**Cover Sheet for Proposals**  
*(All sections must be completed)*

<table>
<thead>
<tr>
<th><strong>JISC Digital Infrastructure Programme</strong></th>
</tr>
</thead>
</table>

**Name of Programme Initiative:**  
Managing Research Data: Research Data Management Training Materials

<table>
<thead>
<tr>
<th><strong>Name of Lead Institution:</strong></th>
<th>University of East London (UEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Proposed Project:</strong></td>
<td>TraD (Training for Data Management)</td>
</tr>
<tr>
<td><strong>Name(s) of Project Partner(s):</strong></td>
<td>Digital Curation Centre (DCC)</td>
</tr>
</tbody>
</table>

**Full Contact Details for Primary Contact:**

<table>
<thead>
<tr>
<th><strong>Name:</strong></th>
<th>Gurdish Sandhu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position:</strong></td>
<td>Associate Director – Library and Learning Services</td>
</tr>
<tr>
<td><strong>Email:</strong></td>
<td><a href="mailto:G.Sandhu@uel.ac.uk">G.Sandhu@uel.ac.uk</a></td>
</tr>
<tr>
<td><strong>Address:</strong></td>
<td>University of East London, Library and Learning Services, University of East London, Docklands Campus, University Way, London, E16 2RD</td>
</tr>
<tr>
<td><strong>Tel:</strong></td>
<td>020 8223 6463</td>
</tr>
<tr>
<td><strong>Fax:</strong></td>
<td>020 8223 2804</td>
</tr>
</tbody>
</table>

**Length of Project:** 12 months

| **Project Start Date:** | 1 June 2012 |
| **Project End Date:** | 31st May 2013 |

| **Total Funding Requested from JISC:** | £60,000 38% |
| **Total Institutional Contributions:** | £96'379 62% |

**Outline Project Description:**  
The TraD project aim to embed research data management training practices in the university research culture. It starts with focused needs analysis in Psychology and Computer Science, and library DM support. The project team will adapt psychology training material and create new training material for computer science. The project will use blended learning approach to train research staff and students. The project is committed to support librarians and research support professionals and will extend training sessions to JISC community. We are delighted to be supported by DCC in data needs analysis, training and advice. The project will encourage libraries to engage with the university research and researchers to engage with their libraries.

The outputs and outcomes of the project include: data management training material, online modules, creating data management culture and skills. The outputs and outcomes of the project include: data management training material, online modules, creating a data management culture and enhanced skills across UEL.

**I have looked at the example FOI form at Appendix A, and included an FOI form in the attached bid (Indicate)**  
**YES**  
**NO**
B Appropriateness and Fit to Programme Objectives and overall Value to the JISC Community

TraD (Training for Data Management) will embed training in UEL’s developing support for data management. It will showcase disciplinary training for postgraduates by running courses in psychology and computer science (the latter from newly-created material). It will also enhance skills in a library-run institutional data management setting through devising and delivering training for librarians, reinforced with workshop training for researchers. It targets use cases (a) and (c) of the programme objectives, with indirect benefits for use case (d). UEL has been developing a Data Management (RDM) roadmap since Nov 2011 with the DCC, and TRaD will be a timely intervention that fits into this roadmap, benefiting from in-depth DCC support via the institutional engagement programme.

B.1 Objectives

- To gather and analyse data management training requirements of a variety of academic and support roles
- To adopt and adapt existing training material (specifically DMTpsych\(^1\) and MANTRA\(^2\)) for the School of Psychology
- To create new online training material in computer science (CS), a discipline not covered by previous JISC projects
- To develop skills in data management through creating an online training module for librarians and research support staff based around DCC resources.
- To embed training material within existing curricula and the Graduate School’s Researcher Development Programme (RDP).

B.2 Value to the JISC Community

The hybrid approach at UEL, whereby disciplinary training within postgraduate courses is combined with programmatic support training by and for librarians, will be of interest to other new universities with comparatively modest research bases. These will see value in developing capacity in libraries as the focus of data management support and co-ordination, and in the strategy of targeting curriculum-level training in disciplines with a strong research focus. Data management will thereby be embedded in the organisational culture in a timely but practicable way, and best practice can be shared within and between institutions.

The new curriculum material in computing science will expand the body of open content to a new disciplinary area, and feedback will be given on the reuse of existing content aimed at psychologists. The training material for librarians will be of direct interest to other universities where libraries play a central role in the data management environment, and more generally where central functions support researchers with RDM services. The generic RDP workshop will

\(^1\) http://www.dmtpsych.york.ac.uk/
\(^2\) http://datalib.edina.ac.uk/mantra/index.html
offer researchers grounding in RDM as part of their ongoing development, and will be customised for application in further disciplinary settings. Through DCC’s existing institutional engagement, the lessons learnt from UEL will be transferred to other institutions that the DCC is working with, and the DCC will help promote and disseminate the new materials.

C Quality of Proposal and Robustness of Workplan

C.1 Intended Project Plan

The project will create online training modules for a variety of audiences using Xerte toolkits, with seminars allowing opportunities for interaction with students and workshops helping to embed learning in teaching practice. TraD will comprise the following seven elements:

C.1.1 Planning and needs analysis

The TraD project will begin by identifying data management training requirements through interviews and online surveys, by reviewing existing data management procedures in Psychology and Computer Science, and targeted DAF assessments run by DCC engagement partners. These disciplines were chosen for their commitment to research data, open access and a comparatively large group of research students, in both cases including professional doctorates as well as PhDs. (Requirements gathering will also help inform ongoing RDM work as part of the institutional roadmap, beyond the specific needs of TraD.)

C.1.2 Adoption of training material for use in Psychology

York’s DMTpsych and Edinburgh’s MANTRA, suitably adapted as an online module, will be used in the School of Psychology and evaluated both by staff and students. Experience will be shared with CS through a workshop to help accelerate the process for CS. Issues of arranging training, relating it to existing curricula and embedding it in UEL processes for approving teaching content will be made concrete. Feedback will be offered to York and Edinburgh and areas explored for collaborative dissemination.

C.1.3 Development of training material for use in Computer Science

The Centre for Geo-Information Studies in the ACE will lead the development of CSdm, an online RDM training course for computer science (CS) postgraduate students (and staff). The online course with teaching support will be delivered to CS students in the School and evaluated by both staff and students. Workshops will be held to review the evaluation results and teaching process, and UEL processes explored to adopt the course as core curricula content. The School will also run a workshop to consider how the content can be adapted for its architecture, engineering and sustainability fields. Online courses are particularly appropriate to the School which offers Professional Doctorates in Information Security and collaborates with the Centre for Alternative Technology (Machynlleth, Wales) on MSc courses in sustainability and environment.

C.1.4 Embedding data management training in Psychology and Computer Science

The two Schools will each review their experience of delivering online training materials and report to UEL colleagues through established fora such as UEL’s annual Research Conference and School-level research seminars. Formal mechanisms for embedding the online courses in current curricula will be followed. The Project Advisory Board with the two Schools will recommend university-wide action in support of good data management training for research students and staff.
C.1. 5 Training librarians to support data management

The project team will develop supportDM, a self-directed online training course (designed around DCC resources such as DMPOnline and DCC101) in aspects of data management appropriate to library-centred support services. The Digital Curation Centre will support its development through repurposing DCC101 for UEL and with training for LLS staff. SupportDM will include online resources and course material, lecturer notes and advice on implementing and evaluating it in libraries. UEL subject librarians will test and evaluate supportDM. The course will be aimed at librarians, but should be suitable for other settings which undertake RDM support and coordination (like research offices, IT, corporate governance). The training will also build capacity in LLS to support skills training at UEL: the library is seen as a natural partner across the university, having developed the online Info skills\(^3\) course, to teach students information skills. Experience from supportDM will also inform the RDM roadmap.

C.1.6 Embedding RDM training through researcher development

Library staff thus trained and DCC will then deliver a generic workshop-style training event on data management skills as part of the Graduate School’s ongoing RDP open to academics and research students. As part of RDM roadmap work already scheduled for Spring 2012, two disciplines or research centres will be identified who wish to have a customised version of the workshop delivered to their researchers (either staff or students, or a mix of both); this will provide subject librarians with an opportunity to put their own training into practice, and help to widen the embedding of data management skills at UEL. Evaluation will also feed back to DCC.

C.1.7 Dissemination of experience gained

LLS and the two academic partners will disseminate the teaching materials, evaluation and lessons learned widely in UEL, with the aim of fostering a wider take-up of RDM training and therefore skills. A conference in Mar-April 2013 in conjunction with LIRG the Library and Information Research Group (a special interest group of CILIP) and DCC will share the experience of embedding training for data management support with UEL’s subject librarians – and of related activities, including others funded under this JISC stream. The project will also feed into DCC’s own dissemination work, its blog, roadshows and meetings.

C.2 Timetable

<table>
<thead>
<tr>
<th>WORKPACKAGES</th>
<th>Tasks/Activities</th>
<th>Time scale</th>
</tr>
</thead>
</table>
| WP1 Planning Phase | • Write project plan following grant award  
• Establish Advisory Board and Project Management Group, Recruitment of research assistant  
• Liaise with DCC | Jun-Sep 2012 |
| WP2 Needs analysis | • Analysis in CS and psychology  
• Analysis in library and cognate services | Jun-Aug 2012 |
| WP3 Adapt training material Psychology | • Review DMTpsych and MANTRA in light of existing needs and courses  
• Adapt for UEL content | Jun-Oct 2012 |
| WP4 Develop material for Computer Science | • Research and create online course material CSdm | Sep-Jan 2013 |

\(^3\) http://infoskills.uelconnect.org.uk/home/
C.3 Project Deliverables and Outcomes

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data management requirements reports for both schools (Psychology, Computer Science)</td>
<td>Enhanced knowledge and understanding of data management practices within both schools</td>
</tr>
<tr>
<td>Research data management online training module for Computer Science &quot;CSdm&quot;</td>
<td>Embedded culture of data management in research environments</td>
</tr>
<tr>
<td>Online training module for librarians in RDM support/ enabling roles “supportDM”</td>
<td>Equipping staff and research students with data management skills</td>
</tr>
<tr>
<td>Generic and targeted RDM workshops as part of Researcher Development Programme</td>
<td>Increased awareness of institutional data management issues</td>
</tr>
<tr>
<td>Training support material such as presentation slides, videos and lecture notes; Project documentation</td>
<td>Project team will have developed skills and relationships that can be further exploited for RDM roadmap</td>
</tr>
<tr>
<td>Conference/symposium with LIRG, DCC and JISC</td>
<td>Would have developed collaborative relationship with schools, DCC and JORUM for future projects</td>
</tr>
</tbody>
</table>

C.4 Project Management arrangements

Library & Learning Services (LLS) is leading UEL’s roadmap for data management. This project, a natural fit to the roadmap, would be led and managed by LLS on behalf of the university.
Project: TraD (Training for Data Management)  

Academic leadership will be provided by Prof. Cornelia Boldyreff in CS and Dr Tom Dickins in Psychology. Dr Yang Li will support Prof. Boldyreff with his experience of teaching RDM in existing postgraduate curricula, while Dr Dickins will lead a small pool of colleagues to deliver doctoral-level RDM training. Sarah Jones and Monica Duke from the DCC will support the project through reviewing plans, activities and training content, and by participating in project activities (such as facilitating workshops), as part of DCC’s institutional engagement with UEL to strengthen its RDM capability. They will also provide the Project Advisory Board with a critical external perspective.

The post of Research Assistant will be advertised in June 2012. The RA will help the Project Manager to conduct the needs assessment with participating schools, help the schools design training modules, re-purpose and develop training material. He/she will also ensure widespread dissemination at UEL and beyond. In case recruiting a suitable RA is delayed we will seek interest from current research students for part-time paid internships and make use of existing library staff for administrative support functions.

C.5 Risk Assessment

<table>
<thead>
<tr>
<th>Risk</th>
<th>Probability (1-5)</th>
<th>Severity (1-5)</th>
<th>Score (P x S)</th>
<th>Action to Prevent/Manage Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of effective recruitment; delayed start; early departure of staff</td>
<td>3</td>
<td>5</td>
<td>15</td>
<td>Minimized by choosing more than one clear candidate to take up positions or seconding LLS or Research Support staff to roles</td>
</tr>
<tr>
<td>Unforeseen circumstances result in staff shortage</td>
<td>3</td>
<td>5</td>
<td>15</td>
<td>Minimize by identifying clear alternatives and by recruiting and emphasising champions who support the project and are well placed to ‘step in’ to provide support</td>
</tr>
<tr>
<td>Different priorities and changes to courses could affect the partners’ abilities to deliver project</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>Ensure partners’ commitments. Ongoing advocacy</td>
</tr>
<tr>
<td>Training material not used by the wider research community</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>Minimised by extensive promotion and by working with DCC to promote uptake</td>
</tr>
<tr>
<td>Poor take up of training by subject and research support librarians</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>Work with Library &amp; Information Research Group from the beginning to publicise training course well in advance</td>
</tr>
<tr>
<td>Cost overrun</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>Appropriate budget measurement would be in place. Team has significant budget management experience</td>
</tr>
</tbody>
</table>
C.6 IPR

IPR of training material, reports and other documents produced during the project will be retained by the authors and host institution but freely made available on a non-exclusive licence. Training material will be deposited in JORUM and freely shared under Creative Commons CC-BY licences.

C.7 Sustainability issues

On the successful completion of the project UEL will have established a method to embed RDM training in teaching curricula with evidence from two disciplines, and will have developed capacity for RDM support through training its librarians. Training would be embedded as part of UEL’s RDM roadmap, in the way that Info Skills followed needs analysis for information skills training.

C.8 Technology standards used

OAI-PMH protocol would be used for increased discoverability. Dublin Core will be used for metadata. The project will comply with W3C accessibility standards for online content. E-learning modules will be developed using Xerte open source software.

D Engagement with the community

D.1 Stakeholder analysis

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Interest / stake</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>UEL researchers &amp; students</td>
<td>Research data management training will enhance their data management skills. Their feedback will further enhance the training toolkit.</td>
<td>High</td>
</tr>
<tr>
<td>Senior managers at UEL</td>
<td>Interest in the successful delivery of project. Able to promote project to peers and increase uptake. Project will help engage them further with UEL RDM planning</td>
<td>High</td>
</tr>
<tr>
<td>DCC</td>
<td>Opportunity for further promotion of good research data management practices within UEL. Strengthens the relationship with UEL. Provides practical lessons that can be shared with other institutions.</td>
<td>High</td>
</tr>
<tr>
<td>JISC</td>
<td>Ensuring project objectives are met</td>
<td>High</td>
</tr>
<tr>
<td>Librarians</td>
<td>Availability of training resources to support their institutional data management requirements</td>
<td>High</td>
</tr>
<tr>
<td>Research Support staff</td>
<td>Availability of resources and expertise to support training. Project will help to engage support staff in RDM efforts at UEL</td>
<td>Medium</td>
</tr>
</tbody>
</table>

D.2 Dissemination Plan
### D.3 Evaluation Plan

<table>
<thead>
<tr>
<th>Timing</th>
<th>Factors to evaluate</th>
<th>Questions to address</th>
<th>Method(s)</th>
<th>Measure of success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov-Jan 13</td>
<td>Training module design</td>
<td>Is it feasible within the project resources and time scale? Does it meet schools requirements?</td>
<td>Review by trainers and advisory board</td>
<td>Positive feedback</td>
</tr>
<tr>
<td>Mar-Apr 13</td>
<td>Training modules</td>
<td>Have research staff and students improved their understanding of RDM best practice?</td>
<td>Interviews, group discussions, survey</td>
<td>Evidenced shown by participants</td>
</tr>
<tr>
<td>Mar-Apr 13</td>
<td>Workshops</td>
<td>Improved librarians’ understanding</td>
<td>Discussion, survey</td>
<td>Positive feedback and evidence</td>
</tr>
<tr>
<td>Ongoing</td>
<td>Quality of training material in JORUM and ROAR@UEL</td>
<td>Is it being used?</td>
<td>Gather usage statistics</td>
<td>Number of downloads</td>
</tr>
</tbody>
</table>

- **Establishment of project blog**
  - **Jun 12**
  - **Activity**: News on UEL, JISC and DCC websites
  - **Audience**: Publicising project
  - **Purpose**: Raising project awareness
  - **Key Messages**: Project summary and funding news

- **News on UEL, JISC and DCC websites**
  - **Jun-Jul 12**
  - **Activity**: News on UEL, JISC and DCC websites
  - **Audience**: Publicising project
  - **Purpose**: Raising project awareness
  - **Key Messages**: Project summary and funding news

- **Training course pilots**
  - **Nov-Mar 13**
  - **Activity**: Training course pilots
  - **Audience**: Participants, stakeholders
  - **Purpose**: Stakeholder engagement
  - **Key Messages**: Project outputs and seeking feedback

- **LIRG symposium**
  - **Mar-Apr 13**
  - **Activity**: LIRG symposium
  - **Audience**: Librarians, library schools
  - **Purpose**: Awareness, skills development
  - **Key Messages**: Training

- **Internal & external presentations**
  - **Feb-May 13**
  - **Activity**: Internal & external presentations
  - **Audience**: Librarians, academics, research support professionals
  - **Purpose**: Sharing RDM knowledge
  - **Key Messages**: Sharing knowledge and project outputs

- **JISC summative RDM training workshop**
  - **May 13**
  - **Activity**: JISC summative RDM training workshop
  - **Audience**: Librarians, researchers, research support staff
  - **Purpose**: Sharing RDM training knowledge across JISC-funded projects
  - **Key Messages**: Sharing knowledge and project outputs
F Previous experience of the Project team

Gurdish Sandhu is Associate Director of Library & Learning Services at University of East London. Gurdish has delivered several large scale internal and external projects ranging from collections management, establishment of integrated help desk, replacing and developing library systems /technology etc. Gurdish has qualifications, knowledge and experience in information science, software engineering and management, a unique combination required to deliver technical and non-technical projects successfully. She enjoys building and sustaining partnerships with academics, other HEIs, FEIs and suppliers at national and international level. She established library research support service from scratch and is proponent of open access and open data.

Stephen Grace is Research Services Librarian since October 2011; he drafted UEL’s Research Data Management Policy and is leading the university’s developing Data Management roadmap. Previously, he was Digital Curation Manager at King’s College London where he led the planning and delivery of AHDS training workshops and was active in data management-related research.

Dr. Tom Dickins is Reader in Evolutionary Psychology, Chair of the School of Psychology Research and Knowledge Exchange Committee, its Lab Coordinator, and School Representative on the UEL Research and Knowledge Exchange Committee. He oversees activities relating to projects and postgraduate theses (where students use experimental quantitative and/or qualitative data).

Professor Cornelia Boldyreff is Associate Dean (Research and Enterprise) in the School of Architecture, Computing and Engineering (ACE). As well as directing her own research programme in open source software and systems, she supervises PhD students and co-ordinates the School's knowledge transfer and research efforts. She also engages in organising conferences, including ACE's own annual research conference. She will be supported by Dr Yang Li, Research Fellow in the School's Centre for Geo-Information Systems. He is a specialist in data cleansing, data integration and geo-computational analysis including data quality modelling and sensitivity analyses. He is active in teaching data management for several modules of ACE’s computer science programme.

Sarah Jones and Monica Duke of the Digital Curation Centre are active in developing the UK’s data management capacity through DCC’s research and training, and through their institutional engagement activities. They will offer training in DCC101lite, run DAF assessments and provide an external QA function for the project.

G FOI Withheld Information Form

We would like JISC to consider withholding the following sections or paragraphs from disclosure, should the contents of this proposal be requested under the Freedom of Information Act, or if we are successful in our bid for funding and our project proposal is made available on JISC’s website.

We acknowledge that the FOI Withheld Information Form is of indicative value only and that JISC may nevertheless be obliged to disclose this information in accordance with the requirements of the Act. We acknowledge that the final decision on disclosure rests with JISC.

<table>
<thead>
<tr>
<th>Section / Paragraph No.</th>
<th>Relevant exemption from disclosure under FOI</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Staff Costs (Budget)</td>
<td>Data Protection Act 1998</td>
<td>Individuals pay details</td>
</tr>
</tbody>
</table>
JISC
Northavon House
Coldharbour Lane
Bristol
BS16 1QD
15th March 2012
Dear Sir/Madam,

JISC Circular 01/12: JISC Digital Infrastructure Programme: Managing Research Data:
Research Data Management Training

I would like to confirm the University of East London’s (UEL) full support for the enclosed proposal. It is fully aligned with the University’s Research & Knowledge Exchange strategy which is driven by UEL’s Transformation for Excellence strategy.

UEL’s Library and Learning Services have developed an impressive portfolio of research support services in the last five years and is committed to supporting the University’s research & knowledge exchange activities.

Recently, the Research & Knowledge Exchange Committee gave the library responsibility for leading the implementation of Research Data Management Policies and plans. This JISC call is very timely for UEL and the proposed project will equip our researchers with improved data management skills and practices.

Our library has established the University repository roar@uel with JISC funding which is recognised as a strategic asset to support UEL’s research activities. The library has also developed various digital archives with JISC funding and has established an excellent relationship with the JISC community. This project will not only develop our researchers’ skills but will also roll out the training material for librarians at national level. UEL’s library has significant experience of embedding digital archives and research repositories within teaching and research programmes and is well placed to deliver this project.

The project team will be led by Gurdish Sandhu, our Library Associate Director, who has successfully delivered several JISC projects. The University is fully committed to undertaking this project.

Yours sincerely,

[Signature]

Professor John Joughin
Deputy Vice-Chancellor
Managing Research Data Proposal

I am glad to offer DCC’s support for the proposal from the University of East London. It builds on the work we are already undertaking with them to improve research data management capability and capacity, backed both by our JISC core grant and HEFCE’s University Modernisation Fund. Success with this proposal would enable UEL to achieve even more as a result of our work with them, and our existing strong working relationship will make it straightforward for us to ensure that the project’s outputs and outcomes are drawn to the attention of a wider audience and reused where appropriate.

It is for these reasons that we are content to be an unfunded but active partner in this proposal, as is the case with all of those coming from institutions where we are already undertaking funded engagements and where the project proposal is well-aligned with the work we are funded to do.

Your sincerely

[Signature]

2012-03-14

Kevin Ashley
Director, Digital Curation Centre
2012-03-14

The DCC – because good research needs good data
Supported by JISC
JISC
Northavon House
Coldharbour Lane
Bristol, BS16 1QD

14th March 2012

Dear Sir/Madam,

As Chair of the Library & Information Research Group (CILIP) I am writing to confirm that we offer our support for the UEL proposal submitted under JISC Grant Digital Infrastructure Programme: Managing Research Data: Research Data Management Training. As a group representing professional researchers and practitioners we are aware that this area of research management is currently high in profile and of key importance.

The Library & Research Information Group (LIRG) is committed to develop information professionals’ skills in undertaking research and supporting research. We organise conferences, seminars, training sessions and workshops throughout the year on emerging research themes. Certainly we would be interested in disseminating the findings of this project along with seeking opportunities to exploit any materials in a way that would improve the skills and knowledge of librarians; for example by incorporating training in our regular programme of workshops held nationally.

LIRG is happy to offer support to the project and is confident that the lead role provided by Gurdish Sandhu our Vice Chair and current Treasurer of LIRG, will ensure that the project is a success. To conclude I confirm that the proposal has the support and backing of The Library & Information Research Group.

Yours Sincerely,

[Signature]

Ronan O’Beirne M.Ed. FCLIP.
LIRG Chair