

# DRS Futures User Requirements Catalog

## Summary

This document catalogs the user requirements of the DRS Futures project. It is organized thus:

1. Top-level headers (1., 2., etc.) identify the functional requirement categories;
  - 1.1. Second-level headers (1.1, 1.2, etc.) are the requirements within those categories;
    - Bullet points under each header represent user stories supporting the requirements or related notes.

The primary target audiences for this document are the DRS Futures Executive Committee, potential vendors, Harvard stakeholders, and other interested parties.

## TOC

1. Functional Requirement Categories
2. Top Priorities
3. All Requirements
4. Glossary

## Functional Requirement Categories

1. [Digital Preservation](#)
2. [Revolving and Ongoing Management](#)
3. [Ingest](#)
4. [Search and Retrieval](#)
5. [Administrative](#)
6. [Reporting and Statistics](#)
7. [UI/UX](#)
8. [Digital Accessibility](#)
9. [Security](#)
10. [Access management](#)
11. [Integrations](#)
12. [Supporting System Transition](#)
13. [Community Facing Resources](#)

## Top Priorities

### 1. Digital Preservation – DP

- DP01 – Support effective, efficient, and sustainable persistence of access to authentic digital information objects and affordance of legitimate digital information experiences
- DP02 – Meet mandatory OAIS responsibilities (ISO 14721:2012, § 3.1)
- DP03 – Consistency with OAIS reference model to the extent it is not extended or superseded by other F/NF requirements
- DP04 – Support for NDSA Levels of Preservation (V2.0) Level 4 guidelines (NDSA, 2019)
- DP05 – Support for automated policy-driven preservation actions
- DP06 – Ability to capture and retain curatorial preservation intentions
- DP07 – Support for complete rollback of content state (metadata and storage) if/when preservation actions fail
- DP08 – Complete system and content state instantiated in storage, which is considered the copy-of-record
- DP09 - Operational metadata store(s) can be rebuilt from preservation store(s)
- DP10 – Configurable scaling of deployed processing components for responsive performance
- DP11 – Ability to integrate directly with any S3 API-conforming storage platform
- DP12 – Support for (synchronous) online and (asynchronous) nearline and offline storage platforms
- DP13 – Support for arbitrary policy-driven number of replicas on a per-file basis
- DP14 – Support for encryption on a per-file basis
- DP15 – Support for compression on a per-file basis
- DP16 – No reliance on block- or file-level deduplication
- DP17 – Support for Oxford Common File Layout as the structuring principle for storage
- DP18 – Periodic reconciliation of stored content and metadata state, i.e., everything instantiated in storage has a corresponding record in metadata
- DP19 – Vendor supports Harvard in all kinds of verification efforts including routinely-scheduled and ad hoc file-level fixity verification of any or all hosted content at rest and after specified actions, based on cryptographically-secure digests

- DP20 – Vendor supports fixity verification of submitted content using externally-supplied digest types at the point and time of ingest
- DP21 – All information about fixity violations is available via auditable-logging for transparent communication
- DP22 – Auditable-logging of automatic "healing" of bit-level corruption by copying from a replica known to be "correct" through verification consensus
- DP23 – Support the widest range of metadata schemas and elements, for example in capture, persistence, index, and search
- DP24 – Metadata associatable with all entities in the supported data modeling hierarchy
- DP25 – Support content association with characterizing metadata from an arbitrary number of schemas
- DP26 – Support for content intentionally presented only by metadata where no stored instantiation is expected
- DP27 – Eventual consistency of metadata state with its instantiation as the stored copy-of-record with Recovery Point Objective of 2 hours
- DP28 – Disaster Recovery reinstantiation of metadata state from stored copy-of-record with Recovery Time Objective of 24 hours
- DP29 – Periodic reconciliation of metadata state and stored content, i.e., every record in metadata has corresponding files instantiated in storage, unless there is intentionally no stored representation, as required by DP26
- DP30 - No prescriptive eligibility requirements regarding content genre, format, structure, or degree of associated metadata (beyond a bare minimum of critical administrative properties)
- DP31 – Flexible configuration of arbitrary Submission Information Package formats
- DP32 – Support for Bagit-based submission packages
- DP33 – Fullest-possible file-level characterization (i.e., validation and metadata extraction) of any or all content at the point/time of ingest or on an ad hoc basis
- DP34 – Fullest-possible object/representation/bitstream-level characterization of any or all content at the point/time of ingest or on an ad hoc basis
- DP35 – Policy-triggered automated transcoding from/to the widest range of file formats for purposes of normalization and/or creation of derivatives at the point/time of ingest or on an ad hoc basis
- DP36 – Versioned change history, with ability to reconstitute arbitrary prior state
- DP37 – Automatically reformat deprecated or suboptimal file formats (e.g. jpeg to jp2, PDF to PDF/A)

2. [Revolving and Ongoing Management](#) – ROM
  - ROM01 – Ability for basic updates to content and metadata in place
  - ROM04 – Ability for curators to add annotations and commentary
  - ROM06 – Flexibility in downloading content and content subsets (including bulk, different groupings, and portions of digital objects)
  - ROM07 – Flexible content relationships including in structure, relationship, and groupings
  - ROM08 – Take action on large numbers of assets
  - ROM09 – Human-Instigated Automation
  - ROM11 – Support for widest character set inclusion (multilingual, etc.)
3. [Ingest](#) – IG
  - IG01 – Support submission of any type of content in user-defined groupings
  - IG04 – Deposit large number of files
  - IG05 – Deposit large file sizes
4. [Search and Retrieval](#) – S
  - S01 – Depositor search and access available by any or all metadata
  - S02 – Fielded metadata
  - S03 – Add new metadata schemas
  - S04 – Unfielded metadata
  - S06 – Construct simple or advanced search on any metadata possibly including keywords, Boolean, wildcard, free text, result-filtering, etc.
5. [Administrative](#) – A
  - A01 – Log in and Integration with Harvard SSO
  - A02 – Administrative User and Department Profiles
  - A03 – Easier system user management (DRS account creation and maintenance)
  - A04 – Auditing Capabilities
  - A05 – Robustness in Auditing Capabilities
  - A06 – Deposit tracking functionality (user can observe status of deposit)
  - A07 – Notifications (Near or real-time updates about actions, timely system communication to users regarding status of digital objects throughout lifecycle)
  - A08 – Supports internal billing
  - A10 – Digital object version history
  - A12 – Clear and meaningful error messages
  - A13 – Fault-tolerant mode of operation
  - A14 – Remember and return files in user-defined organization including folder hierarchies and file order

- A15 – Portable upload tooling, not restricted to desktop, able to point to digital objects staged anywhere
6. [Reporting and Statistics](#) – RS
    - RS01 – Support flexible and customizable reporting
    - RS02 – Human- and machine-readable output
  7. [UI/UX](#) – UI
    - UI01 – Intuitiveness of primary functionality including deposit, limited editing, reporting, etc.
    - UI02 – Support self deposit of any content
    - UI03 – Content Preview in repository system
    - UI04 – Ability to interact with system via multiple interfaces, including GUI, API, etc.
    - UI05 – Support mediated deposit of any content
  8. [Digital Accessibility](#) – DA
    - DA01 – Supports alternate representations of materials as required by Harvard's Digital Accessibility Policy
    - DA02 – System itself conforms to Harvard accessibility policies
  9. [Security](#) – SEC
    - SEC01 – Conforms to Harvard security policies
    - SEC03 – Disaster recoverability
    - SEC04 – Storage for PII, Level 4 and other protected materials
    - SEC05 – Log Retention for at least 90 days in compliance with HUIT Security requirements
    - SEC06 – Data handling conforms to additional data handling requirements (e.g. HIPAA, GDPR, contractual and data use agreements etc.)
  10. [Access management](#) – AM
    - AM03 – Grant access to object within DRS to external users for administrative work
    - AM01 – Repository supports metadata recording assertions about access permissions
  11. [Integrations](#) – I
    - I01 – Repository system supports metadata and source catalog integration
    - I02 – Flexible resource pathways and pipelines supported by DRS Vendor
  12. [Supporting System Transition](#) – SST
    - SST01 – Clarify recommended content transition path and estimated time requirements
    - SST02 – Please describe the support you offer for content transition out of your system
  13. [Community Facing Resources](#) – CFR

- CFR02 – Access to community-driven support
- CFR03 – Open documentation (including API) available without login
- CFR06 – Vendor Training (or access to training modules)
- CFR07 – Clear Product Ownership
- CFR08 – Harvard Iterative feedback and improvement
- CFR09 – Harvard training

## All Requirements

### 1. Digital Preservation – DP

- 1.1. DP01 – Support effective, efficient, and sustainable persistence of access to authentic digital information objects and affordance of legitimate digital information experiences
  - [STORY] As a DRS Business Owner, I want the DRS to support the effective, efficient, and sustainable persistence of access to authentic digital information objects and affordance of legitimate digital information experiences so that I am confident that Harvard’s digital heritage will be available for use and reuse in the very long term.
- 1.2. DP02 – Meet mandatory OAIS responsibilities (ISO 14721:2012, § 3.1)
  - [STORY] As a DRS Business Owner, I want the DRS to meet the mandatory responsibilities as laid out by OAIS 3.1, so that we are consistent with best practices in the Digital Preservation discipline.
- 1.3. DP03 – Consistency with OAIS reference model to the extent it is not extended or superseded by other F/NF requirements
  - [STORY] As a DRS Business Owner, I want to ensure that the DRS uses the OAIS reference model as a guiding principle while still meeting other Harvard-specific requirements, so that we can preserve Harvard’s digital heritage in the most robust and flexible way possible.
- 1.4. DP04 – Support for NDSA Levels of Preservation (V2.0) Level 4 guidelines (NDSA, 2019)
  - [STORY] As a DRS Business Owner, I want to ensure that the DRS provides support for the NDSA Levels of Preservation (V2.0) Level 4 guidelines, so that we are confident that we are consistent with best practices in the Digital Preservation discipline.
- 1.5. DP05 – Support for automated policy-driven preservation actions
  - [STORY] As a DRS Business Owner, I want the system to perform automated preservation activities as defined by our local policies and requirements, so that we can focus on more complex tasks requiring human judgment and intervention.
- 1.6. DP06 – Ability to capture and retain curatorial preservation intentions
  - [STORY] As a DRS Business Owner or Collection Manager, I want the DRS to provide an opportunity to capture and retain statements of formal preservation intention, so that I can better articulate the preservation "plan" for objects, and develop the foundation for evaluating the objects’ preservation outcomes.
- 1.7. DP07 – Support for complete rollback of content state (metadata and storage) if/when preservation actions fail
  - [STORY] As a DRS Business Owner, I want to be able to roll my preserved objects back to a prior state in the event of a preservation action failure, so that I am confident that I am preserving objects that are faithful to the original copy of record.

- 1.8. DP08 – Complete system and content state instantiated in storage, which is considered the copy-of-record
  - [STORY] As a DRS Business Owner, I want to ensure that both content and system are preserved in my Archival Storage, so that I have a clear copy of record from which I can generate other copies for usage.
- 1.9. DP09 - Operational metadata store(s) can be rebuilt from preservation store(s)
  - [STORY] As a DRS Business Owner, I want to be sure that my operational metadata can be rebuilt from information in the preservation store(s), so that my preserved materials are resilient.
- 1.10. DP10 – Configurable scaling of deployed processing components for responsive performance
  - [STORY] As a DRS Business Owner, I want to ensure that the system processing is scalable and responsive, so that I am assured of the best system performance based on the resources available and requirements at any time.
- 1.11. DP11 – Ability to integrate directly with any S3 API-conforming storage platform
  - [STORY] As a DRS Business Owner, I want the DRS to integrate with any and all S3 API-conforming storage platforms of my choice, so that I can ensure a robust and diverse storage environment without being locked into any vendor’s proprietary storage.
- 1.12. DP12 – Support for (synchronous) online and (asynchronous) nearline and offline storage platforms
  - [STORY] As a DRS Business Owner, I want the system to support both synchronous and asynchronous storage platforms, so that all of my digital materials, both copy-of-record and derivatives, can be stored in the most appropriate storage option a defined by my local requirements.
- 1.13. DP13 – Support for arbitrary policy-driven number of replicas on a per-file basis
  - [STORY] As a DRS Business Owner, I want the DRS to enforce my local policies regarding number of replicas for a given digital object, so that I do not need to enforce the policies manually for each object with each deposit.
- 1.14. DP14 – Support for encryption on a per-file basis
  - [STORY] As a DRS Business Owner, I want the DRS to support in transit and at rest encryption on a per-file basis, so that I am confident that my materials are secure.
- 1.15. DP15 – Support for compression on a per-file basis
  - [STORY] As a DRS Business Owner, I want the DRS to support compression on a per-file basis, so that I am confident that we are using our available storage efficiently.
- 1.16. DP16 – No reliance on block- or file-level deduplication
  - [STORY] As a DRS Business Owner, I do not want the DRS to perform deduplication activities so that I avoid the potential risks posed by inter-object dependencies, accepting that this may lead to a larger storage footprint than would otherwise be possible.
- 1.17. DP17 – Support for Oxford Common File Layout as the structuring principle for storage
  - [STORY] As a DRS Business Owner, I want the DRS to use the OCFL as the structuring principle for storage, so that I am confident that my objects are stored in a robust, stable, and self-describing structure.
- 1.18. DP18 – Periodic reconciliation of stored content and metadata state, i.e., everything instantiated in storage has a corresponding record in metadata

- [STORY] As a DRS Business Owner, I want the DRS to periodically (on a cadence of my choice) ensure that each object has metadata so that I am confident all of our objects can be discovered using that metadata.
- 1.19. DP19 – Vendor supports Harvard in all kinds of verification efforts including routinely-scheduled and ad hoc file-level fixity verification of any or all hosted content at rest and after specified actions, based on cryptographically-secure digests
- [STORY] As a DRS Business Owner, I want the DRS vendor to support my use of any kind of verification effort of my choice, at any time, so that I am confident that I am ensuring the authenticity of my objects without artificial constraints.
- 1.20. DP20 – Vendor supports fixity verification of submitted content using externally-supplied digest types at the point and time of ingest
- [STORY] As a DRS Business Owner, I want the DRS to support fixity verification of contents upon ingest, so that I have a baseline to compare future versions against.
- 1.21. DP21 – All information about fixity violations is available via auditable-logging for transparent communication
- [STORY] Auditable logging must be a component of the provenance and change history for the digital objects, in particular fixity violations and automatic “healing” of bit-level corruption by copying from a replica.
- 1.22. DP22 – Auditable-logging of automatic "healing" of bit-level corruption by copying from a replica known to be "correct" through verification consensus
- [STORY] As a DRS Business Owner, I want any preservation activities, including automated healing of a corrupted version, to be logged in an auditable manner, so that I have full visibility into any automated activities undertaken by the system.
- 1.23. DP23 – Support the widest range of metadata schemas and elements, for example in capture, persistence, index, and search
- [STORY] As a DRS Business Owner, I want the DRS to support the widest range of metadata schemas and elements, so that I am not artificially constrained in how I describe objects in my custody.
- 1.24. DP24 – Metadata associatable with all entities in the supported data modeling hierarchy, e.g., collections, objects, representations, files, bitstreams, etc.
- [STORY] As a DRS Business Owner, I want to be able to associate metadata with any and all entities in the supported data modeling hierarchy, so that I do not have entities without metadata.
- 1.25. DP25 – Support content association with characterizing metadata from an arbitrary number of schemas
- [STORY] As a DRS Business Owner, I want to be able to associate my content with metadata from an arbitrary number of schemas, so that I am not artificially constrained in how I describe objects in my custody.
- 1.26. DP26 – Support for content intentionally presented only by metadata where no stored instantiation is expected
- [STORY] As a DRS Business Owner, I want to be able to have the underlying intellectual content of preserved objects be represented solely by characterizing metadata without any corresponding instantiated data.
- 1.27. DP27 – Eventual consistency of metadata state with its instantiation as the stored copy-of-record (see DP08) with Recovery Point Objective of 2 hours

- [STORY] As a DRS Business Owner, I want metadata updates to be represented in persistent storage within 2 hours of a discontinuity event, so that I am confident that our stored objects and their associated metadata are synchronized with each other.
- 1.28. DP28 – Disaster Recovery reinstatement of metadata state from stored copy-of-record with Recovery Time Objective of 24 hours
- [STORY] As a DRS Business Owner, I want any metadata impacted by a disaster or other damage to be reinstated within 24 hours, so that my users are not affected by long-term outages.
- 1.29. DP29 – Periodic reconciliation of metadata state and stored content, i.e., every record in metadata has corresponding files instantiated in storage, unless there is intentionally no stored representation, as required by DP26
- [STORY] As a DRS Business Owner, I want the DRS to periodically (on a cadence of my choice) ensure that all metadata has an object associated with it (unless it is exempted as described in DP26) so that I am confident all of our objects can be discovered using that metadata.
- 1.30. DP30 - No prescriptive eligibility requirements regarding content genre, format, structure, or degree of associated metadata (beyond a bare minimum of critical administrative properties)
- [STORY] As a DRS Business Owner, I want my users to be able to deposit digital objects with minimal metadata so the objects can be preserved safely until staff are able to more fully process them.
- 1.31. DP31 – Flexible configuration of arbitrary Submission Information Package formats
- [STORY] submissions should be able to be done in Harvard's format and structure, not dictated to by vendor's preferences
- 1.32. DP32 – Support for Bagit-based submission packages
- [STORY] As a DRS Business Owner, I want the DRS to support Bagit-based submission packages, so that it is in line with best practices in the discipline.
- 1.33. DP33 – Fullest-possible file-level characterization (i.e., validation and metadata extraction) of any or all content at the point/time of ingest or on an ad hoc basis
- [STORY] As a DRS Business Owner, I want the DRS to provide the fullest possible file-level characterization on any or all content at any time, so that I have confidence in the fidelity of my preserved content.
- 1.34. DP34 – Fullest-possible object/representation/bitstream-level characterization of any or all content at the point/time of ingest or on an ad hoc basis
- [STORY] [STORY] As a DRS Business Owner, I want the DRS to provide the fullest possible object/representation/bitstream-level characterization on any or all content at any time, so that I have confidence in the fidelity of my preserved content.
- 1.35. DP35 – Policy-triggered automated transcoding from/to the widest range of file formats for purposes of normalization and/or creation of derivatives at the point/time of ingest or on an ad hoc basis
- [STORY] As a DRS depositor, I want the DRS to automatically create and associate with the original work derivative or alternate materials (such as OCR, audio description, transcript, caption, etc.) based on a configuration and preservation analysis so that I can support many different ways of engaging with my preserved content.
- 1.36. DP36 – Versioned change history, with ability to reinstantiate arbitrary prior state
- [STORY] As a DRS Business Owner, I want the DRS to maintain a versioned change history for objects, so that I can reinstantiate an object to any arbitrary prior state.

- 1.37. DP37 – Automatically reformat deprecated or suboptimal file formats (e.g. jpeg to jp2, PDF to PDF/A)
  - [STORY] As a DRS staff user, I want an automated process to reformat deprecated or suboptimal file formats so that better support for long-term preservation of the digital object is ensured.
  - [STORY] As a DRS staff user, I want to be able to perform this process on one to many objects at a time.

## 2. Revolving and Ongoing Management – ROM

- 2.1. ROM01 – Update information resource without having to remove from DRS and re-upload
  - [STORY] As a DRS depositor, I want to be able to update the information resource while it is still within the DRS, so that I can keep my collections up to date without having to delete the object(s) and re-mint a new URN.
- 2.2. ROM02 – Processing Workspace (for more detail, see 1.1.2 of Technical Foundational Principles)
  - [STORY] As a DRS depositor, I want a content management location analogous to a shelf prep location that allows me to prepare or update digital objects so that I am confident that they are safely preserved until I can process them out of my backlog.
  - [STORY] As a DRS depositor, I want a digital preservation solution that encompasses the full lifecycle of the digital preservation process, so that I do not encounter unnecessary roadblocks in my daily workflow.
  - [STORY] As a DRS depositor that uses MPS and IS services, I want a centralized drop zone for sharing documentation and other materials to be deposited, so that I do not have to distribute paper copies or email.
- 2.3. ROM03 – Deposit with minimal metadata
  - [STORY] As a DRS depositor, I want to be able to deposit digital objects with minimal metadata so that I can preserve them safely until I am able to more fully process them.
- 2.4. ROM04 – Ability for curators to add annotations and commentary
  - [STORY] As a Harvard curator, I want to be able to add annotations to digital objects in my custody, so that I can support the fullest possible context for these objects.
- 2.5. ROM05 – Ability for patrons to add annotations and commentary
  - [STORY] As a user of DRS materials, I want to be able to add annotations and commentary for future users, to build additional context for digital objects similar to marginalia in physical manuscripts.
- 2.6. ROM06 – Object download flexibility
  - [STORY] As a DRS staff user, I want to be able to download files out of the DRS without having to open a zip with all of the other associated files.
  - [STORY] As a DRS staff user, I want to be able to download a page-turned object with the structural metadata included in my download package.
- 2.7. ROM07 – Flexible content relationships including in structure, relationship, and groupings
  - [STORY] As a Harvard curator, I want to be able to associate an object with any collection, so that my digital collections are not constrained by artificial administrative boundaries.

- [STORY] As a Harvard curator, I want to be able to associate an object with multiple collections, so that my digital collections more accurately reflect the overlapping nature of my materials.
  - [STORY] As a Harvard curator, I want to preserve structural metadata about an item that belongs to multiple containers or groups, so that I can reuse that item in multiple contexts.
  - [STORY] As a Harvard curator, I want to express the relationship between two items in a way that is less rigid than containment, so I can differentiate users' understanding of the information at hand in a more subtle way.
  - [STORY] As a DRS depositor, I want to be able to connect related objects to each other so that I can more accurately represent the complex and interconnected nature of my collections.
  - [story] As a DRS staff user, I want the DRS to allow configurable metadata fields, including flexibility in defining which fields are required, so that I can better capture the nuance of my collections.
- 2.8. ROM08 – Take action on large numbers of assets
- [STORY] As a DRS staff user, content manager in charge of depositing or batch-editing large amounts of data, I want to be able to take actions on large quantities of data in the system, so that I don't have to add complexity to my workflow.
  - [STORY] As a DRS staff user, I want to be able to perform mass updates to multiple records at a time, so that I do not have to spend my time typing the same updates multiple times in a row.
  - [STORY] As a DRS depositor, I want to be able to delete digital objects in bulk, so that I can update the works without performing repetitive tasks.
  - [STORY] As a DRS staff user, I want to be able to perform bulk downloads of objects stored in the DRS myself, so that I do not have to request support from LTS, with the associated delays.
- 2.9. ROM09 – Human-Initiated Automation
- [STORY] As a DRS staff user, I want to be able to manually initiate automated processes, so that the system can handle repetitive tasks while I focus on work that requires my expertise.
- 2.10. ROM10 – System-Initiated Automation
- [STORY] As a DRS product owner, I want the DRS to support automation initiated by the system as a result of certain conditions being met, so that the system can handle repetitive tasks that need no human judgment without user input.
- 2.11. ROM11 – Support for widest multilingual character set inclusion
- [STORY] As a DRS product owner, I want the DRS to support metadata using the widest possible character set.
  - [STORY] As a DRS depositor, I want support for locally-defined and meaningful filenames for objects, so that I can support our local discovery and retrieval practices.

### 3. Ingest – IG

- 3.1. IG01 – Support submission of user-defined content in flexible groupings
- [STORY] As a DRS depositor, I want to be able to submit diverse forms of content in flexible groupings, so that I am not constrained in what I am able to preserve.
- 3.2. IG02 – Derivative materials (at ingest, submit externally pre-generated material)

- [STORY] As a DRS depositor, I want to be able to submit externally pre-generated derivative or alternate representations of works at ingest (such as captions, transcripts, audio descriptions, OCR, etc.) and relate to needed content, so that I can preserve the richest possible object for the long term.
- 3.3. IG03 – Derivative materials (at ingest, system automatically generates)
- [STORY] As a DRS depositor, I want the DRS to automatically generate and relate to original content derivative or alternate representations of works (such as OCR, captions, transcripts, audio descriptions, etc.) upon ingest, based on a configuration and preservation analysis, so that I can preserve the richest possible Thing for the long term.
- 3.4. IG04 – Deposit large number of files
- [STORY] As a DRS depositor, I want to be able to deposit a large number of files (minimum of 10,000 for objects and 25,000 for all files) at a time, so that I do not develop a backlog of undeposited and unpreserved digital objects.
  - [STORY] As a DRS depositor, I want to be able to feed large quantities of data to the system without having to break them up in multiple deposit groupings, so that I don't have to add complexity to my workflow or work through a trial-and-error process.
- 3.5. IG05 – Deposit large file sizes
- [STORY] As a DRS depositor, I want to be able to deposit large objects (minimum of 600GB and going up to the limits allowed by the storage layer) into the DRS, so that my preservation needs are not constrained by object size.
- 3.6. IG06 – Consolidated workflows for common operations
- [STORY] As a DRS content manager, I want the deposit workflow to provide all the options I need for my task, so I can share issues and find solutions from colleagues who have had the same issues in the past.
  - [STORY] As an LTS support team member, I want DRS content managers to use a consistent workflow, so that I can help them troubleshoot issues.
- 3.7. IG07 – Workflow for born digital objects
- [STORY] As a Harvard University records manager, I want an easy-to-use workflow for born digital objects, so that I can support the University's Digital First electronic records management initiative without needing to create a bespoke project for each group of born digital records.
- 3.8. IG08 – Less complex reformatting submission forms for IS and MPS
- [STORY] As a repository that uses Imaging Services and Media Preservation Services' reformatting and depositing services, I want to use simpler deposit submission forms, so that it is easier to initiate a digitization project.
  - [STORY] As a Harvard depositing agent, I want more flexibility in terms of required metadata fields in the DRS, so that I do not need to ask my users for unnecessary or duplicative information in order to provide my services.

#### 4. Search and Retrieval – S

- 4.1. S01– Robust search and access by any or all metadata available (e.g., billing code, deposit date, collection title, etc.)
- [STORY] As a DRS product owner, I want the DRS to index all metadata by default so that my end users can perform searches on any or all metadata.
  - [STORY] As a DRS staff user, I want robust search functionality using any or all available metadata, so that I do not need to refer to external systems to find deposited objects.
- 4.2. S02 – Fielded Metadata

- [STORY] As a DRS staff user, I want to be able to search any fielded metadata, so that I can more easily find the digital objects that I need.
- 4.3. S03 – Unfielded metadata
- [STORY] As a DRS staff user, I want to be able to search unfielded metadata, such as OCR text, so that I can more easily find the digital objects that I need.
- 4.4. S04 – Persistent and shareable queries and results. Option for automation.
- [STORY] As a DRS staff user, I want to be able to conduct a custom search in the system and share that query with my colleagues, so that they do not need to duplicate my efforts in order to find specific digital objects.
  - [STORY] As a DRS staff user, I want to be able to conduct a custom search in the system and share the search results with my colleagues, so that they do not need to duplicate my efforts in order to find specific digital objects.
  - [STORY] As a DRS staff user, I want to be able to conduct a custom search in the system and export the results of that query, so that I can use those results in other ways.
- 4.5. S05 – Search interface
- [STORY] As a DRS staff user, I want to be able to construct simple or advanced searches on any metadata, including keywords, Boolean, wildcard, result-filtering, etc., so that I can quickly find the deposited objects that I need to which I have access.
  - [STORY] As a DRS staff user, I want to be able to save any search that I have constructed, so that I can more easily run the same search in the future, without having to re-define those parameters.

## 5. Administrative – A

- 5.1. A01 – Log in and Integration with Harvard SSO
- [STORY] As a DRS staff user, I want to be able to log into the DRS so that I can perform activities in the system.
  - [STORY] As an LTS employee, I want the DRS to seamlessly integrate with the Harvard Single-Sign-On platform so that my users have a consistent experience across systems.
- 5.2. A02 – Administrative User and Department Profiles
- [STORY] As a depositing agent serving many repositories, I want to be able to easily toggle between repository profiles, so that I do not have to input basic repository administrative details every time I deposit.
  - [STORY] As a DRS depositor, I want to be able to deposit individual small objects that are not subject to billing without needing to find and get approval for a billing code, so that my work is not blocked by unnecessary administrative hurdles.
  - [STORY] As a DRS staff user, I want customizable and persistent personalized interfaces, so that I can more quickly do my job without having to update my settings each time I log in.
  - [STORY] As a DRS staff user, I want the DRS to allow configurable metadata fields, including flexibility in defining which fields are required, so that I can better capture the nuance of my collections.
- 5.3. A03 – Easier system user management (DRS account creation and maintenance)
- [STORY] As an LTS Production Systems Librarian, I want to be able to easily create and maintain staff user accounts, so that I can complete my tasks with minimal effort or duplication.
  - [STORY] As a DRS Product Owner, I want to provide my users with granular administrative user permissions with varying read/write/delete configurations, as well

as also other metadata-related restrictions (such as owner code, repository, sub-repository, collection, Level 4 data, etc.) so that I can best support my users' work while still adhering to the principle of least privilege.

5.4. A04 – Auditing Capabilities

- [STORY] As an LTS employee, I want to be able to audit DRS activities so that I can better support the repositories using the system.
- [STORY] As a DRS staff employee, I want to be able to audit my deposited objects, so that I have a receipt and record of what was deposited and when.
- [STORY] As an LTS employee, I want the DRS to provide access to logs that track transactions, so that I have full transparency of system activity for troubleshooting and security assessment purposes.

5.5. A05 – Robustness in Auditing Capabilities

- [STORY] As an LTS employee, I want the audit functionality in the DRS to be robust, so that I am confident that I can audit on any activity I need.

5.6. A06 – Deposit tracking functionality

- [STORY] As a DRS depositor, I want to be able to track my deposits within the system, so that I do not have to maintain a separate tracking system.
- [STORY] As a DRS depositor, I want my deposit tracking functionality to include identifiers from other systems such as Alma, JStor Forum, ArchivesSpace, etc., so that I can more easily match records for objects across Harvard's systems.

5.7. A07 – Near or real-time updates about actions

- [STORY] As a DRS repository owner, I want to receive system notifications from the DRS, so that I have up to date information about the status of the system.
- [STORY] As a DRS user, I want the DRS to provide notification about any event impacting deposited objects in my custody so that I know the status of my objects at all times.
- [STORY] As a DRS depositor, I want to receive timely notifications when objects I have deposited are available, so that I know when I can move to the next stage of my workflow.
- [STORY] As a repository that uses Imaging Services and Media Preservation Services' reformatting and depositing services, I want to receive timely notifications when they have completed their deposit activities, so that I know when I can move to the next stage of my workflow.
- [STORY] As a DRS user, I want to be able to receive notifications about any issues that arise at any stage of the preservation process so that I have prompt and convenient notifications and can more easily take action.
- [STORY] As a DRS user, I want to be notified when an object moves from the management layer into the preservation layer, so that I have timely and relevant information about the status of my deposits.
- [STORY] As a DRS depositor, I want a dashboard to view my deposit's progress data, so that I do not have to wait for a failure notification at the end to identify issues.

5.8. A08 – Supports Internal Billing

- [STORY] As a Harvard finance employee, I want to be able to receive departmental DRS usage data, so that I can more easily generate departmental bills.
- [STORY] As a DRS Product Owner, I want to be able to export object usage and ownership data, so that I can provide it to the Finance department for billing.

5.9. A09 – Affordable

- [STORY] As a Harvard depositing department, I want Harvard University to financially support my deposits, so that I do not have to make difficult decisions about which of Harvard's intellectual assets should be preserved based on my departmental funding.
- 5.10. A10 – Digital Object Version History
- [STORY] As a DRS product owner, I want the system to maintain a granular change history of all digital objects, so that I can keep track of how my collections have changed over time.
- 5.11. A11 – Versioning and support for reverting to previous version
- [STORY] As a Harvard curator, I want the DRS to automatically create a new version of a digital object when I make edits to that object, so that the dynamic nature of my collections is more accurately reflected.
  - [STORY] As a Harvard curator, I want to be able to browse past versions of my digital objects and revert if necessary, so that I can easily identify the most up-to-date and accurate version of my objects.
- 5.12. A12 – Clear and Meaningful Error messages (for more detail, see 1.4.4 of Technical Foundational Principles)
- [STORY] As a DRS staff user, I want clear and meaningful error messages so that I can easily identify what went wrong and how to proceed.
- 5.13. A13 – Fault-tolerant mode of operation
- [STORY] As a DRS product owner, I want to ensure that the DRS can detect and recover from errors, so that my users do not have to worry about service interruptions.
  - [STORY] As a DRS depositor, I want to ensure that the DRS can automatically recover from common temporary errors such as connection errors, so that I do not need to fix objects that are fine.
- 5.14. A14 – Remember and return files in user-defined organization including folder hierarchies and file order
- [STORY] As a DRS depositor, I want deposits to preserve my original folder hierarchies and file order, so that I can more effectively preserve record context in addition to the records themselves.
  - [STORY] As a DRS Product Owner, I want to ensure that the DRS maintains knowledge of the original order and context of an object but does not constrain the storage structure requirements, so that I do not break the OCFL requirements.
- 5.15. A15 – Portable upload tooling
- [STORY] As a DRS depositor, I want to be able to upload objects from any staging location to which I have access, so that I do not need to perform the intermediate step of copying objects to my desktop before depositing to the DRS.

## 6. Reporting and Statistics – RS

- 6.1. RS01 – Support flexible and customizable reporting
- [STORY] As a DRS staff user, I want to be able to use DRS data to generate reports about usage, deposit volume, and more, so that I may better understand my repository's needs.
  - [STORY] As a DRS staff user, I want to have access to meaningful, insightful reports about deposit activity and repository statistics at any time, so that I can analyze my activity and the repository content.

- [STORY] As a DRS staff user, I want to be able to use DRS data to generate reports about deposited objects so that I can more easily share information with my funding sponsors, donors, and stakeholders.
  - [STORY] As a DRS staff user, I want to be able to query a specific set of fields about the DRS activity of deposited objects, so that I can focus on specific metadata without downloading and manually skimming large amounts of data.
  - [STORY] As a DRS staff user, I want to be able to query on new objects added based on a given date or date range as well as existing objects that were changed based on a given date or date range, so that I have a better understanding of my team's work over time.
  - [STORY] As a DRS staff user, I want to be able to query which records in the DRS are missing their descriptive metadata, so that I can easily identify and update those records.
  - [STORY] As a DRS staff user, I want my routine query modules to allow me to filter using fields, to better support my discovery as a depositor within the system.
  - [STORY] As a DRS staff user, I want both pre-defined queries and customizable queries, so that I can find the information I need in a timely manner.
  - [STORY] As an LTS employee, I want to use DRS data to generate reports so that I may better support the repositories using the system.
  - [STORY] As a DRS staff user, I would like a periodic report informing me what preservation activities have been taken on my deposited objects and when, so that I can more easily share information with my funding sponsors, donors, and stakeholders.
  - [STORY] As a DRS product owner, I want the DRS to record preservation actions so that those actions can be relayed to my users in a useful way.
- 6.2. RS02 – Human- and machine-readable report output
- [STORY] As a DRS staff user, I want to be able to export DRS data in a format that is both human-readable and processable by machines, such as CSV, so that I may use other robust systems of my choice to take additional actions (such as billing, reporting, or visualizations) on that data.

## 7. UI/UX – UI

- 7.1. UI01 – Intuitiveness of primary functionality including deposit, limited editing, reporting, etc.
- [STORY] As a DRS depositor, I want the primary batch deposit functionality to be intuitive and easy to use, so that I do not need to follow complex instructions any time I use the DRS.
  - [STORY] As a DRS product owner, I want the system to support a high degree of self-service operations (for example, low number of steps or clicks to accomplish a task), so that my users are not disincentivized to deposit their digital objects due to unnecessary complexity.
- 7.2. UI02 – Supports self-deposit of any content
- [STORY] As a DRS depositor, I want to be able to deposit my own repository's objects, so that I am not constrained by anyone else's expertise or schedules restrictions.
  - [STORY] As a DRS depositor, I want to be able to easily deposit complex content without needing other Harvard departments to mediate, so that I can reduce backlogs and delays in my work process.

- [STORY] As a DRS depositor, I want to be able to easily deposit complex content without needing other Harvard departments to mediate, so that I can reduce my departmental spending.
- 7.3. UI03 – Content Preview in Repository System
- [STORY] As a DRS depositor, I would like to see thumbnails of images, so that I do not have to re-download the file to perform quality checks.
  - [STORY] As a DRS depositor, I would like to be able to preview any content within the administrative interface, so that I can more easily perform quality assurance on my objects.
- 7.4. UI04 – Ability to interact with system via multiple kinds of interfaces, including GUI, API, etc.
- [STORY] As a DRS product owner, I want my users to be able to interact with the system via multiple kinds of interfaces, so that they can develop workflows that best suits their needs.
  - [STORY] As a DRS depositor, I would like to be able to use a graphical user interface to manage my deposits, including upload spreadsheets, metadata review, file reorganization, etc., so that I can more intuitively prepare materials before final deposit.
- 7.5. UI05 – Supports mediated deposit of any content
- [STORY] As a curator with digital objects in the DRS, I want to be able to have my deposits mediated by other departments, such as Imaging Services or Media Preservation Services, so that I can rely on their professional expertise.

## 8. Digital Accessibility – DA

- 8.1. DA01 – Supports alternate representation of materials as required by Harvard's Digital Accessibility Policy
- [STORY] As a DRS curator, I want to provide my users with alternate representation of materials, such as transcriptions, audio descriptions, and OCR, so that I am in better compliance with the University's Digital Accessibility Policy.
  - [STORY] As a DRS curator, I want to be able to provide either automatically-generated or human-generated alternate representation of materials, so that I can better tailor these versions to individual circumstances.
- 8.2. DA02 – Conforms to Harvard accessibility policies - <https://accessibility.huit.harvard.edu/digital-accessibility-policy-2023-update>
- [STORY] As a Harvard employee, I want the DRS to conform to Harvard's accessibility policies so a patron with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner, with substantially equivalent ease of use.
  - [STORY] As a DRS staff user with a disability, I want the DRS to conform to the University's Digital Accessibility Policy so that I can do my job.
- 8.3. DA03 – Internationalization support in interface for staff UI
- [STORY] As a non-native English-speaking Harvard staff member, I want to be able to navigate the DRS user interface in my language, so that I can more easily fulfill my tasks.

## 9. Security – SEC

- 9.1. SEC01 – Conforms to Harvard security policies - <https://policy.security.harvard.edu/policies>
- [STORY] As a Harvard employee, I want the DRS to conform to Harvard’s security policies so that the objects preserved in the DRS are protected from cybersecurity vulnerabilities.
  - [STORY] As an LTS employee, I need any SAAS or service hosted in the Harvard landscape to comply with HUIT security standards for systems and data management (i.e. locally hosted must integrate with required security agents, must adhere to requirements in the security rider if SAAS, etc.), so that I can better protect all content stored in the system.
- 9.2. SEC02 – Remove VPN requirement
- [STORY] As a DRS depositor who is not always on Harvard’s campus, I want to remove the VPN requirement for access, so that I do not need to regularly re-authenticate my internet access in the middle of a deposit process.
  - [STORY] As a HUIT-LTS employee, I want to ensure the security of the DRS in order to support the University’s security requirements.
- 9.3. SEC03 – Disaster recoverability
- [STORY] As a Harvard curator, I want to ensure that my digital assets can be recovered in the event of a disaster, so that I can continue to steward Harvard’s collections.
  - [STORY] As a Harvard University IT employee, I want to be able to easily recover digital assets that have been lost in a disaster, so that I can support the curatorial staff’s mission.
- 9.4. SEC04 – Storage for PII, Level 4, and other protected materials
- [STORY] As a Harvard security officer, I want to ensure that protected objects are stored appropriately, so that I have confidence that the DRS will not inadvertently expose sensitive data.
- 9.5. SEC05 – Log File Retention
- [STORY] As an LTS employee, I want the DRS to retain logs for at least 90 days so that I am in compliance with HUIT security requirements.
- 9.6. SEC06 – Data handling conforms to additional data handling requirements (e.g. HIPAA, GDPR, deeds of gift, data use agreements, etc.)
- [STORY] As a Harvard employee, I want the DRS to conform to additional data handling requirements, so that I can better protect my users’ data.

## 10. Access Management – AM

- 10.1. AM01 –Repository supports metadata recording assertions about access permissions
- [STORY] As a Harvard administrator, I want access to DRS objects that are otherwise restricted, so that I can access the information I need to do my job.
  - [STORY] As a Harvard University Archives records manager, I want to provide limited access to DRS objects that are otherwise restricted, so that I can support critical University operations.
  - [STORY] As a researcher, I want to know that a digital object exists, even if my permissions do not allow me access to it, so that I have a more thorough understanding of the full landscape of materials.
  - [STORY] As Harvard curator, I want to be confident that the DRS can distinguish between access and retrieval for both primary content and descriptive metadata.

- [STORY] As a Harvard curator, I want to be able to use a system setting to allow my users to download a full-sized image or broadcast-quality a/v object without my intervention, so that I can focus on my other tasks.
- [STORY] As an instructor for a Harvard class, I want to be able to provide access to DRS objects to only the students in that class, so that I can better support my syllabus materials.
- [STORY] As a Harvard curator, I want to be able to leverage the controlled digital lending model of “one copy, one user,” so that I am in compliance with copyright restrictions.
- [STORY] As a researcher, I want to be able to know where I am in the lending queue, so that I can better plan my research timeline.
- [STORY] As a Harvard curator, I want to be able to provide limited access to certain materials that are otherwise under restrictions to certain classes of users (e.g. donors, grant funding sponsors, University administrators), so that I can continue to support University business.
- [STORY] As a Harvard curator, I want to have an automated process that manages embargoes on temporarily restricted materials, so that my team does not have to manually manage these processes.
- [STORY] As a Harvard curator, I want to receive notifications that an embargo is about to expire, so that I can continue to monitor and manage access to the materials for which I hold custody.
- [STORY] As a Harvard curator, I want to be able to support more complex embargoes (e.g. materials can be viewed online immediately but download restrictions continue for several years) so that I can provide appropriate access to these materials to my patrons.
- [STORY] As a Harvard curator, I want to be able to provide limited access to DRS objects to users from our reading room, so that I can support researchers while still fulfilling our restriction obligations.
- [STORY] As a patron accessing DRS-stored materials in a geographically restricted way, I want to be confident that it has any assistive technology that I may need, so that I do not need to find workarounds to support my abilities.
- [STORY] As a Harvard curator, I want the local desktop support team to work in tandem with the local repository on supporting on-site Harvard-owned kiosks, so that I am confident that the kiosks are properly equipped to provide full delivery system access and functionality for my on-site patrons.
- [STORY] As a Harvard curator, I want to leverage geo-blocking functionality, so that I am in compliance with geographically heterogeneous copyright restrictions.
- [STORY] As a Harvard curator managing complex collections, I want to be able to apply granular access policies to individual digital objects regardless of intellectual or administrative grouping, so that I can more easily and efficiently support the complexities of the collection.
- [STORY] As a Harvard curator, I want to be able to provide appropriate access to certain DRS objects within a collection so that my patrons can access what they need without violating donor agreements.
- [STORY] As a Harvard curator, I want to be able to easily enable or disable temporary access for digital objects based on certain metadata, so that I have more flexibility in granting access to my collections.
- [STORY] As a Harvard curator, I want to be able to easily enable or disable temporary access for digital objects based on certain metadata such as sacred and/or ceremonial

material, season at the time of access, gender of the patron, etc., so that I can provide culturally sensitive access to Indigenous materials.<sup>1</sup>

- [STORY] As a Harvard curator, I want to be able to provide view-only, non-downloadable access to a subset of my DRS objects, so that I can support my patrons' needs while remaining in compliance with my restriction-based obligations.
- 10.2. AM02 – Conditional open access
- [STORY] As a Harvard curator, I want to be able to provide informed conditional access to potentially sensitive, copyrighted, or donor-restricted DRS objects, so that my patrons can access what they need with full disclosure to the nature of the materials.
  - [STORY] As a Harvard curator, I want to be able to capture patron acknowledgement/agreement of use conditions for restricted DRS objects, so that I can prove that I am in compliance with these restrictions in the event of an audit.
- 10.3. AM03 – Grant access to object within DRS to external users for administrative work
- [STORY] As a Harvard curator, I want to be able to provide DRS system access to non-Harvard users, so that I can have assistance in processing collections.

## 11. Integrations – I

- 11.1. I01 – Metadata and source catalog integration
- [STORY] As a DRS depositor, I want to be able to have bi-directional communication between the DRS and my source cataloging and discovery systems (such as Alma, Hollis, ArchivesSpace, JStor Forum, as well as selected science-specific resources) so that I can deposit and apply descriptive metadata to DRS objects in any order of operations.
  - [STORY] As a DRS depositor, I want to be able to designate the source of record for the descriptive metadata of my DRS objects, so that I can identify where the most accurate metadata should populate the DRS from.
  - [STORY] As a DRS depositor, I want to be able to synchronize descriptive metadata for already-deposited objects, so that I can ensure that my legacy digital assets are as fully described as possible.
  - [STORY] As a patron of Harvard's digital collections, I want the most up to date descriptive metadata associated with the digital objects, so that I can more easily discover materials that are relevant to my needs.
- 11.2. I02 – Flexible resource pathways and pipelines supported by DRS Vendor
- [STORY] As an LTS employee, I want the DRS to provide a way to receive digital objects and any associated metadata from other systems (such as email, administrative records, theses and dissertations, museum objects, etc.) so that I can help support Harvard's digital preservation needs.
  - [STORY] As a user of a system that handles University digital objects (such as email, administrative records, theses and dissertations, museum objects, etc.), I want to have an automated pipeline from that system to the DRS, to better support the lifecycle of the object.
  - [STORY] As a Harvard Archives Records Manager, I want to automatically receive selected digital objects into the DRS so that I can help keep Harvard's departments in compliance with the General Records Schedule.

---

<sup>1</sup> <https://datascience.nih.gov/data-ecosystem/generalist-repository-ecosystem-initiative>;  
<https://www.gida-global.org/care>;  
<https://localcontexts.org/labels/traditional-knowledge-labels/>

- [STORY] As a Harvard curator, I want digital objects and any relevant metadata owned by Harvard that are stored elsewhere, such as Internet Archive, to feed into the DRS, so that I can better preserve all digital objects owned by Harvard.
  - [STORY] As a Harvard custodian of objects in the DRS, I want access copies and any relevant metadata to flow out to the delivery systems that are most appropriate to the format, so that I can provide access to those objects to my audiences.
- 11.3. I03 – Flexible resource pathways and pipelines supported by Harvard
- [STORY] As an LTS technical resource, I want to be able to use a digital ingest tool to support the transfer of digital objects and metadata from one Harvard-supported system (such as Dataverse, AppXtender, ePadd+, etc.) to the DRS so that I can help support Harvard’s digital preservation program.
  - [STORY] As an LTS technical resource, I want to ensure that selected objects and metadata stored in the DRS are automatically fed out to the Harvard-supported delivery services so that I can help support the discovery and use of Harvard’s cultural heritage objects.

## 12. Supporting System Transition – SST

- 12.1. SST01 – Clarify recommended content transition path and estimated time requirements
- [STORY] As an LTS employee, I want the new Digital Preservation solution provider to create a robust transition plan that also supports our other business requirements, so that I have a better understanding of the effort and time commitment of the transition.
  - [STORY] As an LTS employee, I need to understand what is involved in the transition and migration into a new DRS so that I can accurately plan my team’s resources.
- 12.2. SST02 – Please describe the exit strategy that you offer for your system
- [STORY] As an LTS employee, I need to know what the new digital repository solution’s exit strategy is so that I can ensure that I can plan ahead for my technology and staffing needs.
- 12.3. SST03 – Integrity verification for migrated content
- [STORY] As an LTS employee, I need a solid mechanism for ensuring that all data that we have sent has landed successfully and that they have verified integrity (via checksum) so that I can consider the migration complete.

## 13. Community Facing Resources – CFR

- 13.1. CFR01 – Harvard Knowledge Base
- [STORY] As a DRS staff user, I want to be provided with a straightforward and meaningful knowledge base for using the system so that I can easily find the steps I need to do my job.
  - [STORY] As a DRS staff user, I want the knowledge base to be well structured, with references to the maintainer of the knowledge base, so that that I can quickly find what I need, and I can ask the maintainer further questions or notify them about missing information.
  - [STORY] As a DRS user, I want a directory of common issues I might see in the DRS alongside their standard resolution paths so that I can more easily resolve errors myself.
  - [STORY] As a digital archeologist in the far future, tasked with recovering data from a long-unmaintained repository, I want to be able to find historical documentation online (e.g. on the Wayback Machine), so that I can access information on my tasks.

- 13.2. CFR02 – Community-driven support
  - [STORY] As a DRS user interacting with a 3rd-party acquired module of DRS, I want to be able to turn to a community of users of that software, so that I can find help among peers.
- 13.3. CFR03 – Open documentation available without login
  - [STORY] As a DRS business owner, I want the DRS documentation to be available to all and unrestricted in perpetuity, so that anybody can consult it at any time without any licensing or access concerns.
- 13.4. CFR04 – User Groups
  - [STORY] As a DRS user, I want the opportunity to discuss the system and its surrounding policy and support framework with other Harvard users, so that we can share tips, tricks, and best practice to support our daily work.
- 13.5. CFR05 – Governance & business model
  - [STORY] As a DRS product owner choosing to adopt a third-party product, I want to clearly understand the company's mission and business model (for commercial software) or its governing board's charter (for community-supported Open-Source Software), so that I can make strategically sound choices and be confident that the 3<sup>rd</sup> party's goals align with Harvard's Digital Preservation strategy.
- 13.6. CFR06 – Vendor Training (or access to training modules)
  - [STORY] As a new DRS user, I want access to regular and accurate vendor trainings, so I can learn the most effective ways to use the system.
  - [STORY] As a new DRS user, I want access to regular and accurate Harvard trainings, so I can learn the most effective ways to use the system.
- 13.7. CFR07 – Clear Internal Product Ownership
  - [STORY] As a DRS user, I want to know who the best Harvard person or team are to reach out with questions so that I am not working in isolation.
- 13.8. CFR08 – Iterative feedback and improvement (for more detail, see 1.5 of Technical Foundational Principles)
  - [STORY] As a DRS staff user, I want to be a partner in the iterative maintenance and update process of the system so that my needs can be reflected in the ongoing requirements.
  - [STORY] As an LTS employee, I want a mechanism to solicit and receive routine user feedback, so that I can support a continuous improvement process for the DRS.
- 13.9. CFR09 – Harvard Training
  - [STORY] As a new DRS user, I want access to regular and accurate Harvard trainings, so I can learn the most effective ways to use the system.
- 13.10. CFR10– Iterative feedback and improvement with Vendor
  - [STORY] As a DRS Business Owner, I want to be able to submit enhancement requests and other support and maintenance requirements to vendor so that I can be a partner in the ongoing development of the system.
  - [STORY] As a DRS Business Owner, I want the vendor to have a transparent process for the submission and tracking of enhancement requests, so that I have confidence that my requests have not disappeared.
- 13.11. CFR11 – Harvard user feedback to DRS Business Owners
  - [STORY] As a DRS user, I want to be able to submit enhancement requests to the DRS Business Owners, so that I can be a partner in the ongoing development of the system.

- [STORY] As a DRS Business Owner, I want to have a process to receive, vet, and track internal enhancement requests, so that I can be responsive to my end users.