# PREFACE TO SELECTED INFORMATION DIRECTIVES

CIO Transmittal No.: 15-010 CIO Approval Date: 06/12/2015

Issued by the EPA Chief Information Officer, Pursuant to Delegation 1-19, dated 07/07/2005

### CHIEF INFORMATION OFFICER MEMORANDUM

**SUBJECT:** Chief Technology Officer (CTO) Responsibilities in Selected Information Directives

# Re-assigned CTO responsibilities

Effective immediately, CTO responsibilities detailed in the selected information directives (i.e., Information Policies, Procedures, Standards, and Guidance) listed in Appendix A are re-assigned to the OEI Office of Technology, Operations, and Planning (OTOP) Director and the Senior Agency Information Security Officer (SAISO) as detailed. The re-assignment does not change any requirements in the selected information directives.

The OEI Information Directives Program Manager is directed to attach this memorandum and Appendix A as a Preface to each of the Information Directives listed. OEI will then update the Roles and Responsibilities section of each Information Directive in accordance with the normal review and update cycle.

Ann Dunkin
Chief Information Officer

U.S. Environmental Protection Agency

# APPENDIX A

Information Directive	Prior CTO Responsibilities	Re-
		assignment
CIO 2104.1 Software	Provide procedures, standards, and guidance to senior level	OTOP
Management and Piracy	managers to: support the Agency's Software Management and	Director
Policy	Piracy Policy and manage enterprise software licenses.	0.000
CIO 2104-P-01.0	Provide procedures, standards, and guidance to senior level	OTOP
Software Management	managers to: support the Agency's Software Management and	Director
and Piracy Procedure	Piracy Policy, manage enterprise software licenses, and provide	
	covered users within their office with training and awareness on	
	the Software Management and Piracy Policy through the annual	
	Cybersecurity Awareness Training.	
CIO 2121.1 System Life	Establish and publish procedures, technical operational	OTOP
Cycle Management	procedures and standards (TOPS), and guidance supporting the	Director
(SLCM) Policy	Agency's SLCM Policy. Review and approve waivers to the	
	SLCM Procedure.	
CIO 2121-P-03.0 SLCM	Establish and publish procedures, TOPS, and guidance supporting	OTOP
Procedure	the Agency's SLCM Policy. Review and approve waivers to the	Director
	SLCM Procedure.	
CIO 2122.1 Enterprise	Issue procedures, guidance, and technical standards associated	OTOP
Architecture (EA) Policy	with the EA with a specific focus on the technology architecture,	Director
	chair the Quality Technology Subcommittee (QTS), and	
	review technology and security considerations in the Enterprise	
	Target Architecture and Enterprise Transition Plan.	
CIO 2122-P-01.1 EA	Issue procedures, guidance, and technical standards associated	OTOP
Governance Procedures	with the EA, with a specific focus on the technology architecture,	Director
	chair the QTS, and review technology and security considerations	
	in the Enterprise Target Architecture and Enterprise Transition	
	Plan.	
CIO 2122-P-03.0	Recommend to the CIO a specific IT standard, product or	OTOP
Information Technology	specification to be added to the official Agency IT Standards	Director
Infrastructure Standard	Profile with consultation from the Quality Information Council	
Procedure	(QIC) and the QTS, and develop and maintain the Agency's	
	Technology Architecture.	
CIO 2122-S-02.0	Review and approve requests for waivers in regard to this	OTOP
Personal Computer	standard.	Director
Configuration and		
Management Standard		
CIO 2123.1	Provide procedures, standards, and guidance to senior level	OTOP
Configuration	managers in support of the Agency's Configuration Management	Director
Management Policy	Policy; institute change management processes; and provide a	
	change management database.	

<b>Information Directive</b>	Prior CTO Responsibilities	Re-
		assignment
CIO 2150-P-01.1	Approve all methods of dial-up access, approve all wireless	OTOP
Information Security -	connections, establish, document, authorize, and monitor all	Director
Interim Access Control	methods of remote access to an information system; delegate to	
Procedures	Regions and other entities, as appropriate; and address co-	
	management responsibilities for the Agency Security	
	Architecture.	
CIO 2150-P-08.1	Determine Operational Status Categories during Alerts and Risks	SAISO
Information Security -	(OSCAR) 5 level (page 7).	
Interim Incident Response	Be available when the Computer Security Incident Response	OTOP
Procedures	Capability (CSIRC) must report and coordinate incidents (page	Director
	16). Be available to meet with the Director of Cyber Security	
	Staff (CSS) when senior managers are informed of incidents,	
	occurrences and their status (page 18).	
CIO 2150-P-14.1	Approve the use of and, as appropriate, acquire and deploy	OTOP
Information Security -	enterprise vulnerability management technology. Consult with	Director
Interim Risk Assessment	the SAISO to determine the coverage and compliance of	
Procedures	enterprise vulnerability management technology with respect to	
	federal and Agency requirements, including use of these tools to	
	meet assessment requirements of other control families in NIST	
	800-53A, Revision 1, and to ensure the most cost effective,	
CIO 2150 P 15 1	complete and accurate results.	OTOD
CIO 2150-P-15.1	For the procurement of external information system services	OTOP
Information Security -	where a sufficient level of trust cannot be established, be available	Director
Interim System Services	to confer regarding risks associated with the network and the	
Acquisition Procedures CIO 2150-P-16.1	Agency.  Approve use of mobile VoIP-enabled units.	OTOP
Information Security -	Approve use of moone voir-enabled units.	Director
Interim System and		Director
Communications		
Protection Procedures		
CIO 2150.4 Mobile	Oversee policy and procedure implementation regarding use of	OTOP
Computing Policy	mobile computing technologies. Approve mobile computing	Director
	technology and device deployment.	21100101
CIO 2150-P-01.1 Mobile	Oversee policy and the implementation of the procedures.	OTOP
Computing Management	Approve enterprise mobile device types to be deployed. Review	Director
Procedures	and approve requests for waivers in regards to the procedures.	
Procedures	and approve requests for waivers in regards to the procedures.	



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### INFORMATION TECHNOLOGY INFRASTRUCTURE STANDARDS PROCEDURE

### 1. PURPOSE

To establish a procedure under the authority of the Agency's Enterprise Architecture Policy to define the computer hardware, software, and technology standards for the Agency's information technology (IT) environment to support the achievement of Agency mission needs. These standards are listed in the Agency's IT Standards Profile.

## 2. SCOPE AND APPLICABILITY

This procedure applies to all EPA organizational units and their employees. It also applies to contractors and other agents of the EPA who are performing work for the Agency and will deliver any hardware or software to the Agency. All Agency applications, databases, and/or electronic files must conform to these standards.

## 3. AUDIENCE

The audience of this procedure includes any EPA employee or contractor responsible for the development or application of IT standards.

# 4. BACKGROUND

A. The Office of Management and Budget (OMB) requires that each federal agency establish internal policies and procedures for the efficient management of information technology and, more broadly, its information resources.

B. Recognizing the importance of balancing technological, economic, and management concerns, this procedure establishes a process, through which the Agency proposes, thoroughly defines, evaluates for potential costs and security issues, reviews, and formally approves IT standards. The Quality Technology Subcommittee (QTS) of the Quality Information Council (QIC) provides the CTO with recommendations on proposed IT standards. The CTO makes final recommendations on IT standards to the Chief Information Officer (CIO). In view of the dynamic nature of the technology marketplace and the evolving needs of the Agency, the process allows the Agency to make changes to Agency standards as needed.

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C. The Federal Acquisition Regulation (FAR) assigns responsibility to individual agencies to determine the applicability of a particular standard to a particular requirement. One of the primary objectives of this procedure is to ensure there is a clear and recognized authority and process for setting Agency standards, and those products and specifications that EPA endorses as official Agency standards meet the Agency's functional, security, and support needs. Another key objective is to establish a framework for procurement of specific commercially available hardware, software, and communications products that the Agency has endorsed as official standards.

D. The Agency's ability to accomplish its mission objectives depends upon a strong, supportable IT infrastructure. A stable, integrated, cost-effective technology architecture, in alliance with the Agency Enterprise Architecture and the Federal Enterprise Architecture is needed to satisfy environmental and administrative information requirements and to facilitate secure dynamic communication among Agency organizations. The Agency's IT infrastructure is the foundation for environmental and administrative information, interoffice communication, and maintaining a secure environment to protect the information and communications.

E. EPA spends millions of dollars annually on IT acquisitions and in developing mission critical environmental and administrative information systems in a secure manner. It is very important that organizations acquire cost-effective secure software, hardware, and other related IT resources that support connectivity, promote interoperability, improve processing capability, are not duplicative and are supportable.

#### 5. AUTHORITY

- A. EPA Order 2120.3 Enterprise Architecture Policy
- B. Clinger-Cohen Act of 1996.
- C. Competition in Contracting Act of 1984 (P.L. 98-369).
- D. Paperwork Reduction Act of 1995.
- E. Section 508 of the Rehabilitation Act (29 U.S.C. 794d).
- F. OMB Circular A-130, Management of Federal Information Resources.
- G. Federal Information Security Management Act (FISMA)
- H. OMB Circular A-11, Exhibit 43, Data on Acquisition, Operation and Use of Information Technology Systems.
- I. OMB Circular A-76, Performance of Commercial Activities.
- J. Executive Order 12845, requiring agencies to purchase Energy Efficient Computer Equipment.
- K. Federal Acquisition Regulations (FAR)

### 6. PROCEDURE

A. OEI will establish standards for hardware, software, platform configurations (with enterprise-wide or major security implications), and communications technology used within the Agency's IT infrastructure. OEI will evaluate these standards for use in the development, deployment, and operation of EPA information systems and applications, in accordance with evolving Agency needs, applicable industry best practices and the Agency's Enterprise Architecture.

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- B. OEI will establish standards in the context of balancing technological advances with the need for stability and security of operations. The standards provide a stable base for satisfying EPA's mission-based and administrative IT needs, security operations, and ensure efficient management of its resources.
- C. Standards are expressed in an IT Standards Profile. The IT Standards Profile provides direction to users, developers, administrators, and managers of EPA information systems, applications, and infrastructure on what technologies they should select from among multiple alternatives in order to perform certain specific functions.
- D. The functions listed in the IT Standards Profile are those that the Agency deems important to establish a single, or finite set of, technology for use at EPA, for one or more of the following reasons:
  - Supportability
  - Interoperability
  - Efficiency/cost control
  - Security
- E. In order to be defined as an Agency standard, a technology must:
  - Satisfy the functional requirement(s) of an Agency mission need
  - · Perform its function at an acceptable level of quality
  - Be supportable
  - Be acquirable
  - Provide for an acceptable level of security risk
  - Have no (unacceptably) adverse impact on the function or performance of the EPA IT infrastructure
  - Conform with federal standards, laws, and regulations when applicable
  - Meet the applicable Section 508 standards for accessibility
  - Be applicable to multiple users
- F. If an Office or Region wants to propose a particular technology for inclusion as an Agency Standard, they must work through their representative on the QTS. The QTS will decide which technologies are recommended as Agency Standards. The QTS will make recommendations for approval to the CTO and ultimately to the CIO for approval. If the CTO believes a particular standard requires additional Agency review, the CTO may forward the standard to the QIC for consideration prior to recommendation for approval to the CIO. OEI will publish approved IT standards in the IT Standards Profile, which will be kept current on the Agency Intranet (<a href="http://cfint.rtpnc.epa.gov/otop/itarchitecture/standards.cfm">http://cfint.rtpnc.epa.gov/otop/itarchitecture/standards.cfm</a>).
- G. EPA users, developers, administrators, and managers of IT systems, applications, and infrastructure, including all Agency organizations, their employees, contractors, and other agents, are required to use Agency standard technologies when using information technology to perform the functions included in the IT Standards Profile. Offices may request waivers from Agency standards, or they may request that a technology be approved for use by the CTO, who may or may not grant the request. See section 10 "Waivers."

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H. The products that EPA endorses as standard hardware will feature, to the maximum extent possible, energy efficient features as required by the Agency's Energy Star Computer Program.

I. System Management Plans (SMPs) for development and/or enhancement projects must include an explanation of how the system will comply with Agency standards. Refer to the Agency's System Life Cycle Management Policy and Procedure for more information on SMPs.

#### 7. RELATED DOCUMENTS

A. System Life Cycle Management Policy, CIO 2121.0

http://intranet.epa.gov/oei/imitpolicy/policies.htm

B. System Life Cycle Management Procedure, 2121-P-01.0

http://intranet.epa.gov/oei/imitpolicy/policies.htm

C. Agency Network Security Policy (ANSP), CIO 2150.0

http://intranet.epa.gov/oei/imitpolicy/policies.htm

D. CIO Policy 2130.0 Accessible Electronic and Information Technology

http://www.epa.gov/irmpoli8/policies/2130.pdf

E. Agency IT Standards Profile

http://cfint.rtpnc.epa.gov/otop/itarchitecture/standards.cfm

F. EPA Technical Reference Model

http://intranet.epa.gov/architec/pdfs/epa-technical-reference-model.pdf

G. Information Security Manual, Directive

http://intranet.epa.gov/ohr/rmpolicy/ads/manuals/Manual.PDF

H. EPA Acquisition Regulation (EPAAR)

http://ecfr.gpoaccess.gov/cgi/t/text/text-

idx?sid=52c48b59c02b4481b8576a658c6e69ab&c=ecfr&tpl=/ecfrbrowse/Title48/48cfrv6\_02\_tpl

I. OTOP Standard Operating Procedure, Obtaining a Waiver from an EPA IT Requirement, 08/10/04

http://cfint.rtpnc.epa.gov/otop/policies/infoman.cfm

### 8. ROLES AND RESPONSIBILITIES

- A. The Chief Information Officer (CIO) is responsible for:
  - 1) developing policies and procedures to implement all federal IT/IM mandates; and
  - 2) approving the Agency Enterprise Architecture.
- B. The Chief Technology Officer (CTO) is responsible for:
  - recommending to the CIO a specific IT standard, product or specification to be added to the official Agency IT Standards Profile with consultation from the Quality Information Council (QIC) and the QIC's Quality Technology Subcommittee; and

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- 2) developing and maintaining the Agency's Technology Architecture.
- C. The QIC's Quality Technology Subcommittee (QTS) is responsible for:
  - 1) providing direction and leadership for the Agency's IT and, in that capacity, for supporting the Agency's technology architecture, of which the set of hardware, software, and communications standards is an integral component;
  - 2) serving as a sponsor for proposed IT standards;
  - 3) provide direction for managing the Agency's Standards Profile. This involves reviewing existing standards, determining when standards are obsolete, when there is a need for a new standard, and coordinating with the IT community the review and approval process.
- D. The Office of Technology Operations and Planning (OTOP) is responsible for:
  - 1) managing the Agency's information technology infrastructure within the technology architecture:
  - 2) working with the QTS and IT Standards Committee in analyzing IT product(s) or technology recommended for adoption as Agency standards (this includes performance and security testing); preparing or reviewing proposal papers including technology and economic analyses, analyzing comments from the client community and preparing final proposal papers for approval by the Subcommittee or Committee at large;
  - 3) publishing the Agency Standards Profile and updating it to reflect new standards;
  - 4) providing technical and acquisition support for those products which have been endorsed as Agency standards; and
  - 5) managing oversight and compliance activities of the Agency's IT security program to ensure the protection of the Agency's IT systems and data.
- E. Information Management Officers (IMOs) are responsible for:
  - 1) ensuring that IT acquisitions are in conformance with Agency standards;
  - 2) submitting new proposals from their organization's user community to the QTS, performing the initial performance and security testing, and drafting proposal papers that include technology and economic analyses for their new proposals;
  - 3) serving as their organizations representative on the IT Standards Committee; and
  - 4) coordinating within their respective organizations the reviews of proposed IT standards.
- F. For IT standards proposed by their Program Office or Region, Information Security Officers (ISO's) are responsible for:
  - 1) ensuring all IT security risks have been evaluated;
  - 2) ensuring all IT security plans have been documented in accordance with the National Institute of Standards and Technology (NIST)
  - 3) ensuring all IT security controls or compensation controls to minimize risk have been implemented
- G. All EPA managers and employees are responsible for complying with this procedure when they procure information technology resources for the Agency.

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#### 9. DEFINITIONS

**Enterprise Architecture:** A strategic information asset base that provides a definition of the mission, the information and technologies necessary to perform the mission, and transitional processes for implementing new technologies in response to changing mission needs. An enterprise architecture includes a baseline architecture, target architecture, and a sequencing plan. (EPA's Enterprise Architecture Policy, approved 11/17/05)

Information Technology: Defined by the Clinger-Cohen Act of 1996, sections 5002, 5141, and 5142, means any equipment or interconnected system or subsystem of equipment used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For purposes of this definition, equipment is "used" by an agency whether the agency uses the equipment directly or it is used by a contractor under a contract with the agency that (1) requires the use of such equipment or (2) requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product. Information technology includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources. It does not include any equipment acquired by a Federal contractor incidental to a Federal contract." (http://www.whitehouse.gov/omb/circulars/a11/current\_year/s53.pdf, p. 6)

**IT Standards Profile:** The EPA IT Standards Profile serves as the official guidance on information technologies selected by EPA to be used to perform particular functions. It provides information to IT managers, application developers, and end users on products, services, and technical specifications upon which the Agency has standardized. Where applicable, the Profile conveys future target technologies and those planned to be phased out.

**Standards:** Agency-wide IT solutions that ensure Agency applications and information assets are consistent, secure, and compatible with the Agency's information technology infrastructure and in turn help promote more cost-effective business practices. Standards help contain costs and promote information sharing.

## 10. WAIVERS

OEI will consider waivers from the requirements of this Procedure based on the business needs of the requesting office. The requesting office's Senior Information Official or Information Management Officer must send all waiver requests in writing to the CTO. The CTO maintains authority to approve or deny all waiver requests from the requirements of this Procedure. Refer to the OTOP Standard Operation Procedure, "Obtaining a Waiver from and EPA IT Requirement" found at http://cfint.rtpnc.epa.gov/otop/policies/infoman.cfm.

# 11. RELATED PROCEDURES, STANDARDS AND GUIDANCE

See Section 7.

## 12. MATERIAL SUPERSEDED

IRM Policy Manual Chapter 20 – Hardware/Software/Communications Standardization

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## 13. ADDITIONAL INFORMATION

For questions about this Procedure, please contact the Office of Environmental Information, Office of Technology Operations and Planning, Mission Investment Solutions Division at (202) 566-0330.

Malcolm D Jackson

Assistant Administrator for Environmental Information

and Chief Information Officer U.S. Environmental Protection Agency