Department of Energy
Washington, DC 20585

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MEMORANDUM FOR: ALL DEPARTMENTAL ELEMENTS

FROM: S. W. HALL, JR.
CHIEF INFORMATION OFFICER

SUBJECT: Department of Energy Corporate Information Management
Guidance

The attached *Department of Energy Corporate Information Management Guidance (Revised August 1997)* is a collaborative effort by a team of Headquarters Information Management representatives from the Information Management Council. The Council adopted the guidance items and asked that they be published. This provides the Information Management community with implementing guidance for Information Management policies and strategies.

The *Guidance* reflects current mainstream thinking of the Department and demonstrates our ability to work together for the common good. This second annual issue provides a set of 26 Information Management guidance items and identifies others for future consideration. While the guidance provided is not mandated for either the Federal or contractor communities, its use is strongly encouraged when planning and budgeting for Information Management resources. The *Guidance* should aid your organization in taking a corporate view of the Department's Information Management environment, thereby improving interoperability of information systems and increasing the cost effectiveness of our collective efforts. We believe this guidance employs the best management practices for conducting the Information Management business of the Department.

I endorse and encourage you to use the *Department of Energy Corporate Information Management Guidance* as you undertake Information Management initiatives in support of your mission. I also encourage you to support your Information Management representative in making the Corporate Information Management Guidance process successful.

Please contact Ted Griffin, 301-903-4602, if you have any questions about the attached document or require additional copies.

Attachment

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The Process

The general steps used by the Headquarters IM representatives in formulating the corporate IM guidance and strategies within the parameters of the CGG process flow are as follows.

- Establish initial thoughts on possible corporate guidance/strategy items
- Conduct research and review existing studies, positions etc., on particular guidance/strategy items
- Develop draft guidance and strategies (Nomination)
- Review/comment on draft items through the Lotus Notes database (Analyze)
- Discuss and vote on each item [with 100 percent unanimity required]
(Discuss/Recommend)
- Prepare report and brief IM Council (Approve)
- Conduct annual reviews of approved guidance items to determine their effectiveness
(Assess)

The team has continued to pursue an ambitious course of action in developing corporate IM guidance. This activity has produced a great degree of enthusiasm, participation, and cooperation. In addition, Bob Wells of the Office of Civilian Radioactive Waste Management (RW) has provided a Lotus Notes work group capability that allows for dialogue and guidance formulation outside the assigned meeting times.

The team recognizes that work must be completed outside the scheduled quarterly meetings to further the success of the guidance process. The team continues to adhere to the following basic guidelines.

- Effort is ongoing and requires leveraging the knowledge of existing groups, committees, staffs, etc. whenever possible.
- Only items that received a unanimous vote are adopted.
- The team concentrates on guidance only and does not try to fix the planning process or any other aspect of information management.
- The final product represents corporate IM guidance and strategies that Headquarters IM representatives can support and follow.
- Guidance is issued as suggestions for informational purposes, not as a mandate.
- Guidance is clear, succinct, and useful.
- The team relies upon the services of the CGG support team to enhance effectiveness of the CGG Chair.

The team began by reviewing the initial set of potential corporate IM guidance items. As examples, these items included DOE Technology Supported Learning Program, Departmental Information Management Corporate Performance Guidance, CIO Relationships, DOE Software Engineering Practices, Public Key Infrastructure (PKI) Certificate Policy, Configuration Management, DOEwide Electronic Interoperability, DOE Corporate Network, and Desktop Hardware and Software Strategy.

To facilitate discussion and analysis, items were grouped into three categories and additional items added as they were proposed. A total of 31 items were proposed, each being placed in one of the following three categories.

- **Corporate Management Information** - Guidance items related specifically to information systems intended to support management activities. Examples in this category include Planning Information Systems, Budget Formulation and Execution Information Systems, and Procurement/Acquisition Information Systems.
- **Infrastructure** - Guidance items that cut across organizations, systems, and applications. Examples include security, DOEwide networking, local area networking, and electronic mail.
- **Scientific and Technical Information** - Guidance items pertaining to programmatic information. Examples include Document/Records Management, Internet/Home Pages, and Scientific and Technical Information.

Often, aspects of a potential guidance item touched more than one of the above categories. In such cases, the item was examined from the perspective of each of the associated categories, allowing a complete review.

During subsequent meetings, the team reviewed and voted on each IM Strategy/Guidance item and sorted them into three groups.

1. **Corporate IM Guidance and Strategies.** Items the team voted unanimously to adopt immediately.
2. **Potential Corporate IM Guidance/Strategies.** Items the team examined and concluded that further attention or development was needed to finalize them as guidance.
3. **Deferred Corporate IM Guidance/Strategies.** Items that could become guidance that the team did not examine closely for a variety of reasons (e.g., insufficient time, inadequate information available, unlikely agreement could be reached, etc.).

Lessons Learned

The Headquarters IM representatives have proven they can work together effectively and efficiently to develop corporate IM guidance for DOE IM Council consideration and issuance. During the past year, they thoroughly reviewed and discussed several different areas of IM, and unanimously adopted 26 (specifically documented in this report). They freely voiced different views, shared experiences and thoughts, and, in the end, enthusiastically wore their corporate hats as well. They clearly recognized the importance (and benefit) of working together for the common good.

The efforts of the Headquarters IM representatives were favorably received by the owners and supporters of various IM technical areas, particularly the CIO leads. They welcomed a forum that would hear and discuss their areas and consider them for corporate adoption. Because the HQ IM representatives, for the most part, control the funding and political support for IM initiatives, they seemed to go out of their way to get their views before the team.

The most important lesson learned is that the development of corporate IM guidance must continue to be an ongoing process and the only process by which corporate IM guidance is established.

Recommended Next Steps

The DOE IM Council has been able to use this process for establishing corporate IM guidance over the past year. HQ IM organizations are prepared to rely on and plan/budget in accordance with the guidance items presented in this report. The HQ IM representatives recommend the following steps for continuing institutionalization of the process.

- HQ IM representatives present corporate IM guidance/strategies to the DOE IM Council for review and approval.
- DOE IM Council and the CIO agree to follow the process for developing corporate IM guidance based on the following recommended guidelines.
 - HQ IM representatives of the HQ programs, CIO and staff offices, under the auspices of the DOE IM Council, routinely recommend corporate IM guidance for Council consideration.
 - The chairperson of the team of HQ IM representatives is elected as vice chair by a majority vote of the group and succeeds the outgoing chair in the following year.
 - The CIO organization provides ongoing support to the team of HQ IM representatives with at least 1.5 full-time equivalent (FTE) Federal employees (plus contractor support) that are identified as the Special Integration Project (SIP) team. The CIO is the owner and operator of the process.
 - All corporate IM guidance recommended to the DOE IM Council requires 100 percent agreement by the voting HQ IM representatives.
 - Establishment of all corporate IM guidance and strategies must go through this process.
 - Final corporate IM guidance and strategies come from the DOE IM Council and is issued by the CIO.
 - No specific enforcement of the guidance and strategies is necessary.
 - In the future, consideration should be given to expanding the operation of the team of HQ IM representatives to include the entire IM Council membership.
- The CIO presents the corporate IM guidance and strategies initiative to the Executive Committee for Information Management (ECIM) for awareness and buy-in. Such a presentation serves as a success story for the IM community.

- The CIO officially distributes the corporate IM guidance and strategies and accompanying process guidelines to all DOE organizations and contractors. The information is provided to the contractors for awareness purposes only; DOE IM guidance and strategies are not mandated for contractors (unless they are included in their contract).

Conclusion

The following pages list the corporate IM guidance and strategy items identified by the HQ IM representatives team. The first list provides the 26 items the team is approving for immediate adoption. The second list represents the 12 items the team deems to be strong candidates for corporate IM guidance; however, they require further review, analysis, and development. The third list consists of 3 items deferred for future consideration.

Following the three lists, the 26 items approved for corporate IM guidance are documented in a standard one-page format.

I. Approved Corporate IM Guidance Items

Corporate Management Information

- 0001 DOE Strategic Management System
- 0002 SOLOMON Performance Measurement/Evaluation Information System
- 0003 DOE ES&H Reporting Systems
- 0004 Corporate Human Resource Information System (CHRIS)
- 0005 DOE Career Counselor System
- 0006 DOE Travel Manager System
- 0007 Endorsement of National Institute of Standards and Technology (NIST)
Date Standard for Information Interchange
- 0008 Endorse Records Management "Roadmap 2000"
- 0009 Conversion to Electronic Documents
- 0010 Document Online Coordination System (DOCS)
- 0210 IM Products and Services Management Structure
- 0212 Defense Messaging System (DMS)
- 0301 Departmental Information Architecture Guidance

Infrastructure

- 0020 TCP/IP for all Sites by FY98
- 0021 Internet/WWW Access
- 0022 Electronic Mail
- 0024 DOE Electronic Commerce Gateway
- 0026 Computer Incident Advisory Capability (CIAC) as DOE Center of Expertise
- 0030 Network Operating System
- 0031 DOE Software Development Tools
- 0032 Groupware Interoperability
- 0228 Information Technology (IT) Standards
- 0232 Year 2000 Guidance
- 0233 Directory Services
- 0234 Computer Virus Protection and Incident and Information Advisories
- 0236 DOE Corporate Network
- 0239 Access to Corporate Systems via the WEB

Scientific & Technical Information

None have been adopted at this time.

II. Potential Corporate IM Guidance Items

Corporate Management Information

- 0011 Digital Signature
- 0211 Departmental Information Management Corporate Performance Guidance
- 0213 Chief Information Officer (CIO) Relationships
- 0214 DOE Software Engineering Practices

Infrastructure

- 0029 Wireless Communication
- 0050 Management and Accessibility of Scientific and Technical Information (STI)
- 0224 DOE Technology Supported Learning Program
- 0231 Public Key Infrastructure (PKI) Certificate Policy
- 0235 DOEwide Electronic Interoperability
- 0237 Desktop Hardware and Software Strategy
- 0238 Configuration Management

III. Deferred Corporate IM Guidance

Corporate Management Information

None have been deferred at this time.

Infrastructure

- 0023 Electronic Publishing/Dissemination
- 0025 DOE Unclassified Video Teleconferencing
- 0027 Data Center Consolidation

DOE Corporate Guidance & Strategy

Reference Number: 0001

Group: Corporate Management Information

Title: DOE Strategic Management System

Proposed Guidance/Strategy:

ISSUE: There is a need to integrate strategic planning, budgeting, and performance measurement and evaluation into a single system. Uncoordinated activities can lead to duplicative and costly incompatible efforts.

GUIDANCE: The Department of Energy shall use the Strategic Management System (SMS), developed by the Office of Policy, to link the major parts of the annual cycle of planning, budgeting, budget execution, and evaluation of results. DOE program and staff offices shall develop any local use systems in concert with and compatible with the SMS framework.

The development of the SMS provides a framework that ties our business practices together. The Secretary wrote, "...it is now up to all of us to take advantage of the discipline it offers so we may realize the gains in effectiveness, efficiency, and quality that are available."

BACKGROUND: The former Secretary approved the system and distributed its description for the FY 1998 cycle with her memorandum dated March 4, 1996, and the current Secretary reviewed the system on 04/30/97. The former Secretary made it clear that the activities would be repeated for the FY 1999 cycle, and beyond, thus institutionalizing the process. On November 20, 1996, another memorandum was issued instituting the Strategic Management System for the FY 1999 cycle.

The Strategic Management System (SMS) is effective immediately. The Assistant Secretary for Policy will have overall responsibility for the SMS initiative. The Chief Financial Officer will continue to be responsible for budget activities. Secretarial Officers, Field Office Managers, and contractor responsibilities are detailed in the system documentation. DOE implemented the SMS with the budget preparations for FY 1998. Offices provided their commitments and measures of success to be submitted with the budget and modeled after the Performance Agreement with the President for FY 1996.

POINTS OF CONTACT: Michael Shapiro, (202) 586-9459.

REFERENCES: Government Performance and Results Act of 1993,
Government Management Reform Act of 1994,
DOE Corporate IM Guidance and Strategy, "SOLOMON Performance
Measurement/Evaluation Information System"
URL reference: <http://apollo.osti.gov/policy/sms/sms.html>

DOE Corporate Guidance & Strategy

Reference Number: 0002

Group: Corporate Management Information

Title: SOLOMON Performance Measurement/Evaluation Information System

Proposed Guidance/Strategy:

ISSUE: Uncoordinated activities can lead to a potential proliferation of duplicative, costly, and incompatible tracking systems for agency commitments and to inconsistencies in reported status.

GUIDANCE: The Department of Energy will use the SOLOMON system, developed by the Office of Policy, as the tracking and reporting system for the Performance Agreement between the Secretary and the President.

BACKGROUND: It is a Web-based, centralized database with status entered by owners of commitments directly. The system maintains the current Agreement text, status of measures of success, assessments by commitment owners as to the projected success in meeting the commitments, and points of contact for every commitment and measure of success.

If any other DOEwide performance tracking and reporting system is contemplated, the SOLOMON point-of-contact below should be included in those deliberations.

POINTS OF CONTACT: William G. Kennedy, (202) 586-0423.

REFERENCES: The National Performance Review recommendation that the President develop written performance agreements with Department and Agency heads. Performance Agreement between the Secretary and the President for FY 1996.

URL Reference: [HTTP://HST.DYNC.DOE.GOV/SOLOMON/sol_dwn.htm](http://HST.DYNC.DOE.GOV/SOLOMON/sol_dwn.htm)

DOE Corporate Guidance & Strategy

Reference Number: 0003

Group: Corporate Management Information

Title: DOE ES&H Reporting Systems

Proposed Guidance/Strategy:

ISSUE: Operating multiple versions of different information systems for environmental, safety, and health reporting can lead to support inefficiencies, costly data incompatibilities, and costly problems of non-interoperability of systems.

GUIDANCE: Information management planning for safety or health reporting systems should be conducted in consultation with the Office of Environment, Safety, and Health (ES&H). The use of ES&H designated corporate systems (regarding safety and health) should be relied upon to the fullest extent feasible for meeting requirements for radiation exposure monitoring, occurrence reporting, performance indicators (pertaining to health and safety), accident and injury reporting, non-compliance tracking, safety issue (DNFSB) management, and medical surveillance. Such coordination with ES&H will promote interoperability and help avoid duplicative systems.

BACKGROUND: The Office of Environment, Safety and Health is re-engineering DOE's safety and health reporting systems to provide increased support to users throughout the Department. The redesign of these systems will improve their accessibility and their capability for providing management information (on safety and health) to field sites and program offices. These redesigned systems are expected to help field sites and program offices avoid the development and/or use of site-specific systems and to reduce the amount of functionality that must be built into site-specific systems.

POINTS OF CONTACT: Steve Scott, Office of Information Management, Office of Environment, Safety & Health at (301) 903-3033 or Steve.Scott @ hq.doe.gov.

REFERENCES: N/A

DOE Corporate Guidance & Strategy

Reference Number: 0004

Group: Corporate Management Information

Title: Corporate Human Resource Information System (CHRIS)

Proposed Guidance/Strategy:

ISSUE: The Department's initiative to implement a Corporate Human Resource Information System will take several years. Uncoordinated activities during that time frame can lead to costly problems of data incompatibility and/or local system non-interoperability.

GUIDANCE: Individual Departmental Elements should not commit the expenditure of funds for the upgrade of existing or development of new human resource information systems without close consultation with and agreement by the Deputy Assistant Secretary for Human Resources and the Chief Information Officer.

BACKGROUND: An extensive assessment and strategic information management process to determine the need for a single, integrated corporate human resource information system was completed in June 1996. A formal evaluation process conducted by a Departmentwide evaluation team resulted in the purchase in September 1996 of PeopleSoft Federal Human Resource Management System, Benefits Administration, and Payroll Interface to support this corporate system. This commercial-off-the-shelf software will provide a fully integrated system to support some thirty human resource programs currently handled through manual processes or automated within the Department's Payroll/Personnel system or in multiple standalone applications. An Executive Board, Steering Committee, and Project Management Office have been established to provide oversight, guidance, and support to the corporate system implementation effort, which is being carried out by some 70 Department human resource and information management professionals across the complex working in matrix teams. There is a very strong commitment to minimizing customization of the software through extensive re-engineering of business practices identified as targets of opportunity during the strategic planning process. Future activities will be prioritized based on direction and guidance from the Executive Board and the Steering Committee. The Department is committed to implementing a single, integrated Corporate Human Resource Information System. Full implementation will be accomplished through a phased approach over several years. Phase I, to process personnel transactions in the system at all Servicing Personnel Offices, is scheduled for completion by March 1998, which will lay a solid foundation for implementation of additional system functionalities.

POINTS OF CONTACT: Nancy Tomford, Steering Committee Chair and Project Manager, Corporate Human Resource Information System (CHRIS), (202) 586-7480

REFERENCES: NA

DOE Corporate Guidance & Strategy

Reference Number: 0005

Group: Corporate Management Information

Title: DOE Career Counselor System

Proposed Guidance/Strategy:

ISSUE: Uncoordinated activities can lead to the development of duplicative, costly, and incompatible systems for DOE Career Counselor efforts and possible use of non-sanctioned data or inappropriate and non-approved privacy information.

GUIDANCE: In conjunction with the Office of Personnel Management (OPM), DOE-HQ has developed Career Counselor, an automated system to assist organizations and their employees in career development, career transitioning, and workforce reengineering. Employees are able to assess skills, view occupational profiles, access training courses, create a career development plan, and locate current job vacancies. The data are union-sanctioned. Because DOE has developed the software updates for the OPM system, DOE has a license to use the system as needed. Departmental elements should not develop systems with similar functions without close coordination with the points of contact identified below.

BACKGROUND: The current version of Career Counselor provides occupational information on 67 clerical and technical occupations collected in 1995 and managerial occupations collected in 1992. In June 1996, 120 professional and administrative occupations were added. The assessment feature of Career Counselor allows employees to assess skills and interests for the current job or for a future job in three different ways: 360-degree assessment, diagnostic tests, and measures of work-related interests. With the career development plan feature, employees can create a career development plan based on the information obtained from competency and interest assessments as well as exploration of occupations and training opportunities. Employees are able to identify training courses for each competency they need to develop. The occupational exploration feature allows employees to explore careers at specific organizations or agencies throughout the Federal government. The information provided includes tasks, career paths, and competencies needed for occupations. It also includes information about where the jobs are and matches an employee's job with related occupations both in the Federal government and the private sector. Employees can use this information to learn which of their competencies need to be developed to enhance their career or to change careers. They can also identify specific training courses to help them meet their goals. The job opportunities feature allows employees to search for current job openings using different search criteria. Automatic updates through OPM's electronic bulletin boards provide employees with the most current listings available. Additionally, an authoring system allows the Department to include local vacancies limited to employees within DOE.

OPM rolled out the Career Counselor program to its partners (major Federal agencies) on April 22, 1997. Agencies (including DOE) must now decide to provide the application to their employees. This is not an IS decision. Rather, it needs to be made by the human resources managers in DOE-HQ (both HR-3 and program offices) as well as field offices.

POINTS OF CONTACT: Steve Von Vital, Office of Energy Efficiency and Renewable Energy, (202) 586-2978, or Office of Personnel Policy, Programs, and Assessment, HR-32, (202) 586-7393

REFERENCES: N/A

DOE Corporate Guidance & Strategy

Reference Number: 0006

Group: Corporate Management Information

Title: DOE Travel Manager System

Proposed Guidance/Strategy:

ISSUE: Operating multiple versions of different travel document processing systems can lead to support inefficiencies and costly problems of data incompatibility.

GUIDANCE: The Travel Manager System is the Department's corporate travel processing system. This guidance is in concert with the Strategic Alignment Implementation Team recommendation that the Department of Energy consolidate certain accounting functions such as travel processing. It is also in accordance with the Accounting Consolidation Steering Committee recommendation that the Travel Manager System be adopted as the corporate travel processing system. All DOE organizations should use the Travel Manager System for travel processing. The use or development of any other travel processing system should be avoided.

BACKGROUND: The Travel Manager System is a travel document processing system for government agencies. Travel Manager automates travel regulations, travel authorization, and voucher preparation and processing. The package enables paperless forms processing from electronic signatures, electronic routing for approval, and automated auditing to an interface with the DOE accounting system. The Capitol Accounting Center, with guidance from GAO, has contracted with the National Institute of Standards and Technology (NIST) to develop public key infrastructure (PKI) specifications that comply with FIPS PUB 186 to support the DOE Travel Manager system. These specifications define a DOE PKI that will be a complete PKI on its own, which can be used with other applications in addition to Travel Manager, and is designed to join the emerging Federal PKI as it is deployed.

POINTS OF CONTACT: Shirley Barker, Capital Accounting Office, CFO, (301) 903-3632

REFERENCES:

1. Memorandum dated July 13, 1995, from the Office of the CFO to DOE Field Managers and Field Chief Financial Officers regarding Travel Processing Consolidation.
2. Travel Consolidation Implementation Plan
3. DOE Corporate IM Guidance and Strategies, "Digital Signature" (#0011)
4. DOE Corporate IM Guidance and Strategies, "Work Breakdown Structure" (#0212)

DOE Corporate Guidance & Strategy

Reference Number: 0007

Group: Corporate Management Information

Title: Endorsement of National Institute of Standards and Technology (NIST) Date Standard for Information Interchange

Proposed Guidance/Strategy:

ISSUE: Year date information being used in electronic information interchange can produce costly problems of data incompatibilities and possible system failures if two-digit year codes are used.

GUIDANCE: As of August 1996, the year data element used in electronic information interchange with other governmental agencies or within the Department shall be four-digits in length according to the National Institute of Standards and Technology (NIST) Date Standard.

EXCEPTIONS: This guidance does not apply if the agencies involved in the exchange determine that the exchange is year 2000-compliant without further modification. Other exceptions to this policy should be rare, and should be agreed to in advance by all parties involved in the exchange.

BACKGROUND: Federal Information Processing Standards Publication (FIPS Pub 4-1, page 2 in reference to paragraph 10), "Representation for Calendar Date and Ordinal Date for Information Exchange" reads as follows: "For purposes of electronic data interchange in any recorded form among U.S. Government agencies, NIST highly recommends that four-digit year elements be used. The year should encompass a two-digit century that precedes and is contiguous with, a two-digit year-of-century (e.g., 1999,2000, etc.). In addition, optional two-digit year time elements specified in ANSI X3.301985(R1991) should not be used for the purposes of any data interchange among U.S. Government agencies".

POINTS OF CONTACT: Carol Blackston, HR-4, (301) 903-4294

REFERENCES: FIPS Pub 4-1, "Representation for Calendar Date and Ordinal Date for Information Exchange"

DOE Corporate Guidance & Strategy

Reference Number: 0008

Group: Corporate Management Information

Title: Endorse Records Management "Roadmap 2000"

Proposed Guidance/Strategy:

ISSUE: Rapid evolution in Information Technology has altered practices and procedures for managing information and DOE record material. Guidance is needed for electronic records management across the DOE complex.

GUIDANCE: The Headquarters Program CIOs endorse and support the need to plan and budget for the DOE Records Management Program as outlined in "Roadmap to the Year 2000" and the "Electronic Records Management Guide".

POINTS OF CONTACT: Mary Ann Wallace, HR-4, (301) 903-4353

REFERENCES: Electronic Records Management Guide
Roadmap to the Year 2000, Rev. 7, October 1996

DOE Corporate Guidance & Strategy

Reference Number: 0009

Group: Corporate Management Information

Title: Conversion to Electronic Documents

Proposed Guidance/Strategy:

ISSUE: Although advances in technology have led to improvements in hardware/software costs, the primary cost of converting existing documents is associated with the labor costs involved in physically removing files from cabinets, separating pages, scanning, and indexing the resulting database. Since labor costs are unlikely to change in the near future, the cost-benefit ratio of converting existing paper documents to electronic form is likely to remain poor.

GUIDANCE: It is intended that there will be little (or no) effort to convert existing paper documents to electronic form. In the absence of a compelling mission requirement, organizations planning to convert existing paper documents to electronic form should perform a careful cost-benefit analysis to justify the effort or to conform with necessary regulations and guidance. Departmental guidance on the management of electronic records is contained in the "Electronic Records Management Guide", dated December 6, 1996.

POINTS OF CONTACT: Corporate Guidance Group, c/o Chuck Guyker HR-4, (301) 903-4706

REFERENCES: Electronic Records Management Guide, December 6, 1996
DOE Records Management home page address: <http://www.fetc.doe.gov/rm/>

DOE Corporate Guidance & Strategy

Reference Number: 0010

Group: Corporate Management Information

Title: Document Online Coordination System (DOCS)

Proposed Guidance/Strategy:

ISSUE: There are multiple projects throughout DOE-HQ to address document management/workflow systems. Noncoordinated activities can lead to duplicative and costly noncompatible efforts.

GUIDANCE: The Document Online Coordination System (DOCS) is managed by the Office of the Executive Secretariat (ExecSec) in partnership with several other HQ offices. It is designed, at this time, to manage documents requiring Office of the Secretary signature, typically responses to correspondence from Congress. Incorporation of field sites into the processes supported by DOCS has not yet been addressed. It is expected that the field sites will follow the HQ program offices in adopting (or interoperating with) DOCS. In the meantime, it is expected that HQ offices will not develop any information systems similar to DOCS.

BACKGROUND: DOE-HQ has conducted and evaluated a pilot of an integrated document management and workflow system during the first half of FY 1997. Based on the evaluation, the system is being modified. After acceptance, it is expected to go into production for pilot partners during the last quarter of 1997. The system is expected to become a DOE corporate system. Since DOCS comprises Head-of-Agency records, a critical requirement of the database is open standards; accordingly, SQL compliance was deemed mandatory. DOCS uses software compatible with that used or under testing in HQ program offices. It is expected that after the system's operability is demonstrated, HQ offices will integrate their installed document management/workflow capabilities (e.g., Lotus Notes) with DOCS. Proposals for Lotus Notes integration, browser capability, and electronic signature have already been identified.

DOCS is designed to do the following.

- Scan incoming correspondence, creating an image file capable of OCR conversion
- Create a document file in a database capable of search and retrieval
- Create a "Workflow" folder containing the incoming file for action, and all related subsequent response files
- Allow users to electronically route the folder across the HQ LAN for action and concurrence
- Track the location and status of the action upon request
- Allow electronic assignment of Records Disposition information

POINTS OF CONTACT:

Bette Mohr, Office of the Executive Secretariat, (202) 586-4313
Ted Kurkowski, Energy Efficiency and Renewable Energy, (202) 586-9273
Lorretta Bryant, Office of Defense Programs, (301) 903-5176

REFERENCES: DOE Corporate IM Guidance & Strategy, "Groupware" (#0032)

DOE Corporate Guidance & Strategy

Reference Number: 0020

Group: Infrastructure

Title: TCP/IP for all Sites by FY98

Proposed Guidance/Strategy:

ISSUE: The Internet is ubiquitous and provides an efficient and cost-effective means for DOE sites nationwide to exchange unclassified/non-sensitive information. The existing Internet protocol is TCP/IP, and not all DOE sites (and staff) have access to it.

GUIDANCE: Implementation of TCP/IP services should be planned and budgeted for all desktops by FY 1998. Plans should also anticipate future improvements of IP. Utilization of secure TCP/IP intranet services shall be used to meet classified/sensitive data protection requirements.

POINTS OF CONTACT: Rickey Hall, HR-433, (301) 903-8022

REFERENCES: DOE Corporate IM Guidance and Strategy, "Internet/WWW Access" (#0021)

DOE Corporate Guidance & Strategy

Reference Number: 0021

Group: Infrastructure

Title: Internet/WWW Access

Proposed Guidance/Strategy:

ISSUE: Internet based information services provide a significant part of the DOE Information Management mix, but are not readily accessible in a timely manner by all DOE personnel who can benefit by their use.

GUIDANCE: DOE organizations should plan and budget for providing Internet access to a web browser in the software configuration of desktops in their organizations.

EXCEPTIONS: Classified information is excluded from this guidance.

BACKGROUND: The DOE work force shall have universal access to Internet based information services and a public DCE (Distributed Computing Environment). It is expected that Internet based information services will become a primary means of communicating DOE information that is approved for public dissemination.

POINTS OF CONTACT: NA

REFERENCES:

DOE Corporate IM Guidance and Strategies, "TCP/IP for all Sites by FY98" (#0020)
DOE Corporate IM Guidance and Strategies, "Electronic Mail" (#0022)
DOE Corporate IM Guidance and Strategies, "Electronic Publishing/Dissemination" (#0023)

DOE Corporate Guidance & Strategy

Reference Number: 0022

Group: Infrastructure

Title: Electronic Mail

Proposed Guidance/Strategy:

ISSUE: The Department's current electronic mail system (E-Mail) needs a standardized capability to effectively and efficiently carry typical business documents to all DOE sites.

GUIDANCE: DOE organizations/sites should plan to implement standards-based E-Mail services to include X.400 or SMTP/MIME* by the end of FY 1998 to achieve "business quality" connectivity and interoperability between all entities of the Federal, state, local and tribal governments, business partners, suppliers, and industry.

BACKGROUND: Business quality E-Mail service, sufficient to conduct the regulatory and financial operations of Government, will require an infrastructure that supports the following capabilities: connectivity/interoperability, guaranteed delivery/accountability, timely delivery, confidentiality/security, sender authentication, integrity, survivability, availability/reliability, ease of use, identification of receipts, message preparation, storage and retrieval.

POINTS OF CONTACT:

Tal Corbett, Departmental E-Mail Program Management Official, HR-43, (301) 903-4628

Internet address: talmage.corbett@hq.doe.gov

X.400 address: /C=US/A=ATTMAIL/P=USDOE/O=HQ/S=Corbett/G=Talmage

REFERENCES: Office of Management and Budget, Office of Information and Regulatory Affairs.

1. Governmentwide Electronic Mail Task Force Report
2. Governmentwide Electronic Messaging Program
3. Goal Architecture for Governmentwide Electronic Directory
4. DOE Corporate IM Guidance and Strategies, "Defense Message System (DMS)" (#0212)

Electronic documentation may be obtained at... <http://www.fed.gov/arch/final/final.htm>.

*Simple Mail Transport Protocol/Multipurpose Internet Mail Extensions (SMTP/MIME)

DOE Corporate Guidance & Strategy

Reference Number: 0024

Group: Infrastructure

Title: DOE Electronic Commerce Gateway

Proposed Guidance/Strategy:

ISSUE: Operating multiple and/or different types of electronic gateways for a specific function can lead to support inefficiencies and costly problems of non-interoperability.

GUIDANCE: The Department has a single gateway (i.e., computer vehicle for electronically receiving and distributing data in the conduct of DOE business). DOE sites should utilize this gateway, which is supported by the Office of the CIO for their electronic commerce initiatives, and avoid funding/developing alternative gateways.

POINTS OF CONTACT:

Andrew Yocke, HR-4, (301) 903-4764
Steve Mournighan, HR-5, (202) 586-1148

REFERENCES:

Presidential Memorandum of October 26, 1993
Department of Energy Electronic Commerce Agency Plan

DOE Corporate Guidance & Strategy

Reference Number: 0026

Group: Infrastructure

Title: Computer Incident Advisory Capability (CIAC) as DOE Center of Expertise

Proposed Guidance/Strategy:

ISSUE: Providing protection for DOE computer systems and networks to ensure their availability and to protect the integrity and confidentiality of the information is an expert-level task. This task is further compounded by the diversity of the operating environments and the levels of concern for protecting the varieties of information in the systems. Centralizing the expertise ensures a high level of competence at a reduced cost.

GUIDANCE: The Department of Energy will maintain a computer security incident response team and a computer security center of expertise. For FY 1998, the Headquarters Program CIOs recognize and endorse the Computer Incident Advisory Capability (CIAC) as the DOE "computer security incident response team" and the computer security center of expertise. All organizations are encouraged to use these services, and to budget for this infrastructure service provided through CIAC when allocating information management resources to the local computer security area. Local security, including routine virus protection, should supplement and complement the CIAC rather than supplant it.

BACKGROUND: Since its inception in 1989, CIAC has routinely dealt with nearly all forms of computer security incidents. The CIAC Team provides a central capability for analyzing incidents, coordinating technical solutions, conveying necessary and timely information to those who need it, and training others to deal with incidents. Computer security incident handling is CIAC's primary responsibility — twenty-four hours per day, seven days per week. CIAC also pursues training and awareness, technology watch, and research and development to support the incident handling capability and to provide comprehensive consulting to the DOE community.

POINTS OF CONTACT:

Philip Sibert, HR-4, (301) 903-4880

George Seweryniak, ER-31, (301) 903-0071

Raymond Holmer, NN-512, (301) 903-3019, or Larry Wilcher, NN-512, (301) 903-5217

REFERENCES:

CIAC Home Page www address: <http://ciac.llnl.gov>

DOE Unclassified Computer Security Program Home Page www address: <http://www.hr.doe.gov/ucsp/>

DOE Corporate Guidance & Strategy

Reference Number: 0030

Group: Infrastructure

Title: Network Operating System

Proposed Guidance/Strategy:

ISSUE: Operating multiple versions of network operating systems in a local area network (LAN) environment can produce support inefficiencies and costly problems of non-interoperability.

GUIDANCE: It should be recognized that Novell NOS is a de facto Headquarters standard; other operating systems such as NT, UNIX, and OS/2 may be required to meet various corporate information processing requirements (e.g., application servers for Lotus Notes, World Wide Web, etc.). Interoperability among these various operating systems should be planned. Headquarters organizations should plan for a migration to Novell's Network Operating System (NOS), Netware 4.1.1. This approach minimizes the problems associated with providing support to multiple network operating system versions.

POINTS OF CONTACT: Rickey Hall, HR-433, (301) 903-8022

REFERENCES: NA

DOE Corporate Guidance & Strategy

Reference Number: 0031

Group: Infrastructure

Title: DOE Software Development Tools

Proposed Guidance/Strategy:

ISSUE: System Development tools are expensive to acquire and support. Use of these tools requires a stable, trained, and dedicated team of practitioners that exceeds the capability of any single organization to support.

GUIDANCE: In order to achieve consistent, predictable, repeatable system product, all Information Management points of contact will plan and budget for the collaborative purchase of system development and management tools to support the following functions:

1. project planning and management (planning, tracking and oversight)
2. quality assurance
3. requirements development and management
4. design
5. implementation (program/acquire, integrate)
6. test
7. installation and checkout (production release)
8. operation and maintenance
9. retirement.

In addition, Information Management points of contact will plan and budget for the collaborative funding and management of skilled practitioners who will train, consult and be assigned to specific projects to ensure the effective application of the acquired tools.

BACKGROUND: This guidance combines functions as described in stages of the DOE Software Engineering Methodology, the Software Engineering Institute's Software Capability Maturity Model and System Engineering Capability Maturity Model and IEEE-STD-610. The first 2 functional areas are cross-cutting, throughout the project life cycle. "Test" also permeates several functional areas: implementation, installation, and maintenance. "Configuration Management", another cross-cutting function, was not listed because it is being addressed in a separate Corporate Guidance Item.

Possible tools supporting each function include the following:

1. project planning and management (planning, tracking and oversight)
 - estimating models/tools
 - project planning and scheduling programs
2. quality assurance
 - data collection tools
 - software life cycle simulators
 - quantitative analysis tools
 - auditing tools
3. requirements development and management
 - requirements tracking/traceability tools
 - specification tools
 - prototyping tools
 - modeling tools
 - simulation tools
 - configuration management tools
 - test management tools

4. design
 - specification tools
 - prototyping tools
 - simulation tools
 - program design languages
 - graphics tools
 - interactive documentation tools
5. implementation (program/acquire, integrate)
 - editors
 - compilers
 - cross reference generators
 - source code analyzers
 - graphics tools
 - interactive documentation tools
 - on-line help aids
6. test
 - test management tools
 - test generators
 - test drivers
 - test profilers
 - symbolic debuggers
 - test coverage analyzers
 - statistical analysis tools
 - infrastructure stress test tools
7. installation and checkout (production release)
 - automated installation tools
8. operation and maintenance
 - problem tracking and resolution tools
 - operations (database/performance) monitoring tools
 - error recovery (automatic checkpoint/restart) tools
 - disaster recovery tools
9. retirement
 - electronic records management tools.

AD tool purchases should be made tactically with a strategic eye on the future. Gartner Group references predict an evolution towards purchased software and componentware. Evaluate how the tools considered are evolving.

Specific tools to be considered are listed below.

- For Business Process Reengineering (BPR) - BPWin from Logic Works;
- For system data modeling, design and database schema generation - ERWin from LogicWorks;
- For configuration management, version control, and software component reuse - PVCS from Intersolv;
- For test planning and design, test development and execution, problem tracking and progress monitoring, and client/server stress testing - Automator QA Center from Direct Technologies

POINTS OF CONTACT:

Walter Eckhardt, Office of Budget, CFO, (301) 903-2330
 Kathleen Centeno, Office of Information Management, (301) 903-5472

REFERENCES:

Key Practices of the Capability Maturity Model (CMM), version 1.1, February 1993, (SEI Software CMM)
 SEI Systems Engineering CMM, version 1.1, November 1995
 DOE Software Engineering Methodology, March 1996
 Gartner Group Research Notes

DOE Corporate Guidance & Strategy

Reference Number: 0032

Group: Infrastructure

Title: Groupware Interoperability

Proposed Guidance/Strategy:

ISSUE: Many DOE Program Offices are making a commitment to a groupware standard. Long-term goals of enterprise-wide collaboration, streamlined work processes, and more usable information can be attained through planning and coordination of groupware implementations. The recognition of groupware as a strategic initiative will result in more focused implementations, and ones that will influence decisions related to Headquarters' overall messaging backbone, network infrastructure, and Internet strategies.

GUIDANCE: Lotus Notes is becoming the "defacto" groupware standard for DOE Headquarters. This standard is based on the strong support of the product by a majority of DOE Program Offices, as well as the products solid position in the marketplace. A Groupware Steering Committee will be established to coordinate Headquarter's initiatives by mid July 1996. The Steering committee will be responsible for turning the vision of an enterprise groupware environment into a reality, and will report the progress of this initiative to the Chief Information Officer through the DOE IRM Council. The Groupware Steering Committee will be responsible for defining Headquarters-wide standards for administration and maintenance, and for coordinating groupware developments and deployments. The Committee Chairperson will act as a central point of contact for integration with other corporate initiatives such as DOCS, and for Field activities wishing to coordinate groupware initiatives with Headquarters. Headquarter elements planning groupware implementations shall coordinate them with the Groupware Steering Committee.

POINTS OF CONTACT:

Robert Wells, Office of Civilian Radioactive Waste Management, (202) 586-5003

REFERENCES: Office of the Future: Assessment of Needs and Solutions, Office of Computational and Technology Research (ER-30), January 1996.

DOE Corporate Guidance & Strategy

Reference Number: 0210

Group: Corporate Management Information

Title: IM Products and Services Management Structure

Proposed Guidance/Strategy:

ISSUE: Inconsistently defined management activities and projects within and across DOE organizations can lead to uncoordinated, possibly duplicative, and/or costly incompatible efforts.

GUIDANCE: The DOE Headquarters organizations have established a common high-level IM products and services management structure to provide consistent definition of Information and Information Technology initiatives within and across organizational elements. All DOE organizations are encouraged to use this common structure to define and plan their projects and activities for better understanding and improved resource allocation.

BACKGROUND: DOE Headquarters Information Management organizations have been working on defining common goals, requirements, activities, projects, and collaborative efforts for over 12 months. Decisions on cost sharing initiatives and corporate or collaborative activities have been difficult to achieve due to lack of agreement on definitions of the projects or grouping of activities. More effective cost saving decisions can be achieved with better understanding of the common activities being pursued throughout headquarters. In addition, better understanding and communication of organization specific activities and projects will allow program or site IM and IT investment decisions that will more closely align with requirements for improved management decision making under the ITMRA Act (1996) and OMB's guidance and requirements on agencywide Capital Planning and IT investment processes.

POINTS OF CONTACT:

Ted Griffin, HR-4, (301) 903-4602
Buck Buchanan, DP-44, (301) 903-2989

REFERENCES:

IM Product and Services Management Guide (Draft)

DOE Corporate Guidance & Strategy

Reference Number: 0212

Group: Corporate Management Information

Title: Defense Message System (DMS)

Proposed Guidance/Strategy:

ISSUE: The current Department of Defense (DoD) AUTODIN messaging system is due to be deactivated on December 31, 1999. Therefore, a new replacement DoD system, DMS, must be implemented within DOE before the deactivation date occurs. Also the Director of Central Intelligence has directed the Intelligence community to adopt DMS. In addition, DMS is a completely interoperable, business quality electronic mail system replacing the disparate DoD electronic mail systems and may be of use to DOE.

GUIDANCE: The Department of Energy will implement DMS to comply with the deactivation of AUTODIN and the directive from the Director of Central Intelligence. This will affect messaging activities in HR-4, NN-30, NN-40, NN-60 and field office interfaces. Before expending or allocating resources, other programs and sites that need secure internal DOE messaging, communications with DoD, and those that have a requirement for digital signature, official records maintenance, interoperability, or multi-level security are encouraged to evaluate the possible use of DMS.

BACKGROUND: DMS is being developed by DoD for use across all agencies that require interoperable messaging both secure and unsecure with DoD. The Interagency Electronic Message and Directory Service Working Group has adopted the requirements of DMS as the common definition of characteristics for Business Quality Electronic Mail within the Government. In some situations, the features offered by DMS may be useful for reasons beyond secure communications such as:

1. DMS is being developed outside DOE, which offers cost savings to DOE in not developing their own system.
2. There are DMS versions of Lotus Notes and Microsoft Exchange thus enhancing interoperability for Groupware.
3. DMS has been chosen by DoD to supply Digital Signature for Travel Manager.
4. DMS is following the National Security Agency's Multi-level Security Program.
5. DoD is exploring DMS in relation to Web based features.

POINTS OF CONTACT: Rod Witschey, HR-433, (301) 903-6852

REFERENCES:

DOE Corporate IM Guidance and Strategies: "Electronic Mail" (#0022), "Digital Signature" (#0011), "TCP/IP for all Sites by FY98" (#0020), "DOE Travel Manager System" (#0006), "Internet/WWW Access" (#0021), "Groupware" (#0032), "Endorse Records Management Roadmap 2000" (#0008), and "Network Operating System" (#0030)
Electronic Mail Taskforce, "Governmentwide Electronic Mail for the Federal Government"

DOE Corporate Guidance & Strategy

Reference Number: 0228

Group: Infrastructure

Title: Information Technology (IT) Standards

Proposed Guidance/Strategy:

ISSUE: The Department has stovepiped, non-integrated systems and technologies that are inefficient. An enterprisewide process is needed to effectively adopt and retire Information Technology Standards that enhance integration and interoperation of information technologies and applications throughout the Department.

GUIDANCE: DOE programs and sites plan and budget for the implementation and use of formally adopted DOE IT standards. Department of Energy programs and field sites should fully support and endorse adherence to the Departmental IT Standards Guidance.

BACKGROUND: As a result of the Information Architecture Standards Adoption and Retirement Process, DOE IT Standards Guidance will be issued by the CIO during the fourth quarter of FY1997. OMB guidance, under the Information Technology Management Reform Act (ITMRA) of 1996, requires the use of Information Architectures as a key element in managing Departmental investments in Information Technology. The Department of Energy Chief Information Officer, through the coordinated efforts of a nationwide crosscutting team of information management professionals, is creating and implementing a DOE Information Architecture. Achieving the vision of information architecture requires adopting, implementing, and tracking information technology standards, where appropriate, to assist customers and business partners in fulfilling the Departmental mission and enhancing the use of DOE information. Adoption and implementation of standards DOEwide will be consensus based with active participation of enterprise stakeholders.

POINTS OF CONTACT:

Dave Berkau, HR-4, (301) 903-3193
Carol Blackston, HR-4, (301) 903-4294

REFERENCES:

- 1) Information Technology Management Reform Act, 1996
- 2) Department of Energy Information Architecture, Volume I, The Foundations, March 1995.
- 3) DOE Information Architecture Profile of Adopted Standards, Prepublication Draft, April 1997
- 4) DOE IT Standards WWW Home Page: <http://www-it.hr.doe.gov/iat/itspro>

DOE Corporate Guidance & Strategy

Reference Number: 0232

Group: Infrastructure

Title: Year 2000 Guidance

Proposed Guidance/Strategy:

ISSUE: On or before January 1, 2000, many of DOE's current computer applications will fail if they do not properly handle the century date change.

GUIDANCE: The Department must: (1) identify mission-essential computer systems, (2) correct and test systems with year 2000 issues to ensure that no mission of the Department is adversely impacted, and (3) provide information on all mission-essential systems to the Department's Year 2000 Mission-Essential Status System to fulfill Departmental requirements for reporting to the Secretary of Energy, Congress and the Office of Management and Budget.

The guidance on the definition of mission-essential is based on Title 36 of the Code of Federal Regulations, Chapter XII, Part 1236, MANAGEMENT OF VITAL RECORDS and Office of Management and Budget Circular A-130, Management of Federal Information Resources. A definition of mission-essential can be found at website: <http://websparc.hr.doe.gov/year2000/>.

EXCEPTIONS: There are no exceptions for mission-essential systems. Systems other than mission-essential are the owner's responsibility and must be addressed at the local level. Specific issues related to embedded microchips, which affect health and safety and are outside the purview of the information management community, are being addressed by the Assistant Secretary for Environment, Safety, and Health. The point of contact for this effort is Steve Scott, (301) 903-3033.

BACKGROUND: DOE Order 200.1 dated September 30, 1996, states that each site is responsible to ensure appropriate project management practices are implemented. For year 2000, these practices should follow, where applicable, the General Accounting Office guidance provided in the references below. Departmental project management is accomplished by setting overall project milestones and monitoring information reported about each mission-essential system. Individual system status information is captured through an Internet-accessible Year 2000 Mission-Essential Status System. This information is used for tracking each system's progress as it achieves year 2000 compliance and highlighting any area of concern requiring management's attention.

POINTS OF CONTACT: CIO Project Team -- Cliff Hoyt (301) 903-5237

REFERENCES:

- 1.) DOE Order 200.1 Information Management Program, Dated September 30, 1996
- 2.) Year 2000 computing Crisis: An Assessment Guide, Exposure Draft, General Accounting Office, February 1997. This document is available on the GAO website:
<http://www.gao.gov/special.pubs/y2kguide.pdf>
- 3.) Title 36 of the Code of Federal Regulations, Chapter XII, Part 1236, MANAGEMENT OF VITAL RECORDS, July 1, 1996
- 4.) Office of Management and Budget Circular A-130, Management of Federal Information Resources, February 8, 1996

DOE Corporate Guidance & Strategy

Reference Number: 0233

Group: Infrastructure

Title: Directory Services

Proposed Guidance/Strategy:

ISSUE: The DOE is in need of a flexible, maintainable, comprehensive enterprise directory services. Currently, directory services do not exist that addresses DOEwide corporate requirements. The non-existence of a comprehensive DOEwide directory services is inhibiting the collaboration and exchange of electronic information DOEwide. With the proliferation of DOEwide corporate network services, infrastructure, applications (i.e. E-mail, scheduling, ...) and information systems, the requirement for enterprise directory services and information exchange continues to escalate.

The X.500 standard for directory services is used to design large-scale distributed directory services. The X.500 standard specify a cohesive naming and addressing structure that lends support for multiple resources and applications of multi-program and geographically dispersed user organizations. Additionally, the X.500 distributed architecture provides a framework for ease of implementation and maintenance of a comprehensive corporatwide directory services.

GUIDANCE: DOE is adopting and implementing X.500 standards-based directory services. Headquarters organizations and field sites implementing X.500 services should have control over the source of the naming information. All efforts in developing, purchasing, or deploying site-unique or proprietary directory services are to be coordinated with the contact for this guidance item. Any entities wishing to collaborate in this activity are also encouraged to contact the DOE point of contact below.

BACKGROUND: Directory services is a requirement that every entity in the DOE must face. Every organization has already duplicated, is in the process of duplicating, or will have to duplicate the effort to address the directory services requirement. Because of the many systems used, there is not an efficient or effective way to consolidate the directories to provide a DOEwide view. As the DOE user community's demands for accurate, timely, and automated directory information heightens, DOE's IM community must respond with the capability. The governmentwide GSA sponsored Electronic Messaging And Directory Working Group (EMAD) has given direction to executive agencies to move forward with governmentwide X.500 directory services.

The deployment of X.500 distributed directory services for DOE use will provide the following advantages:

- Provides networked users with DOEwide, governmentwide, and global directory services.
- Implements the standards-based and industry accepted X.500 standard.
- Supports the architecture necessary to implement the Defense Messaging System
- Reduces the requirement for multiple and proprietary directories.
- Offers an effective, distributed application to manage users and network resources.
- Improves user information currency and reliability and support functions such as those performed by the Headquarters Central Naming Registration (CNR).

POINTS OF CONTACT:

Talmage Corbett, HR-4, (301) 903-4628, talmage.corbett@hq.doe.gov
Patrick Hargett, HR-4, (301) 903-4625, patrick.hargett@hq.doe.gov
Kevin Shaver, CDSI, (301) 903-0664, kevin.shaver@hq.doe.gov

REFERENCES: N/A

DOE Corporate Guidance & Strategy

Reference Number: 0234

Group: Infrastructure

Title: Computer Virus Protection and Incident and Information Advisories

Proposed Guidance/Strategy:

ISSUE: As DOE staff continue to increase their interaction, collaboration, and exchange of electronic documents, computer virus encounters also are on the rise. In total, the virus threat is at its highest point ever and showing no signs of diminishing.

GUIDANCE: All DOE servers, gateways, and desktop computers will be protected where practical from computer viruses.

- Anti-viral software will be made available to all DOE desktop users. Where practical, workstations will have anti-viral protection software installed and activated. An anti-virus monitoring (memory-resident) program with the ability to detect all major classes of viruses (boot sector, file infector, and macro) will be initiated on all systems during boot-up and remain active during usage.
- The anti-viral software used must be current and updated on all workstations as new versions become available.
- DOE computer users are to scan (or have an auto-scan enabled) all downloaded files, all files attached to E-mail messages, and all files on portable media prior to access.
- All DOE file servers will be protected by anti-viral software to prevent virus infections and propagation through shared resources and data.
- All DOE organizations will provide continuous virus-protection campaigns to maintain user awareness.
- Each DOE entity will implement a virus reporting, eradication, and investigation process to ensure endangered parties are identified and warned, and viruses are eradicated at the earliest warning to prevent spread and loss of resources.

The DOE Headquarters Automated Systems Security Incident Strike Team (ASSIST) is responsible for the DOE Headquarters Virus Protection Plan. DOEwide (DOECAST) and Headquarters virus-related announcements are to be submitted to the ASSIST for review, with a copy provided the computer security points of contact below.

BACKGROUND:

POINTS OF CONTACT:

ASSIST:	David Ensign, CDSI, (301) 903-0654, david.ensign@hq.doe.gov
	Robin Luther, CDSI, (301) 903-0649, robin.luther@hq.doe.gov
Computer Security:	Phil Sibert, HR-4, (301) 903-4880, phil.sibert@hq.doe.gov
	John Staley, HR-4, (301) 903-4566, john.staley@hq.doe.gov
	Jack Whichard, HR-4, (301) 903-2399, jack.whichard@hq.doe.gov

REFERENCES: ASSIST Home Page: www-it.hr.doe.gov/assist

DOE Corporate Guidance & Strategy

Reference Number: 0236

Group: Infrastructure

Title: DOE Corporate Network

Proposed Guidance/Strategy:

ISSUE: Today's networking capabilities throughout DOE are diverse and most often transparent to the end user. Because of this transparency, sensitive unclassified transactions could be routed across an open Internet link and subject to the compromises that environment allows. Additionally, as Intranet, web-based, and workflow applications become mainstream, the need for a DOE closed network becomes more necessary.

GUIDANCE: All activities throughout the DOE that involve new networks, new segments, alternate network routing, or network upgrades are to coordinate their efforts with the DOE Networking Group, a sub-group of the DOE IM Council. The DOE Corporate Network specifics follow:

- DOE will assemble a closed network to be called the DOE Corporate Network. This network will provide connectivity among all DOE entities and may be virtual or physical.
- Each DOE entity will be responsible for providing closed interconnectivity among its organizations and distributed offices should there be a business justification to do so.
- The DOE Corporate Network will be used for all DOE business transactions such as time reporting, payroll data transfer, and financial related transactions.
- The DOE Corporate Network will be used as the carrier for the DOE Intranet.
- An organization within the DOE will be assigned the responsibility for verifying and monitoring that all segments of the DOE Corporate Network remain open only to the DOE community.

EXCEPTIONS: As granted by the DOE Networking Group.

BACKGROUND: DOE is moving toward a common DOEwide network infrastructure to support its administrative applications, protect its information resources, simplify its networking infrastructure, and save both dollar and staff resources when and where practical. There are a number of networks within the DOE community today. ESNET, DOECN, DOEBN, and the Internet are all used today. The DOE IM Council is proactively assessing our network capabilities and redundancies through the Networking Group. There is much momentum throughout the DOE IM community for a standard infrastructure and common networking capability to connect DOE's diverse and geographically dispersed entities. This guidance item supports this initiative.

POINTS OF CONTACT:

Tom Rowlett, (301) 903-6555, thomas.rowlett@hq.doe.gov
Gary DeWitt, (301) 903-0443, gary.dewitt@em.doe.gov
George Seweryniak, (301) 903-0071, george.seweryniak@er.doe.gov
Bob Miller, (301) 903-0660, robert.miller@hq.doe.gov

REFERENCES:

DOE Corporate Guidance & Strategy

Reference Number: 0239

Group: Infrastructure

Title: Access to Corporate Systems via the WEB

Proposed Guidance/Strategy:

ISSUE: The complexities involved in distributed computing is driving many IM organizations to seek a more simple implementation for accessing business applications. Applications that are dependent on protocol stacks, client software installations, middleware installations, server software installations, and specific network configurations are nearly impossible to implement across diverse operating environments.

GUIDANCE: All newly developed, migrated, or commercially obtained business applications to be used DOEwide or across multiple DOE sites/organizations will primarily use Web browser technology for user access. Additionally, all new business applications serving a single site or organization should consider requiring Web browser access capability to simplify implementation and technical support.

EXCEPTIONS: As granted by the DOE IM Council or implementing DOE Site(s) IM Manager(s).

BACKGROUND: Web browser access is becoming the defacto standard for accessing new applications. The DOE Headquarters Collaboration Group plans to create a Web Application Development Strategy in FY98 to further define the design and deployment of Web enabled transaction based systems. Most organizations are currently using Web browsers that support HTML 2.0 or above. Using this level of common access will ensure interoperability across the DOE and will simplify and facilitate the deployment of shared and corporate applications.

POINTS OF CONTACT:

Buck Buchanan, DP-44, (301) 903-2989, james.buchanan@hq.dp.doe.gov
John Sewell, CDSI, (301) 903-0667, john.sewell@hq.doe.gov

REFERENCES:

DOE Corporate Guidance & Strategy

Reference Number: 0301

Group: Corporate Management Information

Title: Departmental Information Architecture Guidance

Proposed Guidance/Strategy:

ISSUE: The Department has numerous stovepiped, non-integrated systems and technologies. An enterprisewide blue print is needed to effectively integrate and interoperate information technologies and applications throughout the Department.

GUIDANCE: Information Architecture Guidance will be issued by the CIO during the third quarter of FY1997. It recommends that DOE programs and sites plan and budget for the development of formalized information architectures using proven approaches and tools. Department of Energy programs and field sites should fully support and endorse adherence to the Departmental IA Guidance.

BACKGROUND: OMB guidance, under the Information Technology Management Reform Act (ITMRA) of 1996 requires the use of Information Architectures as a key element in managing Departmental investments in Information Technology. The Department of Energy Chief Information Officer, through the coordinated efforts of a nationwide crosscutting team of information management professionals, is creating and implementing a DOE Information Architecture. The architecture is being implemented cooperatively on a decentralized basis. The Department IA program will be closely aligned to the OMB guidance on Information Technology Architectures (released June 18, 1997). The Guidance is viewed as a major component and deliverable in defining and promulgating the Departmental Architecture. The CIO began work on the DOE Information Architecture in FY1995, providing broad guidance and an overall corporate vision. In FY1998 the focus will move from the development of a corporate framework to assistance for DOE programs and sites. In addition, information architectures will become more closely integrated with the Departmental Capital Planning and IT investment process.

POINTS OF CONTACT:

Dave Berkau, HR-4, (301) 903-3193

Michael Tiemann, HR-431, (202) 586-5461

REFERENCES:

- 1) Information Technology Management Reform Act, 1996
- 2) Department of Energy Information Architecture, Volume I, The Foundations, March 1995
- 3) Department of Energy Information Architecture, Volume II, The Baseline Analysis, Parts 1,2, & 3, December 1996
- 4) Department of Energy Information Architecture, Volume III, Guidance, April 1997
- 5) DOE Information Architecture WWW Home Page: <http://www.hr.doe.gov/iat>

1990年12月
 1991年1月

Stage 1. Nomination

A. Types of Guidance Candidates

New Information Management (IM) Guidance Candidates. New guidance candidates can be submitted by any member or group within the DOE Community. Guidance may be submitted for the use of any technology solution. New Guidance candidates are submitted by originators to the Corporate Guidance Group (CGG) Support Team within the Office of Information Management (HR-4).

Rogue IM Guidance. *Rogue Guidance* is any inferred or mandated IM guidance issued outside of this process. When rogue guidance surfaces, the Chief Information Officer (CIO) representative meets with the originator of the guidance to discuss the technology solution being promoted to discuss and determine if it is something intended to implement approved guidance or in conflict with approved corporate guidance and may adversely impact the infrastructure. There are two kinds of Rogue Guidance.

- New guidance that did not go through the Departmental review and adoption process.
- Unintentional variation from approved guidance.

If Rogue Guidance is determined by the CIO to be value-added, the CIO representative does one of the following.

- Works with the Rouge Guidance proponent to establish an official IM guidance submission for review and approval.
- Prepares the guidance for submission by the CIO organization.

If Rogue Guidance is considered for the formal process, it moves through the normal process steps. If it is considered detrimental to the IM environment, the CIO issues a statement of noncompliance to the IM community on this guidance.

Existing IM Guidance. Existing IM Guidance is reviewed at least once per year. It is also reviewed warranted by changes in laws, policies, new technology directions, etc. Guidance items are updated, terminated, or reinstated based on review.

B. Format and Supporting Materials

The following is required for each candidate.

1. A discussion/point paper on the guidance. Level of detail for submissions can be at either the macro or micro level at the discretion of the sponsor/champion. The discussion paper and reference documents should be provided in electronic format whenever possible.
2. A statement of how this guidance improves the business processes of the Department.
3. Suggested performance measures that can be used to determine if implementation of the guidance has obtained the expected results.

C. Candidate Tracking

Items submitted for consideration as corporate guidance are tracked throughout the process by the Special Integration Project (SIP) Team. The SIP Team does the following.

- Provides prompt notification and feedback on all activities surrounding candidates to guidance sponsors through all stages of the process
- Maintain a list of all candidates and their disposition that is provided regularly to the CIO, CGG, and IM Council
- Inputs accepted candidates to groupware system for review, comment, and approval.

Analyze

Stage 2. Analyze

Filters are first applied by the SIP Team and later by the CGG to ensure only guidance items that assist programs and sites with their planning and budgeting activities are considered in the Corporate IM Guidance process.

A. CGG Support Team

The SIP Team consults with the sponsor and conducts an initial review to determine whether the requirement stated above has been met and that all required information and references listed under 1B are provided with the candidate. Once established, additional filters are applied to determine if the item influences technical decisions or assists in prioritizing information technology resources.

If either of these additional filtering criteria are met, the item is prepared for CGG evaluation and approval. If the filtering criteria are not met, the SIP Team either works with the submitter to revise items that have significant potential as guidance or appropriately redirect it. Items may be redirected as follows.

- Corporate items of significant interest that do not meet the guidance categories are briefly described in a corporate awareness list and forwarded to the CGG.
- Headquarters (HQ) site-specific items are directed to the HQ Collaboration Group.
- Program-specific items are directed to the appropriate program.

A report on redirected items is prepared and provided to the CGG.

B. Corporate Guidance Group

The Corporate Guidance Group reviews the list of filtered candidates as well as the list of redirected items. The following actions are taken.

- If approved, sponsors are notified. If further action is required, the sponsor is notified by the CGG. Examples of further actions required would be a detailed briefing to the

appropriate program, or more detailed documentation to the IM Council or Executive Committee for Information Management (ECIM).

- The report recommending items be redirected is approved as written, or new direction is given by the CGG for this item.

The CGG specifies whether the item should be put through the process and incorporated as guidance or if the CGG will only prepare a position paper on the item.

Stage 3. Discuss/Recommend

A. Corporate Guidance Group

1. Review all candidates submitted by the CIO staff through the formal process.
2. Act on candidate guidance. Options include the following.
 - a. Endorse as is.
 - b. Recommend minor revisions and coordinate with originator.
 - c. Return to originator for further explanation or revision.
 - d. Reject proposed guidance/prepare position paper.
3. Direct the SIP Team to do any of the following as appropriate.
 - a. Arrange for briefing/demonstration of guidance candidate.
 - b. Prepare and distribute guidance and appropriate supporting materials to IM Council members on approved/recommended candidates.
 - c. Coordinate rework of guidance with sponsor/originator.
 - d. Distribute position paper to IM Council on rejected candidates.
 - e. Coordinate briefing of approved candidates to the IM Council at scheduled meeting.

Stage 4. Approve

A. Information Management Council

1. Review submissions recommended and forwarded by the CGG.
2. Act on candidate guidance. Options include the following.
 - a. Endorse as is.
 - b. Recommend minor revisions and coordination with originator on changes.
 - c. Return to CGG or originator for further explanation or revision.
 - d. Reject proposed guidance.
3. Prepare position paper on rejected candidates.
4. Prepare briefing and position paper on unresolved candidates/issues for presentation to the ECIM.
5. Direct the SIP Team to do any of the following as appropriate.
 - a. Arrange for briefing/demonstration of guidance candidate.
 - b. Prepare and distribute approved guidance to IM Community.
 - Update guidance document
 - Update Home Page
 - c. Coordinate rework of guidance with sponsor/originator.
 - d. Finalize position paper for ECIM on unresolved issues/candidates.
 - e. Prepare and present briefing on approved guidance items that are deemed appropriate for the ECIM level as an informational item

B. Executive Committee for Information Management

1. The ECIM is only presented with important unresolved issues for decision.
2. Act on unresolved issues guidance. Options include the following.
 - a. Endorse as is.
 - b. Recommend minor revisions and coordination with originator on changes.
 - c. Return to IM Council and/or originator for further explanation or revision.
 - d. Reject proposed guidance.
3. Promote and support the IM Guidance Process.

Stage 5. Use

A. Special Integration Project Team

1. Update Corporate Information Management Guidance
2. Prepare guidance update for distribution.
 - ▶ Paper copies
 - ▶ Home Page
 - ▶ Electronic file
3. Maintain master file on guidance decisions.
4. Coordinate position papers from the following on disapproved guidance.
 - ▶ Corporate Guidance Group
 - ▶ Information Management Council
 - ▶ Executive Committee for Information Management
5. Distribute position papers to the following.
 - ▶ Guidance originators
 - ▶ HQ IM Team
 - IM Council
 - Home Page, if appropriate
 - ▶ to others, as appropriate
6. Maintain distribution lists for Guidance and Reports.
7. Provide status on guidance submissions by keeping originators informed on guidance candidate status.

Stage 6. Assess