Plans for Jan-Dec 2005

System Build	Tier/Functional Component Affected	Requirements Addressed	Driver
D03.1	Service Tier	NR-PER.x,NR-CMP.x	Must stay compatible with latest and improved version of service tier software
D03.2	Web Tier/Data Set View,Data Set Browsers,PDS Explorer	NR-PER.x	Customers expect reasonable response times.
D03.2-SPS	Web Tier/Data Set View,Storage Tier/Data Set Catalog	FR.ING.7,FR.SCH.1,FR.RET.6	Caltech Award Fee - Satisfactory Performance Standard - Customers expect that all links are valid.
D03.3			Must provide online access to the status of PDS action items, standard change requests, and deliverables
D03.3		NR.DOC.*	Must document PDS processes.
D03.3-SPS	Web Tier/Tracking	FR.TRK.4	Caltech Award Fee - Satisfactory Performance Standard - Customer expects up-to-date information about the state of a data set in the ingestion queue.
D03.x	All Tiers and Components	FR.ADM.3	Internal process improvement for system reliability.
D03.x		NR.STD.1	Must approve the Spectral Cube Standard.
D03.4-SPS	Web Tier/Validation	FR.VAL.1,FR.VAL.2,FR.VAL.3	Caltech Award Fee - Satisfactory Performance Standard - Must reduce cost of validating MRO products
D03.4-SPS	Web Tier/Validation	FR.VAL.1,FR.VAL.2,FR.VAL.3	Must complete this component of Core data system for MRO Era.

D03.4-SPS	Web Tier/Validation	FR.VAL.1,FR.VAL.2,FR.VAL.3	Must complete this component of Core data system for MRO Era.
D03.4-EPS	Web Tier/Validation Service	FR.VAL.1,FR.VAL.2,FR.VAL.3	Caltech Award Fee - Excellent Performance Standard - Must provide consistent standards and validation tools for the customer
D03.4-EPS	Web Tier/Validation Service	FR.VAL.1,FR.VAL.2,FR.VAL.3	Caltech Award Fee - Excellent Performance Standard - Must provide consistent standards and validation tools for the customer
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D03.4-EPS	Web Tier/Validation Service	FR.VAL.1,FR.VAL.2,FR.VAL.3	Caltech Award Fee - Excellent Performance Standard - Must provide consistent standards and validation tools for the customer
D03.4-EPS	Service Tier/Product Server,Profile Server	NR.DOC.6, NR.DOC.7	Caltech Award Fee - Excellent Performance Standard - Must provide documentation for developers.
D03.4	Web Tier/Data Set Browsers	FR.SCH.x,FR.RET.x	Must implement common API for all catalogs to reduce developement and maintenance costs, Near term committment for data set browsers include the SBN IHW data set and the ESA MEX data sets

D04.0	Service Tier/Product Validation	NR.DOC.*	Must improve the process for data dictionary update, include ensuring closure for updates and online database access. This action item does not address the approval process.
D04.0		NR.STD.1	Must determine whether to allow JPEG 2000 as an archive format in support of the MRO HiRise archive.
D04.0			Must keep Data Dictionary Up to date.
D04.0	Service Tier/Product Server,Profile Server	NR.INT.2	Desire to share planetary science data between the ESA and NASA through a standard interface
D04.0	Storage Tier	FR.TRN.3	Must find alternative to three hard media volumes for archive. Component of Core data system for MRO Era.
D04.0	Service Tier/Profile Server	FR.SCH.1, FR.SCH.2, FR.SCH.3	Must complete this component of Core data system for MRO Era.
D04.0	Storage Tier	FR.TRN.3	Need to test portable large scale disk media (rewritable) for large data volume transfers between geographically distributed data repositories.
D04.0	Storage Tier/Data Set Catalog	FR.ADM.3, FR.ING.10	Must allow online update of catalog data. Current process requires either batch oriented catalog template ingestion or direct access to database using SQL.

D04.0	Service Tier/Product Server	FR.PRC.2-EXT,FR.PRC.4-EXT,FR.RET.11-EXT	This item is added as a high value additional effort to be performed as resources are available. Need to provide conversion functionality for common image formats.
D04.0	Service Tier/Product Server,Profile Server	FR.SCH.1, FR.SCH.2, FR.SCH.3	Must allow record level access (as opposed to data set level) for selected SBN data sets. SBN to provide interface and EN to integrate the capability into the online interface
D04.0	Storage Tier/Data Set Catalog	FR.ING.4	Must ensure that ingested data is complete and consistent.
D04.0	Storage Tier/Data Set Catalog	FR.ING.4	Must provide interoperabilty with useful external resources.
D04.0	Service Tier/Product Server	FR.TRN.2,FR.TRN.3	Should used existing space data systems standards for data transfer.
D04.0		NR.DOC.*	Must document PDS processes.

Task	Source
Upgrade PDS OODT installations to latest version of OODT.	ActionItems-fy05-58
Identify and optimize online system performance bottlenecks. This is an ongoing effort with updates occuring in concert with other planned releases. Hyperlinks - Conduct a thorough walkthrough of all PDS hyperlinks to ensure they are up-to-date and not broken - Will validate all static links and dynamic resource links. Will work with nodes to coordinate and correct resource link problems since up-dates to these catalog/table-based links are the responsibility of the nodes. Will make updates to HTML pages and database files as needed on an iterative basis.	ActionItems-fy05-59 ActionItems SPS-1
Track issues and anomalies using issue-tracking software	ActionItems - 23 (D03-1)
Documentation (SOM, STP, SDIP, SRD, etc), Archive Life Cycle Document -> APG Dataset Tracking - Include a tracking status display for all datasets - Data tracking begins when an assigned data set id is submitted to CN catalog for ingestion. Will assess completeness of current data set status field descriptors and display data set id and archive status keywords in a data set status page with two columns and each column sortable.	ActionItems-fy04-51 ActionItems SPS-3
Create a software test plan for unit, integration and acceptance testing of the online-system	ActionItems-fy05-60
Spectral Cube Standard	Standards-52
PDS IV&T 1 of 3 - Conduct a Return on Investment (ROI) analysis for IV&T components by February 14, 2005.	ActionItems SPS-2
PDS IV&T 2 of 3 - Develop detailed requirements consistent with SRD and Concept of Operations.	ActionItems SPS-2

PDS IV&T 3 of 3 - Design and Implement Phase 1 system	ActionItems SPS-2
1 of 3 - Reach agreement with the Tech Session and Management Council on the complete set of "catalog information" that is required from the Data Provider for entry into the PDS Data Set Catalog. Then document this in the PDS Standards Reference. - To be completed by April 30, 2005	ActionItems EPS-1
2 of 3 - Reach agreement on the subset of the catalog information that is required for inclusion in the traditional PDS catalog files and made part of the data set archive. Agree also on the structure and layout of the catalog files themselves. Then document this in the PDS Standards Reference. - To be completed by April 30, 2005	ActionItems EPS-1
3 of 3 - Update the data dictionary so that a standard PDS label validation tool, e.g., LVTOOL, will correctly verify the structure of each individual catalog file, in accordance with the standard agreed upon, above. - To be completed by May 30, 2005	ActionItems EPS-1
Provide an additional tool that will verify that the catalog files, taken as a complete set, contain all the information that the catalog files are required to provide, consistent with the standard agreed upon, above. Note: This tool requires testing whether catalog files can be loaded into the PDS Catalog without violating referential integrity. We therefore recommend that the tool be implemented as an online tool, in order to test against the actual PDS Catalog. - This can be completed by September 30, 2005	ActionItems EPS-1
Develop PDS API / OODT developer's package	ActionItems EPS-2
Modify default Basic Browser to use default profile server. Deploy for PSA/PDS Prototype - Complete installation of IHW and Stardust product server and Basic Browsers.	
	ActionItems-fy05-61

Update the Data Dictionary in a timely manner

JPEG 2000 Archive Format

ActionItems-fy04-55 & 56

Documentation (SOM, STP, SDIP, SRD, etc) DD
(backlogged Keywords, new mission keywords)
ESA/PSA Interoperability

Standards-10

ActionItems-fy04-55 & 56
New

PDS/NSSDC Electronic Data Transfer Interface

ActionItems - 30 (D03-8)

Product Level Search across distributed nodes

SRD

Data Brick Research

ActionItems - 26 (D03-4)

Administrative Interfaces - Allow online update of data set catalog information using standard forms based interfaces.

Operational support.

Integrate Imaging node's (Steve Levoe's) ImageIOLibrary into the PDS product servers to allow conversion of PDS image products to FITS, JPEG, VICR, etc. format for delivery from product servers.	
	ActionItems-fy05-62
SBN Record Level Searching Integration	
	D03-3
Continue cleanup of data set Citations, Abstracts, and Data Set Terse Descriptions	
	ActionItems-fy05-63
Finish ingestion of data set abstracts into Astrophysics Data System (ADS) and links back to PDS through PDSQUERY.	
Prototype XFDUs in a PDS product server. (Volume packaging construct)	
	ActionItems-fy05-64
Documentation (SOM, STP, SDIP, SRD, etc) Validation Process Documentation	ActionItems-fy04-52

Priority	Status
	0 Done
	0 Done
	0 Done
	0 Done - Testing
	0 Done - Ready for Delivery
	0 Done - Under Review
	0 Done ?
	0 Done?
	1 In Progress
	1 In Progress

1 In Progress

1 In Progress

1 In Progress

1 In Progress

1 In Progress

1 In Progress

2 In Progress

2 In Progress

2 In Progress

2 In Progress

2 In Progress

2 In Progress

2 In Progress

3 In Progress

3 In Progress

3 Queued

3 Waiting on SBN

4 Queued

4 Queued

5 Queued

9 Subsummed by IV&T work

o D03.5   Web Tier/New Component FR.ING.11,FR.ADM.3   Must provide the ability to
                                                          update data set catalog
                                                          online.

Design and implement administrative interfaces o D04.0	Web Tier/New Component	FR.SCH.x,FR.RET.x	Must provide product/record level access to archived data. Implement proof-of-concept for a Mars Data Base and the Cassini Master Index

Implement the "Global
Product Search" capability
for Mars and Cassini Data
Sets