# University of Stirling: Research Data Management Roadmap v8 April 2017 http://chimpcam.com/wp-content/uploads/2009/11/Stirling-Uni-Logo.jpg

Aligned to meet the EPSRC’s data expectations - https://www.epsrc.ac.uk/about/standards/researchdata/expectations/

| **Current University Policy/Practice (A)** | **Future University Policy/Practice (B)** | **Work undertaken or required or to get from A to B** | **Timing of work** | **Resources required? (Human and Financial)** |
| --- | --- | --- | --- | --- |
| 1. **EXPECTATION 1. INTERNAL AWARENESS** 2. Research organisations will promote internal awareness of these principles and expectations and ensure that their researchers and research students have a general awareness of the regulatory environment and of the available exemptions which may be used, should the need arise, to justify the withholding of research data; | | | | |
| There is a variable level of awareness across the institution about the risks associated with poor data management and the requirements of funders. Whilst there is some RDM training and staff resource available, knowledge of this could be better disseminated.  Training regarding the Freedom of Information Act is part of staff induction and annual refreshment training is provided for key individuals. However, this is not specifically targeted at researchers. | The University will make all relevant staff aware of the expectations of research funders, and will provide training, support, advice, guidelines and, where appropriate, templates for research data management plans and training on the preparation of data for deposit in a repository.  Training and support provision for researchers will cover the entire regulatory environment, including Freedom of Information (supplementing existing resources and training), Intellectual Property and commercial interests etc. | Awareness raising and advocacy events held within Faculties or University-wide working with the Faculty Research Directors and the Graduate School as appropriate.  RDM web pages  Customisation of DMPOnline  Links have been added from the RDM web pages to the online modules of the University of Stirling Induction on Data Protection, (covering Records Management; Information Security; Data Protection and FOI) | Continuous on-going programme, e.g., research bites  Continuous updating  Autumn 2017  Continuous | Led by RIS and LARS  Led by LARS and RIS.  Led by LARS and RIS.  Data Protection Officer, LARS and RIS |
| 1. **EXPECTATION 2. ACCESS STATEMENT** 2. Published research papers should include a short statement describing how and on what terms any supporting research data may be accessed. | | | | |
| Details of supporting research data and how this can be accessed are rarely included in published research papers. However, practices are variable by individual and publisher.  Research Data Management plans are included within research proposals wherever required by the funder. | Details of how and on what terms supporting research data may be accessed is to be stated in all relevant research papers.  New research proposals will include research data management plans or protocols that explicitly address data capture, management, integrity, confidentiality, retention, sharing/access and publication.  Research data management plans will ensure that research data are available for access and re-use where appropriate and under appropriate safeguards. | Open Access Policy effective from April 2013 requires that RCUK funded publication to detail how underlying data can be accessed.  Field added into DataSTORRE/RMS/Research hub with data location  Agreed at Research Committee that IS should see research proposals at an early stage to be involved in discussions about storage, etc. Need to investigate how to do this  Customisation of DMPOnline  To feature as part of the guidance, support and training for researchers, continuous programme.  Procedures for checking statement are included in all relevant research papers to be established. Include within workflows | Ongoing  Ongoing  Autumn 2017/Spring 2018  Autumn 2017  Ongoing  Ongoing | Led by LARS and RIS.  Led by LARS and RIS.  Led by LARS and RIS.  Led by LARS and RIS.  Led by LARS and RIS.  Led by LARS and RIS. |
| 1. **EXPECTATION 3. POLICIES AND PROCESSES** 2. Each research organisation will have specific policies and associated processes to maintain effective internal awareness of their publicly-funded research data holdings and of requests by third parties to access such data; all of their researchers or research students funded by EPSRC will be required to comply with research organisation policies in this area or, in exceptional circumstances, to provide justification of why this is not possible. | | | | |
| Information on research data holdings, and third-party requests to access them, are not collected centrally. | Appropriate communication systems will be put in place to ensure that staff are aware of how research data is held, funder policy requirements for access and requests made by third parties to access the data.  Systems will be scoped and developed to support the capture of this data. Workflows will be amended to ensure compliance. | Development of an institutional RDM policy and procedures to implement the policy. Future review and monitoring activity to be scoped and implemented. Overall responsibility for the policy will sit with the Research Committee.  DataSTORRE launched in December 2015 | Policy will be reviewed and updated, e.g., to include DataSTORRE May 2017 | To be developed by RIS and IS and approved by the Research Committee |
| 1. **EXPECTATION 4. NON-DIGITAL DATA** 2. Publicly-funded research data that is not generated in digital format will be stored in a manner to facilitate it being shared in the event of a valid request for access to the data being received (this expectation could be satisfied by implementing a policy to convert and store such data in digital format in a timely manner); | | | | |
| Research data, whether digital and analogue, are not centrally monitored, rather it is held locally by researchers.  The University has generic record retention guidance which states that information relating to research grants should be retained for 10 years after last date the data was accessed. | A central record of the location of publically funded data, whether in digital format or not, will be held.  There is no requirement for data to be stored centrally or at the University as long as it is stored in a reasonable manner that facilitates sharing. (e.g., metadata included in the central catalogue.)  Where data is not in digital format the University will make provision for post-2015 research data stemming from EPSRC funded research to be made accessible either via an alternative format, or in person at the university | DataSTORRE launched in December 2015.  The researcher needs to add the metadata either to DataSTORRE or to the Research Hub, to record where the data is held.  We need to establish procedures on how paper records and physical data should be handled | Dependent upon Research Hub project 2017/18  Spring 2018 | Led by RIS and LARS  Led by RIS and LARS |
| 1. **EXPECTATION 5. METADATA PUBLICATION** 2. Research organisations will ensure that appropriately structured metadata describing the research data they hold is published (normally within 12 months of the data being generated) and made freely accessible on the internet; in each case the metadata must be sufficient to allow others to understand what research data exists, why, when and how it was generated, and how to access it. Where the research data referred to in the metadata is a digital object it is expected that the metadata will include use of a robust digital object identifier (For example as available through the DataCite organisation - [http://datacite.org](http://www.datacite.org/)). | | | | |
| No centralised approach. Metadata relating to research data made available is dealt with locally by researchers. | Research data held within the University (or elsewhere, for example in an overseas data service or domain repository which complies with the relevant legislation) will be recorded within the University’s Research Management System, with metadata records available to external viewers.  The University will adhere to appropriate, approved and consistent metadata standards which enable data harvesting. | DataSTORRE launched in December 2015  The researcher needs to add the metadata, either to DataSTORRE or to the Research Hub, to record where the data is held. | Dependent upon Research Hub project 2017/18 | Led by RIS and LARS |
| 1. **EXPECTATION 6. RESTRICTIONS** 2. Where access to the data is restricted the published metadata should also give the reason and summarise the conditions which must be satisfied for access to be granted. For example ‘commercially confidential’ data, in which a business organisation has a legitimate interest, might be made available to others subject to a suitable legally enforceable non-disclosure agreement. | | | | |
| No centralised approach to providing metadata about commercially sensitive research data. The commercial sensitivity of any project is considered at the research contract stage. | The legitimate interests and personal data of the subjects of research data will be protected. Data shared or deposited in repositories will not contain any personal un-anonymised information.  Exclusive rights to reuse or publish research data will not be granted to commercial publishers or agents without retaining the rights to make the data openly available for re-use, unless this is a condition of funding.  Guidance will be provided to researchers so that they can apply the safeguards appropriate for their own data and describe it in their DMP. | Responsibility lies with the Principal Investigator. Guidance is provided to all staff on the anonymisation of data.  DataSTORRE reminds academics that they must seek third party permission | Ongoing  Ongoing |  |
| 1. **EXPECTATION 7. PRESERVATION** 2. Research organisations will ensure that EPSRC-funded research data is securely preserved for a minimum of 10-years from the date that any researcher ‘privileged access’ period expires or, if others have accessed the data, from last date on which access to the data was requested by a third party; all reasonable steps will be taken to ensure that publicly-funded data is not held in any jurisdiction where the available legal safeguards provide lower levels of protection than are available in the UK | | | | |
| The CARDIO exercise indicated a lack of awareness of data back-up and storage facilities, both in-project and post-project | Research data of future historical interest, and all research data that represent records of the University, including data that substantiate research findings, will be offered and assessed for deposit and retention in an appropriate national or international data service or domain repository (which meets relevant legislation), or the University repository. | DataSTORRE launched in December 2015 | Ongoing |  |
| 1. **EXPECTATION 8. CURATION** 2. Research organisations will ensure that effective data curation is provided throughout the full data lifecycle, with ‘data curation’ and ‘data lifecycle’ being as defined by the Digital Curation Centre. The full range of responsibilities associated with data curation over the data lifecycle will be clearly allocated within the research organisation, and where research data is subject to restricted access the research organisation will implement and manage appropriate security controls; research organisations will particularly ensure that the quality assurance of their data curation processes is a specifically assigned responsibility; | | | | |
| Practices unknown. The CARDIO exercise indicated that there were few departmental or group policies relating to RDM (or little awareness of these).  Guidance for effective data curation linked with expectation 9 | Research data will be managed to the highest standards throughout the research data lifecycle as part of the University’s commitment to research excellence. | Scope the current IS storage capacity and ability to meet future requirements.  Develop procedures including end of life data review and destruction.  Develop guidance for academic staff on data curation to be delivered online and through training | Creation of research drive, Spring 2017  Awaiting finalisation  RDM web pages updated January 2016 and training materials and other resources identified | Led by LARS and Infrastructure Development  Infrastructure Development |
| 1. **EXPECTATION 9. RESOURCING** 2. Research organisations will ensure adequate resources are provided to support the curation of publicly-funded research data; these resources will be allocated from within their existing public funding streams, whether received from Research Councils as direct or indirect support for specific projects or from higher education Funding Councils as block grants**.** | | | | |
| Currently storage space is limited and an identified risk is lack of appropriate storage space in future. The University has allocated resources to invest in its It infrastructure and particularly it storage capacity. | The University will provide mechanisms and services for storage, backup, registration, deposit and retention of research data assets (including their curation) in support of current and future access, during and after completion of research projects. (This could include guidance on costing and business planning) | Investigate permissible RDM costs in research proposals and current RDM costs included within proposals including (including through TRAC)  Agreed at Research Committee that IS should see research proposals at an early stage to be involved in discussions about storage, etc. Need to investigate how to do this  Provide guidance on cost of different levels of storage space.  Scope the current IS storage capacity and ability to meet future requirements. Implement as appropriate.  Raise awareness of cost of RDM and how this can be funded. | Need to work on this  Autumn 2017/Spring 2018  Creation of research drive, Spring 2017  Creation of research drive, Spring 2017  On-going | Led by Finance?  RIS and LARS and Faculties  Led by Infrastructure Development  Led by Infrastructure Development  Led by RIS and LARS |