APPENDIX F

ELECTRONIC MESSAGING AND VOICE MAIL

1 PURPOSE

This appendix establishes policies and assigns responsibility for the management and use of electronic messaging systems and services in the United States Department of Agriculture (USDA).

2 BACKGROUND

Electronic Mail (E-Mail) is an integral component in the conducting of business within USDA and between USDA and other federal and private organizations. Across government, users have experienced frustration in transmitting E-Mails and attachments. The executives and users have higher expectations, volumes are increasing, some attachments are very large, and queue times are noticed by the users. The Chief Information Officer (CIO) Council, through the Interoperability Committee, is seeking pragmatic solutions to these and other common problems. To assist in defining the technical barriers and opportunities, the Federal E-Mail Postmasters Group was established to develop realistic service expectations, share best practices, develop service guidelines, and message delivery status expectations. As consensus is gained, USDA will continue to update E-Mail policies to reflect government-wide decisions and approaches.

As a result of the USDA Electronic Mail Modernization Program, USDA agencies agreed to the implementation of a USDA enterprise-wide infrastructure, the Departmental Electronic Mail Gateway Service, as the integrated E-Mail solution for interconnecting disparate E-Mail systems. The Program's benefits include: electronic mail protocol conversions between different proprietary E-Mail formats (e.g., GroupWise, cc:Mail), directory synchronization of E-Mail addresses, and standard X.400 message exchange.

3 REFERENCES

Source	<u>Publication</u>	<u>Title/Subject</u>
Congress	5 U.S.C. 552,	Freedom of as amended Information Act (FOIA)

Congress 33	44 U.S.C.	Federal Records Act (FRA) Chapters 21, 29,31, and
Congress	18 U.S.C. 2701	Electronic et seq. Communications Privacy Act
Congress	18 U.S.C. 1030	Computer Fraud and Abuse Act of 1986
Congress	P.L. 100-235	Computer Security Act of 1987
Congress	P.L. 104-104	Telecommunications Act of 1996
OMB Formation Re	Circular No. A-130 sources	Appendix III, Security of Federal Automated In
GSA Office1995 -	Electronic Two-Year 1996 (E-Mail PMO)	Plan:Messaging Program Fiscal Years Management
GSA		Center for Electronic Messaging Technologies
GSA	E-Mail PMO	Instructions to Registration Applicants Services
NIST Specification	Spec Pub 500-217	IGOSS-Industry/Government Open Systems
NIST Technologies	FIPS PUB 146-2 (POSIT)	Profiles for Open Systems Internetworking
ITU-TSS (MHS): Syste	X.400 Series of m Model-Service Elen	Messaging Handling Recommendations Systems nents
ITU-TSS The Directory	X.500 Series of	Open Systems Recommendations Interconnection-
NARA and 1234	36 CFR Chapter XII	Electronic Mail Parts 1220, 1222, Systems 1228,
USDA	DR 3140-1	Information Systems Security Policy
USDA	DR 3140-2	Electronic Mail Security and Privacy (Draft) Policy
USDA	DM 3140-1	Information Systems
Thru 8		Security (Draft) Manuals
USDA	DR 3040-1	Electronic Records Management Program

USDA DR 3040-2 Call Detail Records

USDA DR 3080-1 Records Disposition

USDA DR 3090-1 Vital Records Program

4 ABBREVIATIONS

AAI - Administrative Authority Identifier

CCITT- International Telegraph and Telephone Consultative Committee

CEMT - Center for Electronic Messaging Technologies

CIO - Chief Information Officer

COR - Contracting Officer's Representative

CTSB - Communications Technology Services Branch

FIP - Federal Information Process

FOIA - Freedom Of Information Act

FRA - Federal Records Act

IGOSS - Industry/Government Open Systems Specification

IT - Information Technology

ITU/ - International Telecommunications Union-

TSS Telecommunications Standardization Sector

MHS - Messaging Handling Systems

MTA - Message Transfer Agent

NARA - National Archives and Records Administration

OCIO - Office of the Chief Information Officer

OR - Originator/Recipient

OSI - Open Systems Interconnection

OU - Organizational Unit

PMO - Program Management Office

PRMD - Private Management Domain

SMTP - Simple Mail Transfer Protocol

TBSD - Telecommunication Business Services Division

UA - User Agent

USDA - United States Department of Agriculture

5 POLICY

a <u>Electronic Mail</u>

- (1) Electronic mail shall be used for the conduct of official business or limited personal use as outlined in the Main Body section in this Directive. Official business conducted over electronic mail systems shall comply with record keeping requirements of the Federal Records Act (FRA). Electronic mail messages are subject to the Freedom Of Information Act (FOIA).
- (2) Electronic mail shall be used as an enabling technology to improve USDA business processes. Electronic mail messages are Departmental property and not personal property. The expectation of privacy or confidentiality does not apply to electronic mail messages stored, retrieved or exchanged. Accordingly, electronic mail messages shall only be authorized for examination during the course of audits, investigations and system administration functions.
- (3) Electronic mail messages containing discriminatory language or remarks that may constitute sexual harassment are prohibited.
- (4) Electronic mail messages that meet the definition of a record as stated in the FRA shall be preserved, for the

appropriate period of time. For example, E-Mail messages that document agency policies, programs, decisions, operations and functions are considered Federal Records and shall be archived. (See DR 3080-1 for additional guidance.)

- (5) A Business-Quality messaging environment for unclassified communications, shall be implemented within USDA to achieve government wide electronic messaging.
- (6) X.500 Directory Services, shall be implemented within USDA to provide enterprise-wide translation of user or network resource names to electronic mail addresses and directory synchronization services.
- (7) X.400 is the Departmental standard protocol for interconnecting disparate electronic mail systems, providing electronic mail interoperability for USDA staff, and supporting a Business-Quality messaging environment. SMTP may be used as an interim electronic protocol until a Business-Quality messaging environment is implemented.
- (8) All X.400 MTAs shall utilize the USDA Electronic Mail Gateway Service for all intra-USDA X.400 electronic mail traffic and shall be in compliance with FIPS PUB 146-2, POSIT.
- (9) All X.400 MTAs shall be registered with the GSA E-Mail PMO.

NOTE: The GSA E-Mail PMO is the registration authority for the X.500 OU Name, X.400 PRMD Name, and the AAI registrations for the U.S. Government. These registrations are necessary to provide unique identification of Government-wide networks. The E-Mail PMO received its registration authority through a delegation of responsibility from the NIST which has the overall OSI registration authority.

- (10) Acquisitions of new electronic mail systems shall have X.400 capabilities that:
 - (a) Are based on POSIT-compliant X.400 standards as specified in the effective version of FIPS PUB 146-2.

- (b) Comply with the 1988 X.400 Series of Recommendations developed by the ITU-TSS, formerly the CCITT.
- (c) Are capable of configuration for interoperation with the FTS2000/2001 X.400 system, in addition to the requirement for POSIT-compliant operation.
- (11) E-Mail systems, facilities and resources shall be shared among agencies and staff offices to reduce costs, improve efficiency and eliminate redundancy.
- (12) The standard E-Mail naming convention shall be: firstname.lastname@usda.gov (john.smith@usda.gov). When two or more persons have the same firstname and same lastname, and if the agency E-Mail system supports the use of a middle initial, then the first alternative shall be: firstname.middleinitial.lastname@usda.gov (john.s.smith@usda.gov). If the agency E-Mail system does not support a middle initial, then one of the following alternatives shall be used: append a middle initial to the firstname or append a unique number to the last name.

This second alternative shall be: firstname middleinitial.lastname@usda.gov (johns.smith@usda.gov)or firstname.lastnamex@usda.gov (john.smith2@usda.gov).

b Voice Mail

- (1) The USDA contract for voice mail service is mandatory-for-use in the Washington, D.C. metropolitan area unless the agency's requirements cannot be met through that contract.
- (2) USDA agencies in the Washington, D.C. metropolitan area shall request a waiver from OCIO, to include a cost/benefit analysis, for any voice mail systems or services, other than USDA's mandatory contract, before any expenditure of funds will be authorized.
- (3) The USDA contract for voice mail service is mandatory-for-consideration outside of the Washington,

- D.C. metropolitan area. Field locations shall complete a cost/benefit analysis to determine the best source of supply and shall include the USDA mandatory contractor, VoiceCom, as an alternative in the analysis.
- (4) Purchase of voice mail equipment or service shall be accomplished within the framework of current procurement regulations and requirements contracts. The following factors should be taken into consideration in the acquisition:
 - (a) The acquisition of services rather than voice mail systems. While the cost of services may be higher than the cost of a voice mail system, for long term value the following criteria should be considered:
 - 1 The number of persons to be served by the system;
 - <u>2</u> The anticipated and potentially increasing volume of voice mail traffic; and
 - <u>3</u> The evolving industry standards, which are not currently met by all voice mail systems.
 - (b) The use of available or acquired voice mail resources on a shared basis with other Federal agencies as an alternative to more than one agency acquiring voice mail equipment at that location.

6 RESPONSIBILITIES

- a Office of the Chief Information Officer will:
 - (1) Establish and maintain Department-wide electronic messaging policy, programs, and procedures;

(2) Perform oversight management functions required of the FTS2000/2001 Mail system;

- (3) Maintain and disseminate current information on electronic mail standards, records, and interoperability to agencies;
- (4) Provide and manage the USDA Electronic Mail Gateway Service to ensure:
 - (a) All USDA electronic mail systems are configured for efficient and cost-effective operations;
 - (b) All USDA electronic mail systems conform to a minimum of 1988 X.400 POSIT standards;
 - (c) Interoperability exists between USDA electronic mail systems; and
 - (d) Coordination of Departmental Open Systems Addressing. (See Appendix H, Open Systems Addressing);
- (5) Provide X.500 Directory Services and directory synchronization;
- (6) Ensure compatible Department-wide electronic mail capabilities;
- (7) Serve as liaison to the GSA E-Mail PMO on all electronic messaging issues;
- (8) Serve as the registration representative for X.400 PRMD Names, X.500 OU Names, and AAI requests and serve as liaison to the GSA E-Mail PMO on registration issues;
- (9) Review agency requests to use voice mail systems other than USDA's mandatory contract:
 - (a) The COR will obtain written certification that the contractor cannot meet the agency's voice mail requirements; and

(b) The COR will obtain the necessary waivers from the Contracting Officer and forward them to the requesting agency for all voice mail requests.

b Agencies and Staff Offices will:

- (1) Utilize USDA's Electronic Mail Gateway Service to exchange electronic messages among disparate electronic mail systems;
- (2) Support business-quality messaging to the maximum extent possible;
- (3) Conform to the USDA X.500 Directory Schema to ensure integration of all USDA directory information;
- (4) Complete and submit X.400 PRMD Name Registration Application Forms to OCIO;
- (5) Implement E-Mail as an enabling technology in support of the government-wide electronic messaging initiative;
- (6) Identify and preserve those electronic mail messages that constitute a record as defined in the FRA and DR 3040-1;
- (7) Submit requests for waiver from the mandatory voice mail contract within the Washington, D.C. metropolitan area to the Voice Mail COR at OCIO/TBSD/CTSB; and
- (8) Complete a cost/benefit analysis to determine the best source of supply and include the USDA mandatory contractor, VoiceCom, as an alternative in the analysis. The USDA contract for voice mail service is mandatory-for-consideration outside of the Washington, D.C. metropolitan area.

7 SECURITY

Information Security is the protection of USDA's automated information or FIP resources (i.e., telecommunications) from unauthorized accidental

or deliberate modification, destruction, denial, delay, transmission or exposure.

- a The Electronic Communications Privacy Act of 1986 makes it a federal crime to intercept and disclose electronic messages. The Act applies to a message either in transmission or storage.
- b Telecommunications security policies and procedures apply to the planning, acquisition, and use of electronic mail systems and electronic mail services, including FTS2000/2001 Mail.
- c National security information and sensitive information require protection and shall not be exchanged via electronic mail by unsecured means, such as clear text.

8 DEFINITIONS

<u>Business-Quality Messaging</u>. The fully featured, reliable messaging system that supports the exchange of a wide range of sensitive but unclassified information between agencies. Business Quality E-Mail includes connectivity/interoperability, guaranteed delivery/accountability, timely delivery, confidentiality/security, sender authentication, integrity, survivability, availability/reliability, ease of use, and identification of recipients.

<u>Directory Schema</u>. The framework consisting of a set of rules and definitions, which define the format for the structure and the contents of the electronic messaging directory as well as the rules for its use.

<u>Directory Synchronization</u>. The bi-directional electronic exchange and update of information between proprietary electronic mail directories.

Message Transfer Agent. A component of the X.400 message transfer system that receives, stores, and forwards X.400 formatted messages to either a UA or another MTA based on the routing information in the X.400 Originator/Recipient (OR) Name.

<u>Simple Mail Transfer Protocol</u>. The standard Internet protocol for transferring electronic mail messages with ASCII contents from the originator to the recipient. The SMTP standard specifies the interaction and format of messages between mail systems.

<u>USDA Electronic Mail Gateway Service</u>. The interface between proprietary electronic mail environments (i.e., WorldTalk software) to facilitate the exchange of messages and attachments despite the size and type of message content.

<u>X.400</u>. The set of ITU/TSS recommendations, approved in 1984 and revised in 1988, which describe the system model and service elements of a message handling system.

 $\underline{X.500}$. The set of ITU/TSS recommendations, defined in 1988 and revised in 1993, which describe directory services for X.400 and other networks.