the national archives

Seamless Flow

Statement of Requirements

for

Transfer to TNA Project

Release	Date: February 2006
Author:	**Project Manager**
Owner	**Senior Responsible Owner**
Client:	**The National Archives (TNA)**
Document Number:	

Document History

Document Location

This document is only valid on the day it was printed.
The source of the document will be found in the Control section of the Project File.

Revision History

Date of next revision:

Revision date	Previous revision date	Summary of Changes	Changes marked
27 January 2006	10 January 2006	Incorporation of comments	No
30 January	27 January 2006	Minor amendments	No
3 February 2006	30 January 2006	Further minor amendments for sign off	No
9 February 2006	3 February 2006	Amendments as a result of Gateway review	

Approvals

This document requires the following approvals.
Signed approval forms are filed in the project files.

Name	Signature	Title	Date of Issue	Version
Project Board	Via email			2.0

Distribution

This document has been distributed to:

Name	Title	Date of Issue	Version
Project Board			
Project team			
Programme Board			

System Requirements

This document catalogues system requirements for the Seamless Flow Transfer to The National Archives (TNA) project. The individual requirements are listed below.

They are prioritised as follows:

Mandatory those that *must* be delivered from the start

Desirable those that *should* be included, but possibly as part of a later phase of development

Optional those that *could* be included given resources and time, or if they are readily incorporated into work on a mandatory or desirable requirement.

Abbreviations/Glossary

AIP: Archival Information Package – the conceptual package of records and metadata, which is stored in the DOS and the GMMS.

D & P: Delivery and Presentation project within the Seamless Flow Programme. This project is responsible for providing access to digital records to the public across the web, to OGDs and to internal staff.

DIP: Dissemination Information Package – a package of records and metadata, which is available for use through a presentation system.

DOS: Digital Object Store – the secure storage system for AIPs

ERMS: Electronic Records Management System

GME: Generic Metadata Editor. The user interface required for the GMMS.

GMMS: Generic Metadata Management System – the authoritative source and management system for metadata.

GSI: Government Secure Intranet

OGD: Other Government Department

PPS: Presentation Preparation System. The system responsible for exporting records from the RPS to the presentation system.

PROCAT: The former name of the current catalogue of public records at The National Archives.

RPS: Record Preparation System – the working area on which all record processing occurs, e.g. for ingest, migration, and redaction.

SF or SFP: The Seamless Flow Programme of which Transfer to TNA; Preservation and Maintenance; Technology Watch and Delivery and Presentation are component projects.

SAR: The System for Access Regulation. This system controls closed records, recording the reasons for closure and the appropriate sections legislation.

SIP: Submission Information Package – the conceptual package of records and metadata, which is transferred to TNA by an OGD. An accession may consist of multiple SIPs.

Contents

One Functional requirements 6
01 Transfer system – remote delivery 6
02 Transfer system – self-contained 7
03 Transfer system – system metadata conversion 8
04 Transfer system – transfer/load management 9
05 Generic metadata editor interface 10
06 User interface design 10
07 GMMS – metadata updates 11
08 GMMS – extensibility 12
09 GMMS – look-up tables 12
10 GMMS – automation 13
11 GMMS – mandatory fields 13
12 GMMS – access restrictions flagged 14
13 GMMS – pre-transfer technical report 15
14 GMMS – transfer technical report 15
15 GMMS – restrictions identified 16
16 GMMS – metadata schema conversion 16
17 GMMS – package SIP 17
18 GMMS – closure amendment 18
19 GMMS – manifestation management 19
20 GMMS – automated metadata population 19
21 GMMS – management of multiple manifestations 20
22 GMMS – inheritance and bulk update 20
23 GMMS – automatic and manual roll-back 21
24 GMMS – DOS object management 21
25 GMMS – presentational sensitivity 22
26 GMMS – managing retained records on accession 23
27 GMMS – error handling 24
28 GMMS – fault reporting to OGDs 24
29 GMMS – metadata redaction 25
30 GMMS – reference allocation (unique identifier) 26
31 GMMS – reference allocation for retained records 27
32 GMMS – metadata status 28

33 GMMS – digitised records 29
34 GMMS – metadata search and browse 29
35 GMMS – search and replace 30
36 GMMS – simultaneous comparison 30
37 GMMS – contextual/authority metadata 31
38 GMMS – SAR interface 31
39 GMMS – export of authority data 1 32
40 GMMS – export of authority data 2 32
41 GMMS – interface with presentation 33
42 GMMS – interface with Technology Watch 33
43 GMMS – xml export/import 34
44 GMMS – printing 35
45 GMMS – spell check 35
46 GMMS – tracking accession targets 36
47 GMMS – controlled workflow 37
48 GMMS – configurable workflow 37
49 GMMS – management of dependent actions 38
50 GMMS - access control 38
51 GMMS - audit 39
52 Reports – copy integrity/migration 39
53 Reports – unsuccessful loads/transfers 40
54 Reports - updates 40
55 Reports – ad hoc 41
56 Reports - exceptions 41
57 Reports – audit trail 42
58 Reports – summary report 42
Two Non-functional requirements 43
59 GMMS - back-up and disaster recovery 43
60 GMMS - number of users 43
61 GMMS – Business Process Model 44
62 GMMS – development standards 44
63 GMMS – secure remote access 45
64 Online support, training & documentation 45
65 Support services 46
66 Performance metrics 47
67 Product Testing 48
68 Piloting 49
69 Knowledge Transfer 49

Section	**One**	**Functional requirements**

Requirement	**01**	**Transfer system – remote delivery**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The transfer system user interface provided to OGDs should be browser based and independent of any requirement to install software on the OGD desktop/network.
Benefits
Allows for deployment to government departments with locked-down desktops or thin client solutions.
Suggested Solutions
Comments
This should not exclude the use of standard commercial plug-ins that could be expected to be available on a standard office PC, e.g.. a PDF reader. Certain functions of Transfer may require functionality that cannot be provided through a browser – e.g. packaging files for transfer.
Resolution
Related Requirements

Requirement	**02**	**Transfer system – self-contained**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The browser-based transfer system user interface described above must support the functionality required to produce the complete metadata set for a valid SIP as it is described in the Business Process Model (Activity diagram 1 and its child diagrams).
Benefits
Suggested Solutions
Comments
Further requirements in this document detail the metadata capture and editing functionality and process management functionality required of the GMMS and its interfaces. It is recognised that some additional functionality may be desirable and may only be possible through loading software to the OGD desktop/network.
Resolution
Related Requirements

Requirement	**03**	**Transfer system – system metadata conversion**	
Priority	**Desirable**	Owner	**Project Team**

Functional Requirement
The transfer system must include a configurable tool for the automated conversion of system metadata from an ERMS. This needs to be configurable by TNA staff to account for different xml outputs from the various ERMS systems in use at OGD's. If the OGD cannot use the TNA provided tools for metadata conversion (e.g. network permissions) they should be able to manually download TNA xml schema from the TNA website. Using this schema they should be able to create their own xml file for a manual upload into the transfer system.
Benefits
Ability to value-add to the core function of the application in those environments where loading software is feasible.
Suggested Solutions
Comments
TNA will continually develop tools (e.g. characterisation and conversion tools) that will simplify the record ingest process. Therefore, the transfer system design should not preclude additional functionality through tools either developed by TNA or commercially available.
Resolution
Related Requirements

Requirement	**04**	**Transfer system – transfer/load management**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The system must support the subdivision of accessions into multiple SIPs (in this case the digital objects with minimal metadata) for separate processing in transfer or loading. (Batch transfer or loading.)
Benefits
This is to avoid transferring or loading a whole accession as one unit regardless of its size and will mean errors can be isolated and loading can continue despite an error in one part. An accumulation divided into several SIPs can be processed despite one SIP failing. The OGD will only need to replace the faulty SIP/s and not the entire accumulation.
Suggested Solutions
Comments
Responses should indicate how the proposed solution will sub-divide an accession for either electronic or physical media transfer and a proposed size or size limit for each unit.
Resolution
Related Requirements
Requirement 17

Requirement	**05**	**Generic metadata editor interface**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The browser-based transfer system interface described above should be based on a generic metadata editor interface for reuse throughout TNA in accessing and managing the generic metadata.
Benefits
This allows for a single interface for all users that can be reconfigured for different user groups.
Suggested Solutions
Comments
Must meet the user interface criteria given in the requirements section of the ITT.
Resolution
Related Requirements
Metadata and Cataloguing Project 6

Requirement	**06**	**User interface design**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
All user interfaces developed for the GMMS must demonstrate a high degree of usability, utility, ease of learning and stability of operation.
Benefits
Suggested Solutions
Comments
Must meet the user interface criteria given in the requirements section of the ITT.
Resolution
Related Requirements

Requirement	**07**	**GMMS – metadata updates**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system must allow metadata updates to be saved and approved in stages at any point prior to release.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements
Transfer; Metadata and Cataloguing Project Req. 06

Requirement	**08**	**GMMS – extensibility**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system database design must be fully extensible and conform to the Seamless Flow Metadata Model. It may prove necessary to change types, attributes and relationships. Suppliers should also address the issues of data migration arising from schema level changes.
Benefits
Suggested Solutions
Comments
The underlying data model must be extensible without requiring re-coding i.e. system must be data-driven (See annex D metadata model).
Resolution
Related Requirements
Metadata and Cataloguing Project Reqs. 01, 02

Requirement	**09**	**GMMS – look-up tables**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system must allow updates to look-up tables (controlled lists) by cataloguing staff.
Benefits
Suggested Solutions
Comments
Examples of these lists include controlled lists of names of transferring authorities or OGD Department names.
Resolution
Related Requirements
Metadata and Cataloguing Project Req 10

Requirement	**10**	**GMMS – automation**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need to automate the process to check / report on metadata quality in the generic metadata management system where appropriate (e.g. by automatically sampling descriptions in accumulations and by reporting on empty fields in accumulations)
Benefits
Suggested Solutions
Comments
The Business Process Model requires metadata checks to be routinely applied at the transfer stage and requires a process of catalogue enhancement separate from transfer which could apply across the entire catalogue.
Resolution
Related Requirements

Requirement	**11**	**GMMS – mandatory fields**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Any fields regarded as mandatory in the generic metadata management system must be identified to the user through the GME.
Benefits
Suggested Solutions
Comments
The database should not be used to hard code mandatory fields.
Resolution
Related Requirements

Requirement	**12**	**GMMS – access restrictions flagged**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Transfer system interface must require catalogue fields to be flagged as closed if they contain information that cannot be made publicly available (i.e. they must come in to the Digital Archive correctly flagged as open / closed)
Benefits
Suggested Solutions
Comments
Those particular fields that require this level of control will be identified by the project to the developers prior to the design stage. This requirement will include restrictions for FOI or security classification, however this will not include material with a security classification above restricted.
Resolution
Related Requirements

Requirement	13	GMMS – pre-transfer technical report	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Facility required for recording initial technical report from Client Managers (pre-transfer)
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	14	GMMS – transfer technical report	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Facility required for automatic generation of secondary technical report (transfer)
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**15**	**GMMS – restrictions identified**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need to be able to record what restrictions have been placed on a record and why.
Benefits
Suggested Solutions
Comments
This will include recording closed material and any copyright information that we can identify This requirement will include restrictions made for sensitivity and data protection.
Resolution
Related Requirements

Requirement	**16**	**GMMS – metadata schema conversion**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need the facility to automate the conversion from source to destination schema when taking metadata exported from an ERMS and to validate the product of this conversion.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**17**	**GMMS – package SIP**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Facility to package SIP (including production of a manifest and burning media or production of appropriate packages for electronic transfer).
Benefits
Suggested Solutions
Comments
OGDs need to be presented with two options for the process of transferring digital objects. One is the burning of physical media (serial-numbered DVDs and CDs and the other is the packaging of the objects for electronic transfer in manageable units. See Business Process Model for further elaboration.
Resolution
Related Requirements

Requirement	**18**	**GMMS – closure amendment**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need to be able to amend closure. The system must allow for the editing of metadata to take place in response to changes of record and metadata status concerning closure. On receipt of an instruction [from SAR or its equivalent] to change the closure status of a record, which may refer to one of the following: *Retention Period Expiry/Change* *Closed Content Review – open, part open, extended closure* *Accession of Previously Retained Record* a new SIP may be transferred, a new AIP and/or a new DIP may/will be created and new manifestations will follow. In these instances, access through the GME to all levels and to metadata fields including the following will be required: Creator Name Title Scope content Covering dates Access Conditions Closure Type; Closure Code; Closure Status Related Material and some Technical Fields (File format, File Size) The level at which metadata is enhanced will take place should reflect the level at which those enhancements have been made.
Benefits
Enables changes to be made to the metadata in response to an instruction concerning closure. Essential to the referential integrity or SFP
Suggested Solutions
Comments
Not available at OGD end – only internal to TNA
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 17

Requirement	**19**	**GMMS – manifestation management**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need to be able to manage all manifestations of a record. A record migrated for reasons of preservation or presentation becomes a manifestation. Each manifestation will be required to inherit common metadata and to include manifestation-specific metadata.
Benefits
Suggested Solutions
Comments
See Diagram 1 and its child diagrams for an operational explanation and the Seamless Flow Glossary for definitions of SIP, AIP and DIP.
Resolution
Related Requirements

Requirement	**20**	**GMMS – automated metadata population**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Where possible non-technical metadata needs to be populated automatically to all appropriate levels and manifestations of a record.
Benefits
Eases management burden.
Suggested Solutions
Comments
For instance by inheritance, propagation, etc. across manifestations.
Resolution
Related Requirements

Requirement	21	GMMS – management of multiple manifestations	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system requires the ability to store metadata for multiple manifestations (preservation and presentation copies) and redactions and to allow for editorial intervention at all levels of the catalogue.
Benefits
Suggested Solutions
Comments
This should incorporate the automatic inheritance of metadata both up and down the hierarchy in the catalogue where appropriate. In addition provision should be made for automatic inheritance to be overridden where that is appropriate.
Resolution
Related Requirements
Transfer; Metadata and Cataloguing Project Reqs. 06, 17, 22

Requirement	22	GMMS – inheritance and bulk update	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system should incorporate the automatic inheritance of metadata both up and down the hierarchy in the catalogue where appropriate and allow for bulk update of metadata fields across the hierarchy.
Benefits
To facilitate the evaluation, addition and revision of the metadata. This may prove particularly useful given the anticipated bulk of metadata changes concerning closure.
Suggested Solutions
Comments
As above, provision should be made for automatic inheritance to be overridden where that is appropriate.
Resolution
Related Requirements
Transfer; Metadata and Cataloguing Project Reqs. 25 & 33

Requirement	**23**	**GMMS – automatic and manual roll-back**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The system must be transactionally secure and a facility to allow cataloguers to move back to the last historical state of metadata should be provided.
Benefits
Automatic (for batch problem correction) and manual roll back functionality will protect the integrity of the metadata.
Suggested Solutions
Comments
This should include at least the last action taken and last publicly accessible state and any actions prior to the last publicly accessible state.
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 13

Requirement	**24**	**GMMS – DOS object management**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The system must record that objects belonging to a particular AIP manifestation have been removed from the Object Store for processing. Workflow should not allow different things to happen to the same record or manifestation.
Benefits
Safeguard against duplicating processes on record objects.
Suggested Solutions
Comments
This requirement is relevant to processes taken after ingest where the original DIP will be produced in parallel with the AIP.
Resolution
Related Requirements

Requirement	**25**	**GMMS – presentational sensitivity**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need to identify what could not be published on the web, either due to technical limitations or sensitivity of material
Benefits
Suggested Solutions
Comments
Complex virtual reality models, large video files and obscure formats are examples of objects which would not be readily presentable across the web. Images of harrowing scenes would be considered material unsuitable for web presentation even though it may be technically achievable.
Resolution
Related Requirements
Requirement 17

Requirement	**26**	**GMMS – managing retained records on accession**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Objects retained by OGDs must be linked, on transfer, to earlier related accessions
Benefits
Suggested Solutions
Comments
SIP may contain objects for which published metadata already exists. 'Retained records' refers to those records selected for transfer but withheld from transfer to TNA. OGDs may choose to keep copies of records transferred to TNA (although this would be discouraged) but in this case the archival version would be the version held at TNA and TNA would have no interest in the OGD-held copy.
Resolution
Related Requirements
Metadata and Cataloguing Project req 22

Requirement	**27**	**GMMS – error handling**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Rich error-handling required in all systems. Errors should be reported to the user with sufficient detail for the user to act to avoid repeating the error or to act to correct the error, if a correction is required.
Benefits
Suggested Solutions
Comments
Please refer to process model and TNA's Application Development Guidelines annexed to the ITT.
Resolution
Related Requirements
See also workflow and reporting requirements

Requirement	**28**	**GMMS – fault reporting to OGDs**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Facility will be required to advise OGD of a transfer problem where their action is required.
Benefits
Suggested Solutions
Comments
See process diagram 1.6 Request replacement SIP
Resolution
Related Requirements

Requirement	**29**	**GMMS – metadata redaction**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The system must allow for the editing of metadata to take place in response to changes of record and metadata status concerning a redaction. On receipt of an instruction [from SAR or its equivalent] to create a redaction, a new AIP and/or DIP may/will be created. In these circumstances, certain metadata fields will require enhancement. In these instances access through the GME to all levels and to metadata fields including the following will be required: Title Scope content Covering dates Access Conditions Closure Type; Closure Code;Closure Status Related[Separated] material field And possibly some Technical Fields (File format, File Size) The level at which the editing of metadata will take place shall reflect the level at which those changes have been made
Benefits
Enables changes to be made to the metadata in response to instruction concerning a redaction. Essential to the referential integrity of SFP
Suggested Solutions
Comments
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 17

Requirement	**30**	**GMMS – reference allocation (unique identifier)**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system must allocate a unique identifier (reference) to all new records (Deliverable Units) in a SIP and to all new versions and manifestations created in the processes of seamless flow
Benefits
Allows for cataloguing prior to ingest and for the correct identification of all records at the earliest opportunity.
Suggested Solutions
Comments
Resolution
Related Requirements
Metadata and Cataloguing Project Req. 07

Requirement	**31**	**GMMS – reference allocation for retained records**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need facility for creating a place-holding marker and an archival classification reference for a retained record.
Benefits
Suggested Solutions
Comments
Retained records are still required to be catalogued with the SIP in which they would otherwise belong and to be added later. Some form of place holder will be required to allow for their reintroduction at a later point. 'Retained records' refers to those records selected for transfer but withheld from transfer to TNA. OGDs may choose to keep copies of records transferred to TNA (although this would be discouraged) but in this case the archival version would be the version held at TNA and TNA would have no interest in the OGD-held copy.
Resolution
Related Requirements

Requirement	**32**	**GMMS – metadata status**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system must allow updates to be saved at any point prior to release and must control further release. It is important the status of all metadata fields undergoing editorial change can be recorded . All changes to status should be date stamped.
Benefits
To enable control and tracking of all processes which involve the change of status of metadata and/or editorial intervention
Suggested Solutions
Comments
Resolution
Related Requirements
Metadata and Cataloguing Project Req. 12

Requirement	**33**	**GMMS – digitised records**	
Priority	**Desirable**	Owner	**Project Team**

Functional Requirement
The generic metadata management system must record that a deliverable unit is a digitised record where that is the case.
Benefits
This requirement will allow for the future incorporation of digitised master-copies to be stored in the Digital Object Store and for their metadata to be managed through the GMMS.
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**34**	**GMMS – metadata search and browse**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system should provide the ability to search and browse the metadata hierarchy to find level(s)/field(s) as appropriate. This could include advanced searching capabilities and the ability to save searches.
Benefits
To facilitate the evaluation, addition and revision of the metadata.
Suggested Solutions
Suppliers should explore the possibility of integration with the Seamless Flow search engine Autonomy.
Comments
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 27, 28

Requirement	**35**	**GMMS – search and replace**	
Priority	**Mandatory**	Owner	**Metadata and Cataloguing Project Team**

Requirement
The GME must provide a search and replace function
Benefits
To facilitate the evaluation, addition and revision of the metadata.
Suggested Solutions
Comments
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 30

Requirement	**36**	**GMMS – simultaneous comparison**	
Priority	**Optional**	Owner	**Metadata and Cataloguing Project Team**

Requirement
The GMMS must enable user comparison of metadata about a number of records on screen simultaneously
Benefits
To expedite evaluation of metadata prior to and during editorial
Suggested Solutions
Software does not have to build in comparison into a single window; could open more than one window.
Comments
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 31

Requirement	**37**	**GMMS – contextual/authority metadata**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need the ability to receive or pull contextual/authority metadata from The Catalogue (PROCAT).
Benefits
Suggested Solutions
Comments
Department level metadata, for instance, will be maintained and updated in The Catalogue and The Catalogue will remain the authority source. The GMMS will need to be maintained by regular update through exports from the Catalogue. Suppliers should consider triggered, scheduled and manual updates.
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 8

Requirement	**38**	**GMMS – SAR interface**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need the ability to check closure status against the SAR system and to allow records whose closure period elapses to become open
Benefits
Suggested Solutions
Comments
SAR does not contain all information that governs record availability. GMMS contains other metadata which may influence availability. Both are required.
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 26

Requirement	**39**	**GMMS – export of authority data 1**	
Priority	**Desirable**	Owner	**Metadata and Cataloguing Project Team**

Requirement
The system must provide for the export/exposure of authority data and/or category data to the Autonomy search engine.
Benefit
Updates metadata in the search engine; facilitates global search
Suggested Solutions
Comments
.
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 39

Requirement	**40**	**GMMS – export of authority data 2**	
Priority	**Desirable**	Owner	**Metadata and Cataloguing Project Team**

Requirement
The system should enable the supply of Authority Metadata from SF to external online resources
Benefits
To enable authority metadata relating to electronic records to contribute to national and international shared resources for archival authority metadata
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**41 GMMS – interface with presentation**		
Priority	**Mandatory**	Owner	**Metadata and Cataloguing Project Team**

Requirement
The system must provide for metadata to be release to PPS in a format compatible with the requirements of the presentation system
Benefits
To facilitate the presentation of metadata enhancements
Suggested Solutions
Must be an API to allow all or part of record metadata to be extracted by other systems.
Comments
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 40

Requirement	**42 GMMS – interface with Technology Watch**		
Priority	**Mandatory**	Owner	**Metadata and Cataloguing Project Team**

Requirement
The system must record all process of Technology Watch and ingest processes managed by the record preparation system as described in the process model.
Benefit
Updates metadata in the search engine; facilitates global search
Suggested Solutions
Comments
Resolution
Related Requirements
Metadata and Cataloguing Project Team Req. 41

Requirement	**43**	**GMMS – xml export/import**	
Priority	**Mandatory**	Owner	**Metadata and Cataloguing Project Team Project Team**

Requirement
The system should allow for the import and export of metadata in XML format, and other formats as appropriate, in accordance with the Seamless Flow metadata schema.
Benefits
To enable the import/export of data from other systems where required.
Suggested Solutions
Comments
This requirement does not relate to the transfer of records (SIPs) from OGDs but instead relates to the ability to exchange catalogue metadata with other archives and systems.
Resolution
Requirement of: GMMS
Related Requirements
Metadata and Cataloguing Project Req. 03

Requirement	**44 GMMS – printing**		
Priority	**Mandatory**	Owner	**Metadata and Cataloguing Project Team**

Requirement
The GME must enable printing in configurable format of metadata fields or hierarchy
Benefits
To facilitate the evaluation, addition and revision of the metadata.
Suggested Solutions
Comments
Printing may be via browser, but ability to assemble all information for print must then be provided.
Resolution
Related Requirements
Requirement of: GMMS
Process Flow:

Requirement	**45 GMMS – spell check**		
Priority	**Mandatory**	Owner	**Metadata and Cataloguing Project Team**

Requirement
The GME must enable spell check of revised metadata.
Benefits
To facilitate the evaluation, addition and revision of the metadata.
Suggested Solutions
Comments
Resolution
Related Requirements
Requirement of: GMMS

Requirement	**46**	**GMMS – tracking accession targets**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Configurable facility to record and track accession targets.
Benefits
The ability to define which users should receive alerts and when and how those alerts should be sent will allow for targets to be managed and issues to be appropriately escalated.
Suggested Solutions
Comments
Currently there is a 60 day processing target which digital records will need to meet. (80% of records should be transferred in 60 days.)
Resolution
Related Requirements

Requirement	**47**	**GMMS – controlled workflow**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
There is a need for tracking, workflow and reporting capabilities, showing the progress of a set of records through the system and allowing for notifications to and approvals by all relevant actors.
Benefits
Implement the Seamless Flow Business Process Model with controlled management of all business processes.
Suggested Solutions
Comments
See Business Process Model for further elaboration.
Resolution
Related Requirements
Req. 10

Requirement	**48**	**GMMS – configurable workflow**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Workflow solution must be configurable and capable of supporting the current Business Process Model.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**49**	**GMMS – management of dependent actions**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Users need to be restricted from actioning any process before any preceding process, on which there is a dependency, has been approved.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**50**	**GMMS - access control**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need access control for individuals and user groups to the generic metadata management system with relevant permissions and in compliance with the Digital Records Access Control Policy and the Digital Records Access Control Model.
Benefits
Suggested Solutions
Comments
The Digital Records Access Control Policy and the Digital Records Access Control Model are annexed to the ITT. The Access Control management system in Seamless Flow is Role Based not User Group based. The terms do have somewhat different meanings in security and though very similar in implementation, are quite different in management. Suppliers and developers may need to understand this difference as it applies in TNA.
Resolution
Related Requirements
Metadata and Cataloguing Project Req. 05

Requirement	**51**	**GMMS - audit**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need to maintain an audit trail for all metadata processing and enhancement activity and all transformations of objects carried out for transfer or active preservation. The audit trail should be capable of recording a full history of all metadata changes.
Benefits
Suggested Solutions
Comments
This should include audit control on user actions and comply with the Digital Records Access Control Policy and the Digital Records Access Control Model (See req 05). A 'before and after' audit record is required, it must be possible to establish the exact state prior to a change and subsequent to a change.
Resolution
Related Requirements

Requirement	**52**	**Reports – copy integrity/migration**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need to provide reporting on copy integrity failures and migration pathways.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**53**	**Reports – unsuccessful loads/transfers**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need to provide and log notification of successful and unsuccessful loads/transfers.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**54**	**Reports - updates**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The system must be able to generate reports on updated information & actions
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**55**	**Reports – ad hoc**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need support for ad-hoc reporting with standard third-party tools. There will be a need for TNA to run unspecified queries against the database.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**56**	**Reports - exceptions**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
Need reporting on exceptions, statistics and time estimates.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**57**	**Reports – audit trail**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
The generic metadata management system ’transformation audit trail report’ should be publicly presentable by D&P.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	**58**	**Reports – summary report**	
Priority	**Mandatory**	Owner	**Project Team**

Functional Requirement
It should be possible to produce a summary report indicating the number of records in the archive, optionally split by department and record series.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Section	**Two**	**Non-functional requirements**

Requirement	**59**	**GMMS - back-up and disaster recovery**	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
The generic metadata management system needs to have a back-up system and appropriate disaster recovery plan that conforms to TNA standards.
Benefits
Suggested Solutions
Comments
Please see Annex G the Overview of The National Archives IT Environment for further guidance.
Resolution
Related Requirements

Requirement	**60**	**GMMS - number of users**	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
The generic metadata management system needs to be able to support 50 concurrent users and be capable of expanding to more users over time.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	61	GMMS – Business Process Model	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
The GMMS, Generic Metadata Editor and the Transfer System are required to perform all business processes described in the Seamless Flow Business Process Model and to capture all metadata required for those processes and manage digital objects where appropriate.
Benefits
The Seamless Flow Business Process represents a considered view by TNA of all the business processes required to implement the programme and has been developed with the input of all projects involved in these business processes and the business units/departments who will be responsible for their implementation.
Suggested Solutions
Comments
Reference should also be made to the Logical Application Systems Architecture diagram annexed to the ITT.
Resolution
Related Requirements

Requirement	62	GMMS – development standards	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
Development of the GMMS, Generic Metadata Editor and the Transfer System must comply with TNA's application development standard annexed to the ITT and appropriate ISO and BSI standards.
Benefits
Suggested Solutions
Comments
Resolution
Related Requirements

Requirement	63	GMMS – secure remote access	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
OGDs will need to access the GMMS and use the Transfer System across a means of providing secure remote access.
Benefits
Suggested Solutions
It is currently anticipated that OGDs will access the GMMS and use the Transfer System across the Government Secure Intranet (GSI).
Comments
Resolution
Related Requirements

Requirement	64	Online support, training & documentation	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
Suppliers must provide details of support including online support, training and documentation.
Benefits
Suggested Solutions
Comments
It is anticipated that suppliers will provide the following documentation in addition to the detailed functional and non-functional specification required in phase 1: release notes, an installation guide, a systems admin guide, system test scripts (in conjunction with TNA), user guide, training plan and training notes and a road map for development. Suppliers should also indicate the maximum term of a support contract and their proposed strategy for managing upgrades to third-party software.
Resolution
Related Requirements

Requirement	**65**	**Support services**	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
Suppliers should provide details of business hours system support (08:00 – 18:00) including a response time to a business critical issue of 24 hours with a work around and 5 working days with a resolution. Lesser issues can be addressed on a longer time frame. However suppliers should clearly define business critical issues from lesser issues (preferably with examples).
Benefits
Suggested Solutions
Comments
TNA will provide a detailed description of services required and definitions of service levels at the contract negotiation stage.
Resolution
Related Requirements

Requirement	**66**	**Performance metrics**	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
All user interfaces developed for the GMMS must provide the user with an apparent response time of <1 second for all queries on or logging to the GMMS with 50 concurrent users. The systems must be fully functionally available for at least 98% of the core business hours of 08:00 to 18:00.
Benefits
The user must be able to progress their work without the system unduly delaying their ability to use the interface.
Suggested Solutions
Comments
Must meet the user interface criteria given in the requirements section of the ITT. The successful supplier will be required to identify concrete performance metrics acceptable to TNA during the first phase of the project which can be used for later acceptance testing.
Resolution
Related Requirements

Requirement	**67**	**Product Testing**	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
The supplier should propose an appropriate high-level testing strategy, including system testing (both at supplier site and within TNA), penetration testing and user acceptance testing and supply all code and other resources required for white box testing in a debug environment.
Benefits
Suggested Solutions
Comments
A more detailed testing strategy and plan will be required to form part of the proposal for stage 2. The supplier should state what access to TNA systems would be required for the development and pilot phase.
Resolution
Related Requirements

Requirement	**68**	**Piloting**	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
The supplier should provide a pilot phase involving the transfer of meaningful data from an OGD. This will form part of the acceptance testing
Benefits
Suggested Solutions
Comments
The supplier should state what access to TNA systems would be required during the pilot phase. The pilot should demonstrate that the OGD staff can successfully add and edit metadata to the GMMS and successfully package and transfer records to TNA.
Resolution
Related Requirements

Requirement	**69**	**Knowledge Transfer**	
Priority	**Mandatory**	Owner	**Project Team**

Requirement
The supplier should state their approach to knowledge transfer, in regard to the system, to TNA staff during both system development and implementation.
Benefits
Suggested Solutions
Comments
This will include staff within ICT, Digital Preservation and Records Management Departments.
Resolution
Related Requirements