

R5-68.9 Disconnect Subscription Version - Set to Old

NPAC SMS shall set the disconnect Subscription Version status to old if the disconnect request failed at one or more, but not all, of the Local SMSs.

R5-68.10 Disconnect Subscription Version - Resend Disconnect Requests to Failed Local SMSs

NPAC SMS shall provide authorized NPAC SMS personnel with the functionality to resend disconnect requests to all Local SMSs that failed to register the disconnect request.

5.1.2.2.6 Subscription Version Cancellation

This section provides the requirements for the Subscription Version Cancellation functionality, which is executed upon the NPAC personnel or SOA to NPAC SMS interface user requesting to cancel a Subscription Version.

RR5-26.1 Cancel Subscription Version - Inform Both Service Providers of Cancel Pending Status

NPAC SMS shall inform both old and new Service Providers when the status of a Subscription Version is set to cancel pending for an Inter-Service Provider port.

RR5-26.2

DELETE

R5-69 Cancel Subscription Version - Version Identification

NPAC SMS shall receive the following data from the NPAC personnel to identify a Subscription Version to be canceled:

Ported Telephone Number (or a specified range of numbers)
or
Subscription Version ID

R5-70 Cancel Subscription Version - Invalid Status Notification

NPAC SMS shall send an appropriate error message to the originating user if the status is not pending, conflict, or disconnect pending.

RR5-27 Cancel Subscription Version - Validate Service Provider

NPAC SMS shall send an appropriate error message to the originating user if the originating user is neither the New nor the Old Service Provider in the existing Subscription Version upon Subscription Version cancellation.

R5-71.1 Cancel Subscription Version - Set to Canceled.

(Superseded - refer to RR5-28)

R5-71.2 Cancel Subscription Version - Set Cancellation Date and Time Stamp

NPAC SMS shall set the Subscription Version cancellation date and time to current upon setting the Subscription Version status to canceled.

R5-71.3 Cancel Subscription Version- Set to Cancel Old Service Provider only

NPAC SMS shall set the subscription version status to cancel upon receiving a cancellation from the old Service Provider if the New Service Provider has not sent a subscription version create.

R5-71.4 Cancel Subscription Version- Set to Cancel New Service Provider only

NPAC SMS shall set the subscription version status to cancel upon receiving a cancellation from the New Service Provider if the Old Service Provider has not sent an subscription version create.

R5-71.5 Cancel Subscription version- Error on Cancellation

NPAC SMS shall return an error if a Service Provider sends a cancellation for a subscription version that has not been created by that Service Provider.

R5-71.6 Cancel Subscription Version- Set Pending subscription version to Cancel Pending Status Inter-Service Provider port

NPAC SMS shall set the subscription version status to Cancel Pending upon receiving a cancellation from either the Old or New Service Provider for a subscription version with a pending status (both Service Providers have done a create) for an Inter-Service Provider or Port to original port.

R5-71.7

DELETE

R5-71.8 Cancel Subscription Version- Set Conflict Subscription to Cancel New Service Provider only

NPAC SMS shall set the subscription version status to cancel upon receiving a cancellation from the new Service Provider on a subscription in conflict that was previously in cancel pending and for which only the old service provider has sent a cancellation acknowledgment.

R5-71.9 Cancel Subscription Version - Rejection of Old Service Provider Conflict Cancellation

NPAC SMS shall return an error to the Old Service Provider if they attempt to cancel a Subscription Version that is in conflict due to lack of New Service Provider cancellation concurrence on a subscription version that was previously in cancel pending state.

R5-71.10 Cancel Subscription Version- Set Disconnect Pending subscription version to Active

NPAC SMS shall set the subscription version status to Active upon receiving a cancellation for a subscription version with a status of disconnect pending.

RS-71.11 Cancel Subscription Version- Set to Cancel Status - Intra-Service Provider port

NPAC SMS shall set the subscription version status to cancel upon receiving a cancellation from the current Service Provider for an Intra-Service Provider port.

RR5-28.1 Cancel Subscription Version - Set to Cancel After Service Provider Acknowledge

NPAC SMS shall set the Subscription Version status to cancel upon receiving cancellation pending acknowledgment from the Service Provider that did not initiate the cancellation for an Inter-Service Provider port.

RR5-28.2

DELETE

RR5-29.1 Cancel Subscription Version - Inform Both Service Providers of Cancel Status

NPAC SMS shall notify both old and new Service Providers after a Subscription Version's status is set to canceled for an Inter-Service Provider port.

RR5-29.2 Cancel Subscription Version - Inform Current Service Provider of Cancel Status

NPAC SMS shall notify the current Service Provider after a Subscription Version's status is set to canceled for an Intra-Service Provider port.

RR5-30 Cancel Subscription Version Acknowledgment - Update Old Service Provider Date and Time Stamp

NPAC SMS shall update the old Service Provider cancellation date and time stamp with the current date and time when the cancellation acknowledgment is received from the old Service Provider.

RR5-31 Cancel Subscription Version Acknowledgment - Update New Service Provider Date and Time Stamp

NPAC SMS shall update the new Service Provider cancellation date and time stamp with the current date and time when the cancellation acknowledgment is received from the new Service Provider.

RR5-32.1 Cancellation-Initial Concurrence Window - Tunable Parameter

NPAC SMS shall provide a Cancellation-Initial Concurrence Window tunable parameter, which is defined as the number of business hours after the version is set to Cancel Pending by which the non-originating Service Provider is expected to acknowledge the pending cancellation.

RR5-32.2 Cancellation-Initial Concurrence Window - Tunable Parameter Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the Cancellation-Initial Concurrence Window tunable parameter.

RR5-32.3 Cancellation-Initial Concurrence Window - Tunable Parameter Default

NPAC SMS shall default the Cancellation-Initial Concurrence Window tunable parameter to 9 business hours.

RR5-33.1 Cancellation-Final Concurrence Window - Tunable Parameter

NPAC SMS shall provide a Cancellation-Final Concurrence Window tunable parameter which is defined as the number of business hours after the second cancel pending notification is sent by which both Service Providers are expected to acknowledge the pending cancellation.

RR5-33.2 Cancellation-Final Concurrence Window Tunable Parameter Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the Cancellation-Final Concurrence Window tunable parameter.

RR5-33.3 Cancellation-Final Concurrence Window - Tunable Parameter Default

NPAC SMS shall default the Cancellation-Final Concurrence Window tunable parameter to 9 business hours.

RR5-34 Cancellation-Initial Concurrence Window - Tunable Parameter Expiration

NPAC SMS shall send a notification to the Service Provider (new or old) who has not yet acknowledged the cancel pending status when the Cancellation-Initial Concurrence Window tunable parameter expires.

RR5-35.1 Cancellation-Final Concurrence Window - Tunable Parameter Expiration New Service Provider

NPAC SMS shall set the Subscription Version status to conflict when the NPAC SMS has not received the cancellation acknowledgment from the new Service Provider and the Cancellation-Final Concurrence Window tunable parameter has expired.

RR5-35.2 Cancellation-Final Concurrence Window - Tunable Parameter Expiration Old Service Provider

NPAC SMS shall set the Subscription Version status to cancel and set the cause code to "NPAC SMS automatic cancellation" when the NPAC SMS has not received the cancellation acknowledgment from the Old Service Provider and the Cancellation-Final Concurrence Window tunable parameter has expired.

RR5-36 Cancel Subscription Version - Inform Service Providers of Conflict Status

NPAC SMS shall notify the old and new Service Providers upon setting a Subscription Version to conflict.

5.1.2.2.7 Subscription Version Resend

This section provides the requirements for the Subscription Version resend functionality, which is executed upon the NPAC personnel requesting to resend a Subscription Version.

RR5-38.1 Resend Subscription Version - Identify Subscription Version

NPAC SMS shall receive the following data from NPAC personnel to identify a failed or partial failure version to be resent:

Ported Telephone Number
or
Subscription Version ID

RR5-38.2 Resend Subscription Version - Input Data

NPAC SMS shall require the following input data from NPAC personnel upon a Subscription Version resend:

- List of "failed" Local SMSs to resend to.

RR5-38.3 Resend Subscription Version - Error Message

NPAC SMS shall send an error message to the originating user upon Subscription Version resend if the version does not have a list of failed LSMSs associated with the subscription's last operation..

RR5-38.4 Resend Subscription Version - Activation Request

NPAC SMS shall resend a Subscription Version activation request, if either the Subscription Version previously failed activation or an active Subscription Version previously failed modification, to the designated list of failed Local SMSs via the NPAC SMS to Local SMS Interface upon a Subscription Version resend request.

RR5-38.5 Resend Subscription Version - Disconnect Request

NPAC SMS shall resend a Subscription Version disconnect request, if the Subscription Version failed disconnect, to the designated list of failed Local SMSs upon a Subscription Version resend request.

RR5-38.6 Resend Subscription Version - Failed or Partial Failure

NPAC SMS shall set a failed or partial failure Subscription Version to sending subsequent to resending to the Local SMSs.

RR5-38.7 Resend Subscription Version - Standard Activation Processing

NPAC SMS shall proceed with the standard activation processing subsequent to resending a Subscription Version activation request to the Local SMSs.

RR5-38.8 Resend Subscription Version - Standard Disconnect Processing

NPAC SMS shall proceed with the standard disconnect processing subsequent to resending a Subscription Version disconnect request to the Local SMSs.

5.1.3 Subscription Queries

This section provides the requirements for the Subscription Version Query functionality, which is executed upon the user requesting a query of a Subscription Version (R5-13).

5.1.3.1 User Functionality

R5-72 Query Subscription Version - Request

NPAC SMS shall allow NPAC personnel, SOA to NPAC SMS interface users, and NPAC SMS to Local SMS interface users to query data maintained by the NPAC SMS for a Subscription and all its Versions.

5.1.3.2 System Functionality

The following requirements specify the NPAC SMS query functionality defined above.

R5-73 Query Subscription Version - Version Identification

NPAC SMS shall receive the following data to identify a Subscription Version to be queried:

Ported Telephone Numbers and status (optional)

or

Subscription Version ID

R5-74.1 Query Subscription Version - Status Supplied

NPAC SMS shall only retrieve Subscription Versions with a specific status when the user supplies a specific Subscription Version status as part of the query criteria.

R5-74.2 Query Subscription Version - Return All Subscription Versions for Ported TN

NPAC SMS shall return all Subscription Versions associated with a ported TN that the requester is eligible to view if the originating user has not provided a Subscription Version status as part of the query criteria.

R5-74.3 Query Subscription Version - Output Data

NPAC SMS shall return the following output data for a Subscription Version query request initiated by NPAC personnel or a SOA to NPAC SMS interface user:

- Subscription Version ID
- Subscription Version Status
- Local Number Portability Type
- Ported Telephone Number
- Old facilities-based Service Provider Due Date
- New facilities-based Service Provider Due Date
- New facilities-based Service Provider ID
- Old facilities-based Service Provider ID

- Authorization from old facilities-based Service Provider
- Status Change Cause Code
- Location Routing Number (LRN)
- Class DPC
- Class SSN
- LIDB DPC
- LIDB SSN
- CNAM DPC
- CNAM SSN
- ISVM DPC
- ISVM SSN
- Billing Service Provider ID
- End-User Location Value
- End User Location Type
- Customer Disconnect Date
- Effective Release Date
- Disconnect Broadcast Complete Time Stamp
- Conflict Time Stamp
- Activation Time Stamp
- Cancellation Time Stamp (Status Modified to Canceled Time Stamp)
- New Service Provider Creation Time Stamp
- Old Service Provider Authorization Time Stamp
- Pre-cancellation Status
- Old Service Provider Cancellation Time Stamp
- New Service Provider Cancellation Time Stamp
- Old Time Stamp (Status Modified to Old Time Stamp)
- New Service Provider Conflict Resolution Time Stamp
- Create Time Stamp
- Modified Time Stamp
- Porting to Original
- List of all Local SMSs that failed activation, modification, or disconnect.

R5-74.4 Query Subscription Version - Output Data

NPAC SMS shall return the following output data for a Subscription Version query request initiated over the NPAC SMS to Local SMS interface:

- Subscription Version ID
- Ported Telephone Number
- Location Routing Number (LRN)
- New facilities-based Service Provider ID
- Activation Time Stamp
- Customer Disconnect Date
- Class DPC
- Class SSN
- LIDB DPC
- LIDB SSN
- CNAM DPC
- CNAM SSN
- ISVM DPC
- ISVM SSN
- End-User Location Value

- End-User Location Type
- Billing Service Provider ID
- Local Number Portability Type

RS-75 Query Subscription Version -No Data Found

NPAC SMS shall send the originating user an appropriate message indicating that there was no data found if no Subscription Versions were found for a query.

RN5-4 Query Subscription Version - Retrieve Data, Modification Not Allowed

NPAC SMS shall allow NPAC personnel or SOA to NPAC SMS interface users to retrieve subscription data that they cannot modify.

RN5-5 Query Subscription Version - Retrieve Data Based on Single Ported TN Only

NPAC SMS shall allow authorized NPAC personnel, SOA to NPAC SMS interface users, or NPAC SMS to Local SMS interface users to submit query requests for Subscription Version data based on a single ported TN only.

RN5-6 Query Subscription Version - View for Any Ported TN

NPAC SMS shall allow old and new Service Providers or NPAC personnel to view a Subscription Version for any ported TN.

RR5-39 Query Subscription Version - View Old or Active Only

NPAC SMS shall allow NPAC Customers who are neither the old nor the new Service Provider to view only those Subscription Versions for a ported TN with a status of active, canceled, or old.

RR5-40 Query Subscription Version - Online Records Only

NPAC SMS shall only allow Subscription Version queries of online subscription Versions that have not been archived.

6. NPAC SMS Interfaces

Two CMIP-based, mechanized interfaces to the NPAC SMS were defined in the Illinois NPAC RSMS RFP. One interface supports the Service Provider's Service Order Administration (SOA) systems. This interface is referred to as the SOA to NPAC SMS interface. The second interface supports the Service Providers Local Service Management System (LSMS). This interface is referred to as the NPAC SMS to LSMS interface. Both of the interfaces support two-way communications.

6.1 SOA to NPAC SMS Interface

R6-1

DELETE

R6-2.1

DELETE

R6-2.2

DELETE

R6-3

DELETE

R6-4.1

DELETE

R6-4.2

DELETE

R6-4.3

DELETE

R6-5.1

DELETE

R6-5.2

DELETE

R6-6.1

DELETE

R6-6.2

DELETE

R6-7.1

DELETE

R6-7.2

DELETE

R6-8.1

DELETE

R6-8.2

DELETE

R6-9.1

DELETE

R6-9.2

DELETE

R6-9.3

DELETE

R6-10.1

DELETE

R6-10.2

DELETE

R6-10.3
DELETE

R6-11
DELETE

R6-12
DELETE

6.2 NPAC SMS to Local SMS Interface

R6-13
DELETE

R6-14.1
DELETE

R6-14.2
DELETE

R6-15.1
DELETE

R6-15.2
DELETE

R6-15.3
DELETE

R6-16.1
DELETE

R6-16.2
DELETE

R6-17.1
DELETE

R6-17.2
DELETE

R6-17.3
DELETE

R6-18.1
DELETE

R6-18.2
DELETE

R6-18.3
DELETE

R6-19
DELETE

R6-20.1
DELETE

R6-20.2
DELETER

6-20.3
DELETE

R6-21
DELETE

6.3 Interface Transactions

The CMIP protocol provides for six types of transactions over the interface (Reference: ISO 9595 and 9596). They are:

- Create
- Delete
- Set
- Get
- M-Action
- Event Report

R6-22 Manager-agent relationship of interface transactions

NPAC SMS Interoperable Interface shall be designed in terms of CMIP transactions in a manager-agent relationship.

6.4 Interface and Protocol Requirements

While it is expected that dedicated links will be used for the interfaces, switched connections should also be supported. Reliability and availability of the links will be essential and high capacity performance will be needed.

R6-23 Open interfaces

The SOA to NPAC SMS Interface and the NPAC SMS to Local SMS Interface shall be open, non-proprietary interfaces and will not become the property of any entity.

6.4.1 Protocol Requirements

R6-24 Interface protocol stack

Both of the NPAC SMS interfaces, as defined above, shall be implemented via the following protocol stack:

INTERFACE PROTOCOL STACK	
Application	CMISE, ACSE, ROSE
Presentation	ANSI T1.224
Session:	ANSI T1.224
Transport:	TCP, RFC1006
Network:	IP

INTERFACE PROTOCOL STACK	
Link	PPP, MAC, Frame Relay, ATM (IEEE 802.3)
Physical	DS1, DS-0 x n , V.34

Table 0-1 Interface Protocol Stack

R6-25 Multiple application associations

NPAC SMS shall support multiple application associations per Service Provider.

6.4.2 Interface Performance Requirements

R6-26 Interface availability

Both the SOA to NPAC SMS and the NPAC SMS to Local SMS interfaces shall be available on a 24 by 7 basis, consistent with other availability requirements in this specification.

R6-27 Interface reliability

A 99.9 % reliability rate shall be maintained for both the SOA to NPAC SMS and NPAC SMS to Local SMS interfaces.

AR6-1 Range Activations

A range activate will contain an average of 20 TNs.

AR6-2 Percent of Range Activations

20% of all downloads as specified in R6-28.1, R6-28.2, R6-29.1 and R6-29.2 will be processed via range activations.

R6-28.1 SOA to NPAC SMS interface transaction rates - sustained

A transaction rate of 2 CMIP transactions (sustained) per second shall be supported by each SOA to NPAC SMS interface association.

R6-28.2 SOA to NPAC SMS interface transaction rates - peak

NPAC SMS shall support a rate of 5.2 CMIP operations per second (peak) over a single SOA to NPAC SMS interface association.

R6-29.1 NPAC SMS to Local SMS interface transaction rates

A transaction rate of 25 TN downloads per second shall be supported by each NPAC SMS to Local SMS interface.

R6-29.2 NPAC SMS to Local SMS interface transaction rates - sustainable

NPAC SMS shall, given a transaction rate of 25 TN downloads per second and the assumptions concerning range activations expressed above, support a rate of 5.2 CMIP operations per second (sustainable for 5 minutes) over each NPAC SMS to Local SMS interface association.

6.4.3 Interface Performance Requirements

R6-30.1 Interface specification

The interoperable interface model defining both the NPAC to Local SMS and the SOA to NPAC SMS shall be specified in terms of ISO 10165-4, "Guideline for the Definition of Managed Objects (GDMO)".

R6-30.2 Interface specification identification

The interface specification shall be referred to as the "NPAC SMS Interoperable Interface Specification" (NPAC SMS IIS).

R6-30.3

DELETE

R6-31

DELETE

R6-32

DELETE

R6-33

DELETE

R6-34

DELETE

R6-35 NPAC SMS Interoperable Interface Specification extensibility

The interface specified shall be capable of extension to account for evolution of the interface requirements.

RR6-1 Acknowledgment of a Cancel Pending for a Subscription Version

NPAC SMS shall acknowledge receiving a cancel pending request for a Subscription Version via the SOA to NPAC SMS Interface.

RR6-2 Acknowledgment of a Conflict Resolution for a Subscription Version

NPAC SMS shall acknowledge receiving a conflict resolution request for a Subscription Version via the SOA to NPAC SMS Interface.

RR6-3 Deferred Disconnect of a Subscription Version

NPAC SMS shall allow a specific Subscription Version to be placed into a deferred disconnect status by having the effective date in the future via the SOA to NPAC SMS Interface.

RR6-4 Cancel Request Notification

NPAC SMS shall notify a Service Provider of a request for a Subscription Version status to be changed to cancel via the SOA to NPAC SMS Interface.

RR6-5 Conflict Resolution Request Notification

NPAC SMS shall notify a Service Provider of a request for a Subscription Version status to be changed to conflict resolution via the SOA to NPAC SMS Interface.

RR6-6

(Duplicate - refer to R10-10.1)

RR6-7

(Duplicate - refer to R10-10.1)

6.4.4 Request Restraints

RR6-8 Tunable Parameter Number of Aggregated Download Records

NPAC SMS shall allow NPAC System Administrators to specify a tunable parameter value for the maximum number of download records.

RR6-9 Download Time Tunable Parameter to Restricted Time Range

NPAC SMS shall allow NPAC System Administrators to specify a tunable parameter value for the maximum time range for a download.

RR6-10

DELETE

RR6-11

(Duplicate - refer to RX6-2.5)

RR6-12

DELETE (moved to RX6-2.6)

RR6-13 Queries Constrained by NPA-NXX

NPAC SMS shall constrain all queries on the NPAC SMS to Local SMS Interface to one NPA-NXX plus additional filter criteria.

6.5 NPAC SOA Low-tech Interface

The NPAC SOA Low-tech Interface supports the request functionality of the SOA to NPAC SMS interface.

RX6-2.1 NPAC SOA Low-tech Interface

NPAC SMS shall provide an NPAC SOA Low-tech Interface.

RX6-2.2 SOA to NPAC SMS Create Subscription Versions administration requests via an NPAC SOA Low-tech Interface

NPAC SMS shall support Create Subscription Version requests via a secure, NPAC SOA Low-tech Interface.

RX6-2.3 SOA to NPAC SMS Cancel Subscription Versions administration requests via an NPAC SOA Low-tech Interface

NPAC SMS shall support Cancel Subscription Version requests via a secure, NPAC SOA Low-tech Interface.

RX6-2.4 SOA to NPAC SMS Modify Subscription Versions administration requests via an NPAC SOA Low-tech Interface

NPAC SMS shall support Modify Subscription Version requests via a secure, NPAC SOA Low-tech Interface.

RX6-2.5 SOA to NPAC SMS Query Subscription Versions administration requests via an NPAC SOA Low-tech Interface

NPAC SMS shall support query of Subscription Versions via a secure, NPAC SOA Low-tech Interface.

RX6-2.6 SOA to NPAC SMS Activate Subscription Versions administration requests via an NPAC SOA Low-tech Interface

NPAC SMS shall support Activation of Subscription Versions via a secure, NPAC SOA Low-tech Interface.

RX6-2.7 SOA to NPAC SMS Disconnect Subscription Versions administration requests via an NPAC SOA Low-tech Interface

NPAC SMS shall allow NPAC personnel and users of the SOA to NPAC SMS interface to request disconnection of a Subscription Version via a secure, NPAC SOA Low-tech Interface.

RX6-3 SOA to NPAC SMS audit requests

NPAC SMS shall support SOA to NPAC SMS audit requests for all, part or one Service Provider via the NPAC SOA Low-tech Interface.

RX6-3.1

DELETE

RX6-4 NPAC SMS Notification Handling

NPAC SMS shall support, via a secure NPAC SOA Low-tech Interface, a method to view and locally capture notifications that have occurred for the service provider upon request.

7. Security

7.1 Overview

In addition to the general security requirements based on the user interface paradigm in Section 7.2 through 0, there are requirements for the security on an OSI application to application interface (such as the one specified in Section 6, *NPAC SMS Interfaces*, for the SMS to SMS and SMS to SOA interfaces).

7.2 Identification

The NPAC will accept only authorized NPAC customers through interface connections, and among NPAC customers, the NPAC will make appropriate limitations on their actions (for example, letting only old or new Service Providers view a pending record). The NPAC will only accept authorized customer user IDs. However, the NPAC will make no distinction among an NPAC customer's employees; the NPAC customer and their systems must control individual NPAC customer employee actions.

A user identification is a unique, auditable representation of the user's identity within the system. The NPAC SMS requires all system users, both individuals and remote machines, to be uniquely identified to support individual accountability over the NPAC Administrative and NPAC SOA Low-tech Interfaces.

R7-1 Unique User Identification Codes - Individuals

NPAC SMS shall require unique user identification codes (userids) to identify all NPAC and Service Provider personnel.

R7-2 Assigned Userid Identification

NPAC SMS shall require NPAC and Service Provider personnel to identify themselves with their assigned userid before performing any actions.

R7-3 Current Active User List Maintenance

NPAC SMS shall maintain internally the identity of all NPAC and Service Provider personnel logged on to the NPAC SMS.

R7-4 User Invoked Processes

NPAC SMS shall have for every process running an associated userid of the invoking user (or the userid associated with the invoking process).

R7-5.1 Userids, Unused - Disabling

NPAC SMS shall disable userids after a period of time during which the userId has not been used.

R7-5.2 Unused Userid Disable Period - Tunable Parameter

NPAC SMS shall provide an Unused Userid Disable Period tunable parameter which is defined as the number of days for which the userId has not been used.

R7-5.3 Unused Userid Disable Period - Tunable Parameter Modification

NPAC SMS shall allow the NPAC SMS administrator to modify the Unused Userid Disable Period tunable parameter time period.

R7-5.4 Unused Userid Disable Period - Tunable Parameter Default

NPAC SMS shall default the Unused Userid Disable Period tunable parameter to 60 days.

R7-6.1 Userids, Disabled - Reinstatement

NPAC SMS shall provide a complementary mechanism or procedure for the re-instatement disabled userids.

R7-6.2 Userids - Deletion

NPAC SMS shall provide a procedure for the deletion of userids.

R7-7 Userids - Temporary Disabling

NPAC SMS shall support the temporary disabling of userids.

R7-8 Userids, Disabled - Automatic Reactivation

NPAC SMS shall provide an option for automatic reactivation of disabled userids.

R7-9.1 Userids - One Active Login

NPAC SMS shall control and limit simultaneous active usage of the same userids by allowing only one active login.

R7-9.2 Second Login Attempt

NPAC SMS shall present the NPAC or Service Provider personnel with an option of disconnecting the first login and continuing the second login or terminating the second login, when a second login is entered.

7.3 Authentication

The identity of all NPAC SMS system users, both individuals and remote machines, must be verified or authenticated to enter the system, and to access restricted data or transactions over the NPAC Administrative and NPAC SOA Low-Tech Interfaces.

R7-10 User Authentication

NPAC SMS shall authenticate the identity of all NPAC and Service Provider users of the NPAC Administrative and NPAC SOA Low-tech Interfaces prior to their initially gaining access to NPAC SMS.

R7-11

(Duplicate - refer to R7-10)

R7-12 Authentication Data Protection

NPAC SMS shall protect all internal storage of authentication data so that it can only be accessed by an NPAC Security Administrator user.

7.3.1 Password Requirements

R7-13 Passwords - Non-shared

NPAC SMS shall require a single password entry for each userId.

R7-14 Passwords - Userid Unique

NPAC SMS shall allow a user to define a password that is already associated with another userId.

R7-15 Passwords - One-Way Encrypted

NPAC SMS shall store passwords in a one-way encrypted form.

R7-16 Passwords, Encrypted - Privileged Users Access Control

NPAC SMS shall only allow access to encrypted passwords by authorized users.

R7-17

(Duplicate - refer to R7-15)

R7-18 Passwords, Entry - Automatic Clear Text Suppression

NPAC SMS shall automatically suppress or fully blot out the clear-text representation of the password on the data entry device.

R7-19 Passwords - Network Transmission Clear Text Suppression

NPAC SMS shall ensure that passwords sent over public or external shared data networks are encrypted.

R7-20 Passwords - Non-Null

NPAC SMS shall require non-null passwords.

R7-21 Passwords - User-Changeable

NPAC SMS shall provide a mechanism to allow passwords to be user-changeable. This mechanism shall require re-authentication of the user identity.

R7-22 Passwords - Reset Capability

The NPAC SMS shall have a mechanism to reset passwords.

R7-23.1 Passwords - Aging Enforcement

NPAC SMS shall enforce password aging.

R7-23.2 Password Aging Default

NPAC SMS shall default the system password aging to 90 days.

R7-24.1 Passwords - Expiration Notification

NPAC SMS shall notify users a NPAC-specifiable period of time prior to their password expiring. The system supplied default shall be seven days.

R7-24.2 Passwords - Expiration Notification Default

NPAC SMS shall default the password expiration notification time period to seven days

R7-24.3 Passwords - Require User to Enter New Password

NPAC SMS shall require any user whose password has expired to enter a new password before allowing that user access to the system.

R7-25.1 Passwords - Non-Reusable

NPAC SMS shall ensure that a password can not be reused by the same individual for specifiable period of time.

R7-25.2 Password Reuse Default

NPAC SMS shall default the time period in which a password can not be reused to six months.

R7-26.1 Passwords - Minimum Structure Standard #1

Passwords shall contain a combination of at least six case-sensitive alphanumeric characters including at least one alphabetic and one numeric or punctuation character.

R7-26.2 Passwords - Associated Userid

NPAC SMS shall ensure that passwords do not contain the associated userID.

R7-27.1 Password Generator

NPAC SMS shall provide a password generator.

R7-27.2 Passwords, System Generated - Attack Resistant

NPAC SMS shall ensure that generated passwords are "reasonably" resistant to brute-force password guessing attacks.

R7-27.3 Passwords, System Generated - Random

NPAC SMS shall ensure that the generated sequence of passwords have the property of randomness.

7.4 Access Control

Access to the NPAC SMS and other resources will be limited to those users that have been authorized for that specific access right.

7.4.1 System Access

R7-28.1 System Access - Individuals

NPAC SMS shall allow access to authorized individual users.

R7-28.2 System Access - Remote Machines

NPAC SMS shall allow access to authorized remote systems.

R7-29.1 System Access, User Information - Entry

NPAC SMS shall provide a facility for the initial entry of authorized user and associated authentication information.

R7-29.2 System Access, User Information - Modification

NPAC SMS shall provide a facility for the modification of authorized user and associated authentication information.

R7-30

(Duplicate - refer to R7-10)

R7-31 System Access, Login - Trusted Communication

NPAC SMS's login procedure shall be able to be reliably initiated by the user, i.e., a trusted communications path should exist between NPAC SMS and the user during the login procedure.

R7-32.1 System Access - Disconnect User

NPAC SMS shall disconnect end users after a period of non-use.

R7-32.2 Non-use Disconnect Tunable Parameter

NPAC SMS shall default the Non-use Disconnect tunable parameter to 60 minutes.

R7-33.1 System Access - User Authentication Failure

NPAC SMS shall exit and end the session if the user authentication procedure is incorrectly performed a specifiable number of times.

R7-33.2 Incorrect Login Exit Default

NPAC SMS shall default the number of allowable incorrect login attempts to 3.

R7-34 System Access, User Authentication Failure - Notification

NPAC SMS shall provide a mechanism to immediately notify the NPAC SMS system administrator when the threshold in R7-33.1 is exceeded.

R7-35.1 System Access - Login Process I/O Port Restart

NPAC SMS shall restart the login process when the threshold in R7-33.1 has been exceeded and a specified interval of time has passed.

R7-35.2 Login Process Restart Default

NPAC SMS shall default the time interval to restart the login process to 60 seconds.

R7-36 System Access, User Authentication Failure - Userid Non-Suspension

NPAC SMS shall not suspend the userid upon exceeding the threshold in R7-33.1.

R7-37 System Access, User Authentication Procedure - Entry

NPAC SMS shall perform the entire user authentication procedure even if the userId that was entered was not valid.

R7-38 System Access, User Authentication Procedure Entry - Error Feedback

NPAC SMS shall only provide error feedback of "invalid".

R7-39 System Access, User Authentication Procedure Entry - Time Parameters

NPAC SMS shall provide a mechanism to restrict user login based on time-of-day, day-of-week, calendar date.

R7-40.1 System Access, User Authentication Procedure Entry - Method

NPAC SMS shall provide a mechanism to restrict user login based on method of entry.

R7-40.2 System Access, User Authentication Procedure Entry - Location

NPAC SMS shall provide a mechanism to restrict user login based on user system location.

R7-41 System Access, User Authentication Procedure Entry - Dial-Up Limitations

NPAC SMS shall provide a mechanism to limit the users authorized to access the system via dial-up facilities.

R7-42.1 System Access - Network Basis

NPAC SMS shall provide a mechanism to limit system entry for privileged NPAC SMS users on a specifiable network access.

R7-42.2 System Access - Per-Port Basis

NPAC SMS shall provide a mechanism to limit system entry for privileged NPAC SMS users on a specifiable per-port basis.

R7-43.1 System Access, Network Authentication

NPAC SMS shall provide a strong authentication mechanism for network access.

R7-43.2 Internet Access

NPAC SMS shall use authentication of public encryption keys for users accessing the NPAC SMS over the Internet.

R7-43.3 Dial-in Access

NPAC SMS shall use smart cards to authenticate users accessing the NPAC SMS via dial-up.