



NIHnet Enterprise Network Services

Service Level Agreement for Standard Services 2007 Edition V1.2

1 Introduction

This Service Level Agreement (SLA) defines and describes the terms for support including covered services; service implementation; service management; technical support; as well as contact and escalation procedures.

2 Covered Services

Under this agreement, CIT will provide the Customer with the services listed below:

- NIHnet Enterprise Network Services for local area networks.

Note:

Service Delivery and Service Assurance of the network infrastructure will include building access switches and copper infrastructure up to the end-system wall plate, including connectivity to the NIHnet distribution network.

2.1 CIT Responsibilities

Under this Service Level Agreement, CIT will:

- Provide NIHnet network connectivity for the Customer's LAN from the "wall plate" to the NIHnet backbone network.
- Provide 24x7 Service Operation of the Customer's LANs by performing Network Management System (NMS) monitoring, customer notification, and problem resolution of all data network devices and components.
- Provide immediate response to all of the Customer's network data network alarms as detected in the NIHnet NMS.
- Provide immediate response to all customer problem reports as submitted to the NIH Help Desk.
- Commence immediate repair activities on all network-noticed faults and customer-noticed faults to restore service.
- Use prescribed NIHnet change control Standard Operating Procedures (SOPs) to plan, schedule, and execute all maintenance activities that may be necessary in support of continuous operation of the Customer's data network.
- Coordinate all Customer-related network maintenance activities with designated Customer LAN support personnel.
- Create and maintain accurate data network infrastructure documentation for NIHnet systems supporting Customer network.
- Maintain a current and accurate IP Address Scheme for the Customer networks. (Does not include tracking of end-system IP assignments.)
- Perform Event Notification duties to alert designated Customer contact personnel of all the Customer's network outages and network impairment events.
- Replace defective NIHnet hardware as necessary
- Replace access layer equipment following NIHnet hardware refresh cycle.

2.2 Customer Responsibilities

Under this Service Level Agreement, the Customer will:

- Clearly define and present to CIT future requirements for additional Customer network service activation once it is known.
- Provide funding to support additional Customer network service activation when required.
- Provide key/card-key for LAN closet entry, as necessary.
- Provide at least ten (10) business days advance notification to CIT of relocation of any Customer network equipment that may affect connectivity to NIHnet.

3 Service Implementation

Upon acceptance of this service level agreement, CIT will focus efforts and resources on service implementation activities as specified in the sections below.

3.1 Customer Port Activations

Activate additional end-user LAN drops connections and services only at the request of designated Customer contact personnel.

- Five (5) or less ports activated within 24 hours via pre-installed, provision-ready cable to end-system work-area outlets (WAO).
- Six (6) or more ports activated within five (5) business days via pre-installed, provision-ready cable to end-system work-area outlets (WAO).

3.2 Customer Network Upgrade

Future Customer data network upgrades which fall outside of normal hardware refresh will be charged to the Customer Common Account Number (CAN). CIT will purchase no equipment using the Customer's CAN without Customer consent. Upon finalization of requirements and recommended solutions, CIT will:

- Purchase new hardware
- Oversee delivery
- Stage equipment
- Implement upgrade

4 Service Management

Upon acceptance of this service level agreement, CIT will immediately commence the service management activities as describe in the sections below.

4.1 Network Connectivity

Under this agreement CIT will:

- Maintain network connectivity to each Customer data network port as covered by this SLA.
- Maintain IC-owned building facility system network distribution hardware, including but not limited to:
 - Routers
 - Switches
 - Media Converters
- Maintain LAN closets, including but not limited to:
 - General housekeeping within each LAN closet
 - Network cable infrastructure management
 - Physical Security
 - Installation and removal of network equipment as needed

4.1 Network Monitoring

Under this agreement CIT will manage major infrastructure components using a Network Management System (NMS), 24x7. This includes, but is not limited to:

- Port level event monitoring of infrastructure network switches
- Port level event monitoring of security firewalls
- Uninterrupted Power Supply (UPS) power management

4.2 Event Management

Under this agreement CIT will:

- Perform Event Management activities to resolve network impairments and outages by ensuring timely technical referrals and management escalation are made as prescribed by NIHnet Network Operations SOPs.
- Receive technical referrals and management escalations from Customer personnel during periods of network outages and service instability.
- Publish appropriate outage reports and get-well plans for all network events and chronic problems associated with the Customer data network service.

4.3 Problem Resolution

Under this agreement CIT will:

- Commence immediate repair activities on all network-noticed faults.
- Commence immediate repair activities on all customer-noticed faults.

Note: During Catastrophic network events, CIT has a pre-established restoration sequence and priority as listed below:

1. NIHnet Core and DMZ Networks
2. FACnet Network
3. SLA Customer Networks
4. Non-SLA Customer Networks

4.4 Performance Metrics

CIT Network Event classifications are defined below.

- A **Priority 1 Service Outage** is defined as the loss of connectivity between a Customer end-user and data destinations, such as an application server or remote site end system.
- A **Priority 2 Service Impairment** is defined as performance degradation between a Customer end-user and data destinations, such as an application server or remote site end system.

4.4.1 Repair Targets

The Mean Time to Repair (MTTR) target for the Customer data network infrastructure is set as follows:

- A four-hour maximum repair time to resolve all Priority 1 Customer outages.
- An eight-hour maximum repair time to resolve all Priority 2 Customer impairments.

4.4.2 Availability Target

The network availability target for the Customer data networks is set as follows:

- A 99.9% service availability target for each installed Customer switch access device.
- A maximum of 8 hours 46 minutes of unplanned downtime per year for each installed Customer switch access device.

4.5 Scheduled Maintenance

Scheduled Maintenance is defined as either CIT-initiated or customer-initiated network modifications that are not the result of a service outage or other emergency events.

4.5.1 CIT-Initiated Maintenance

When it becomes necessary for CIT to make a planned change to the Customer data network service or to NIHnet, CIT personnel will notify the appropriate Customer personnel a minimum of one week prior to the planned change.

During emergency situations, CIT will immediately contact the customer to provide specific details of an existing service fault or hazardous condition.

4.5.2 Customer-Initiated Maintenance

CIT requests the customer to notify the NIHnet NOC at least 48-hours prior to any planned customer network changes to the Customer LAN environment. Advanced notification of planned Customer change should be sent to the NIHnet NOC via the NIH Help Desk at (301) 496-HELP (4357).

4.6 Emergency Maintenance and Repair

During emergency situations, CIT will immediately contact the customer to provide specific details of an existing service fault or hazardous condition.

4.7 Documentation and Customer Meetings

Under this agreement CIT will:

- Provide LAN topology drawings upon request from Customer.
- Provide customized reports as requested and defined by customer (cost and requirements will be determined upon negotiation of delivery of each report).
- Meet with the customer twice annually to discuss (more frequent meetings possible):
 - Tickets related to service and traffic summaries
 - Administrative and technical issues
 - Milestones that affect customer networks
 - Future requirements for network
 - Other NIH changes that affect the customer

5 Technical Support

5.1 Service Hours

The NIHnet Network Operations Center (NOC) is staffed 24 hours a day, seven days a week and will provide an immediate response to all network-noticed faults as detected in the NIHnet NMS. Additionally, the NIHnet NOC will provide an immediate response to all customer-initiated requests as received via the NIH Help Desk.

5.2 Trouble Reporting

The customer can contact the NIHnet NOC via the NIH Help Desk at (301) 496-HELP (4357) for 24x7 data network support.

5.3 Moves, Adds, and Changes (M.A.C.)

Data network port moves, adds, and changes (M.A.C.) are defined as customer-initiated requests that are not the result of a service outage or other emergency events.

Upon receipt of a M.A.C. request from the Customer, the NIH Help Desk creates a Remedy Service Ticket and will assign the ticket to the NIHnet NOC for processing.

5.4 Service Support Escalation Procedures

All Customer data network problems should be escalated based on the severity level of the reported problem: Priority 1 Outage and Priority 2 Impairment Trouble Calls, which are described below:

Priority 1 Outage Trouble Call - Calls received by the 24x7 NIHnet NOC will be responded to immediately.

Priority 2 Impairment Trouble Call - Calls received by the 24x7 NIHnet NOC will be recorded immediately. Problem resolution will begin within one hour of the initial trouble report.

The CIT Management Escalation contacts are as follows:

Name	Title	Contact Number
Brian Simpson	Chief, Network Operations Section	301-451-5164
John Dvorak	Chief, Network and Engineering Branch	301-451-4730
Renita Anderson	Director, Division of Network Systems and Telecommunications	301-594-9432
Al Whitley	Deputy Director, CIT	301-496-5704
Jack Jones	Acting NIH CIO & Acting Director, CIT	301-402-6759

6 Services Not Supported

The support defined by this SLA does not cover all platforms, software, and services. Specifically, this SLA does not include:

- Desktop computer support, including PC configuration or application installation.
- Improper use or abuse of equipment or infrastructure components.
- Protocols or hardware not supported or recommended by CIT (these items, if part of the current infrastructure, will be identified by CIT during Phase 1, Evaluation, and brought to the customer's attention).
- Server support and configuration of applications.
- Switch port monitoring for end-systems (Port monitoring services available separately through the Centralized Network Monitoring Systems (CNMS))

7 SLA Termination or Modification

This SLA may change when service issues arise or customer requirements change. All modifications are bilateral in that the customer will name an authority that has the right to modify or terminate this agreement. CIT and the customer agree to engage in good-faith efforts to resolve problems prior to considering termination.