

DSSand INS Response to 304 Rejection based on RTM RELB_CDR_030196**Summary of changes being made:****1. S-DSS-03492, 03494 are linked to DADS0281#B in order to address Issue 48:**

DADS 0281 "Each DADS shall be capable of ingesting and storing data to support the instrument science team(s) in: a) Prelaunch checkout of their instruments, b) Prelaunch science checkout, c) Development of initial calibration information"--> The L4's which trace to this L3 do not address the prelaunch nature of this L3. (BK)

2. S-INS-00010 is linked to DADS0240 to address Issue 47:

DADS 0240 "Each DADS shall accept from the SMC, at a minimum, detailed science plans" --> The only L4 which traces to this L3 is: C-MSS-36610 "The Management Agent Service shall have the capability to send detailed science plans to the DSS" . The capability to send plans to the DSS is not the same as the requirement to accept plans there. (BK)

3. S-DSS-00010, 00020, 00060, 00120 are linked to DADS00110 to address Issue 43:

DADS 0110 "Each DADS shall receive from the IMS, at a minimum, the following: a)Documents, b)Product status dialog, c)Product orders" --> The L4's traced to this requirement address a)Documents, but do not address b) and c). (BK)

4. In order to address Issue 14, (a) S-DSS-20390 and S-DSS-20400 have been revised, (b) links between S-DSS-20390 and the L4s DADS1540#A, DADS1540#B have been deleted, (c) new links to DADS1630A and DADS1630B have been added:

DSS-20390 The STMGT CI shall provide operations staff a mechanism for recovery of data as a result of failed archive media. Note: Failed archive media are media which can not be read. --> This is extremely vague. (BK)

5. DADS1370#C has been created and linked to S-DSS-20920 and 20925, in order to address Issue 24:

The Level 4 requirements traced to DADS1350 and DADS1375 need to be expanded. (a) The system should allow for tape "sniffing". For tapes that have not been accessed over an operator-set period of time, a random sample (not all of the tapes) will be checked. (b) The term "refresh" needs to be defined in a glossary. (BK)

6. A new link has been added to IMS-1730 in order to (partially) address Issue 39:

IMS-1730: Level-4 only addresses SDSRV CI requirements but implies human/machine interface requirements too which are not addressed in the level-4s at all. There needs to be a suite of S-CLS and potentially other non-client (e.g. operator, production) subsystem interface requirements to support this. Cross-references that allow for tracing are also not addressed in the level-4s. (RP)

7. S-DSS-04450 has been linked to IMS-1740 in order to address issue 40:

IMS-1740: Level-4s do not address cross-referencing at all - e.g. as might be handled in the STMGT CI.

Level-4s imply there is an HMI that will support this function but there are no Level-4 requirements concerning the Client subsystem (S-CLS) to support this. Nor is there references to other potential subsystem support for this (e.g. operations). (RP)

Table 1: Reference Table

L4 ID	Rel	RT M Key	L4 Text	Clarification	Req Type	RbR ID	RT M key	RbR Text	RbR Type	Interpretation
S-DSS-03492	B	8816	The SDSRV CI shall interface with the STMGT CI to provide storage for real EOS instrument data to support pre-launch checkout of the ground system.		functional	<u>DADS0281#B</u>	3479	Each DADS shall be capable of ingesting and storing data to support the instrument science team(s) in: a. Pre-launch checkout of their instruments b. Pre-launch science checkout c. Development of initial calibration information	functional	
S-DSS-03494	B	8817	The SDSRV CI shall interface with the STMGT CI to provide storage for simulated EOS instrument data to support pre-launch checkout of the ground system.		functional	<u>DADS0281#B</u>	3479	Each DADS shall be capable of ingesting and storing data to support the instrument science team(s) in: a. Pre-launch checkout of their instruments b. Pre-launch science checkout c. Development of initial calibration information	functional	
S-INS-00010	IR1	4026	The INGST CI shall accept Network Ingest Requests to request automated electronic network ingest of a collection of Data. The collection of Data shall describe one or more Data Granules.		functional	<u>DADS0240#B</u>	3476	Each DADS shall accept from the SMC, at a minimum, detailed science plans.	functional	
S-DSS-00010	IR1	9448	The SDSRV CI shall accept Data Requests for Data that is managed within the STMGT CI.		interface	<u>DADS0110#A</u>	4052	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	functional	A: TRMM products
S-DSS-00010						<u>DADS0110#B</u>	3462	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	functional	
S-DSS-00020	IR1	9449	The SDSRV CI shall accept Service Requests from clients.		functional	<u>DADS0110#A</u>	4052	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	functional	A: TRMM products
S-DSS-00020						<u>DADS0110#B</u>	3462	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	functional	

S-DSS-00060	IR1	9450	The SDSRV CI shall acknowledge the receipt of Service Requests from local and remote clients.		functional	<u>DADS011</u> <u>0#A</u>	4052	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	functional	A: TRMM products
S-DSS-00060						<u>DADS011</u> <u>0#B</u>	3462	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	functional	
S-DSS-00120	A	3232	The SDSRV CI shall accept Status Requests from clients and, if requested, provide Service Request Status for any specified pending Service Requests, in return.		functional	<u>DADS011</u> <u>0#A</u>	4052	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	functional	A: TRMM products
S-DSS-00120						<u>DADS011</u> <u>0#B</u>	3462	Each DADS shall receive from the IMS, at a minimum, the following: a. Documents b. Product status dialog c. Product orders	functional	
S-DSS-20390	A	3678	The STMGT CI shall provide <u>tools for recovering data from failed archive media when such tools are supplied by the vendor of the supporting FSMS product(s)</u> operations staff a mechanism for recovery of data as a result of failed archive media. Note: Failed archive media are media which can not be read.		functional	DADS154 0#A	4496	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.	functional	
						DADS154 0#B	3563	In case of corruption or catastrophic failure, capabilities for recovering the file directory shall be provided.	functional	
S-DSS-20400	A	3679	The STMGT CI shall provide <u>tools for recovering data from failed archive devices, when such tools are supplied by either the vendor of the supporting FSMS product(s) or by the vendor of the affected hardware</u> operations staff a mechanism for recovery of data as a result of failed archive storage devices.		functional					
S-DSS-00901	A	3333	The SDSRV CI shall provide tools for database backup and restore.		functional	<u>DADS163</u> <u>0#B</u>	3567	At each DADS tools shall be provided for recovery of data from failed media and devices.	functional	
						<u>DADS163</u> <u>0#A</u>	4506	At each DADS tools shall be provided for recovery of data from failed media and devices.	functional	

S-DSS-21180	A	3768	The STMGT CI shall provide operations staff the capability to backup storage system unique files, which shall include all logs, files used by the storage system and files indicating the allocation of storage devices to Data Servers.		functional	<u>DADS1630#B</u>	3567	At each DADS tools shall be provided for recovery of data from failed media and devices.	functional	
						<u>DADS1630#A</u>	4506	At each DADS tools shall be provided for recovery of data from failed media and devices.	functional	
S-DSS-20920	C	3735	The STMGT CI shall provide a mechanism to statistically monitor the correctable bit error rate (BER) of archive media. Monitoring intervals shall be selectable by operations staff.		functional	<u>DADS1370#C</u>	new	<u>Each DADS shall provide a mechanism for statistically monitoring both the raw and corrected bit error rate (BER) of storage media in the archive.</u>	<u>functional</u>	
S-DSS-20925	C	3736	The STMGT CI shall provide a mechanism to statistically monitor the raw bit error rate (BER) of archive media.		functional	<u>DADS1370#C</u>	new	<u>Each DADS shall provide a mechanism for statistically monitoring both the raw and corrected bit error rate (BER) of storage media in the archive.</u>	<u>functional</u>	
<u>S-DSS-04695</u>	<u>B</u>	<u>NE</u> <u>W</u>	<u>The SDSRV CI shall provide the capability to perform searches that identify the source instrument for a specified data product.</u>		<u>functional</u>	<u>IMS-1730#B</u>	5387	The IMS shall provide the capability to produce reports that trace the data product back to the source instrument. \\871\\		
S-DSS-04450	A	9760	The SDSRV CI shall have the ability to store references to Production History data as Metadata for science data.		functional	<u>IMS-1740#B</u>	5388	The IMS shall produce cross reference reports (by user and data set) of processing performed, data sets produced, supporting data used, and data recipient.	functional	

Table 2: LEVEL_4 change

L4 ID	Re l	RT M Key	L4 Text	Clarif icatio n	Req Type
S-DSS-04695	B	NE W	The SDSRV CI shall provide the capability to perform searches that <u>identify the source instrument for a specified data product.</u>		<u>functional</u>
S-DSS-20390	A	3678	The STMGT CI shall provide <u>tools for recovering data from failed archive media when such tools are supplied by the vendor of the supporting FSMS product(s)operations staff a mechanism for recovery of data as a result of failed archive media. Note: Failed archive media are media which can not be read.</u>		functional
S-DSS-20400	A	3679	The STMGT CI shall provide <u>tools for recovering data from failed archive devices, when such tools are supplied by either the vendor of the supporting FSMS product(s) or by the vendor of the affected hardwareoperations staff a mechanism for recovery of data as a result of failed archive storage devices.</u>		functional

Table 3: REQ_BY_REL changes

RbR ID	RT M key	RbR Text	RbR Type	Interpretation
DADS1370#C	new	Each DADS shall provide a mechanism for statistically <u>monitoring both the raw and corrected bit error rate (BER) of storage media in the archive.</u>	<u>functional</u>	

Table 4: RBR_TO_L4 Links to be ADDED

RbR ID	L4 ID
DADS1630#B	S-DSS-00901
DADS1630#A	S-DSS-00901
DADS1630#B	S-DSS-21180
DADS1630#A	S-DSS-21180
DADS1370#C	S-DSS-20920
DADS1370#C	S-DSS-20925
IMS-1730#B	S-DSS-04695
IMS-1740#B	S-DSS-04450
DADS0281#B	S-DSS-03492
DADS0281#B	S-DSS-03494
DADS0240#B	S-INS-00010
DADS0110#A	S-DSS-00010
DADS0110#B	S-DSS-00010
DADS0110#A	S-DSS-00020
DADS0110#B	S-DSS-00020
DADS0110#A	S-DSS-00060
DADS0110#B	S-DSS-00060
DADS0110#A	S-DSS-00120
DADS0110#B	S-DSS-00120

Table 5: RBR_TO_L4 Links to be DELETED

RbR ID	L4 ID
DADS1540#A	S-DSS-20390
DADS1540#B	S-DSS-20390