

Institutional Repository Project

Project Brief

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1 Purpose

This document outlines the following for the University of Manchester Institutional Repository Project,

- a. why the project exists (sections 2 and 3)
- b. what the project is going to do (sections 4.1 and 4.2)
- c. how it hopes to achieve this (sections 4.3 and 4.4)
- d. who and what services will be involved (sections 4.5 and 4.6)
- e. how the project's success will be measured (section 5)
- f. known obstacles to achieving the projects goals (sections 6 and 7)

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2 Background

Nowadays, the ability to conduct university research relies heavily on researchers having instant and direct access to all related research literature. In many disciplines, it is now common place for a researcher to use electronic information sources available via the World-Wide-Web as their first (and even their only) 'port-of-call'. A modern researcher will invariably take for granted that their research findings and the findings of others are available in electronic form via the World-Wide-Web. This represents a major cultural shift in the last 10-15 years, before which, print was the primary means of accessing and disseminating research findings.

It has always been the case that what determined the impact of a piece of scholarly work was, in part, the research community's awareness of the work. Obstacles that impair the ability of busy academic researchers to find and access scholarly work (e.g. no journal subscription, effort/ time to obtain a reprint or inter-library loan) reduce the likelihood that they will read and cite it. Ultimately, this impacts on authors' research reputations and careers. Thus to sustain and enhance reputations, it is important, more so now than ever, that authors and institutions take full advantage of the World-Wide-Web and the opportunities it presents for disseminating their intellectual assets.

In the last five years considerable interest has grown within the academic community in the use of institutional repositories as a means to storing and disseminating scholarly work electronically. In its simplest form an institutional repository is a place where individuals can store digital copies of their scholarly work and, as appropriate, make these materials freely and easily accessible too others via the World-Wide-Web. Examples of scholarly work are journal articles, magazine articles, books, theses, patents, technical reports, conference posters, lecture presentations, images, performances and compositions.

Six of the seven major UK research councils (AHRC, BBSRC, ESRC, MRC, NERC and STFC) have now mandated that, scholarly works describing the outcomes of their funded research should be made freely available. Other research funding bodies have similarly mandated, including the Arthritis Research Foundation, British Heart Foundation, Cancer Research UK, Department of Health, Joint Information Systems Committee and Wellcome Trust.

In practice these mandates mean that research councils now expect researchers (and their affiliated institutes) to make every effort to ensure their research findings are available free-of-charge and easily accessible. This represents a shift in the dissemination of research outputs, which traditionally has been strongly aligned with the pay-for-publish and pay-for-view services offered by journal publishers. These mandates also intend to affirm that it is the intrinsic merit of the work, and not the reputation of the journal in which a researchers work appears, that should be considered in making value-judgements e.g. award of research grants, appointment and promotion decisions.

Copyright is an often cited problem with making research findings freely available. A normal practice in academic publishing is to sign over the copyright of the work to the publisher. In practice this means a researcher must obtain the publishers permission to further disseminate the piece of work. However, many journal publishers now recognise the benefits of free access to their articles and as a consequence have adjusted their copyright policies to accommodate this. Where restrictive policies still exist, a researcher can still make freely available meta data that describes the work (e.g. article title, journal

name, volume, page numbers) and a hypertext link to the article on the publisher's website (see [SHERPA/RoMEO website](http://www.sherpa.ac.uk/romeo.php) [http://www.sherpa.ac.uk/romeo.php]).

An institutional repository can help an individual researcher manage, disseminate, and preserve their scholarly work. It can increase the visibility and impact of their research findings and improve collaborative research opportunities. Furthermore, a repository can help an institution to develop coherent and coordinated approaches to capturing, identifying, storing and retrieving its intellectual assets. A repository can improve a university's league table ranking (see [Incentivizing the Open Access Research Web](http://www.ctwatch.org/quarterly/articles/2007/08/incentivizing-the-open-access-research-web/) [http://www.ctwatch.org/quarterly/articles/2007/08/incentivizing-the-open-access-research-web/] and [G-Factor](http://www.universitymetrics.com/), [http://www.universitymetrics.com/]).

Considerable research and development on the use of institutional repositories has been conducted in the last five years. Research is ongoing, but efforts have examined a wide range of issues including technical, cultural and political. There are now around 1,000 institutional repositories world-wide, of which over 100 are located in the UK. Additionally, there is a significant and growing global 'open access' movement. This movement aims to make all outcomes of research freely available and is the subject of ongoing debate.

In response to the above developments, and in support of the University of Manchester's 2015 agenda, the Vice President's Research Group (chaired by Professor Nancy Rothwell) requested John Rylands University Library to initiate this project with the aim to establish a repository service for the University of Manchester.

3 Outline business case and benefits

An institutional repository can,

For the academic researcher:

1. increase the visibility of your research findings, your work is easier to disseminate, easier to find and easier to read
2. make it easier to manage your list of publications on your personal website and your organisations website
3. give you a place where your scholarly works are permanently stored, whether they are a PDF of a journal article, a Microsoft Word document of a technical report, a Microsoft PowerPoint file of a conference poster, a JPEG file of a photograph, an audio file of a musical performance or a video file of a speech
4. enable a simple web address to your piece of work that can be cited in subsequent works or easily refer other interested parties too
5. make possible easy access to materials previously only available in print e.g. theses, dissertations
6. give an indicator of the impact your research is having in your field, help identify who is reading your work (or at least from where they are accessing it) and encourage impact to be more related to the merit of your work and not the name of the journal in which it is finally published
7. offer new opportunities for publishing your works e.g. as part of a virtual journal, for others to comment on your work and provide feedback
8. encourage others to do the same, so you can easily find and read the work of your colleagues and others
9. make it easier to keep a breast of the latest research findings (certainly within the institute)
10. for those working in a fast-moving field e.g. computer sciences or electronics, enable quick and dated dissemination of your research findings, which could establish prior discovery
11. have a safe, backed-up and secure place to store your scholarly works
12. have an organized single point of reference for your work, accessible 24/7, readable from any web-enabled device (Windows PC, Apple MAC, PDA, mobile phone), from work, from home, while you are abroad at a conference etc
13. reduce your workload associated with managing your portfolio of scholarly works (or at least not add to it)
14. improve your understanding of copyright, make you aware of your rights and maximise the return of your efforts
15. meet and manage the requirements of funding bodies with respect to disseminating your research outputs and ensure you can confidently tick this box on new funding applications

For research administrators, research managers, librarians, and senior academic staff, Heads of Faculty/School:

16. provide new opportunities for the archiving and preservation of valuable digital works

17. provide meaningful reports on scholarly work, which can act as a barometer of research activity in a particular field, help to identify trends and inform managers involved in strategic planning
18. provide timely alert messages on latest submissions which can increase awareness and responsiveness of support functions and managers
19. facilitate cross-boundary research, by cataloguing scholarly works according to the subject material and not (solely) the affiliation of the author
20. reduce duplication of records and inconsistencies in multiple instances of the same works
21. reduce some of the mundane activities of managing digital collections by automating common tasks and harvesting information from other sources

For the institution (and its component parts):

22. demonstrate to its employees, in particular the academic community, that individuals and their work are valued, by supporting mechanisms that reduce workload and maximise the benefits to them of their efforts
23. provide a reference point for scholarly works that can interoperate with other systems and maximise efficiencies between them by sharing information
24. increase the visibility, reputation and prestige of the institution
25. improve the accuracy and completeness of the institution's record of scholarly works
26. ease the management of an institution's intellectual property rights by raising awareness of copyright issues and facilitating the recording of relevant rights information
27. provide a resource of information for a 'shop window' or marketing tool to show others how the institution is making a difference, this would act to entice staff, students and funding
28. act as a tool to support externally and internally driven audits of research activity e.g. annual reviews, Research Assessment Exercise
29. reduce total cost and risk of ownership, in particular incurred by an institution's component parts who might be supporting equivalent services locally (or at least allow local resource to be allocated to alternative activities)
30. offer greater flexibility and integration than other mechanisms of disseminating scholarly works (e.g. disparate independent system/websites) with more coherent security and preservation of digital materials
31. contribute to the mission and values of an institute, in terms of openness, freedom-of-speech and equality-for-all

For the global community:

32. assist research collaboration through facilitating free exchange of scholarly information
33. aid the public understanding of research endeavours and activity
34. reduce costs (or at least allow their reallocation) associated with publisher subscriptions

The above represents the potential benefits an institutional repository can achieve, many of which other repository projects have reported. To realise these benefits requires: the engagement and cooperation of the university's academic community; the support of related services (see section 4.6); the attainment of a critical mass of content; cultural change within the institution and the passage of time. As a result, it will therefore take time to fully realise these benefits.

4 Project definition

4.1 Project aims and scope – What is a University of Manchester Institutional Repository?

The strategic purpose of this Project is to **improve research reputations** of individuals and organisations affiliated with the University of Manchester. Electronic dissemination of scholarly work is now common place and increasingly the preferred mechanism by which researchers access the research findings of others. The Project aims to reduce cultural and technical obstacles that hinder individuals who wish to manage and disseminate their scholarly work electronically via the World-Wide-Web. As a consequence, the Project aims to maximise the impact of the University of Manchester's intellectual assets.

Tactical this Project aims to “**establish Institutional Repository Services for the University of Manchester**”.

The University of Manchester Repository Services will offer members of the university a means of storing and managing their scholarly works. For the purpose of this project a piece of scholarly work is content that is created by individuals affiliated with the university. The scholarly work would have some intrinsic

value and an indicator of quality. The works may be of value to an individual, an organisation within the university, or the university as a whole. An indicator of quality may be whether the works have been peer-reviewed, the number of times it has been downloaded/cited or some other measure.

Scholarly work may take many forms. The Project will focus on the following,

- a. **Academic publications:** articles (published articles in journals, magazines and newspapers; peer-reviewed, copyright approved post-print articles; pre-print materials related to published peer-reviewed articles), books, book sections (including conference proceedings and abstracts)
- b. **Theses and dissertations:** Doctoral theses, Masters theses and dissertations
- c. **Grey literature:** patents (published only), technical reports, software, project reports, internet publication, documentation and manuals, working and discussion papers, non peer-reviewed conference and workshop materials (posters and speech/lecture materials)
- d. **Audio visual items:** images, shows/exhibitions, performances, compositions, artefacts, talks

We recognise that the above list is not comprehensive. However, priorities and practicalities will mean the Project is unlikely to consider all possible forms of scholarly work. Content that is currently considered beyond the scope of the project are,

- e. **Teaching and learning content:** syllabuses, timetables, exam papers, lecture notes, lecture presentations and e-learning objects. However, the project will consider scholarly works of research in the fields of teaching, learning and education, and, scholarly works of research used for teaching, as these fall into the previous types of content,
- f. **Experimental data:** large raw datasets, data sheets, experimental notes.

Repository Services will support the storage and management of both **metadata** and **full-text** versions of scholarly work. For a journal article the article's title, list of authors, date published, journal title, journal volume, journal issue, page numbers and abstract, are examples of metadata. Full-text content could be the peer-reviewed publication as finally appears in the journal (i.e. post-print) or content that was prepared prior to final acceptance of the article by the publisher (i.e. pre-print). Where the publisher's copyright or other issues prevent storage of a full-text version of the article in the repository, the metadata can include a web address to an online version that is available from the publisher's or some other website. This web address is often implemented in the form of a Digital Object Identifier (DOI) which when selected invariably takes the reader directly to the full-text content of interest.

The Institutional Repository Services will offer individuals the ability to easily and widely disseminate their scholarly works. This means a piece of work is submitted once to the repository and potentially accessed many thousands of times indefinitely for a range of purposes.

The Repository Services will enable dissemination of submitted works to other university-based systems. For example, content could automatically be displayed directly and simultaneously on a personal website, a School website and/or the University's main website. Furthermore, the repository will expose content to appropriate internal systems for administrative purposes.

To further disseminate scholarly works and support research council mandates, the repository will make approved content available to external systems, such as Google Scholar (<http://scholar.google.co.uk/>), Intute (<http://www.intute.ac.uk/>), OALster (<http://www.oalster.org/>) and UK PubMedCentral (<http://ukpmc.ac.uk/>).

We anticipate that an essential component of this Project is establishing a **Repository Services Support Network**. This support network will facilitate the submission and management of scholarly works stored in the repository. Academic staff can submit a piece of scholarly work as part of their normal practice of authoring and disseminating their work (i.e. self-archiving). However, we expect many academics will require additional support. A member of administrative staff (e.g. a Research Business Manager, a Personal Assistant) may submit works on behalf of an academic that they directly support or the organisation that they work in (i.e. assisted-archiving). Furthermore, scholarly works may be managed by support staff located in central university functions on behalf of organisations within the university as per some service agreement. These support staff might be individuals of a dedicated repository support team. Working in a coherent and coordinated way these individuals would form the Support Network. The Project will work to agree, plan and establish this Support Network.

The Project will need to define the potential roles and responsibilities that individuals within the Repository Services Support Network may take on. These may involve a range of activities, including fully managing scholarly works on behalf of one or more individual academic staff; assisting self-archiving activities by providing certain key functions e.g. Digital Object Identifier lookup, copyright checks, file conversion; moderating the works submitted by others e.g. to ensure they are suitably catalogued; act as a curator for parts of the repository e.g. provide reports on usage; advertise and advocate the use of the repository e.g. induct new staff. Furthermore, the Project will need to ensure that individuals involved in

the Support Network receive the appropriate training, credit and recognition for their contribution towards supporting academics and the organisations intellectual assets.

We expect the Repository Services to support a **set of technologies** that will underpin the Support Network's activities. For the Repository Services to be a success, it is essential that the management of content is done in a way that is familiar and comfortable to individuals, meets their expectations and fits with real-life and everyday academic practices. Furthermore, to be sustainable, these technologies will need to fit with existing University technical architecture, in particular authentication, authorisation and storage frameworks.

We envisage that the management tools used by an individual will be distributed. In practice this means we locate the management tools as close to the individuals natural and preferred working environment as is possible. This could be some plug-in software that integrates with their web browser and gives the individual instant access to the repository directly from their computer's desktop. Additionally, an individual may prefer to work in a well-developed Faculty Intranet. In this case we would work with the Faculty to embed the repository's management interfaces inside that Intranet. An individual might prefer to work from multiple locations that cross organisational barriers. As such, they may choose to manage their scholarly work via a central point such as the Library website or University portal.

Other institutional repositories tend to use one or a combination of three alternative open source technologies. These are ePrints (<http://www.eprints.org/>), dSpace (<http://www.dspace.org/>) and Fedora Commons (<http://www.fedora-commons.org/>). Each of these products is used widely, has a significant support community and continues to be developed and enhanced. We expect to leverage the experiences and knowledge of these communities and believe one or a combination of these products will meet the Project's requirements.

The Project will focus on ePrints, dSpace and/or Fedora Commons as suitable software solutions. Initial work will aim to configure and customise a pilot repository with basic functions (most likely an instance of ePrints). This will act as a platform to implement a set of scenarios and demonstrators that are of real-world relevance. We will use these demonstrators in user-testing and advocacy efforts. We expect a phase of work that will scale-up the pilot to a university-wide solution (see section 4.4). To meet user requirements and priorities this is likely to involve some software development work. This work will enhance the standard functionality offered by these packages. The Project will feed these developments back to the wider support communities.

We anticipate key functions offered by the Repository Services technology will replace those currently supported by Faculty publication databases. Faculties may wish to support added-value or specific functions that are not suitable for a university-wide repository to support. In these cases, the Project will work with Faculty IT teams to agree, plan and implement mechanisms whereby repository and publication databases exchange content, ensuring data integrity and the minimum disruption to end-users.

We expect that the Institutional Repository Services will need some form of **governance, management and/or coordination**. For example, the Project will need to define how the set of repository technologies will be maintained and developed. Some aspects are likely to be self-governing e.g. self-archiving, while others may embed into existing university structures e.g. IT Services would manage the hardware infrastructure. The Project will develop structures, policies and processes towards sustaining the Institutional Repository Services and recommend the necessary support requirements.

Noteworthy is that, fundamentally, this Project represents a **long-term commitment by the university to support an individual's and organisations intellectual assets**, including their indefinite preservation.

4.2 Project deliverables and objectives

Within the Project's overall aims, "establish Institutional Repository Services for the University of Manchester", we identify five key deliverables,

D1. Stakeholder engagement and awareness

This will include engagement of a broad spectrum of individual academic staff and awareness of the Repository Services at all levels within the University.

D2. An Institutional Repository Services Support Network

A community of university staff involved with the management of scholarly works generated by themselves, by academic staff they support or by individuals affiliated with an organisation they work for. Individuals within the network would have clearly identifiable roles and responsibilities and, as such, receive recognition for managing the appropriate intellectual assets.

D3. A set of repository technologies

This will include the technical infrastructure and a set of tools that allow individuals to manage and disseminate scholarly works. These technologies will underpin the activities of the Repository Services Support Network and allow the repository to interoperate with university and external systems.

D4. A governance and sustainability plan

This will include a governance and support model, policies, processes, roles, responsibilities, training requirements and expected on-going financial costs.

D5. A functional institutional repository

This will be populated with a significant mass of scholarly works created by individuals affiliated with the University of Manchester, including metadata only and full-text records.

To achieve these deliverables, Project objectives are,

- O1. Establish suitable project management structures and lines of communication
- O2. Implement and demonstrate working features of the Repository Services
- O3. Ensure Repository Services meet the requirements and expectations of its users, is intuitive and easy-to-use and enhances the visibility of scholarly works created by individuals affiliated with the University
- O4. Facilitate and encourage the assimilation of Repository Services into the life-cycle of authoring and disseminating scholarly works by the University's academic constituency and/or their representatives; ensure Repository Services fit with real-life and everyday academic practices
- O5. Develop structures, policies, processes, roles and responsibilities that act to sustain the Institutional Repository Services;
- O6. Establish policies and procedures for the Repository Services to interoperate with other agreed services and systems, whether they are, personal, institutional or community wide and within or outside of the University
- O7. Copy and/or move data from existing internal and external systems into the repository according to Project, individual and organisational requirements
- O8. Establish best practice use of the Repository Services; monitor the adoption of the Repository Services and their impact on the reputation of individual authors and the university as a whole; communicate the outcomes of such findings to the individual and community as appropriate
- O9. Consider and recommend support requirements necessary to operate the Institutional Repository Services beyond the lifetime of the project

4.3 Project approach

The Library Information Systems Team will provide management for the Project; using a lightweight project management approach, based around Prince 2.

The Project will take an iterative approach. We expect to go through a number of cycles of user-engagement, development, advocacy and dissemination (see section 4.4). This will allow the Project to respond to the changing repository environment.

We will establish a **Steering Group** with appropriate stakeholder representation to oversee development of the Project, establish links across the University and facilitate wide dissemination of project deliverables at a strategic level. The Steering Group will report to the Vice Presidents Research Group (see section 4.6).

We anticipate embedding the **Project Implementation Team** in the Library communication, collaboration and management processes. The Project Implementation Team will undertake all major works, produce and maintain the project brief, project plan, communication plan, risk log and issues log. The Project Implementation Team will, in agreement with the Steering Group, establish quality assurance and sign-off mechanisms.

The Project will also establish a **User Focus Group**. This will include individuals from across the university at all levels and who are examples of intended users of the repository e.g. academic staff, postdoctoral research associates, PhD students, research business managers, research support staff and librarians. The User Focus Group will provide a platform to gauge user acceptance, test development iterations and capture requirements. Its membership may change over time. We envisage members will act as advocates of the Repository Services. We anticipate that individuals involved in the User Focus Group will form members of the **Repository Services Support Network**. As such, we expect the Project to 'pump-prime' the formation of the Support Network.

The Project will leverage existing experience, knowledge and work (local, national and international) from activities within the wider institutional repository community e.g. through the ePrints and Sherpa communities. We expect to engage with specific institutes that have both embryonic and well-developed repository services.

The Project will adopt a 'pilot service-in-development' approach building on a sequence of iterations. The project will have five main phases (see section 4.4). Within each phase there may be multiple development iterations. Iterations will be planned and managed in response to a set of prioritised requirements as agreed with the Steering Group (see section 4.6). An evaluation will be conducted at the end of an iteration which will inform subsequent developments.

4.4 Outline project plan

We anticipate five main phases to this project: start up and initiation; establish a working repository and demonstrators; scale up repository services; monitor, review and revise repository services; project closure and handover to service.

The Steering Group will meet monthly in the first instance and then at least quarterly. At the boundary points of the Project phases the Steering Group will assess progress, sign-off deliverables, address issues arising, approve follow-on work and ensure continuity of the Project's strategic aims.

The User Focus Group will meet frequently throughout the Project to ensure deliverables are inline with user expectations. We expect the User Focus Group to go through a number of cycles of user engagement, development, advocacy and dissemination.

The Project will provide more detailed requirement specifications, functional specifications, system specifications and working plans.

4.4.1 Phase 1: Start up and initiation, months 1 - 2

This phase will essentially initiate the project and aims to achieve objective O1 (see section 4.2). We will establish the project's overall management structure, agree the strategy outlined in this document and setup lines and methods of communication.

During this phase we will,

- a. Appoint Project Implementation Team
 - o Project Manager
 - o Project Technical Developer
 - o Project Assistant
- b. Establish Project Steering Group
- c. Establish initial Project User Focus Group
- d. Draft and sign-off high-level Project documentation and strategy
- e. Setup Project website
- f. Familiarise Project Implementation Team with Project issues and strategy
- g. Conduct preliminary awareness sessions with library staff and potential early adopters

4.4.2 Phase 2: Establish a pilot repository and functional demonstrators, months 3 - 8

Work in month's three to eight will focus on implementing and piloting basic repository functions. This phase will aim to deliver objective O2 and in part objectives O3, O4 and O7 (see section 4.2).

We will implement a set of scenarios and demonstrators of 'real-world' relevance and value. These will provide demonstration materials for subsequent advocacy efforts, and provide a reference point for capturing user requirements and assessing user expectations.

In preparation for expected growth in repository usage during Phase 3, this phase will also evaluate mid to long term infrastructure requirements, address financial constraints and examine working polices and practices. We expect the Repository Services Support Network to begin forming by engaging with the User Focus Group, early adopters and users of the demonstrator functions. We will seek contacts with other individuals within Faculty's and Schools, e.g. senior academics, research business managers, and offer presentations on the Project.

During this phase we will,

- a. Configure, customise and commission pilot hardware and software (this is likely to be a branded instance of the ePrints software, <http://www.eprints.org>)
- b. Implement university standard authentication and authorisation mechanisms e.g. LDAP

- c. Agree early adopters/demonstrators and implement. Examples are,
 - o National Centre for e-Social Science (NCeSS) publications
 - o School of Computer Sciences technical reports
 - o Import content from Manchester Institute for Mathematical Sciences (MIMS) repository
 - o Import metadata stub from Research Information Project (see the [RIP website](http://personalpages.manchester.ac.uk/staff/ben.plumpton/rip/) [http://personalpages.manchester.ac.uk/staff/ben.plumpton/rip/])
 - o Import metadata and full text for RAE 2008 submitted materials
 - o Demonstrate presenting content to personal websites and university website
 - o Store Steering Group scholarly works and present on personal websites
- d. Evaluate mid to long term infrastructure (hardware and software) and financial requirements
- e. Draw-up draft working policies and practices i.e. roles, responsibilities and processes
- f. Widen awareness and initiate Repository Services Support Network
- g. Engage with the national/international repository community, leverage learning experiences of others, match this knowledge with findings from preliminary awareness sessions

4.4.3 Phase 3: Scale-up repository services, months 9 - 14

During Phase 3, the project will aim to expand the content stored in the repository and establish working practices. We will scale-up the infrastructure as required, establish and begin monitoring usage, and make deposited content fully available to other university systems. This phase will aim to deliver objectives O3, O4, O5 and O6 (see section 4.2).

Towards the end of Phase 3 we expect to be in a position to advertise widely the repository's availability and functionality, encouraging self-archiving and enabling individual researchers (who have had not prior contact with the project) to directly interact with the repository.

During this phase we will,

- a. Scale-up hardware and software (as necessary)
- b. Migrate demonstrators from pilot to service (as necessary)
- c. Expand Repository Services Support Network
- d. Implement full set of required content types
- e. Implement data deposition working policies and practices i.e. self-archiving, assisted-archiving, centralised-archiving
- f. Establish workflows and content quality checking processes e.g. content mediation, notification and alert messaging, completion of empty meta-data fields, auto addition of abstract, auto addition of full text, check for broken hypertext links, de-duplication
- g. Establish measures of usage and initiate monitoring
- h. Begin to assess benefits of repository against those identified in section 2 and 3
- i. Formalise support network, roles and responsibilities
- j. Surface content to personal and university systems (as agreed and where possible). Examples are,
 - o University Research Information System
 - o University Portal
 - o Research Information Project/Corporate website
 - o Faculty publication databases
 - o Personal websites
 - o Organisational websites
- k. Initiate University-wide communication and advocacy

4.4.4 Phase 4: Monitor, review and revise repository services, months 15 - 21

This phase will, monitor, review and revise the repository services. This will leverage the support network established in Phase 3. Operational practises established in Phase 3 will be reviewed and refined based on experiences and user feedback. This phase will aim to deliver objectives O7, O8 and in part O9.

During the early to mid part of this phase, it may be appropriate for the University to mandate on the use of the repository. Also, we expect to significantly increase advocacy and communication efforts during this period.

To further support the uptake of the repository, we will enhance the interoperability with internal systems and enable interoperability with external systems.

- a. Monitor, review and revise working policies and practices
- b. Monitor take-up
- c. Continue assessing benefits

- d. Expand communication and advocacy
- e. Prepare and announce University mandate (if required)
- f. Formalise Repository Services Support Network
- g. Enhance interoperability within University systems and widen submission options/interfaces, e.g. Firefox plugin, Faculty/School intranets, University Portal
- h. Enable interoperability with external systems via standard protocols, including,
 - o expose content to Google Scholar, OAISter, Intute and PubMedCentral UK
 - o Integrate data ingest/checking e.g. CrossRef Digital Object Identifier check/retrieval, Romeo publisher copyright check, auto-ingests of meta-data from external repositories

4.4.5 Phase 5: Project closure and handover to service, months 22 - 24

The primary focus of this final phase will be to ensure the smooth transition of the project's deliverables to a sustainable service and deliver objective O9. As a consequence, this phase will,

- a. Finalise the financial support model for the service
- b. Finalise support resources and service agreements
- c. Finalise submission processes and workflows
- d. Reaffirm service policies and mandates
- e. Complete knowledge transfer to support team(s)
- f. Identify outstanding issues, recommend future developments and actions
- g. Identify and document lessons learnt
- h. Identify and document benefits realised
- i. Communicate to the university, transfer of the project to service and end of project
- j. Celebrate!

4.5 Project constraints

The Project will run for two years, starting 1st October 2007.

The Project Implementation Team will have three full time staff, a Project Manager, a Project Technical Developer and a Project Assistant. The Project Manager and Assistant will be appointed on fixed term contracts for 2 years. The Project Technical Developer will be appointed on a fixed term contract for one year, in the first instance.

Working alone, the Project Implementation Team is unable to achieve the Project's aims. As a consequence, establishing the Repository Services Support Network is essential. At this time it is assumed that no other resource will be made available to the Support Network. Hence, the work of the Support Network will need to be accommodated by existing staff from across the university.

At this time it is unknown whether additional financial resource to, scale-up hardware infrastructure, is available to the Project.

4.6 Project structure and interfaces

We will convene a **Project Steering Group**. This group will have representation from across the university at a senior level. The group will emphasize representation from the university's academic community. We will draw Steering Group representatives from the following key areas,

- a. Project Sponsor and chairperson
- b. Project Implementation Team (Project Manager)
- c. Vice President's Research Group
- d. Research Office
- e. Library
- f. IT Services
- g. MIMAS
- h. Faculty of Engineering and Physical Sciences
- i. Faculty of Humanities
- j. Faculty of Medical and Human Sciences
- k. Faculty of Life Sciences
- l. A Research Institute
- m. Two additional recently appointed academic staff

The Steering Group will report to the **Vice Presidents Research Group**.

A **Project Implementation Team** (three full-time staff) will undertake the majority of the expected workload. We will provide line management and day-to-day support for the Project Implementation Team by embedding it within Library Information Systems Team.

The **Project User Focus Group** will draw its membership from early adopters, users involved in specifying initial demonstrators and individuals from the Support Network as that develops. The Project may also communicate more widely for volunteers to join the focus group. It is envisaged that membership of the focus group will change over time, subsets of individuals being involved with different aspects of the project.

Other project interfaces are,

- a. Senior academic staff in faculties, schools and research institutes (e.g. Associate Deans for Research, Research Directors and Heads of Schools) on advocacy and establishing the Repository Services Support Network
- b. Faculty/School IT and Web Teams on interoperability of Repository Services with Faculty/School systems
- c. Individual academic staff on establishing the User Focus Group and general advocacy
- d. Faculty and School Research Offices and Research Business Managers on establishing the User Focus Group and the Repository Support Network
- e. Communications, Media and Public Relations Division and Research Information Project (see the [RIP website](http://personalpages.manchester.ac.uk/staff/ben.plumpton/rip/) [http://personalpages.manchester.ac.uk/staff/ben.plumpton/rip/]) on interoperability with University's corporate website
- f. Directorate of Human Resources and UMIP Ltd for University's Intellectual Property policy
- g. Teaching and Learning Support Office, Office of Student Support and Services, Faculty and School Examination Offices for management of theses and dissertations

The Project will provide terms of reference and further details of roles and responsibilities of each group.

5 Acceptance criteria/quality expectations

For acceptance of Phase 1 (see section 4.4.1) we expect to meet all deliverables.

For acceptance of Phase 2 (see section 4.4.2) we expect to meet all deliverables except possibly some of item c. Delivery of item c is dependent on identifying appropriate early adopters and demonstrators and the cooperation of individuals outside the control of this Project.

For acceptance of Phase 3 (see section 4.4.3) we expect to meet deliverables, c to g, as a minimum. Completion of deliverables a and b are dependent on the outcomes of deliverables c and d in Phase 2. It is likely that further financial resource is required to achieve deliverable a. Completion of deliverables i and j, are dependent on the successful completion of items a and b in this phase and item d in Phase 2.

Completion of Phases 4 and 5 is dependent on the work of earlier phases and as such, we consider the identified deliverables subject to change.

Overall, we will assess the achievement of the Project's aims by monitoring usage of the repository. Example usage metrics are,

- a. number of depositors and their affiliations
- b. number of deposits
- c. the number of first time and returning depositors
- d. the fraction of full text submissions present
- e. the number of downloads of deposited content
- f. the number of systems interoperating with the repository
- g. the time it takes for a publication to appear on external services and inside the repository
- h. the time it takes to process a submission e.g. check copyright and formatting
- i. the time it takes to resolve copyright issues

We will compare measures of these metrics with benchmarks obtained from other (past and present) national/international repository projects.

Finally, we will use feedback and comments obtained from engaging with the User Focus Group and support network to assess the Project's success.

6 Known risks

Known high-level risks at this stage are,

a. Inertial resistance

The Project is likely to encounter significant reluctance from, in particular the university's academic community to interact with the Repository Services, this may in part be driven by a perception that self-archiving of their works is time-consuming and of little value. We believe the likelihood of the Project encountering this type of resistance will vary across the University but in general this risk is HIGH.

b. Uninformed resistance

We recognise that a significant amount of misunderstanding and lack of awareness exists in the academic community about institutional repositories and open access. As a consequence, individuals can become misinformed and ultimately their expectations may not be met. A survey of the repository and open access literature suggests the majority of misconceptions have been addressed but significant effort is required to communicate these issues, hence, this risk is MEDIUM.

c. Informed resistance

Cultural, political and philosophical issues remain subjects of significant debate in the open access and institutional repository communities. In particular, the financial impact of open access on the subscription revenues of small learned societies is of concern to certain academic communities. It is possible that such issues may distract and confuse the main aims of the Project. These issues are rare and invariably confused with 'uninformed resistance'. As a result this risk is LOW.

d. Financial constraints

These may prevent up-scaling of infrastructure from pilot to production service or limit the functionality that the project can implement. This risk is HIGH.

e. Restructuring

The current restructuring of University IT and administration functions may negatively affect services the Project is dependent upon, impacting on deliverables. This risk is MEDIUM.

f. Lack of cooperation

We recognise that consequences of the 2004 merger continue to impact on the workload of individuals and that a degree of 'change fatigue' may exist within certain areas of the university. As a result, we anticipate that this Project may be perceived as yet another centrally-driven activity that is aimed primarily at benefiting administrative functions and reducing costs. As a consequence the Project may experience a lack of cooperation. This risk is MEDIUM.

g. Technical obstacles

It is inevitable the Project will encounter technical problems with the hardware and software. We expect by using well established solutions with an active support community and agreed university frameworks that we will minimise these risks. This risk is LOW.

The Project will prepare more detailed project risk and issue logs.

7 Financial Information

At this time it is understood that the Library will support the day-to-day financial requirements of the Project.

It is likely the Project will require further funds to support up-scaling of the hardware infrastructure.

We note the Technical Support position has been funded for one year in the first instance. It is likely we will need to extend this position to support work in Phase 4.

We will finalise the financial impact of converting the Project to a service in Phase 5.