



JISC Project Plan

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1 Project Overview

1.1 Project Summary

This project will cluster and enrich three major public resources for the study, use and enjoyment of the “broadsheet ballad”.

Broadsheet ballads, one of the earliest and most popular forms of printed matter, combine song-lyrics, tunes and woodcut illustrations on a single side of a sheet of paper. Their content includes news, prophecies, histories, moral advice, religious warnings, political arguments, satire, comedy and bawdy tales. Sold cheaply in towns and at fairs by travelling ballad-singers and often posted on the walls of alehouses and other public places, they were sung, heard, read and viewed by a wide audience, but have survived in only small numbers.

The Bodleian Library at the University of Oxford holds nearly 30,000 broadsheet ballads, many of them unique survivals, printed from the 16th to the 20th Centuries, which it has digitized and made accessible online since 1999 at www.bodleian.ox.ac.uk/ballads. Since then, the Bodleian has been joined by other digital resources. A major resource for early ballads, the English Broadsheet Ballad Archive, based in the Early-Modern Center in the Department of English at the University of California Santa Barbara, hosts images, catalogue records and full-text transcriptions, accompanied by performances and other interpretive content, for over 4,000 ballads held by libraries in the UK and the USA. The Vaughan Williams Memorial Library of the English Folk Song and Dance Society Society, based at Cecil Sharp House in London, maintains the online Roud Broadsheet Index of references to songs which appeared on broadsheets, chapbooks, songsters, and other cheap print publications printed up to about 1920.

Integrating Broadsheet Ballads Archives aims to improve public access to and understanding of the rich musical, literary, visual and bibliographical traditions embodied by the broadsheet ballad. It will further cooperation in the description and understanding of broadsheet ballads among researchers and institutions holding ballads in their collections. It will raise the profile of the broadsheet ballad form within teaching and research (inside and outside HE) and among practitioners of printing, illustration, creative writing and traditional music. It will innovate in methods of representing and displaying ballads to these user-groups and to developers of similar resources.

1.2 Objectives

- 1) Semantic specification: the project partners and key stakeholders will define and publish a standard for the description of digital ballad catalogue records and their associated content (images, transcriptions and musical performances). The

Specification structure will comply with Functional Requirements for Bibliographic Records (FRBR).

- 2) Database development: the Bodleian will move content from the existing ballads database to its Digital Asset Management System (DAMS). Bodleian Ballads metadata conforming with the Semantic Specification will be mapped onto the Semantic Specification and published as RDF records and under persistent “cool” URLs. It will be exposed to project partners; to other Bodleian resources (notably SOLO, the Bodleian Libraries’ OPAC); and to third-party citation-managers and indexes (e.g. Zotero).
- 3) Interoperability: the project will implement cross-searching of the Bodleian ballads and the English Broadside Ballad Archive based at the University of California Santa Barbara. Semantic Specification-conformant metadata will become automatically harvestable from within each catalogue to the other. This will allow end-users to discover resources from each and within each resource’s interface, or through a conjoined search interface, as agreed by the partners. Users will be able to navigate from search results to that content hosted and retained by each resource as their exclusive intellectual property or licensed content (such as image-files and text-transcriptions), displayed within each resource’s own native interface.
- 4) Catalogue enhancement: the Bodleian and Vaughan Williams Memorial Library will implement cross-linking between Bodleian Ballad catalogue records and the Roud Broadside Indexes through a machine-to-machine interface.
- 5) Image-search: Image matching software will be mounted on Bodleian servers and integrated with Bodleian ballad images and catalogue records. Deployment of image-search across multiple databases will be scoped.
6. Enrichment with transcriptions: Text-Creation Partnership transcriptions of Bodleian ballads will be identified and linked to Bodleian Ballad catalogue records. Cross-searching and comparison of transcriptions across multiple databases will be scoped for opportunities for future collaborations.

1.3 Anticipated Outputs and Outcomes

Output / Outcome Type <i>(e.g. report, publication, software, knowledge built)</i>	Brief Description
Semantic specification	A semantic structure for broadside ballad catalogue records that meets the needs of the partners and engages stakeholders, particularly ballad scholars and institutions holding ballads.
Enhancements to the Bodleian Ballads Database	Transformed, interoperable Bodleian Ballads Database enhanced with image-search, improved metadata-presentation and links to TCP transcriptions

Enhancements to EBBA	Interoperable English Broadside Ballad Archive
Enhancements to VWML Catalogue	Links between VWML Roud Index and Bodleian Ballads
Visual search software	Software built into the Bodleian resource for comparing illustrations in a subset of broadsides will be deposited with documentation in an appropriate open-source repository. Cross-search across databases will be scoped.
Increased use of partner resources	Each resource will drive web-traffic to the other and will benefit from the higher profile of broadside ballads.
Heightened awareness of broadside ballads	The distinctive broadside ballad form will be defined in more depth and precision and brought to wider attention among scholars, librarians, performers and the public.
Innovation in digital humanities	Methods and materials employed will generate new knowledge in the context of their digital remediation
Community awareness	Greater awareness of the online resources for community outside academia
Final report	Will include an account of experience gained and recommendations for future initiatives.

1.4 Overall Approach

The project will host a high-level conversation about the description of broadside ballad catalogue records involving key stakeholders in the library, ballad and digital humanities communities. The conversation will generate a Semantic Specification that will model the relationships between common ballad catalogue elements; the Specification will serve both as a reference for collaboration between project partners and as a spur to future development. The Specification will set out minimal prescriptions for achieving common resource-discovery whilst documenting options for more detailed digitisation and cataloguing: it will thus be both a narrow recommendation of best practice and a more general record of some current approaches. While the Specification will not cover forms of print or ballads other than specifically broadside ballads, it may describe affinities with other forms of print (e.g. chapbooks; other broadsides) and with wider literary, visual and musical traditions. It will be generated by discussion between the partners and stakeholders at the January 16 workshop and in discussion afterwards and published during the project's lifetime.

The best means of achieving interoperability will be addressed and kept under assessment at planning stage, during development and in review, with the aim of arriving at a flexible and sustainable outcome. The project regards interoperability as the bridging of IT infrastructures and translation of data-formats based on a common understanding of the data to be made interoperable: the approach calls therefore on

both technical and domain-specific knowledges. Our approach will be to disseminate these knowledges widely within the Project and among its stakeholders. It is expected that the project will generate innovation as well as implement known methods: innovations will be identified for review and further development while the implementation of established methods will be critically examined in the light of the project's experience.

Alongside high-level and technical approaches, the project will host a multi-faceted conversation between partners and stakeholders with the aim of engaging the wider public. This conversation will improve knowledge and understanding of the broadside ballad in all its ramifications and build relationships between institutions, scholars educators and artists. It will respect the diversity of approaches that scholars in multiple fields (inside and outside the academy) bring to the ballad and will aim to generate new knowledge from a combination of approaches. Identifying what stakeholders hold in common and what is cherished by particular communities will be important: this may define the scope and boundary of what can be collectively implemented and what is best left to other stakeholder-groups to manage. The Project will set up an ad-hoc advisory group of humanities scholars to advise on impact and embedding in UK teaching and research.

Critical Success Factors are both technical and specialist and are informed both by stakeholders' needs and by a sense of the potential to reach new audiences. They include: completion of the semantic specification; Bodleian database development; integration of image-search with Bodleian and images, metadata; robust and coherent interoperability frameworks; stakeholder engagement; and user take-up.

1.5 Anticipated Impact

Impact Area	Anticipated Impact Description
Positive impact on wider society	Outreach during the course of the project includes engagement with non-academic users. The project will provide improved public access to broadside ballads and support a deeper engagement with their complexities. It will enhance the public understanding of librarianship, bibliographical scholarship and the digital humanities. Measure: workshop and feedback; JISC TIDSR; VWML
Teaching and learning excellence	Stakeholders in the project include libraries holding similar collections. Institutions contemplating beginning or adding to digital collections will find a format available for making these digital collections widely accessible. This will enable future projects to be planned to add on to the integrated search framework. New and enduring collaborative

	relationships with partners and other stakeholders. Measure: publish to institutions with similar collections Measure: focus group of academic users; JISC TIDSR
Research excellence and meeting future needs	Making metadata available as linked-data will allow researchers to apply new techniques emerging within the digital humanities of large-scale, longitudinal corpus analysis (sometimes known as “distant-reading”). It will also permit more fine-grained analysis of convergence and divergence within long-lived ballad traditions. Innovation in image-searching will inspire its further development and application to other data-sets. Enhancements to Bodleian digital infrastructure will help meet future collaborative research and user-service needs.
Effectiveness and cost-saving	The project will reduce duplication of effort in the devising of catalogue-schemas for broadsides and related texts

Impact Areas : maintain research excellence; maintain teaching & learning excellence; be more effective/save money; have a positive impact on wider society; be ready for technology needs in the future.

1.6 Stakeholder Analysis

Stakeholders	Interest	Importance
Project partners: Bodleian Libraries, VWML and EBBA	Greater exposure for their collections and institutional aims; enhanced usability of resources; innovation; intellectual engagement through collaboration	High
HE researchers in history of the book, bibliography, history of printing, art, music and popular culture	Enhanced usability through clustered content and added functionality	High
Traditional musicians; folklorists; local, social and public historians; ballad scholars outside HE	Discovery and engagement; locating content usable for performance, research and teaching; grouping and tagging content in meaningful forms	High
Institutions holding ballad collections under development, e.g. Cambridge University Library; Sheffield	Semantic model; Format for cataloguing & interoperability	High

University Library; University of Newcastle-upon-Tyne Library.		
Digital humanities and digital library communities	Semantic Model; innovative discovery-tools; further analytical possibilities within data	Medium
Teachers in schools and FE	Locating content appropriate to the curriculum	Medium

1.7 Related Projects

John Johnson Electronic Ephemera
 JISC Historic Books
 Welsh Ballads Project
 British Printed Images

1.8 Constraints

Key staff time (lead institution and partners)
 The availability and performance of IT infrastructure within the lead institution and among partners.

1.9 Assumptions

Assumptions of core project staff availability; partner delivery; technical infrastructure
 Robustness of Bodleian DAMS and project partners' infrastructure and systems
 Successful semantic specification
 Successful database development
 Successful metadata development
 Scalability of image-matching application

1.10 Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Staffing	2	5	10	Staffing for web development will be addressed through secondment of Bodleian Libraries experienced staff or recruitment of new staff.
Partnerships	2	4	8	The Project Manager will travel to meet partners. Regular meetings and communications in the course of the project. A 'Memorandum of Understanding' with each partner, will be drawn up within two months of the project start.

Semantic Specification is incomplete or inoperable	2	5	10	Semantic Workshop will be designed with clear goals and will engage participation of all partners, including metadata specialists. Drafting of the Specification will be iterative, inclusive, rapid and realistic in terms of its implementation in working code and catalogue record-display.
Overrun implementing visual matching software in user interface	2	3	6	Additional development effort will be concentrated on this work and added expertise will be sought from the Department of Engineering, University of Oxford.
Legal	2	4	8	Bodleian and EBBA content already complies.
User awareness during the project period	3	3	9	Project events to solicit engagement

1.11 Technical Development

The project will be developed using Agile techniques with an emphasis on user-led design. Components will be loosely-coupled via RESTful API to provide flexibility, scalability and simplicity of development and maintenance.

The existing Bodleian Digital Asset Management Service (DAMS) will provide the foundation for the project, providing a semantically-aware (RDF-centric) object storage facility with an accompanying toolset providing facilities such as Apache-SOLR for faceting and indexing, an OAI-PMH endpoint for machine-machine data sharing, persistent URL's and UUID's, in addition to forming the basis of the Libraries' digital preservation activities.

The development will focus on three main deliverables:

1. An ingest and editorial component will extract data from the existing Ballads system and hold it in an intermediate format (probably a relational database) for corrections, editorial clean up and linking with additional material. The resulting content will then be loaded into the DAMS. Subsequently, elements of this code and workflow will be re-used to provide a path for data ingest from other sources. This code is essentially independent of the other parts of the system, linked only via the objects stored in the DAMS.
2. Public web site, providing conventional faceted searching and browsing for discovery of content. This site will also provide machine-readable endpoints for obtaining OAI-PMH and RDF access to content.
3. A separate implementation of the image search tool. This will be presented seamlessly through the public website but hosted and developed separately.

1.12 Standards

Name of standard or specification	Version	Notes
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RDF		The Semantic Specification will be implemented through RDF – the site will make RDF available in a number of serialisations.
OAI-ORE		ORE Aggregations will be used as the primary organising structure of content (with RDF Lists of sequence as required)
FRBR		A subset of FRBR is likely to be embodied within Semantic Specification
OAI-PMH		Will be scoped for interoperability
UUID		Internally, UUID's will be assigned to every digital object for long-term persistence

1.13 Intellectual Property Rights

[pending consultation with JISC IPR team].

The Semantic Specification will be published under a suitable Creative Commons license

Catalogue records and interoperability protocols delivered by Project Partners for the provision of interoperability will be jointly licensed to each partner for the purposes of the project under a suitable Creative Commons license.

Image-matching software will be deposited in a suitable repository under an Open Source License.

All properties that are the exclusive IPR or licensed content of each partner independently from the project (including image files of original broadside ballads) will remain their exclusive property or under their control.

2 Project Resources

2.1 Project Partners

Bodleian Libraries

To host a Semantic Specification workshop; to develop the semantic model for ballads metadata based on the recommendations of that workshop; to make the semantic model available to EBBA, VWML and other stakeholders; to configure and make available Bodleian Ballads metadata based on the semantic model; to integrate Roud Index metadata delivered by VWML; to participate in Steering Committee meetings and project dissemination activities.

Main Contact: Dr. Giles Bergel, Project Manager

Project Director: Dr. Alexandra Franklin

Associate Director: Mike Heaney

EBBA

To participate in the Semantic Specification workshop; to co-develop the semantic model for ballads metadata based on the recommendations of that workshop; to

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configure and make available EBBA metadata based on the semantic model; to participate in Steering Committee meetings and project dissemination activities.
Main Contact: Professor Patricia Fumerton, EBBA Director
Project Manager: Dr. Eric Nebeker
Associate Director and Technical Lead: Dr. Carl Stahmer

VWML

To participate in the Semantic Specification workshop; to build a machine-to-machine interface for reading the Roud databases; to write a matching algorithm for linking Roud records to Bodleian Ballads records; to participate in Steering Committee and project dissemination activities.

Main contact: Malcolm Taylor (Library Director, VWML)

Consultant: Steve Roud (Author, Roud Indexes)

Technical Lead : Dr. Richard Butterworth (VWML Web Developer)

New Partners

New institutions may join at the invitation by the Steering Committee if they wish to implement the semantic model at their own cost and reciprocally to exchange metadata. There shall be no obligation on existing consortium members to agree to reciprocal exchange with new partners.

2.8 Project Management

The Project's Steering Committee is composed of the Oxford management team (Bergel, Franklin and Heaney) and two representatives each from EBBA (Fumerton, Stahmer) and VWML (Taylor, Roud). The Steering Committee will meet at least three times during the project to agree procedure and review progress and will be in regular email communication.

The project is managed locally within the Lead Institution by weekly (minimum) contact between the Manager and the Director. The Project Director will be responsible for communications with partners; financial reporting; scheduling Steering Group meetings; and keeping project records and task sheets up to date. The Project Manager will normally be the person in attendance at JISC programme meetings. He will be responsible for reporting to the Steering Group, JISC and other stakeholders inside and outside the academic community via the project website and formal reports and for implementing engagement and dissemination activities. He is also responsible for sourcing TCP transcriptions from Bodleian TCP personnel and for scoping future developments.

The Manager liaises with Bodleian Digital Library Systems and Services (BDLSS) staff charged with implementing technical infrastructure. BDLSS will coordinate web design and development for the project and will be responsible for recruiting and training technical staff and liaising with partners on web development issues and with other projects and resources for the repackaging or reuse of content where appropriate, in consultation with the Project Manager and Director. The BDLSS DAMS manager will line manage the web developer and will contribute 1 day per

month to project activities. The BDLSS Metadata Consultant will compile the report on the semantic structure adopted; will ensure compliance with metadata standards for all project material hosted in the Bodleian Libraries DAMS; and will be responsible for the metadata model adopted by the project.

Responsibility for Building the image-search function is held by Professor Andrew Zisserman, who manages the work of Relja Arandjelovic (both of the Faculty of Engineering, University of Oxford). Zisserman and Arandjelovic liaise with BDLSS and, through the Project Manager and Director, may liaise with technical leads for project partners interested in scoping the technology.

2.9 Project Roles

Team Member Name	Role	Contact Details	Days per week to be spent on the project
Alexandra Franklin	Project Director	alexandra.franklin@bodleian.ox.ac.uk	1
Giles Bergel	Project Manager	giles.bergel@bodleian.ox.ac.uk	2.5
Mike Heaney	Associate Director	michael.heaney@bodleian.ox.ac.uk	
Neil Jefferies	DAMS Manager	neil.jefferies@bodleian.ox.ac.uk	.25
TBC	Software Developer	TBC	5
Alexander Huber	Metadata Consultant	alexander.huber@bodleian.ox.ac.uk	1
Andrew Zisserman	Image-search developer	az@robots.ox.ac.uk	

2.10 Programme Support

- IPR/Licensing
- Evaluation and QA
- Embedding and sustainability

3 Detailed Project Planning

3.1 Evaluation Plan

Timing	Factor to Evaluate	Questions to Address	Method(s)	Measure of Success
Formative and summative	Semantic model	Coherent and comprehensive?	Agreement with partners and takeholders	Delivery of interoperability; takeup outside of project
Formative and summative	Enhanced Bodleian database	Robust, sustainable and flexible?	Internal review; peer (programme) review; analytics	Successful long-term hosting; increased usage
Summative	Interoperability	Robust, intuitive, allows further resource-discovery within partner archives	BDLSS and project-partner management; programme management	Increased usage of resources; increase in inquiries regarding resources

Formative and summative	Image-search	Integrated with Bodleian Ballads images and metadata? Robust? Potentially interoperable?	Iterative development with BDLSS and Image-search; critique by printed image specialists and technical staff	Take up by users; approval of printed-image specialists.
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3.2 Quality Assurance

Output / Outcome Name	Semantic Specification	
When will QA be carried out?	Who will carry out the QA work?	What QA methods / measures will be used?
During and following publication	Project staff; stakeholders; invited ballad scholars	Compliance with RDF linked-data specification; suitability for accurate and meaningful resource-description
Output / Outcome Name	Database development	
When will QA be carried out?	Who will carry out the QA work?	What QA methods / measures will be used?
During development	BDLSS and project stadd	Scalability; robustness; integration with third-partt resources (Oxford OPAC; Zotero)
Output / Outcome Name	Interoperability	
When will QA be carried out?	Who will carry out the QA work?	What QA methods / measures will be used?
During and following implementation	Project staff and partners; invited test-users	Cross-searching
Output / Outcome Name	Image-search	
When will QA be carried out?	Who will carry out the QA work?	What QA methods / measures will be used?
During and following implementation	Project staff; invited print scholars	Performance testing

3.3 Dissemination Plan

Timing	Dissemination Activity	Audience	Purpose	Key Message
During Project	Semantic Specification	Specialist librarians; ballad scholars	Peer review; reuse	Resource description
Project end	Journal articles in digital library and media-history journals	Digital humanists; librarians; book-literary- musical- and art-historians	Peer review; engagement	Innovation; resource description
During project/ project end	Traditional music community engagement events (VWML Broadside Day; resource launch)	Music scholars, performers and enthusiasts	Engagement	Richer description; improved access
During	Press releases and other	Specialist and non-	Publicity;	Improved access;

project	project publicity (e.g. blog posts)	specialist users	engagement	innovation
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3.4 Exit and Embedding Plans

Project Outputs/Outcomes	Action for Take-up & Embedding	Action for Exit
Semantic Specification	Implementation on metadata in partner resources	Publication and dissemination
Redeveloped Bodleian Ballads database	Hosting on Bodleian servers	Full data loading; testing
Image-search software	Hosting on Bodleian servers; integration with Bodleian Ballads metadata	Deposit of software and documentation
Interoperability layers	Exposure of metadata	Documentation of methods

3.5 Sustainability Plans

Project Outputs	Why Sustainable	Scenarios for Taking Forward	Issues to Address
Semantic Specification	Deposit and future development	Refinement following project final report; uptake by additional projects	Suitability for resource-description and interoperability
Image-search software	Deposit and future development	Documentation with tutorials; further development and use	Scalability; accuracy; usefulness

Appendices

Appendix A. Project Budget

Appendix B. Workpackages

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
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JISC WORK PACKAGE

WORKPACKAGES	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1: Semantic Specification																									
2: Database development																									
3: Interoperability (BBO and EBBA)																									
4: Interoperability (BBO and VMWL)																									
5. Transcription sourcing																									
7: Image-search																									
8: Interface Development																									
9: Dissemination and engagement																									
10: Future Development Scoping																									

Project start date: 1/1/11
 Project completion date: 31/1/13
 Duration: 15 months

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
YEAR 1					
WORKPACKAGE 1:					
Objective: Semantic Specification					
1. <i>Specification Workshop</i>			Notes towards the Semantic Specification		Heaney, Bergel, Franklin, BDLSS, partners
2. Specification drafting			Draft Specification		HBF; BDLSS; partners
3. Stakeholder consultation			Feedback on draft Specification		Bergel
4. Partner approval			Approved Specification		Franklin
5. Publication			Published Specification		
WORKPACKAGE 2:					
Objective: Bodleian Data-modelling					
6. Extract ballads data from existing database into an intermediate format.					BDLSS
7. Data cleanup and linking					BDLSS
WORKPACKAGE 3:					
Bodleian DAMS Development					
8. Prepare DAMS for hosting ballad metadata , images and integration with image-searching and interoperability layers			Bodleian Ballads database infrastructure		BDLSS
9. Load ballad images and metadata			Populated database		
10. Publish metadata as RDF linked-data			RDF Linked Data catalogue records		BDLSS

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
11. Create persistent “cool” URLs for ballad records based on Bodleian Ballad shelfmarks			Persistent URLs		BDLSS; Bergel;Franklin
12. Integrate Bodleian Ballads Database with Bodleian OPAC (SOLO)			SOLO catalogue records		BDLSS
13. Implement Zotero integration			Zotero-integrated catalogue records		BDLSS
14. Install analytics for impact-measurement					BDLSS
WORKPACKAGE 3:					
Objective: Interoperability (BBO and EBBA)					
15. Develop interoperability methodology			Interoperability methodology		BDLSS Stahmer (B&S)
16. Exchange metadata between BB and EBBA			Interoperable Bodleian Ballads and EBBA		B&S
WORKPACKAGE 4:					
Objective: Interoperability (BBO and VMWL)					
17. Link BBO and VWML Roud Index records					BDLSS and Butterworth
18. Demonstrate cross-search			Interoperable Bodleian Ballads and VMWL Roud Index		BDLSS and Butterworth
WORKPACKAGE 5:					
Objective: Implement image-search					
19. Mount image-matching on Bodleian servers			Installed image-matching software		BDLSS, Zissermann, Arandjelovic
20. Integrate image-matching with Bodleian			Image-searchable Bodleian Ballads		BDLSS

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
Ballads catalogue			database		
21. Scope image-search across databases			Feasibility study of cross-database image search		Stahmer; Zisserman; BDLSS
WORKPACKAGE 5:					
Objective: Transcription Sourcing					
21. Source Text-Creation Partnership ballad transcripts			List of TCP ballads		Bergel
22. Link to Bodleian Ballad catalogue records			Links to TCP ballads in catalogue		BDLSS
23. Scope transcription-retrieval and comparison across databases for future development			Feasibility study of cross-database transcription retrieval		Bergel; Stahmer
WORKPACKAGE 5:					
Objective: User Interface Development					
22. Scope interface options (union catalogue interface and institution-specific)					BDLSS; Partners
23. Develop prototype/mockups			Mockups		BDLSS
24. Consult with Steering Committee and advisory group			Feedback on mockups		Bergel
25. Implement interface			Refreshed Bodleian Ballads Interface		BDLSS; Partners
WORKPACKAGE 8:					
Objective: Dissemination					
26. Project Publicity			Press releases; blog posts; tweets		Bergel; Franklin
27. Project Launch			Press release		Bergel; Franklin

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
WORKPACKAGE 9:					
Objective: Impact Assessment					
28. Implement TIDSR			Report for TIDSR		Bergel; Meyer
WORKPACKAGE 10:					Bergel; partners
Objective: Future development scoping					
29.					
30.					
31.					

Members of Project Team:

Name	Role
Dr. Alexandra Franklin	Project Director
Dr. Giles Bergel	Project Manager
Mike Heaney	Associate Director
Neil Jefferies	DAMS Manager
Alex Huber	Metadata Consultant
BDLSS Web Developer	Web Developer