

Attachment 1 for CCR 95-0963A

The following table shows the linkages proposed by the CCR. The information in the table is taken from reports run against the 12/21/95 RTM baseline. The reports were run on 12/26/95.

C-ISS-01000	4792	The ISS shall interoperate with the V0 Wide Area Network to provide IR-1 connectivity as specified in DID 220, "Communications Requirements for the ECS project".	ESN-0003#Ir1	1205	The ESN shall enable researchers on existing networks (TCP/IP and GOSIP) to gain access to data and ECS services in a transparent manner to the underlying differences between the networks.	functional	IR1: V0 Network where possible; NSI otherwise.
			ESN-1140#Ir1	1327	The ESN shall provide protocol translation, termination, bridging and routing.	functional	
C-MSS-12020	2327	The MSS MUI Service shall have the capability to respond to keyboard and mouse input devices	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	
C-MSS-12030	2328	The MSS MUI Service shall provide a capability for the M&O Staff to add/delete a symbol and to modify a symbol's shape, color and position	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	

C-MSS-12040	2329	The MSS MUI Service shall provide a capability for an application to add/delete a symbol and to modify a symbol's shape, color and position	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	
C-MSS-12050	2330	The MSS MUI Service shall provide a capability for the M&O Staff to add, delete, and modify text strings	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	
C-MSS-12060	2331	The MSS MUI Service shall provide a capability for an application to add, delete, and modify text strings	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	

C-MSS-12070	207	The MSS MUI Service shall have the capability to provide options and methods to the M&O Staff for screen configuration changes (color, symbol placement, etc) and for retaining the changes from session to session	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	
C-MSS-12100	2332	The MSS MUI Service shall provide a capability for the M&O Staff to load and unload vendor or ECS defined MIB.	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	
C-MSS-12110	9114	The MSS MUI Service shall provide a capability for applications to load and unload vendor or ECS defined MIB.	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	

C-MSS-12180	2337	The MSS MUI Service shall provide the capability for an application to display on-line help windows	ESN-0910#Ir1	1308	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the ESN network management facility: c. enable and disable event reports within a system d. manage error and event logging files	functional	
C-MSS-40470	401	The MSS configuration management application service shall regulate operations on software library files through use of individual and group permissions.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.
C-MSS-40480	402	The MSS configuration management application service shall use a checkout/edit/checkin paradigm to govern changing of software library files.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.
C-MSS-40490	403	The MSS configuration management application service shall track each software library file that has been changed as a new version of the original file.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.

C-MSS-40500	404	The MSS configuration management application service shall merge versions of software library files and identify version conflicts, if any.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.
C-MSS-40510	405	The MSS configuration management application service shall maintain records of actual changes made to ECS software library files in implementing system enhancement requests.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.
C-MSS-40540	408	The MSS configuration management application service shall perform builds of baseline systems for ECS platforms and audit the builds such that they can be repeated.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.
C-MSS-40550	409	The MSS configuration management application service shall reconstruct previous versions of software library files.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.
C-MSS-40560	410	The MSS configuration management application service shall allow concurrent user access to software library files.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.

C-MSS-40570	411	The MSS configuration management application service shall maintain an audit trail of all changes made to software library files.	SMC-2510#Ir1	2614	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	functional	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.
C-MSS-66020	2366	The MSS Performance Management Application Service shall be capable of monitoring ethernet-like device performance parameters as specified in IETF RFC 1623.	SMC-8840#Ir1	2800	The SMC shall have the capability to generate detailed and summary reports indicating the performance of ground resources, including, at a minimum: c. Resource utilization	functional	This capability is provided at the EDF, only.
C-MSS-66030	280	The MSS performance management application service shall be capable of receiving managed object definitions for each managed object.	ESN-0740#Ir1	1274	The ESN network management service shall retrieve performance/fault data about ESN protocol stacks and equipment.	functional	IR1: Total applicability.
C-MSS-66060	2378	The MSS performance management application service shall be capable of receiving requested performance data from ECS components.	ESN-0740#Ir1	1274	The ESN network management service shall retrieve performance/fault data about ESN protocol stacks and equipment.	functional	IR1: Total applicability.

C-MSS-66100	2379	The MSS performance management application service shall be capable of retrieving the following data for all hosts: a. total CPU utilization b. memory utilization c. physical disk i/o's d. disk storage size e. disk storage used f. number of active processes g. length of run queue h. network i/o's (packets) i. network errors	ESN-0740#Ir1	1274	The ESN network management service shall retrieve performance/fault data about ESN protocol stacks and equipment.	functional	IR1: Total applicability.
C-MSS-66170	290	The MSS performance management application service shall log ECS performance data pertaining to ECS network components and operating system resources.	SMC-8840#Ir1	2800	The SMC shall have the capability to generate detailed and summary reports indicating the performance of ground resources, including, at a minimum: c. Resource utilization	functional	This capability is provided at the EDF, only.
C-MSS-66310	????	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version	SMC-3415#Ir1	2685	The LSM shall perform short and long-term trend analysis of element performance, including, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	functional	This requirement is supported as follows: IR1 shall monitor the operational status of DAAC hardware and software at the EDF and will provide performance monitoring and Office Automation tools at the local sites. IR-1 does not provide an LSM.

C-MSS-70010	323	The MSS Security Management Application Service shall provide the capability to create, modify and delete user accounts with the following attributes: a. username b. password c. group identification code d. user identification code e. login directory f. command line interpreter	SMC-5325#Ir1	2723	The LSM shall promulgate, maintain, authenticate, and monitor user and device accesses and privileges.	security	This requirement is supported as follows: Authentication is performed only at the host level, and only on the SSI&T Workstations and the SSI&T processor. The maintenance and monitoring of privileges is performed by the operations staff. Ir1 does not provide an LSM.
			SMC-5320#Ir1	2722	The SMC shall establish, maintain, and authenticate access privileges for ECS scientific users.	security	

C-MSS-70020	324	The MSS Security Management Application Service shall enable the assignment of user accounts to groups based on the group identification code.	SMC-5325#Ir1	2723	The LSM shall promulgate, maintain, authenticate, and monitor user and device accesses and privileges.	security	This requirement is supported as follows: Authentication is performed only at the host level, and only on the SSI&T Workstations and the SSI&T processor. The maintenance and monitoring of privileges is performed by the operations staff. Ir1 does not provide an LSM.
			SMC-5320#Ir1	2722	The SMC shall establish, maintain, and authenticate access privileges for ECS scientific users.	security	

C-MSS-70100	325	The MSS site Security Management Application Service shall provide the capability to set, maintain, and update access control information for ECS resources.	SMC-5325#Irl	2723	The LSM shall promulgate, maintain, authenticate, and monitor user and device accesses and privileges.	security	This requirement is supported as follows: Authentication is performed only at the host level, and only on the SSI&T Workstations and the SSI&T processor. The maintenance and monitoring of privileges is performed by the operations staff. Irl does not provide an LSM.
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			ESN-0650#Ir1	1268	The ESN shall perform the following network management functions for each protocol stack implemented in any ECS element, and each communications facility: a. Network Configuration Management b. Network Fault Management c. Network Performance Management d. Network Security Management	functional	
C-MSS-70710	2917	The MSS Security Management Application Service shall have the capability to generate reports from collected management data.	ESN-0760#Ir1	1277	The ESN report generation function shall provide, on an interactive and scheduled basis, network configuration, fault and performance management information.	functional	IR1: interactive basis only.
			ESN-0775#Ir1	1282	The ESN management service shall have the capability to redirect its reports to different devices such as console, disk or printer.	functional	IR1: Total applicability.
C-MSS-70720	161	The MSS Security Management Application Service shall have the capability to redirect reports to: a. console b. disk file c. printer	ESN-0775#Ir1	1282	The ESN management service shall have the capability to redirect its reports to different devices such as console, disk or printer.	functional	IR1: Total applicability.

C-MSS-90150	189	The DBMS shall support access structures (i.e., single-level indexes, multilevel indexes) to improve the efficiency of retrieval of management data.	ESN-0010#Ir1	1215	ESN shall provide the following standard services: a. Data Transfer and Management Services b. Electronic Messaging Service c. Remote Terminal Service d. Process to Process Communication Service e. Directory and User Access Control Service f. Network Management Service g. Network Security and Access Control Service h. Internetwork Interface Services	functional	IR1: a through: h a. ftp, etc. b. mail c. telnet d. internal within a site.
C-MSS-90570	286	The Report Generator shall have the capability to generate charts and graphs (e.g., bar, pie, line, etc.) from management data maintained in the DBMS.	SMC-8840#Ir1	2800	The SMC shall have the capability to generate detailed and summary reports indicating the performance of ground resources, including, at a minimum: c. Resource utilization	functional	This capability is provided at the EDF, only.

S-INS-00040	4029	The INGST CI shall report status to the provider of a Network Ingest Request and to the Error Log indicating successful or unsuccessful authentication of the provider as authorized to submit the request.	DADS0250#I r 1	217	Each DADS shall receive, at a minimum, data in the following forms: b. Electronic communications network	functional	IR1: This requirement is supported as follows: IR1 shall have the capability to receive data via an electronic communications network for the purpose of testing external interfaces to the Ingest subsystem.
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