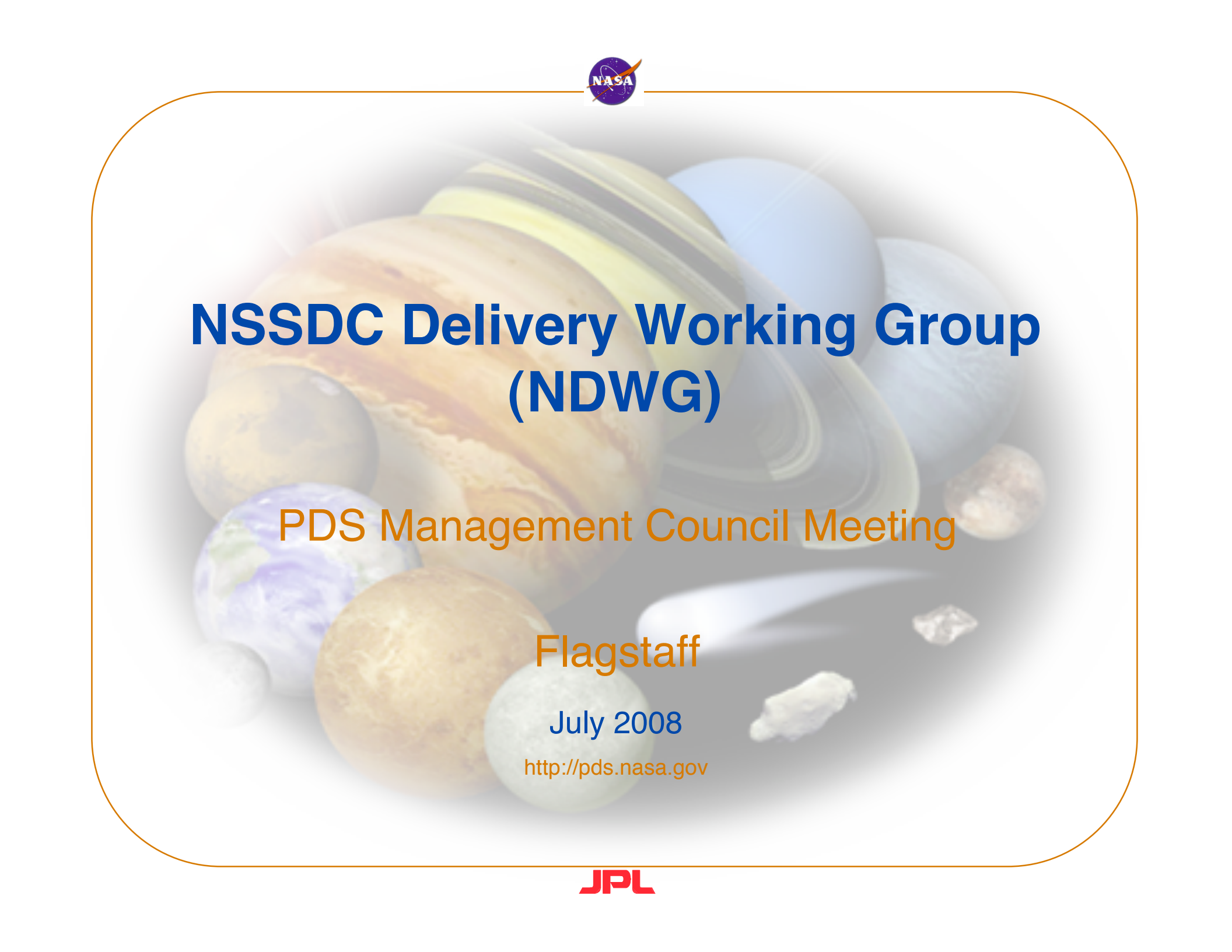


NSSDC Delivery Working Group (NDWG)

PDS Management Council Meeting

Flagstaff

July 2008

http://pds.nasa.gov

Topics

- Status
- Next Steps
- Option
- Backup
  - Submission Process
  - Retrieval Process
  - Replacement Process

Status

- Developed processes to submit, retrieve and replace archive volumes
  - Data will be sent via "data brick”* to the NSSDC*
  - NSSDC will be responsible for transferring the data from the data bricks to their archive system
- Defined delivery and submission manifests that include checksums and description of the volumes and submission
- NSSDC provided software to generate submission manifests
- NSSDC has received test data bricks from both Geosciences (MRO/CRISM) and Imaging Nodes (ODY/THEMIS)

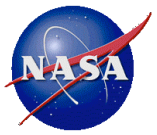
* NSSDC is planning to eventually extend this to include electronic delivery

Next Steps

- Complete testing (July 2008)
- Prepare operational release (July 2008)
  - Installation Guide
  - Users' Guide
  - NSSDC Submission Manifest Generation Software
- Perform Beta Test (August 2008)
- Start NSSDC delivery (September 2008)
- Develop QQC process on deep archive (October 2008)
  - Adopt data integrity requirements for auditing
  - A mutual procedure for checking will be instituted

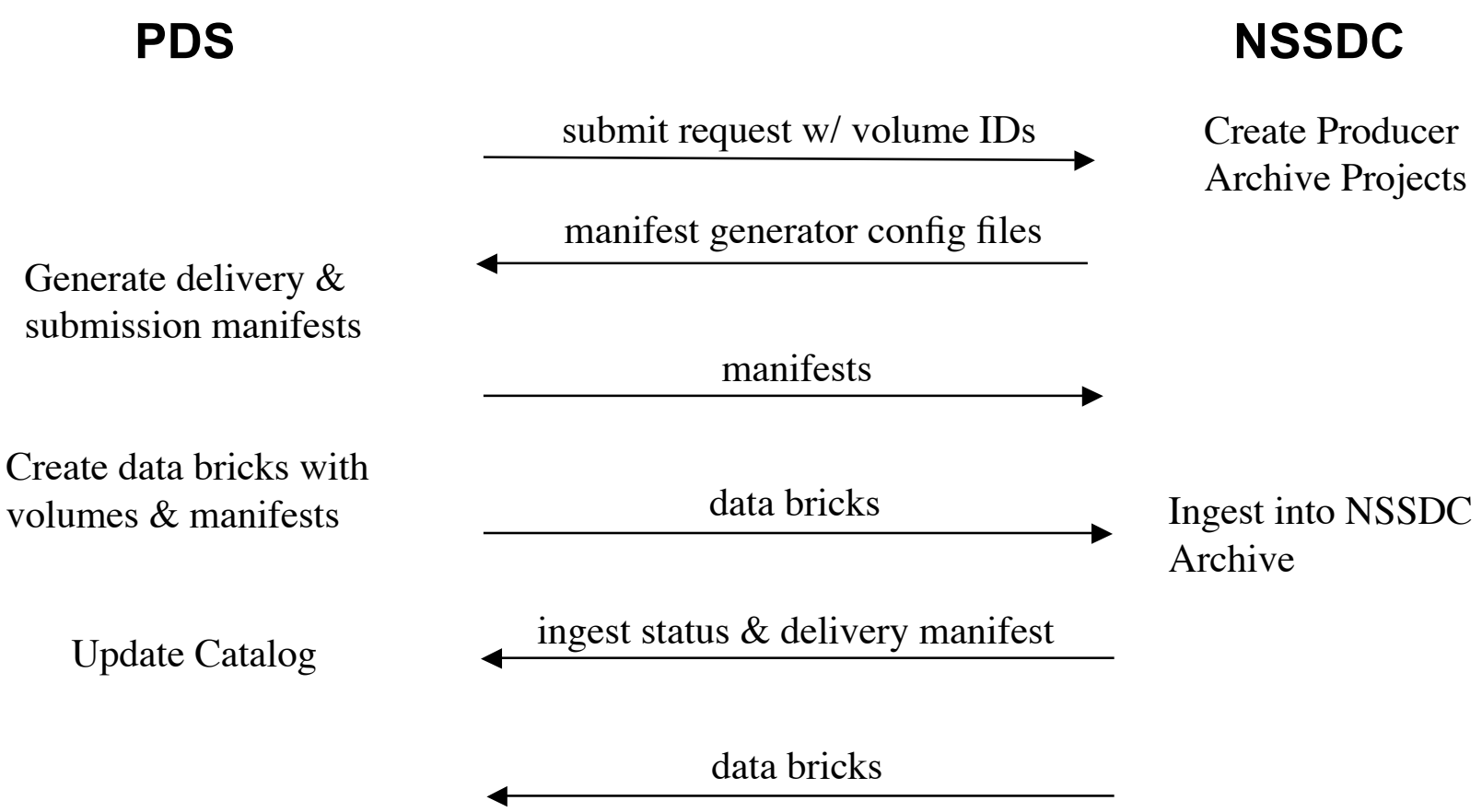
Option

- Nodes to consider redelivering their entire holdings to NSSDC
  - Addresses migration of old data on physical media
  - Synchronizes PDS and NSSDC's inventory



Backup

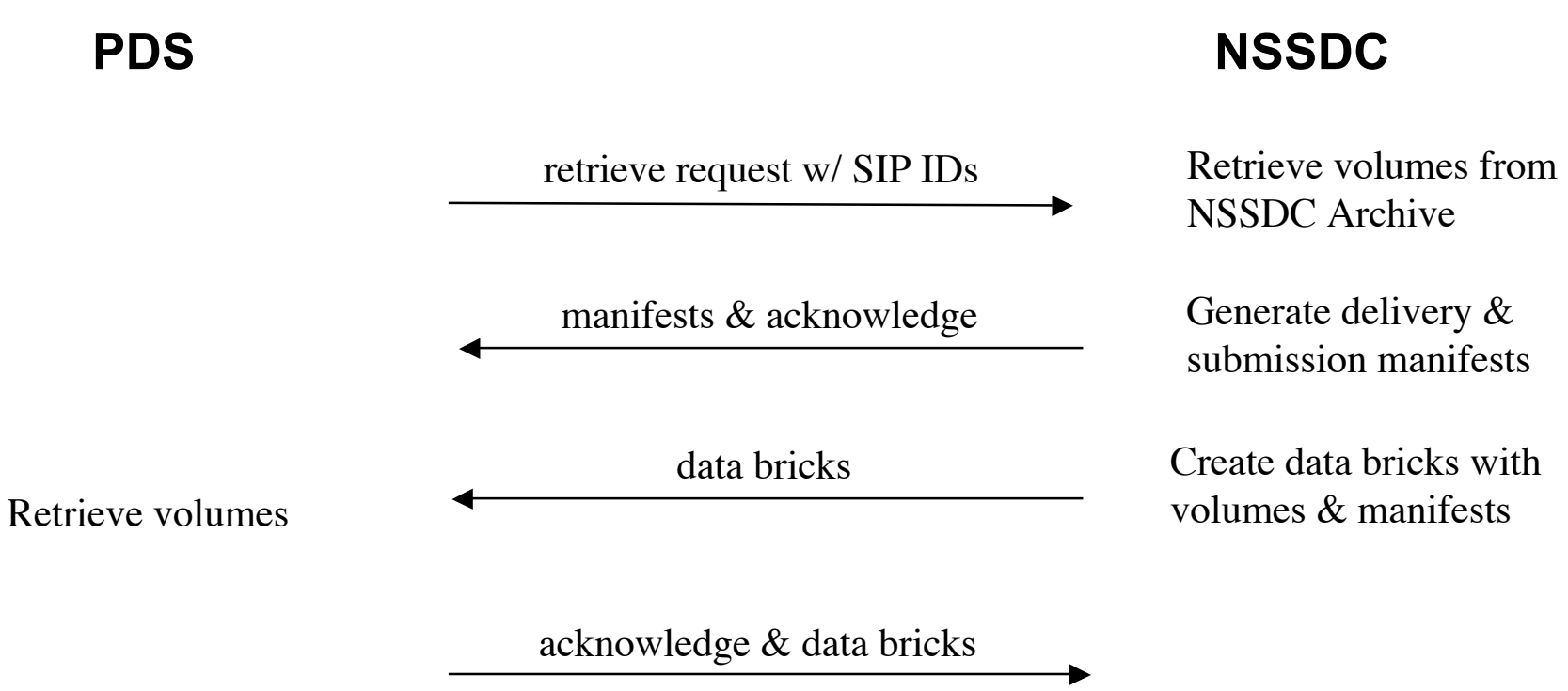
Submission Process - 1



Submission Process - 2

1. PDS Node sends submission request w/ volume IDs to NSSDC
2. NSSDC provides manifest generator configuration files (containing Producer Archive Project IDs) to PDS Node
3. PDS Node generates Delivery and Submission Manifests and sends them to NSSDC
4. PDS Node builds data bricks with volumes and manifests
5. PDS Node sends data bricks to NSSDC
6. NSSDC ingests volumes into NSSDC archive system
7. NSSDC sends Delivery manifests and ingest results to PDS Node and EN
8. NSSDC returns data bricks to PDS Node
9. EN updates catalog

Retrieval Process - 1

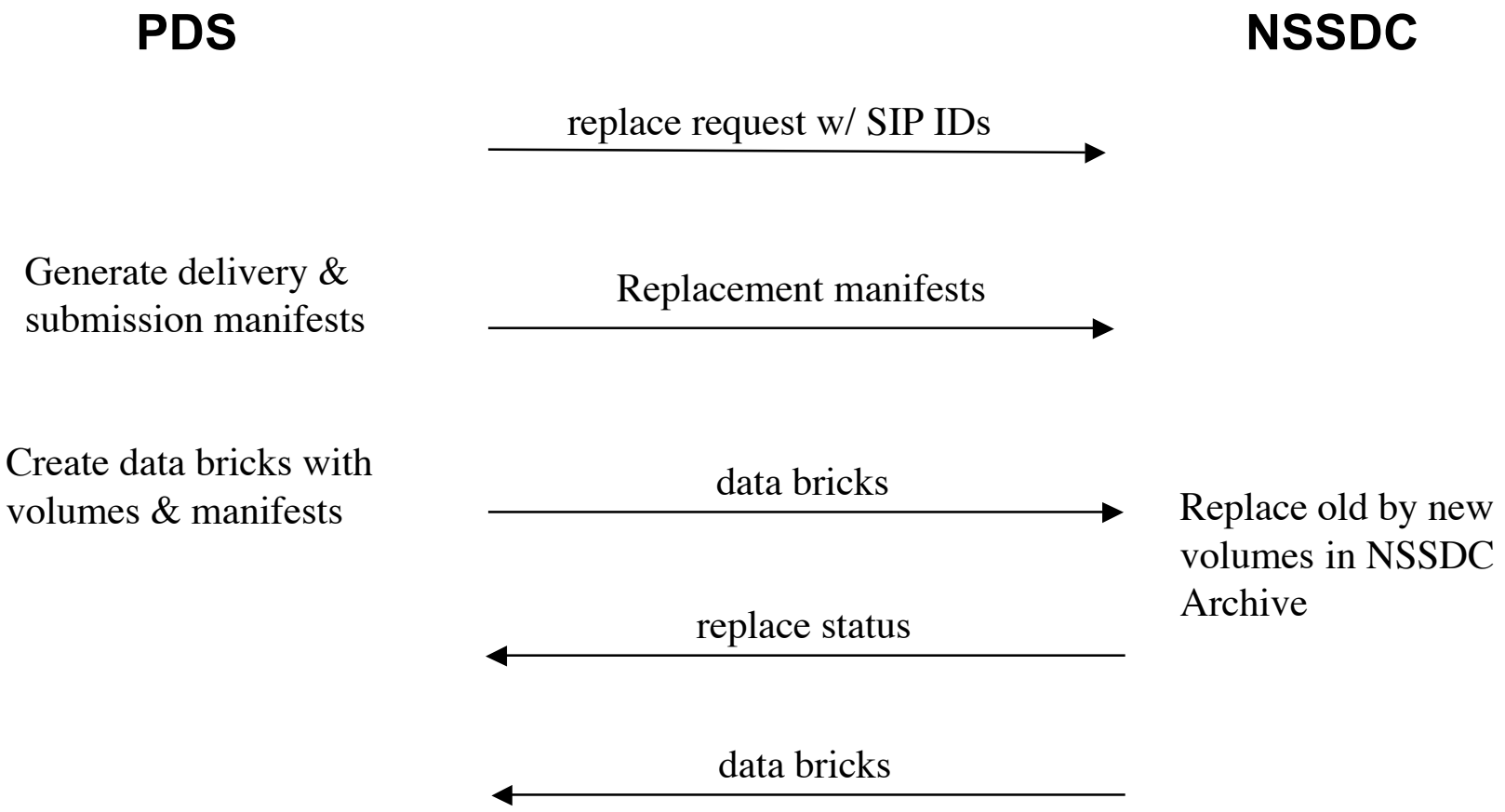


* Retrieval Process not fully defined yet

Retrieval Process - 2

1. PDS Node sends retrieval request w/ SIP IDs to NSSDC
2. NSSDC retrieves corresponding volumes from NSSDC archive
3. NSSDC generates Delivery and Submission Manifests and sends them to PDS Node
4. NSSDC builds data bricks with volumes and manifests
5. NSSDC sends data bricks to PDS Node
6. PDS Node retrieve volumes
7. PDS Node acknowledges and returns data bricks to NSSDC

Replacement Process - 1



* Replacement Process not fully defined yet

Replacement Process - 2

1. PDS Node sends replacement request w/ SIP IDs to NSSDC
2. PDS Node generates replacement Delivery and Submission Manifests and sends them to NSSDC
3. PDS Node builds data bricks with replacement volumes and manifests
4. PDS Node sends data bricks to NSSDC
5. NSSDC replaces the volumes in NSSDC archive system
6. NSSDC sends replacement results to PDS Node
7. NSSDC returns data bricks to PDS Node