, as appropriate, has reviewed the specification and is assured that appropriate computer security requirements are included.
4. CLEARANCE DOCUMENT. Approval of an implementation plan may require that an additional review and approval be conducted of the acquisition prior to contract award. The objective of this review is to ensure that the best overall business deal is obtained for the Department. When such a review is required, a clearance document shall be prepared.
- a. Major Items of ADPE. A clearance document will not be required unless specifically requested by the approving authority. When Implementation plans are approved by Headquarters, AD-24 will stipulate whether a clearance document is required and, if so, whether it must be forwarded to Headquarters for approval or to the responsible Departmental Element. For acquisitions of major items of ADPE where implementation plan approval authority has been delegated, the responsible Departmental Element will determine whether a clearance document is required. If required, approval must be obtained prior to contract award. If no clearance document is stipulated, the site proposing the acquisition must, as minimum, conduct and document an economic analysis supporting the method of acquisition (e.g., lease, purchase). If other than the most cost-effective alternative is selected, the site must document the rationale for the selection and obtain approval, through the cognizant field element, from the Headquarters Element having programmatic responsibility. In cases where clearance documents are not required, submission of economic analyses supporting the method of acquisition may be requested, as appropriate.

- b. Non-Major Items of ADPE. A clearance document will not be required unless specifically requested by the Departmental Element that normally serves as approving authority. When acquisition plans are approved, a statement of whether a clearance document is required will be included. If required, approval must be obtained prior to contract award. If no clearance document is stipulated, the site must conduct and document an economic analysis if the item is to be acquired by a method other than purchase. If an economic analysis is conducted and the method of acquisition chosen is not the most cost-effective alternative, the site must document the rationale for the selection and obtain approval from the managing organization. In cases where clearance documents are not required, submission of economic analyses may be requested by the approving authority, as appropriate.
- c. Clearance Document Elements The following list identifies the information needed when preparing a clearance document.
 - (1) Any significant changes to the elements in the implementation plan should be addressed.
 - (2) A summary of the results of the evaluation, including:
 - (a) Names of vendors who bid or submitted proposals.
 - (b) Names of responsive bidders or offerors and bid or proposal description. Include a brief description of rationale used in determining non-responsive bidders or offerors.
 - (c) Identification of any problems incurred during the acquisition process.
 - (d) Evaluation model summary of responsive vendors (including life cycle cost summary or other appropriate method).
 - (3) A listing of the equipment proposed to be acquired at the subsystem level.
 - (4) Economic analysis of the various acquisition options proposed and rationale for the recommended method of acquisition. If other than the most cost-effective method of acquisition is recommended, it must be supported with a statement indicating all relevant factors and approved by the Headquarters Program Secretarial Office.
- 5. METHODS OF ACQUISITION. Each acquisition of computing resources should normally contemplate the solicitation of costs for each of the four methods of acquisition: purchase, lease to ownership, lease with option to purchase, and lease. When one or more of these options is determined

to be impractical or not in the best interest of the Government, such determination should be documented, and costs then solicited for the

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- d. Functional needs identification; degree of justification and process; approach to aggregating requirements for multiple procurements; and methods of productivity measurement.
- e. Pace of Introduction. Planning and approval process; prototypes; pilots; and integration and compatibility candidates.
- f. Functional area covered and estimated costs.
- g. Procurements. General acquisition strategy, including intended level of competitiveness for hardware and software; and multiple procurements.
- h. Applications. User-unique; serve multiple groups.
- i. Telecommunications. Interfaces with computer mainframes; networks between microcomputers or word processors; standard protocols; and needs for compatibility.
- j. Data Administration. Access controls; update controls; audit trails; data validity controls; responsibility; consistency; and classification and usage.
- k. Software. Degree of emphasis on use of software packages; controls over development; and controls over modifications to vendor packages.
- l. Standards. Hardware; generic applications; protocols; and operating and utility software.
- m. Support structure. Maintenance of hardware and software; installation; compatibility and integration; conventions and protocols; economic and management analyses; needs determination; and setting evaluation criteria for post-implementation evaluations.
- n. Training and Education. Technical support structure; user groups; and training approach.
- o. Security. Physical equipment; data and information; operating and application software; and patent license protection. For classified computing resources, the ADP Security Plan shall be completed as described in DOE 5639.6.
- p. Technology Assessment. Method of tracking state of the art; implications for installed base; and input to plans.

- q. Evaluation. Measures of productivity and cost-effectiveness.
- r. Strategy and approach for networking.
- s. Goals and objectives (e.g., for microcomputers, to help end user transition, provide support for end users, cost-effective use of equipment, and management feedback on issues, problems, or successes).

this evaluation shall be used in determining the level of acquisition plan approval authority to be delegated. The primary areas to be considered are as follows:

- (1) The effectiveness of the IRM management process, including planning, acquisition, use, reporting, self-review, and statements of strategy;
 - (2) The documented need for future equipment changes;
 - (3) The use of competition in acquisition; and
 - (4) The comprehensiveness of policies and procedures to implement DOE policy.
- c. The frequency and depth of these evaluations shall be commensurate with the size of these respective installations. The larger facilities shall generally be evaluated at least once every **2 years**. Other installations may be evaluated less frequently.

4. USE OF ECONOMIC ANALYSES.

- a. Economic analyses shall generally be conducted at several stages in the computing resources acquisition cycle to support the alternative approach being proposed to satisfy the requirement and the method of acquisition recommended. Suggested approaches for conducting economic analyses are available from AD-24.
- b. For major items of ADPE, economic analyses shall be prepared during the budget formulation cycle as support for the alternative and proposed method of acquisition included in the Departmental budget. Economic analyses shall also be prepared and included in clearance documents. If clearance documents are not required, an economic analysis shall still be prepared in the same time frame as a clearance document. In situations where clearance documents are not required and other than the most cost-effective alternative is selected, the rationale for the decision shall be documented and approval obtained from the Headquarters organization having programmatic responsibility. In situations where clearance documents are not required, submission of the economic analysis supporting the method of acquisition may be requested, as appropriate.
- c. For non-major items of ADPE, economic analyses are required only when a method of acquisition other than purchase has been selected or when specifically requested by the approving authority. When required, the analyses shall be conducted after equipment selection but prior to award. The economic analysis may be included within a clearance document, if one has been stipulated. In situations where other than the most cost-effective alternative is selected, rationale for this decision shall be documented and approval obtained from the managing organization (see page 9, paragraph 10).

5. COMPUTER PERFORMANCE EVALUATION.

- a. Computer performance management factors shall be captured and analyzed during operation of data processing facilities to monitor service (e.g., responsiveness, reliability, and effectiveness), define workload trends, identify performance problems, and track use of major system functions.
- b. Such factors shall be analyzed to determine the relative degree of efficiency of computer system operation. This information can serve as a basis for making routine adjustments to the data processing environment (e.g., rescheduling workload, balancing configurations, changing priorities, and changes to system software and application programs) with the objective of maximizing the investment in their future workload planning projections.
- c. The use and degree of computer performance evaluation shall be commensurate with the size of the system, the costs involved, the resources required to conduct the evaluation, and the potential benefits. Other factors such as obsolescence, cost-effectiveness, and the ability to meet program requirements shall be considered as well.

6. SHARING.

a. Sharing Availability.

- (1) Sites that have excess capacity and can share their ADP facilities shall participate in informal sharing groups. These groups shall exchange information concerning the capabilities of their facilities in order to identify for the potential user their salient characteristics (e.g., documentation, user assistance, capabilities, prices, duration, priorities, and termination terms).
- (2) GSA facilitates the use of existing resources by issuing bulletins from time to time containing information concerning sharing opportunities.

b. Sharing Considerations.

- (1) The growth of computing resources in the Government has increased sharing opportunities. Sharing these resources may be the most economical and efficient means to satisfy a requirement but is seldom a substitute for fundamental computing resources capabilities needed by a site. Several factors tend to diminish the realization of the economic and efficiency potentials in sharing. These factors include the increasing complexity of setting up at another data processing facility (even when the facility has the same versions of the same operating systems software), better and cheaper

micro- and minicomputer alternatives, the availability of the DOE Teleprocessing Services Program for commercial ADP services, the entry of many new time sharing vendors into the Government marketplace, and requirements for security and Privacy Act safeguards.

- (2) Sharing may present a viable alternative, at least on an interim basis, for sites that (a) need greater capacity; (b) want to evaluate expensive software or equipment configurations before acquisition; and (c) have insufficient computing existing resources.
- (3) Sharing installed computing resources shall be considered as a means of meeting computing requirements. Additional computing capacity shall be acquired only if a site has made reasonable efforts to determine that sharing existing resources from another site will not economically and efficiently meet the requirements.
- (4) Sites seeking sharing facilities will identify and deal directly with other facilities. Since sharing may be a viable alternative for only a portion of computing requirements, such consideration shall be oriented toward potential sources of sharing support rather than an exhaustive review of all Federal facilities. If the result of selectively screening "targets of opportunity" is unsuccessful, the basis for this determination shall be documented.

C. Reporting of Sharing.

- (1) FIRM 201-21.4, Bulletin C-11 requires that sharing (provided to others) be reported on an annual basis for each ADP facility when the total amount of its sharing exceeds \$100,000 per year.
- (2) Sharing information shall be reported directly to the General Services Administration (CI), Washington, DC 20405, on GSA Form 2068 not later than 60 days after the close of each fiscal year (11-30).
- (3) Each field element shall ensure that all required reports have been submitted and that copies of all reports sent to GSA are provided to AD-24.

7. APPLICATION SOFTWARE CONVERSION.

- a. The cost of application software conversion shall continue to be considered in determining lowest total overall cost whenever appropriate.

- b. An application software conversion study shall be conducted and documented to support the acquisition of major items of ADPE that meet one of the following criteria:
 - (1) The estimated application software conversion cost is the primary justification for a procurement of computing resources that limits competition; or
 - (2) The estimated application software conversion cost is to be used in the evaluation of vendor proposals as part of the process for selection of computing resources.
 - c. Heads of Field Elements shall establish requirements for the preparation of application software conversion studies for acquisitions of a non-major item of ADPE, as appropriate.
 - d. The comprehensiveness of an application software conversion study shall be commensurate with the estimated total dollar cost of the computing resources acquisition and its impact on site operations.
 - e. The Federal Conversion Support Center of GSA provides guidelines on the elements to consider when analyzing applications software conversion. Also, the Center offers a variety of conversion assistance and support services to all Federal agencies and their contractors on a reimbursable basis. Any DOE facility may request assistance by submitting a written request to the Federal Conversion Support Center. Assistance for cost-type contractor facilities should be initiated by the contractor's cognizant DOE Field Office or Headquarters Program Secretarial Officer, as appropriate. The Center can assist in every facet of the conversion process from planning the study to actual conversion and implementation. They also maintain a comprehensive library of software conversion material contributed by Federal agencies and the private sector.
 - f. The results of conversion studies shall also be included in implementation plans and acquisition plans, as appropriate.
 - g. DOE Elements may also be subject to additional requirements for conducting application software conversion studies as outlined in FIRNR 201-20.203-4.
8. LEASE/MAINTENANCE REVIEWS. The following reviews shall be conducted on an annual basis by each DOE or cost-reimbursement type contractor that operates computing resources that are either (a) Government-owned or (b) leased where the full lease costs are paid by the Government under a cost-reimbursement type contract. These reviews should not be forwarded to AD-24 unless expressly requested. The reviews should be retained at the appropriate Headquarters or field element, or contractor site.

a. Annual Review of Lease Agreements.

- (1) Factors to be considered in this review shall include the continued existence of the requirement, the availability of excess equipment, changes in the marketplace, and the availability of more economical sources such as requirements type contracts, plug compatible, and third-party leasing suppliers. Each review is to include a statement indicating whether the equipment should be purchased or continued on lease. If purchase is indicated and funds are not available, a request for funds shall be made at the earliest possible date to the Headquarters organization having programmatic responsibility through appropriate channels. The timing for this review is at the discretion of each site. However, reviews should be made at any time when there has been or there may be a substantial change in the circumstances that were germane to the initial decision to enter into the lease agreement.
- (2) Guidelines for conducting economic analyses are available from AD-24.

- b. Annual Review of Maintenance Agreements. The method of maintaining Government-owned equipment shall be reviewed annually to ensure that maintenance is being accomplished at the lowest overall cost to the Government. In making this review, consideration shall be given to the economic feasibility of performing maintenance with in-house resources or third-party sources. The timing for conducting this review is at the discretion of the ADP installation; it should be conducted far enough in advance of the renewal date to effect a change in the method of maintenance if the review discloses that one is justified.

9. REUSE OF COMPUTING RESOURCES.a. Reassignment of Computing Resources Within DOE.

- (1) Owned or leased computing resources that are no longer needed for the purpose for which it was acquired shall be made available for reassignment within the Department in accordance with Section 109-46 of the DOE PMR.
- (2) Normally, computing resources shall be made available for reassignment by following the Departmentwide circularization procedures outlined above. Exceptions to this general policy include:
 - (a) Computing resources with a current market purchase equivalent value less than \$100,000 may, at the discretion of the Head of the Field Element or equivalent, be reassigned to another DOE site without

Departmentwide circularization when the site has a demonstrated need for the computing resources and Departmentwide circularization is not deemed cost-effective.

- (b) The DOE circularization procedures may be waived for computing resources determined to be obsolescent where such reuse would not be cost-effective. For those items having a current market purchase equivalent value of less than a major item of ADPE, this waiver can be granted by the Head of the Field Element or equivalent and for major items of ADPE by AD-24. Waivers for this reason shall be used judiciously. No waivers shall be granted for the reporting of excess computing resources to GSA (see paragraph 9c, below).

- (3) Following circularization within the Department, the computing resources shall be reassigned to the site that demonstrates the greatest need. In circumstances where the Head of a field element or equivalent receives more than one request and cannot determine which site has the greatest need, the matter should be referred to AD-24 for resolution.

- (4) Elements to be included in justification to reuse computing resources are described on page II-8, paragraph 9.

b. Circularization and Acquisition of Exchange/Sale Computing Resources Within DOE.

- (1) Computing resources subject to an exchange/sale transaction shall be circularized within the Department subject to the provisions of the Departmentwide circularization procedures as outlined in Section 109-46 of the DOE PMR. Reporting of exchange/sale computing resources shall be clearly marked as such including the purchase cost of the equipment.
- (2) Acquisition of exchange/sale computing resources requires the preparation of an implementation plan or acquisition plan as described in Chapter II.

c. Reporting of Excess or Exchange/Sale Computing Resources.

- (1) After it has been determined that computing resources that are no longer needed for the purpose for which they were acquired are also not needed for reassignment within the Department, such computing resources shall be reported to GSA as excess.

- (2) After circularization within the Department, computing resources being replaced pursuant to the applicable exchange/sale provisions shall be reported to GSA as exchange/sale computing resources. Special attention is directed to FIRMR 201-24.202 to ensure that the additional reporting provisions of that regulation, with respect to exchange/sale computing resources, are followed.
- (3) Computing resources shall not be reported to GSA until internal screening has been accomplished and it has been established that there are no DOE claimants. A minimum of 45 days should be allowed for screening prior to reporting to GSA. Concurrent screening of owned computing resources within DOE and GSA is not authorized. However, when time does not permit sequential DOE and GSA circularization, leased and/or exchange/sale computing resources may be circularized concurrently in DOE and GSA. The report to GSA should clearly indicate that concurrent screening is taking place.
- (4) Excess Government-owned or leased computing resources and exchange/sale computing resources shall be reported to GSA on Standard Form (SF-120), "Report of Excess Personal Property."

d. Acquisition of Excess or Exchange/Sale Computing Resources

- (1) GSA publishes and distributes, on a regular basis, an availability list of excess or exchange/sale computing resources available throughout the Government.
- (2) AD-24, Heads of Field Elements, the Administrator, Energy Information Administration, and contracting officers may directly request the transfer of excess or exchange/sale computing resources from GSA, as outlined in FIRMR 201-24.202, after appropriate approvals, as outlined in Chapter II of this Order, have been obtained. DOE contractors are not authorized to request transfers directly from GSA of excess or exchange/sale computing resources.
- (3) Elements to be included in justification to acquire excess computing resources are as outlined on page II-8, paragraph 9. Acquisition of exchange/sale computing resources requires the preparation of a complete implementation or acquisition plan as described on pages II-2 through II-6, paragraphs 2 and 3.

- (4) Excess Government-owned computing resources shall be considered as a replacement for installed leased computing resources or in meeting new requirements when such excess may economically and efficiently meet needs. The reuse of excess Government-owned computing resources is not a procurement action and, therefore, is not subject to the law/regulations governing procurement. However, the reuse of excess leased computing resources is in the nature of a procurement and is subject to the applicable laws and regulations governing procurement.
- (5) If suitable computing resources cannot be found in excess, a request may be placed on the "want list" with GSA by those DOE officials outlined in paragraph 9d(2) above. These officials may place such requests directly by telephone or letter in accordance with FIRMR 201-23, Bulletin C-2. "Want lists" are an inventory of agency computing resources requirements as expressed by the agencies for which requirements may be potentially satisfied from excess or exchange/sale computing resources.

