

Table 1 - Changes in Release A SMC RBRs that must be reflected into Release B

Change s	RBRs ECS 12/11/9 6	KEY	CCR	Seg- ment	REQ Typ e	s V eri Met h	a V er Met h	REQ Catego ry	TEXT	Interp	clarif
Clarif. Segmen t	SMC- 0320# B	7432	96- 0968A	SDPS † CSM S	functional	test	test	missio n essenti al	The SMC shall be capable of scheduling ground activities to a minimum of one minute resolution.	Resource Planning at DAACs and SMC; B: Shared allocation, Planned vs. Actual Reports	<u>SDPS is responsible for Resource Planning and development of tools for B0 to schedule resources</u>
Clarif. Interp.	SMC- 1000# B	5150		CSM S	functional	test	test	missio n essenti al	The SMC shall provide application programming interfaces (APIs) for the monitoring and control of managed resources. These APIs shall provide mechanisms for: a. Capturing, by an application, of management data b. Exchanging management data between a managed application and its management agent c. Exchanging management data between a management agent and the LSM d. Performing analyses and generating reports using management data	B: full compliance	<u>HPOV & Tivoli provide APIs for applications to perform itemized functions.</u>
Clarif. req_type	SMC- 1300# B	6278		CSM S	functional ↓ <u>operation al</u>	test	test	missio n critical	The SMC shall support and maintain the ECS policies and procedures regarding instrument and ground event scheduling, including, at a minimum: a. Mission and science guidelines b. Directives for scheduling instrument data ingest, processing, reprocessing, retrieval, and data distribution		<u>Policy in these areas are implemented through B1 and EMAIL mechanism Writing the policies is operational. EMAIL and BBS are software COTS dissemination mechanism</u>
Clarif. interp	SMC- 1340# B	6288		SDPS	functional	test	test	missio n essenti al	The SMC shall generate scheduling directives for system level, site-to-site, and element-to-element integration, testing, and simulation activities.	Manual exchange of scheduleds <u>schedules</u>	<u>SMC sends EMAIL directives to DAACs/EO to coordinate ground events.</u>
Clarif. interp	SMC- 1345# B	5163		CSM S	functional	test	test	missio n critical	The LSM shall perform priority management services to resolve conflicts for ECS resources.	B: Fully-automated	<u>The SMC consults policy & procedures it guides & resolves conflicts.</u>
Clarif. req_type	SMC- 1360# B	6291		CSM S	functional ↓ <u>operation al</u>	test	test	missio n critical	The SMC shall generate ground resource scheduling directives, or recommendations for FOS elements, in response to emergency situations.	This is viewed as manually supported by office automation tools, e-mail, etc.	<u>The electronic communication support, such as EMAIL, is the full extent of support for this requirement.</u>

clarif. interp	SMC-2110# B	8392		CSM S	functional	de mo	de mo	mission essential	The SMC shall have the capability to generate managerial and operational directives affecting, at a minimum, an elements: a. Operational status b. Resource allocation c. Upgrade	B: full capability	<u>SMC operations staff m issue directives/requests via EMAIL to coordinat resource mode allocation status at a site.</u>
clarif. interp req_type a_verif_method	SMC-2115# B	4669		CSM S	functional <u>operational</u>	analysis	analysis <u>demo</u>	mission essential	The LSM shall convey for site or element implementation, the managerial and operational directives regarding the allocation or upgrade of any elements hardware and scientific and systems software.	B: full capability	<u>Rel A EMAIL provided convey operational directives from LSM.</u>
Clarif. Segment s&a ver.method req_cat clarification	SMC-2200# B	4675		CSM S <u>N/A</u> <u>proce</u> <u>dural</u>	procedural	de mo <u>not</u> <u>ver</u> <u>ified</u> <u>by</u> <u>EC</u> <u>S</u>	de mo <u>not</u> <u>ver</u> <u>ified</u> <u>by</u> <u>EC</u> <u>S</u>	mission essential <u>N/A</u> <u>proce</u> <u>dural</u>	The SMC shall assist each site or element, when necessary, in the performance of on-site preventive and corrective hardware and systems software maintenance.	Facilitation of this requirement will be described by M&O in their 611/OP3 document.	<u>B: Full capability (through use of performance management services) Fault correlation capability in Rel B will facilitate this assistance.</u>
interp	SMC-2300# B	4693		CSM S	functional	de mo	de mo	mission critical	The SMC shall monitor the spares inventory within each element.	B: Semi-automated to fully automated monitoring.	
interp	SMC-2310# B	4697		CSM S	functional	de mo	de mo	mission critical	The SMC shall oversee the replenishment of spare parts for all elements.	B: Fully automated.	
interp	SMC-2320# B	4701		CSM S	functional	de mo	de mo	mission essential	The SMC shall monitor the consumable inventory within each element for items used by the system including, at a minimum: a. Computer tapes b. Computer disks c. Computer paper	B: Manual or semi-automated.	
interp	SMC-2325# B	4710		CSM S	functional	de mo	de mo	mission essential	The LSM shall monitor the consumable inventory within its element for items used by the system including, at a minimum: a. Computer tapes b. Computer disks c. Computer paper	B: Automated.	
interp	SMC-2330# B	4714		CSM S	functional	de mo	de mo	mission essential	The SMC shall monitor the replenishment of consumable items for all elements.	B: Manual or semi-automated.	

interp	SMC-2335# B	4720		CSM S	functional	de mo	de mo	missio n essenti al	The LSM shall manage the replenishment of consumable items for its element.	B: Automated.	
clarif. interp ReqTyp s&a ver.met hod	SMC-2400# B	4722		CSM S	functional <u>operation</u> al <u>procedur</u> al	de mo ins pec tio n	de mo ins pec tio n	missio n essenti al	The SMC shall support the management of training and certification programs for ECS.	B: Capability (Requires M&O staff function as well)	<u>Performed by M&O staff using phone and access to site's training planing documents.</u>
clarif. interp ReqTyp a/s_verif f_M	SMC-2405# B	4725		CSM S	functional <u>operation</u> al <u>procedur</u> al	anal ysis ins pec tio n	anal ysis ins pec tio n	missio n fulfill ment	The LSM shall coordinate with the SMC in managing the training program for its element.	B: Automated	<u>Manually performed by M&O staff using phone e-mail, or through access to site's training plannin documents</u>
clarif. interp s&a ver.met hod	SMC-2415# B	4731		CSM S	functional <u>operation</u> al <u>procedur</u> al	anal ysis ins pec tio n	anal ysis ins pec tio n	missio n fulfill ment	The LSM shall receive from the SMC descriptions and schedules for training courses.	B: Automated.	<u>Manually performed by M&O staff using e-mail and remote access to offi automation tools.</u>
Clarif. a_verif_ method	SMC-2505# B	4743		CSM S	functional	test	test <u>de</u> <u>mo</u>	missio n critical	The LSM shall update the system-wide inventory data base consisting of all hardware, system software, and scientific software contained within its element.		<u>The Baseline Manager w maintain configuration status of site H/W and S/W.</u>
interp a_verif_ method	SMC-2510# B	4747		CSM S	functional	anal ysis	anal ysis <u>test</u>	missio n essenti al	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. The management system shall support the migration of hardware and software upgrades into the operational environment.	B: Semi-automated— Inter-DAAC system-wide view not provided until Rel. C	
Clarif.	SMC-2515# B	4753		CSM S	functional	test	test	missio n critical	The LSM shall provide configuration management for at least the operational hardware, system software, and scientific software within its element and for the migration of enhancements into the operational system.		<u>The Baseline Manager w support site CM.</u>

interp_a_verif_method	SMC-2520# B	4762		CSM S	functional	analysis	<u>analysis</u> <u>demo</u>	mission essential	The SMC shall evaluate received system enhancement requests to determine, at a minimum: a. Technical feasibility b. Implementation schedule c. Expected costs d. Existing system-wide hardware and software impacts	B: Automated receipt of requests for enhancements using CM tools or office automation applications	<u>The DRUED tool for enhancement recommendations is in place.</u>
interp_a_verif_method	SMC-2530# B	4774		CSM S	functional	analysis	<u>analysis</u> <u>demo</u>	mission essential	Upon approval of a system enhancement, the SMC shall provide overall management of the implementation of the approved changes to the hardware and system software.	B: Fully automated.	
interp_a_verif_method	SMC-2535# B	4777		CSM S	functional	analysis	<u>analysis</u> <u>demo</u>	mission essential	Upon approval of an enhancement, the LSM shall facilitate the implementation of the approved changes within an elements hardware and software.	B: Full capability	
interp_a_verif_method	SMC-2540# B	4778		CSM S	functional	analysis	<u>analysis</u> <u>demo</u>	mission essential	Upon approval to include a fully tested enhancement to the algorithms, the SMC shall provide overall management of the implementation of the approved and modified software into the operational environment.	B: Fully automated (staff uses CM tools)	
interp_a_verif_method	SMC-2605# B	4782		CSM S	security	analysis	<u>analysis</u> <u>demo</u>	mission fulfillment	The LSM shall support the site and element in implementing ESDIS Project policies and procedures received from the SMC covering the following areas, at a minimum: a. Element responsibility and authority b. Resource management c. Fault recovery d. Testing e. Simulation f. Maintenance g. Logistics h. Performance evaluation i. Training j. Quality and product assurance k. Inventory management l. System enhancements m. Finance management n. Administrative actions o. Security	B: Fully implemented	

Clarif.	SMC-3300#B	4789		CSMS	functional	demo	demo	mission essential	The SMC shall monitor site and element hardware, and scientific and system software status to determine their operational states including, at a minimum: a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode		<u>SMC through HPOV can monitor application servers.</u>
interp	SMC-3315#B	8394		SDPS	functional	demo	demo	mission essential	The LSM shall monitor its elements schedule and execution of events.		<u>PDPS has tools to monitor production schedules and resource allocation.</u>

req_type	SMC-3320#B	6299		CSMS	<u>operational functional</u> procedural	demo	demo	mission essential	The SMC shall monitor execution of ground operations events.	<p><u>SMC monitors via MSS site reports. System site reports. System monitoring is federated across the DAACs & SMC. SMC to (LSM) interactive messages for ground event traffic among sites is via EBnet and compliant with CSMS protocols and services.</u></p> <p>B:- Full capability Site MSS monitors only those scripts that are executed as a part of the ground event (Ref. SMC-0330#B). Note start/stop time. MSS monitors (Ref. SMC-3325#B) and reports with SMC. SMC has capability to perform this role for its site. System monitoring is federated across the DAACs & SMC.</p>	
ReqType Verification ReqCategory	SMC-3330#B	6301		CSMS	functional <u>operational</u>	demo	demo test	mission essential <u>fulfillment</u>	The SMC shall compare and evaluate system-wide, site, and element actual schedule performance against planned schedule performance.	System monitoring is federated across the DAACs & SMC.	

interp ReqTyp ReqCat egory Segmen t Clarif.	SMC- 3335# B	8395		CSM S <u>SDPS</u>	functional <u>operational</u>	test	test	missio n critical <u>essential</u>	The LSM shall compare and evaluate its elements actual schedule performance against planned schedule performance.	<u>Accomplished with the B: Full capability</u> (through use of various performance management and scheduling tools)	<u>PDPS produces various schedule compliance reports for review at LS</u>
a_Verif M Segmen t Interp. Clarif.	SMC- 3345# B	4925		CSM S <u>SDPS</u>	functional	anal ysis	anal ysis <u>de mo</u>	missio n critical	The LSM shall perform quality assurance for its site/elements performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality checking and audits of products processed and delivered c. Quality testing and audits of element resource performance,	<u>Accomplished with the B: Full capability</u> (through use of various performance management tools)	<u>PDPS supplies product QA reports.</u>
interp Clarif.	SMC- 3350# B	4927		CSM S	functional	anal ysis	anal ysis	missio n critical	The SMC shall generate, maintain, and update performance criteria and responses to performance deficiencies for system, site, and element resources and activities, such as: a. Data collection b. Product generation, QA and validation c. Reprocessing d. Data delivery to DAACs and to users e. Response to user requests f. Response to TOOs g. Response to field experiments h. Response to emergency situations	<u>B: Full capability</u>	<u>SMC disseminates policies and procedures regulating performance criteria and responses.</u>
a_Verif M Clarif.	SMC- 3370# B	4934		CSM S	functional	anal ysis	anal ysis <u>test</u>	missio n critical	For each performance parameter, the SMC shall have the capability of establishing multiple levels of thresholds to include, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation		<u>Tuning of alert threshold is supported.</u>
Interp ReqTyp s/a_Ver ifM	SMC- 3385# B	4943		CSM S	functional <u>procedural</u>	anal ysis <u>ins pec tio n</u>	anal ysis <u>ins pec tio n</u>	missio n critical	The LSM shall evaluate system performance against the ESDIS project established performance criteria.		<u>This is a requirement that sites follow policies and procedures.</u>

Interp ReqTyp s/a_Ver ifM	SMC- 3397# B	4949		CSM S	functional <u>procedur al</u>	test <u>ins pec tio n</u>	test <u>ins pec tio n</u>	missio n critical	The LSM shall generate, as needed, requests for performance testing, including, at a minimum: a. Resource to be tested b. Test purpose c. Requested test priority d. Required test environment e. Impacts to operations f. Expected test results	This requirement will require L4s to be traced to it. L4s should indicate requirement to provide tools to facilitate meeting this requirement, while M&O will write procedures to accomplish this capability.	
Interp ReqTyp s/a_Ver ifM	SMC- 3400# B	4950		CSM S	functional <u>procedur al</u>	de mo <u>ins pec tio n</u>	de mo <u>ins pec tio n</u>	missio n essenti al	The SMC shall generate, as needed, requests for performance testing that includes, at a minimum: a. Resource to be tested b. Test purpose c. Requested test priority d. Required test environment e. Impacts to operations f. Expected test results	This requirement will require L4s to be traced to it. L4s should indicate requirement to provide tools to facilitate meeting this requirement, while M&O will write procedures to accomplish this capability.	
a_Verif M Interp Clarif.	SMC- 3410# B	4952		CSM S	functional	anal ysis	anal ysis <u>test</u>	missio n essenti al	The SMC shall perform short and long-term trend analysis of system, site, and element performance to include, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	B: Full capability	<u>STATIT statistical analysis tool facilitates tl requirement.</u>
req_typ e a_Verif M	SMC- 3421# B	4957		CSM S	TBD <u>functional</u>	anal ysis	anal ysis <u>ins pec tio n</u>	missio n essenti al	The SMC shall analyze user feedback information supporting the development of recommended remedial or enhancement actions.	Facilitation of this requirement will be described by M&O in their 611/OP3 document.	

req_typ Clarif. s & a verif_m ethod	SMC- 4300# B	4959		CSM S	functional l <u>procedur al</u>	de mo ins pec tio n	de mo ins pec tio n	missio n essenti al	The SMC shall support, maintain, and update system fault management policies and procedures including, at a minimum: a. Fault identification b. Fault priorities c. Recovery or corrective actions		<u>Performed by M&O sta using office automation tools. SMC to (LSM) interactive messages for ground event sites is via EBnet and compliant wi CSMS protocols and services.</u>
a_Verif M	SMC- 5345# B	4979		CSM S	security	anal ysis	anal ysis ins pec tio n	missio n critical	The LSM shall perform compromise (e.g., virus or worm penetration) risk analysis, and detection.		
TEXT Clarif. Interp.	SMC- 6300# B	4987		CSM S	functional	anal ysis	anal ysis	missio n essenti al	The SMC shall support, maintain, and update accounting and accountability policies and procedures based on ESDIS Project policies and procedures.	B: Full eapability	<u>Accounting is part of Accountability Management.</u>
interp	SMC- 7310# B	5023		CSM S	functional	test	test	missio n essenti al	The SMC shall establish, maintain, and update the approved facility and equipment inventory to include, at a minimum: a. Facility and equipment identification b. Addresses c. Allowed accesses to privileges	B: Fully automated	
TEXT Interp.	SMC- 8710# B	5034		CSM S	functional	test	test	missio n essenti al	The SMC shall have the capability to generate summary and detailed configuration status reports that includes, at a minimum: a. Current status of all hardware, system and scientific software b. Reason why item not currently operational.	B: Enhaneed functionality provided.	