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



0009116

ORDER

DOE 1360.4A

10-7-87

SUBJECT: SCIENTIFIC AND TECHNICAL COMPUTER SOFTWARE

- 1. PURPOSE. To prescribe Department of Energy (DOE) policies and procedures pertaining to unclassified scientific, technical, and technology-related computer software programs developed for or on behalf of DOE.
- 2. CANCELLATION. DOE 1360.4, COMPUTER SOFTWARE SHARING, of 2-2-83.
- 3. SCOPE. The provisions of this Order apply to all Departmental Elements, contractors, and financial assistance recipients performing work for the Department as provided by law and/or contractual agreement and as implemented by the appropriate contracting officer.
- 4. COVERAGE. This Order addresses scientific and technical computer software programs, developed and/or modified during work supported by DOE or during work carried out for others at DOE facilities, that have been issued, released, or provided by the developing researcher or organization to others for use in the conduct of their research and development activities, or have potential application to other DOE programs or others outside the Department. The Order does not address management of the software development, itself.
- 5. EXCLUSIONS. Excluded from the provisions of this Order are:
 - a. The Energy Information Administration.
 - b. Operational system software, necessary to ensure the fundamental operability of automated data processing equipment, whether supplied by the manufacturer of the system hardware or others and whether or not proprietary.
 - c. Software containing information controlled by the International Traffic in Arms Regulations, Export Administration Regulations, the Nuclear Non-Proliferation Act of 1978, or sensitive information such as Unclassified Controlled Nuclear Information that would compromise national security.

6. REFERENCES.

a. DOE 1330.1A, AUTOMATED MANAGEMENT INFORMATION SYSTEMS AND DATA ADMINISTRATION, of 7-15-83, which establishes responsibilities, policies and guidelines for automated management information systems (MIS) management and the administration of data for use with automated MIS.

- b. DOE 1360.1A, ACQUISITION AND MANAGEMENT OF COMPUTING RESOURCES, of 5-30-86, which establishes Departmental policies and procedures for the acquisition and management of computing resources.
- c. DOE 1360.2, COMPUTER SECURITY PROGRAM FOR UNCLASSIFIED COMPUTER SYSTEMS, of 3-9-79, which establishes Departmentwide policies and procedures for developing, implementing, and administering a program for safeguarding DOE computer systems and in particular DOE sensitive, unclassified information.
- d. DOE 1360.3A, AUTOMATIC DATA PROCESSING STANDARDS, of 7-11-83, which establishes responsibilities and policies for the implementation of Governmentwide ADP standards and for the development and implementation of Departmentwide ADP standards.
- e. DOE 1430.3, POLICY FOR THE DISSEMINATION OF AND ACCESS TO DEPARTMENTAL UNCLASSIFIED SCIENTIFIC AND TECHNICAL INFORMATION, of 12-24-86, which establishes a framework for development of DOE policy concerning dissemination of and access to all unclassified scientific and technical information for or on behalf of DOE.
- f. DOE 1430.1A, MANAGING SCIENTIFIC AND TECHNICAL INFORMATION, of 9-10-86, which establishes responsibility for managing scientific and technical information developed during work supported by DOE.
- g. DOE 1430.2, IMPLEMENTATION OF THE SCIENTIFIC AND TECHNICAL INFORMATION MANAGEMENT PROGRAM, of 12-13-83, which establishes the implementation procedures for the Department's scientific and technical information program.
- h. Title 10 Code of Federal Regulations (CFR) 600, Department of Energy Financial Assistance Rules, of 10-5-82, as amended, which establishes policies and procedures for awarding and administering DOE grants and cooperative agreements.
- i. Title 10 CFR Part 1017, Identification and Protection of Unclassified Controlled Nuclear Information, of 4-22-85, which establishes overall policies and procedures for the identification and protection of Unclassified Controlled Nuclear Information (UCNI).
- j. Title 15 CFR 368.1-399.2, U.S. Export Administration Regulations, of 4-25-80, which implements the Export Administration Act (50 U.S.C. App. Section 2401 et seq.).
- k. Title 22 CFR 121-130, Revision of the International Traffic in Arms Regulations, of 12-6-84, which implements the Arms Export Control Act (22 U.S.C. 2728).
- 1. Title 41 CFR 201, Federal Information Resource Management Regulations, of 7-1-84, Subpart 201-31.014, Federal Software Exchange Program, which provides policy and procedures describing the Federal Software Exchange

Program, the reporting of common-use ADP software to the Federal Software Exchange Center, and subsequent use of this information for Governmentwide sharing.

- m. Title 48 CFR, Part 27, Federal Acquisition Regulation (FAR) (Patents, Data, and Copyrights), of 3-26-86, as amended, which is the uniform, Governmentwide regulation concerning patents, data, and copyrights in Government contracting.
- n. Title 48 CFR 927, Department of Energy Acquisition Regulations (DEAR), (Patents, Data, and Copyrights), of 3-28-84, which implements and supplements the FAR.
- o. Public Law 95-242, The Nuclear Non-Proliferation Act of 1978, of 3-10-78, which provides for more efficient and effective control over the proliferation of nuclear explosive capability.
- p. Public Law 96-511, U.S.C. 101, Paperwork Reduction Act of 1980, which, among other purposes, provides for reducing paperwork and enhancing the economy and efficiency of the Government and the private sector by improving Federal information policy making.
- q. "U.S. Department of Energy National Energy Software Center Installation Representative Guide," of 5-83, ANL/NESC-1 (Rev.), which is an introduction and reference manual to the program and operating procedures of the National Energy Software Center (NESC), and is available from Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Illinois 60439.
- r. Office of Management and Budget Circular No. A-130, "Management of Federal Information Resources," of 12-24-85, which provides a general policy framework for management of Federal information resources.

7. DEFINITIONS.

- a. Scientific and Technical Computer Software. Those unclassified computer programs and routines and supporting material with scientific, technical, and energy-related applications. This includes independent subroutines, related groups of routines, single programs, and sets or systems of programs.
- b. Specialized Information Analysis Centers. Those program office sponsored, DOE and DOE contractor operations that collect, evaluate, announce, and provide scientific and technical computer software in specialized subject areas. These centers are responsible for providing scientific and technical computer software summaries and/or programs to the centralized computer management activity for announcement and for dissemination outside the Department, its contractors, and existing foreign information

exchange agreements. The centers include the Engineering Physics Information Center of the Oak Ridge National Laboratory, and the National Nuclear Data Center of Brookhaven National Laboratory.

- c. National Energy Software Center (NESC). The centralized DOE scientific and technical computer software management facility operated by the Argonne National Laboratory. Specific activities of the facility include collection, review, compilation, sample problem testing, archival storage, announcement, and dissemination of DOE-sponsored scientific and technical computer software.
- d. <u>Supporting Material</u> is the additional information and material necessary to use and run the scientific and technical computer software such as documentation, (i.e., a single comprehensive report or published paper reprints, program reports, users manuals, program maintenance manuals, installation memoranda, and computer output listings), data libraries, copies of sample problems, and other machine readable media.

8. POLICY.

- a. The Department shall operate a centralized scientific and technical computer software activity to promote the sharing of unclassified scientific and technical computer software among DOE and DOE contractors. The centralized activity also shall function as the Department's focal point for dissemination of DOE-sponsored scientific and technical software to private industry, the public, and foreign requestors.
- b. Scientific and technical computer software developed and/or modified during work supported by DOE or during work carried out for others at DOE facilities, with potential application to other DOE programs or outside the Department, (unless otherwise specified in the agreement under which the work is performed) shall be provided to the centralized activity.
- c. As patent, contractual, and other DOE policy considerations permit, the scientific and technical computer software shall be made available to the non-DOE community exclusively through the centralized activity or by a specialized information analysis center as specified in this Order. Freedom of Information Act (FOIA) requests will continue to be handled by the appropriate FOIA Officer with the assistance of the centralized activity as necessary.
- d. DOE organizations and contractors may provide developmental scientific and technical computer software for collaborative purposes directly to other DOE organizations, contractors and others involved in its development. However, once the software has reached a level sufficient to allow others to use the software, it shall be provided to the central facility for dissemination beyond those involved in its development.

e. In instances where specific Departmental program established scientific and technical information exchange agreements exist, such programs or specialized information analysis centers, acting in their behalf, may provide software for direct exchange. However, to ensure continuity with the centralized activity, the central facility shall be advised of such exchanges.

9. RESPONSIBILITIES.

a. Director of Administration (MA-2), in consultation with the Heads of Departmental Elements, establishes policy for the management of DOE computer software. In conjunction with this responsibility, as the single agency official for information resources management, the Director shall, through the Manager of Scientific and Technical Information (MA-28), develop policy and procedures for the collection, storage, announcement, distribution, and exchange of scientific and technical computer software and provide oversight and technical management of the Department's centralized scientific and technical software management activity.

b. Assistant Secretary for International Affairs and Energy Emergencies (IE-1).

- (1) Advises program offices as to what scientific and technical computer software received through international agreements should be subject to access limitations.
- (2) Determines whether dissemination of scientific and technical computer software to particular foreign countries is compatible with U.S. foreign policy.
- (3) Assures that those international agreements to which DOE or one of its subordinate entities is party, conform to DOE scientific and technical computer software policies.
- (4) In conjunction with program offices, assures that scientific and technical computer software exchanges conducted under such international agreements are equitable from a foreign policy standpoint.

c. Assistant General Counsel for Patents (GC-42).

- (1) Controls release of copyright to scientific and technical computer software consistent with applicable statutes, laws, and regulations, and with Departmental policy.
- (2) Approves licenses and other agreements involving scientific and technical computer software.

(3) Makes legal determinations of DOE's rights regarding scientific and technical computer software and handles claims involving proprietary and copyrighted software.

d. Heads of Departmental Elements.

- (1) In consultation with MA-2, participate in the development, implementation, and evaluation of policies for managing scientific and technical computer software.
- (2) Ensure that specialized information analysis centers under their purview send software summaries (abstracts and related bibliographic data (see reference paragraph 6q)) and, upon request, software with potential applicability outside the specialized centers' authorized technical community to, and coordinate distribution activities with, the central facility to ensure continuity with the centralized activity.
- (3) Encourage coordination with the central facility, by the Departmental Elements, contractors, and financial assistance recipients under their purview, prior to development of new scientific and technical computer software.
- (4) Ensure that Departmental Elements, contractors, and financial assistance recipients under their purview provide copies of DOE-sponsored scientific and technical computer software to the central facility. Review of such software for applicability under this Order is the responsibility of the cognizant Departmental Elements. (The procedures for submission of such materials are described in the "National Energy Software Center Installation Representative Guide," ANL/NESC-1 (rev.)).
- (5) Ensure that all scientific and technical computer software developed by DOE organizations, contractors, and financial assistance recipients under their direction, which may be disseminated to others, contain the following statement on the cover and title page of all documentation for that software, and any computer-readable medium used for transmitting that software:
 - (a) "This computer software has been developed under sponsorship of the Department of Energy. Any further distribution by any holder of this software package or other data therein outside of DOE offices or other DOE contractors, unless otherwise specifically provided for, is prohibited without the approval of the National Energy Software Center. Requests from outside the Department for DOE-developed computer software small be directed to the Director, National Energy Software Center, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Illinois 60439."

- (b) In addition, the following disclaimer or equivalent should be placed on the cover and title page of all documentation for that software, and any computer-readable medium used for transmitting that software: "This material was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States nor the United States Department of Energy, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights."
- (6) Ensure that dissemination of scientific, technical, and energy-related software outside the Department, its contractors, and financial assistance recipients shall be through the central facility only, unless there are patent, copyright, or other authorized exceptions. Requests from outside the Department for DOE-developed scientific and technical computer software shall be referred to the central facility.
- (7) To support the technology transfer function of the centralized software activity, ensure that scientific and technical computer software with a general utility, which is the subject of wide interest, or which has important specialized functions is identified at the time of submission to the central facility.
- (8) Ensure that mechanisms are in place for the adequate training of staff members that would ensure appropriate review of scientific and technical computer software from a dissemination control standpoint (i.e., limited scientific and technical Information, such as, applied technology, in accordance with references 6f and 6g) and ensure that the appropriate distribution control instructions are included in all scientific and technical software packages provided to the central facility.
- (9) Requests for exceptions to these requirements, not based on patent, copyright, or contractual provisions, shall be submitted to MA-28 for approval after coordination with cognizant Headquarters organizations.
- (10) Ensure that public dissemination of computer software which is transmitted to the central facility will neither violate the U.S. Export Administration Regulations, the International Traffic in Arms Regulations, the Nuclear Nonproliferation Act, nor constitute the release of sensitive information that would otherwise compromise national security.

e. Heads of Contracting Activities shall ensure that procurement contracts, financial assistance instruments, and funds-out interagency agreements are awarded and administered in compliance with Federal and Departmental acquisition and assistance regulations governing the disposition of rights to computer software developed thereunder.

BY ORDER OF THE SECRETARY OF ENERGY:

