

**FDA STAFF MANUAL GUIDES, VOLUME III - GENERAL ADMINISTRATION**

**INFORMATION RESOURCES MANAGEMENT**

**INFORMATION TECHNOLOGY CONNECTIVITY**

**WAN / MAN CIRCUIT MANAGEMENT POLICY**

Effective Date: May 10, 2017

1. Purpose
2. Background
3. Policy
4. Responsibilities
5. Procedures
6. References
7. Effective Date
8. History

**1. PURPOSE**

The purpose of the Food and Drug Administration's (FDA) Wide Area Network / Metropolitan Area Network (WAN/MAN) Circuit Management policy is to outline requirements for managing leased communications lines and circuits to support the FDA's Information Technology (IT) infrastructure. This policy applies to domestic office locations only. All International site circuit requirements are handled by the International Support Team (IST) in conjunction with the State Department.

**2. BACKGROUND**

In order to effectively operate and maintain the FDA's IT infrastructure, the agency has standardized on a methodology for acquiring, maintaining, operating, and decommissioning leased network and communications services. This manual provides a policy for acquiring and managing leased services for both WAN and MAN connections enterprise-wide. Any references to "tenant" in this document will refer to the official Center or specific department occupying the referenced facility who is responsible for any operational costs associated with the facility unless otherwise noted.

**3. POLICY**

**A. Circuit Sizing Standards**

For each site, a circuit will be sized based on the size of the site, the number of end users, and the type of work being conducted at each site. This will ensure that each site is equipped with adequate WAN/MAN connectivity at a reasonable cost. Special allowances are considered for Data Center environments, as well as Scientific Research facilities, with High Performance Computing requirements. All current circuit sizing standards are maintained on the Enterprise Communications Operations Branch (ECOB) SharePoint site. The location is included in Section 6 of this document.

Used primarily in a campus or Data Center environment, the FDA may elect to install 1Gb to 10 Gb Ethernet to meet WAN/MAN requirements. As requirements continue to increase, the FDA may install higher volume circuits as needed. Each specialized application or service requiring high volume circuits will be customized according to specific requirements (e.g., Guest Internet, Internet 2, DR/Back-up sites, etc.).

## **B. New Installations and Site Upgrades**

**New Installations.** All FDA WAN and MAN circuit requirements will be assessed, designed, and installed by the FDA telecommunications staff. Specifically, only FDA Designated Agency Representatives (DAR), are authorized to order, change, or decommission a data circuit. No FDA site, center, or other organization entity is authorized to procure or modify these services in any way. All requests must be processed through the telecommunications staff. The current DAR contact list will be maintained on the ECOB SharePoint site. The location of this list is included under Section 6 of this document.

New installations will be handled as site construction and engineering design meetings are conducted. Circuit requirements will be coordinated with the assigned telecommunication DAR. The DAR will attend all site meetings and ensure all requirements are documented and a circuit proposal (with any associated costs) is provided for approval.

**Planned Site Upgrades.** To address anticipated staff growth or new application requirements for a specific site, the telecommunications staff will work with the network operations staff to assess and resize the existing circuit to accommodate the projected increase in bandwidth requirements.

*Circuit Cost Responsibility.* For any new or upgrade circuit requirement that was not planned in advance with OIMT, the total first year cost including installation, equipment upgrades and monthly service charges must be covered by the requesting tenant/Center. The total funding amount must be made available to OIMT under the Center's IT allowance.

After the first year, the cost will be covered under the OIMT telecommunications budget with no further cost to the tenant/Center.

### **C. Operational Maintenance**

**Proactive Monitoring.** All FDA circuits are actively monitored 24x7 by the FDA Systems Management Center (SMC). If a circuit reaches an average bandwidth utilization of 50%, the circuit is actively monitored until it falls below 50%. If the circuit reaches 80% average utilization for a 30 day period, the Network Operations Team is notified for further assessment and resizing of the circuit if deemed appropriate.

**Troubleshooting.** If any trouble is detected for a circuit, the SMC staff will initiate a trouble call with the current circuit vendor. The vendor will then initiate any subcontractors servicing the local loop where the identified circuit is installed. The vendors will be responsible for fully testing and correcting the circuit as needed per the current Service Level Agreements (SLAs). If the circuit is found to be operational, the SMC will notify the DAR who will then engage the local cabling vendor to test the cabling from the circuit demarcation to the FDA owned network equipment. If this cabling is found to be operational, the DAR will initiate an Employee Resource & Information Center (ERIC) trouble ticket for the FDA network staff to test and correct any WAN equipment related to the circuit.

Any chronic performance issues encountered by a specific FDA site should be reported to the FDA Help Desk (ERIC) and a ticket should be issued to the Network Operations team for follow up. The Network Operations team will monitor the reported circuit and provide bandwidth utilization statistics and assess if the circuit requires maintenance or upgrade. A circuit must be operating over 80% average bandwidth utilization for a 30 day period to be considered for an upgrade.

### **D. Circuit Decommissioning**

For any sites that have been identified for closing, the DAR will be responsible for coordinating the termination of any circuits. A circuit disconnect request will be submitted by the assigned DAR within 30 day from the date the site is closed. The actual circuit disconnect may take up to an additional 30 days to be completed.

## **4. RESPONSIBILITIES**

### **A. FDA Chief Information Officer (CIO)**

The CIO provides leadership and direction regarding all aspects of the Agency's information technology (IT) programs and initiatives including

operations, records management, systems management, information security, strategic portfolio, and executive coordination and communication activities.

#### **B. Deputy CIO, Office of Technology and Delivery (OTD)**

The Deputy CIO, OTD is responsible for the execution and implementation of infrastructure operations and application services policy and procedures throughout the FDA enterprise.

#### **C. Branch Chief, Enterprise Communications Operations Branch (ECOB)**

The ECOB Branch Chief is responsible for overall direction and management of the Agency's telecommunications infrastructure. The Branch Chief will oversee the daily operations of the Communications staff and Designated Agency Representatives (DARs).

#### **D. Designated Agency Representative (DAR)**

The ECOB DARs are responsible for the day to day management and growth of the Agency's WAN/MAN circuit infrastructure. Each DAR is responsible for capturing site specific requirements, design and cost proposals, placing orders and ensuring all circuits are maintained and operating as required.

### **5. PROCEDURES**

All Communications SOPs relevant to this SMG will be stored within the current on-line digital repository for the Enterprise Communications Operations Branch, within the designated space for *Circuits and Cabling Related Documents* under *SOPs and Policy Documents*.

All Network Operations SOPs relevant to this SMG will be stored within the current on-line digital repository for the Network Operations Team, within the designated space for *WAN Circuit Documents and Diagrams* under *Policy and Process Documents*.

All ERIC procedures are addressed in any ERIC specific Staff Manual Guides or Standard Operating Procedures (SOPs) located elsewhere in FDA's IT document libraries.

### **6. REFERENCES**

FDA Domestic Site Circuit Sizing Standards – March 2017

Designated Agency Representative (DAR) Contact List (ECOB SharePoint Site List) - March 2017

**7. EFFECTIVE DATE**

The effective date of this guide is May 10, 2017.

**8. Document History - SMG 3235.4, WAN/MAN Circuit Management Policy**

<b>STATUS (I, R, C)</b>	<b>DATE APPROVED</b>	<b>LOCATION OF CHANGE HISTORY</b>	<b>CONTACT</b>	<b>APPROVING OFFICIAL</b>
Initial	05/05/2017	N/a	OO/OIMT/OIM/ OTD/DIO	Todd G. Simpson, FDA Chief Information Officer

[Back to General Administration, Volume III \(2000-3999\)](#)