Open access to peer reviewed journal articles is one of the key messages of the current international movement that is changing the paradigm of scholarly communication. Creating open access journals is one such route and creating institutional repositories containing author generated electronic text is another complementary alternative. Pioneering subject based repositories, such as arXiv, have shown the way in specific disciplines but a joined up approach is required for a broader reach. Open Access standards have given the opportunity for a variety of database models to coexist and be beneficial to authors in a variety of ways. Developments in Institutional Repositories are now happening globally and significant models are gradually emerging which demonstrate best practice and illustrate their potential. In the UK, the FAIR (Focus on Access to Institutional Resources) Programme is based on the vision of open access. It has project funded a number of repositories, and has enabled the issues to be explored in practical experiments.

The Institutional Repository agenda, however, is in reality, rather broad. Research and teaching provide a range of scholarly outputs including research publications, the raw data on which the research is based and the learning objects which distil the new insights into a manageable product for the learner. This broad span involves a wide variety of issues to be solved and a number of disparate standards to be tackled. The TARDis (Targeting Academic Research for Deposit and Disclosure) project at the University of Southampton in the UK, targeted academic research for its Institutional Repository in its first stage as a manageable goal with key benefits for the institution. The implementation of the Southampton University Research Repository (e-Prints Soton) followed a route based on studying current practices and needs and on acting on feedback from both the institution management and individual faculty members. The TARDis Route Map below illustrates the series of steps which were taken to build a framework for a sustainable repository for a large multidisciplinary institution.

The institution is represented by a broad spectrum of publication types including, but not exclusively, peer reviewed journal articles and the different disciplines have evolved different recording practices and differing attitudes to making full text freely available. Full text deposits offer the opportunity for added value elements – e.g. links to the full text of the published online version, enhanced diagrams, additional data or presentations - and we are beginning to see interesting exemplars. The repository can then provide the building blocks for enhanced collaborative e-research. Academic institutions that impose research reporting on an institutional repository require full recording of publications and this was a major guiding factor during the TARDis Project. To support this requirement, Southampton EPrint software developers are pioneering a plug-in ‘RAE Management’ module. A practical route is therefore, to develop an
institutional repository which is ‘hybrid’ – containing both records and full text where achievable

While the traditional subject repositories have often developed in STM areas the TARDis Route Map proposes an effective model to also showcase the research of the Social Sciences and Humanities where the range of publication types is quite different. It demonstrates the key drivers and interactions that have influenced the development and the strategic direction of the Southampton University Research Repository (e-Prints Soton) which we believe will lead to open access to research results in a sustainable way. Only with a route planner which addresses the needs of authors in a spread of disciplines can the institutional repository begin to meaningfully represent the whole. The interdisciplinary nature of research can also be illustrated by the repository and the task of depositing can be eased when multiple local authors in different disciplines work together.

Along this route, the technical and management issues eg authentication and quality assurance of the metadata generation may become more complex initially because of the increased size of the database. Researchers issues need addressing, often softened by the one record for many applications advocacy. However the significant outcome of this approach is that the full text element can grow: as the practice becomes more natural within the author’s publication workflow; as funding agencies mandate deposit and as copyright restrictions ease. In the UK, several factors including the Research Assessment Exercise and citation impact measures based on increasing open access could also help encourage this change. The goal of providing open access through institutional repositories to peer reviewed research items may therefore, be achieved by a more circuitous but in the end, more sustainable route.

The TARDis Route Map