



UKOLN Strategy and Work Programme

August 2008 - July 2010

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Summary

This document presents the Strategy and Programme of Work for UKOLN covering the period August 2008 – July 2010.

This is a revised version of the document produced in May 2008. Revisions have been made to the MLA Tasks (detailed in WP3 and WP4.17), in consultation with the MLA. These are the only revisions.

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UKOLN Strategy 2008 - 2010

1 Introduction

This document presents the revised Strategy for the organisation from 2008-2010, together with a summary description of the second annual work programme within the three-year funding period, covering activities during 2008-2009. A two-year financial statement is included with explanatory notes. The updated strategy takes into account the planned changes in core funding from MLA and associated implications for UKOLN.

The Strategy reflects the revised strategic objectives of our core funders as described in their forward planning statements i.e. the JISC Strategy 2007-09, the MLA Corporate Plan 2008 to 2011. We will also support the Mission and Aims of the University of Bath. The Strategy encompasses the entire UKOLN portfolio including core-funded work and projects. The Strategy is reviewed and updated annually on a rolling basis.

The Strategy is positioned in a rapidly changing political environment, illustrated by the newly re-branded "Innovation Group" at the JISC, and the significant changes affecting the Museums, Libraries and Archives Council (MLA). In addition there is a very real and growing momentum behind more social and open collaborative approaches to scholarly, research, learning and cultural activities, driven by a range of Web-based tools and applications, delivering enhanced functionality across a vast and diverse corpora of digital material. UKOLN will continue to provide thought leadership, authoritative advice and guidance, innovative technical solutions and to facilitate knowledge sharing within mixed communities of practice.

2 Vision and Context

The open and democratic Web is now deeply embedded in all aspects of our daily lives, in areas of learning, research, scholarly communications and culture; in the workplace and in a range of leisure and lifestyle activities. Transformative examples can be selected from open notebook science (ONS) workflows practised by chemists in the laboratory¹ as part of the OpenWetWare initiative or from another contrasting exemplar of the Staatliche Kunstsammlungen Dresden, which offers Web visitors information about the real life Old Masters Picture Gallery in Dresden and the opportunity to explore the gallery in Second Life².

There is growing emphasis on visualisations, multimedia, the 3D Web and mixed reality environments. Significant further work is needed to understand the potential of using these immersive environments as opportunities for participative exploration and test-beds (rather than multi-user gaming sites), and for investigating new scenarios and contexts, rather than simply mimicking existing structures.

Citizens are avid producers and consumers of information: they readily adopt roles as content creators: they provide tags, annotations, commentary, analysis, opinion, and evidence, which extends and enriches the digital corpus available to all. They also represent an under-used resource, which can be utilised to help to describe, categorise and manage the growing volumes of data and information. One instance of this is the Powerhouse Museum contribution to the Commons on Flickr where historic photos of Sydney Australia from the Tyrrell Collection are being tagged by the public in a collaborative venture to describe the world's public photo collections³. In an example of "citizen

¹ OpenWetWare Lab Notebook Tutorial <http://openwetware.org/wiki/Help:Notebook>

² Old Masters Picture Gallery Dresden <http://www.dresdengallery.com/>

³ Powerhouse Museum and the Commons on Flickr
<http://www.powerhousemuseum.com/dmsblog/index.php/2008/05/06/commons-on-flickr-one-month-later/>

science” are the collaborative efforts to classify a million galaxies in the Galaxy Zoo Programme⁴ from the US Sloan Digital Sky Survey.

In addition, there are a burgeoning number of light-weight Web services which filter, aggregate, harvest, gather and package content and associated descriptions, to assist the consumer in finding, viewing, sifting, sorting and using “stuff”. We need to consider the implications and potential of content aggregations in more depth. We currently tend to talk about various types of primary content such as text, images and data, but we really need to think more about digests, models and simulations. We need to step forward from content aggregations towards “collective intelligence” and explore how we can extract *new* knowledge from the existing open corpus of digital materials. We need to move on from the “discovery to delivery” metaphor and progress to an emphasis on “rate and recommend”, “mine and model” and “simulate and synthesise”.

The expanding collections (or databases) of quantitative data will allow us to use predictive technologies to prefigure behaviours and patterns in environmental, epidemiological, chemical, engineering and sociological contexts in new predictive science. We will use simulations and models to assess and visualise these behaviours and patterns. A recent announcement from the US Department of Energy National Nuclear Security Administration (NNSA)⁵ demonstrates the scope of investment in this area (\$17 Million to each of five University collaborative centers) and the type of applications possible, such as hypersonic flight and supernovae. We need to think about the implications of this scale of science on our UK data curation infrastructure and programmes. We also need to develop robust and trustworthy validation and verification methodologies to provide indicative assessments of the level of uncertainty and assure confidence in the predictive simulations.

These examples assume that substantive content collections (textual, image and data), are treated as infrastructure elements of the digital landscape, and require appropriate curation and preservation over time. The current work to assess the costs of preservation processes and services will be very valuable in informing strategic planning, co-ordination and investment, to ensure a solid foundation of sustainable resources and services.

These innovative and emergent initiatives will demand new skills and roles of the workforce. Students, researchers, librarians, archivists and curators alike will require additional training and professional development to fully exploit the opportunities that will appear. More effort is needed to extend and re-position the curriculum in library schools, museum courses and the wide range of subject domains to ensure that basic Web skills are routinely embedded and more advanced informatics methodologies are understood. Academic libraries in particular will need to devise strategies for working more closely with scholars, perhaps through multi-disciplinary teams to support the increasingly open practice of research and learning. Staff in cultural heritage institutions will need to make significant skill transitions and develop cross-sectoral alliances in order to fully realise the inter-disciplinary potential of the open Web.

In parallel to these changes in the social and technical environment, there have been changes in the political environment. The creation of the Department for Innovation, Universities and Skills (DIUS) signalled a review and re-branding of the JISC Innovations Group to reflect this strategic positioning. UKOLN is now an Innovation Support Centre and we have incorporated this thinking into the new Strategy.

In the cultural sector following the Comprehensive Spending Review, MLA has undergone a major restructuring programme still to be completed, led by a new Chief Executive. This has modified the role and scale of the regional presence, and in future activity will migrate to a small number of staff in the regions co-ordinated centrally, rather than within the current Partnership of regional agencies. There will also be a new emphasis on research and evidence and consumer impact within the strategies and policies of the “new MLA”. As a result of financial restructuring at MLA, UKOLN’s funding basis will change, and will be phased towards a project-based approach over the next three years.

⁴ GalaxyZoo <http://www.galaxyzoo.org/>

⁵ US Department of Energy NNSA announcement <http://nnsa.energy.gov/news/1823.htm>

In 2008, UKOLN has celebrated its 30th Anniversary at the British Library⁶ and the multimedia timeline illustrates how the organisation has successfully adapted to the changing external environment over the years. We will continue to position UKOLN at the leading edge in this highly volatile environment. Our primary role as an observatory and think-tank is required more than ever, and we look forward to the next 30 years leading thinking into the future.

3 Mission and Values

UKOLN has a clear and simple mission statement:

UKOLN is a centre of expertise in digital information management, providing advice and services to the library, information, education and cultural heritage communities by:

Influencing policy and informing practice

Promoting community-building and consensus-making by actively raising awareness

Advancing knowledge through applied research and development

Building innovative systems and services based on Web technologies

Acting as an agent for knowledge transfer

UKOLN has based its Strategy on three fundamental *Values*, which underpin all our activities:

A collaborative and open approach

We believe strongly in working in productive partnership with other organisations and individuals and ensuring that all our publicly-funded outputs are openly available including reports, papers, presentations, data, programs and services

Delivering value-for-money

We believe our products and services represent good value-for-money to the funders and their sectors. The unique blend of expertise and deep knowledge at UKOLN results in rich, authoritative and intellectually rigorous outputs.

Environmentally-friendly business processes

We are taking steps to enhance our business processes to ensure that we fulfil our collective obligation to supporting a “greener” environment.

⁶ UKOLN 30th Anniversary Celebration <http://www.ukoln.ac.uk/events/anniversary-2008/>

4 Objectives, Outcomes and Benefits

Our organisational strategic objectives are linked to specific and measurable outcomes and benefits, to enable both qualitative and quantitative indicators of success to be reported. They are also aligned with the strategic aims of our core funders. For the period 2008-2010, we will:

Objective 1:

Provide leadership in innovative “futures thinking” in scholarly and cultural digital contexts, to inform UK and international strategy and policy at the highest levels.

- 1.1 Act as “an Observatory” to inform UK work on policy formulation and emergent technologies and standards associated with digital libraries in the broadest sense, in higher education and in museums, libraries and archives.
- 1.2 Implement research and development projects to investigate and test innovative thinking.
- 1.3 Raise the profile of UK digital developments on the international stage.
- 1.4 Build productive partnerships with key national and international organisations, professional bodies and government agencies.

Outcomes:

- 1A The relevant policies, strategies, programmes and projects of JISC, MLA, the University of Bath and other major digital library initiatives, reflect strategic input from UKOLN.
- 1B New projects, research reports, conferences and other outputs will be delivered as a result of collaborative national and international partnerships.

Benefits:

The global visibility of UK digital initiatives is increased.

Broader strategic coherence and engagement in collaborative developments, is achieved.

Strategic Alignment:

JISC Aim 1, Priority 6 Promote emergent technologies.

MLA role: “MLA will help to extend the application of new technologies to support improvement and innovation”.

Objective 2:

Support the JISC Innovation Group and its Programmes in the delivery of the JISC Strategy, through collaborative development of an integrated e-infrastructure and a range of ICT-enabled services.

- 2.1 Provide analysis, technical advice and development expertise to progress service delivery and ensure operational best practice.
- 2.2 Contribute to work on collaborative technologies, service-oriented frameworks, information architectures and data models.
- 2.3 Participate in the global development and adoption of open standards, specifications, metadata schema and protocols.
- 2.4 Develop demonstrators and prototypes to illustrate the potential of the integrated Information Environment.
- 2.5 Promote and inform work on both formal and informal approaches to terminologies, knowledge organisation systems, folksonomies and other semantic networks.

- 2.6 Provide advice and guidance on longer-term digital preservation and curation approaches in partnership with other expert bodies.

Outcomes:

- 2A Collaborative models, service frameworks and associated standards are embedded in the development methodologies and practitioner approaches in JISC programmes and projects.
- 2B The deluge of digital content is both accessible and well-managed with optimal prospects for long-term usage.

Benefits:

The development of user-centric services and robust service frameworks based on common standards result in a positive information experience for the user.

The cost-effectiveness of higher education institutional investments in common ICT infrastructure is maximised.

Strategic Alignment:

JISC Aim 1, Priority 5 Develop...e-Infrastructure (e-Framework & Information Environment).

Objective 3:

Inform MLA policies and Programmes which seek to enhance the digital cultural experience for the consumer.

- 3.1 Provide expert advice, policy guidance, research and evidence to the MLA Executive to inform the evolving digital strategy.
- 3.2 Support the effective delivery of MLA Programmes where there are digital outputs.
- 3.3 Input to the development of digital cultural infrastructure services.
- 3.4 Provide advice and guidance on curation and longer-term digital preservation approaches in partnership with other expert bodies.

Outcomes:

- 3A MLA Programmes and projects provide relevant and sustainable digital services.
- 3B Digital cultural content is both accessible and well-managed with optimal prospects for long-term usage.

Benefits:

The development of consumer-centric and sustainable services, result in a creative information experience for the citizen.

The cost-effectiveness of cultural heritage institutional investments in common ICT infrastructure is maximised.

Strategic Alignment:

MLA Strategic Priority 3: "strengthen capacity in the sector to innovate".

MLA Action Plan for Public Libraries, Challenge 4: Digital Change.

Objective 4:

Facilitate informed communities of practice, which implement effective resource discovery, description, management and dissemination strategies, by acting as a transformative “agent of change”.

- 4.1 Produce a portfolio of participative and interactive Web-based information resources for the education and cultural heritage community.
- 4.2 Deliver a range of advocacy activities to promote best practice in embedding digital repositories and other content management systems in institutional strategies.
- 4.3 Strengthen community knowledge and adoption of data curation and preservation methodologies focussing on access, dissemination and re-use of scholarly outputs.
- 4.4 Facilitate raised awareness, knowledge transfer and community integration through high-quality events, data-casts and other responsive information channels.

Outcomes:

- 4A Digital repositories and other content management systems are fully supported as the primary tool for the institutional management and dissemination of digital assets from learning, research and cultural heritage domains.
- 4B Curation and preservation policies and practice are routinely embedded within the strategic and operational plans of education and cultural sector organisations.
- 4C The communities, audiences and stakeholders designated as high priority for UKOLN are all aware, recognise, use and value UKOLN products, services and staff.

Benefits:

Sectoral workforce capacity is increased through the engagement and empowerment of individuals and communities.

Institutions are positioned to provide adequate and appropriate storage facilities and technical support, for their valued digital assets in both the short and the longer-term.

Strategic Alignment:

JISC Aim 1, Priority 7 Build a national infrastructure of interoperable digital repositories.

JISC Aim 6, Priority 15 Improve dissemination and feedback mechanisms between JISC and its target audiences.

MLA Strategic Priority 2 Communities: “ensure museums, libraries and archives are inclusive and support sustainable communities”.

Univ. of Bath Research Strategy Objective 2, Ensure that the University has effective information systems in support of research and knowledge transfer.

Objective 5:

Develop the UKOLN organisation and staff to optimise its relevance, agility and responsiveness to funder requirements and to rapidly changing digital worlds.

- 5.1 Ensure that our communities of practice can contribute to the evolving programme of work and the continuing development of the organisation, through more inclusive Governance structures.
- 5.2 Refine strategic planning methods to reflect external drivers and support the emerging strategies of our core funders.

- 5.3 Secure the long-term sustainability of the organisation in terms of financial robustness and space allocation.
- 5.4 Seek out and extend professional development opportunities to recruit, grow and retain expert staff.
- 5.5 Deliver value-for-money services through the implementation of cost-effective operational management mechanisms and procedures.

Outcomes:

- 5A UKOLN is recognised as an exemplar of organisational best practice within the education and cultural heritage sector.
- 5B UKOLN is valued as a leading and fully self-sustaining world-class department within the University of Bath.

Benefits:

A competitive Return on Investment is realised for core funding agencies, with excellent value-for-money demonstrated in the sector.

Staff have a rewarding working environment with good prospects for personal growth and development.

Strategic Alignment:

JISC Aim 1, Priority 9 Provide cost-effective and user-led advisory and support services.

5 Risk Statement

Risk	Factors which might make this happen	Likelihood	Impact	Control	Action Required	Responsibility	Timescale
Approval for Strategy not obtained	Core Funders do not agree with plans. JIIE not engaged	Low	High	Consultation and feedback	Shared planning Review and negotiate plans	Director	Annual
Unable to progress key Programme Deliverables	Problems with Partnerships. Additional requirements from Core Funders. Over commitment of staff	Medium	High	Monitor progress of activities. Performance management	Review priorities. Investigate obstacles. Consider alternative delivery mechanism	Operations Group/SMT	Monthly
Unable to meet funder/partner/sector expectations	Limited resources. Failure to communicate function of UKOLN. Inappropriate activity	High	High	Monitor feedback from community	Clarify and communicate function of UKOLN. Review activities	Director, staff	Ongoing
Staff retention/ absence	Skied staff leave. Unable to fill vacancies. Long-term sick leave.	Medium	High	Monitor workloads and absences. Staff development.	Review workloads and roles. Pro-active staff development policy.	Operations Group / SMT	Ongoing
Space constraints	Inability to acquire additional space	Medium	High	Seek space off campus	Implement space strategy	Director / SMT	Ongoing
Unable to cover institutional costs	Reduced income. Increased costs	Low	High	Monitor income available to cover charges	Financial planning and forecasting. Diversify income streams	Director / SMT	Ongoing
Under funding or loss of Core Funding	No annual increase in Core Funding. Increased costs. Loss of Core Funder	High	High	Monitor income / expenditure	Early indication from Core Funders of future funding levels. Reduce activity	Core Funders	Annual

6 Appendix A: Work Programme 2008-2009

This section describes a summary Work Programme for one year 2008-2009. The Work Packages relate to the Objectives and *non-core-funded work is in italics*.

WP1 Provide leadership in innovative “futures thinking” in scholarly and cultural digital contexts, in order to inform UK and international strategy and policy at the highest levels.

TASKS WP1

- 1.1 Launch and maintain an “Open Observatory” channel to disseminate innovative developments.
- 1.2 Provide strategic briefings to MLA and JISC Executive to inform digital policy developments.
- 1.3 *Secure involvement in research projects and consultancy work in emergent areas such as open and predictive science, knowledge extraction, collective intelligence and in digital curation and repositories infrastructure.*
- 1.4 Participate in the work programme of the cross-sectoral UK Strategic Content Alliance.
- 1.5 Participate in selected committees, advisory boards and working groups including UKRDS Steering Group, CIR Strategy Working Group, RIN-RC Liaison Group.
- 1.6 Enhance partnerships with core-funder sponsored bodies including Culture24, Collections Trust, JISC Innovation Support Centres and other JISC Services.
- 1.7 Contribute innovative thinking and UK perspectives to European Commission Programmes and key strategic projects e.g. EDL.
- 1.8 Facilitate collaborative initiatives with a range of key international organisations such as CNI, NSF including the Office of Cyber-Infrastructure, DLF, SURF, NLA and Science Commons, to ensure maximum benefit to the UK.
- 1.9 Act as a broker to explore knowledge transfer opportunities with selected industry partners, such as Sun Microsystems (PASIG), Microsoft Research.

WP2 Support the JISC Innovation Group and its Programmes in the delivery of the JISC Strategy, through collaborative development of an integrated e-infrastructure and a range of ICT-enabled services.

TASKS WP2

- 2.1 Support the strategic development and implementation of the JISC integrated Information Environment (IE), its underlying technical architecture, services and Programmes.
- 2.2 Contribute to the development of the e-Framework.
- 2.3 Maintain and develop the structured catalogue-based approach to support JISC standards best practice.
- 2.4 Devise and deliver a programme of activities as the UK DCMI Affiliate.
- 2.5 Provide technical input and co-ordination effort to shared infrastructure services planning and to resource discovery activities more widely.
- 2.6 *Support the integration of shared infrastructure services and repositories and provide expert technical support to the Intute-X-Search Project.*
- 2.7 *Lead and support infrastructure development projects and services including the IE*

Metadata Schema Registry.

- 2.8 *Develop an IE Demonstrator working with JISC data services.*
- 2.9 *Supply analysis, technical and strategic input to repository developments through the JISC Repositories Research Team, the Common Repository Interfaces Group (CRIG), the OAI-ORE Initiative and the SWORD Project.*
- 2.10 *Co-ordinate the development, maintenance and adoption of a group of metadata application profiles by JISC projects and the wider education community.*
- 2.11 Inform and support the Libraries of the Future Campaign through a themed Ariadne issue, collaborative workshops and briefings.
- 2.12 Participate in selected JISC committees, advisory and management boards, working groups and review panels including the Integrated Information Environment Committee (JIIE), Support for Research Committee (JSR), RPAG and the VRE Advisory Board.
- 2.13 Deliver a professional events management service to support appropriate JISC-related conferences, workshops and meetings.

WP3. Inform MLA policies and programmes which seek to enhance the digital cultural experience for the consumer.

TASKS WP3

- 3.1 Work with MLA, Collections Trust and Culture24 to provide futures thinking, expert advice, policy guidance, research and evidence to develop the MLA digital strategy covering content creation, preservation and dissemination.
- 3.2 Support the implementation of the MLA Digital Strategy
- 3.3 Work with MLA, Collections Trust and Culture 24 to develop an Integrated Digital Architecture
- 3.4 Work with MLA to encourage the sector to make greater use of Web 2.0+ technologies and metadata, and to raise awareness of digital preservation and curation issues, sharing best practice and identifying sector skills needs.
- 3.5 Work with MLA and SCL to research and develop a business case for a national inter-library loans service.
- 3.6 Work with the Collections Trust to explore links to proposed national museum object loan service.
- 3.7 Work with MLA, UKERNA and JISC to scope the requirements for a connection to the JANET network for national public libraries.
- 3.8 Attend and contribute to quarterly strategy meetings
- 3.9 Contribute to digital initiatives as part of the Cultural Olympiad.
- 3.10 Deliver a professional events management service to support appropriate MLA-related conferences, workshops and meetings.

WP4 Facilitate informed communities of practice, which implement effective resource discovery, description, management and dissemination strategies, by acting as a transformative “agent of change”.

TASKS WP4

- 4.1 Develop the UKOLN Web site to be more participative and to reflect the key messages in the Communications Strategy.
- 4.2 Maintain and extend the two-way communications channels with our stakeholder communities through blogs and microblogging, wikis and a range of data-casts.
- 4.3 Create and implement a new delivery model for Ariadne Web magazine.
- 4.4 *Publish two issues per year of the International Journal of Digital Curation.*
- 4.5 *Supply expert advice and support to UK HE institutions through the JISC Repositories Support Project.*
- 4.6 *Deliver a training programme to the JISC Repository Start-Up and Enhancement Projects (SUETr).*
- 4.7 *Lead the Digital Curation Centre (DCC) Community Development work which includes facilitating the Research Data Forum, regional workshops with eScience Centres, building links with eScience Programme projects, organising the International Digital Curation Conference and associated report-based synthesis and analysis.*
- 4.8 *Deliver a Web Preservation Training Programme in partnership with ULCC.*
- 4.9 *Co-organise the DCC Summer School.*
- 4.10 *Contribute to the DCC Data Audit Framework development.*
- 4.11 Support the development of digital repository initiatives at the University of Bath.
- 4.12 Organise the annual Institutional Web Management Workshop (IWMW).
- 4.13-4.15 Removed / incorporated into WP3 tasks following discussion with MLA
- 4.16 Provide expert advice on a range of library standards including MARC21, RDA.
- 4.17 Work with museums, libraries, archives and education communities to build pilots and demonstrators to illustrate the potential of new technologies.
- 4.18 Supply a professional events management service to facilitate selected community-driven conferences and workshops.

WP5. Develop the UKOLN organisation and staff to optimise its relevance, agility and responsiveness to funder requirements and to rapidly changing digital worlds.

- 5.1 Implement a more inclusive and innovative approach to governance in liaison with core funders, through creation of a UKOLN “Innovation Cluster”.
- 5.2 Carry out appropriate strategic planning and reporting.
- 5.3 Progress refinement of financial management approaches including predictive forecasting and monitoring.
- 5.4 Enhance internal and external communications through implementation of a new Communications Strategy.
- 5.5 Develop marketing and knowledge transfer activities to promote the key messages to priority stakeholder groups.

- 5.6 Refine our organisational structures for optimal service delivery to funders and the wider community.
- 5.7 Quantify staff skills gaps and capacity issues and implement a team-based support model to mitigate against individual staff dependency and associated risks.
- 5.8 Continue to develop enhanced support services for remote workers.
- 5.9 Review our hardware and software systems and services to reflect the “green agenda” and to operate as a more flexible environment.
- 5.10 Provide day-to-day administrative support for all UKOLN projects and activities.