

## §11. Institutional Repository as Research Infrastructure for Social Responsibility

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A mini-workshop on the Institutional Repository (IR) at inter-university research institutes was held at NIFS on January 20, 2009. This report is prepared on basis of the presentation given by the author at the mini-workshop aiming to give a principal guide line to IR at inter-university research institutes.

Institutional repository is a part of information infrastructure of an academic institution. It is expected to disseminate scholarly information as products of activities in the institution. Nobody rejects that the system, as information infrastructure, should provide appropriate services and functions such as search engine optimization, and the operation should guarantee accessibility to intended audience.

Institutional repository must meet the mission and policy of the institution in its usages and applications. Academic institutions, in turn, should satisfy social responsibility with the following two aspects.

The first aspect, accountability to social investment, forces them to contribute to develop the nation and their sponsor of research. The second aspect sounds familiar in particular for nuclear scientists: scientists are responsible to social consequences of their scientific results and products. It does not necessarily bring scientists to closed self-accusing sessions and remorse to agony life, but it emphasizes importance of communication among scientists of various research fields and non-scientists (including professionals in the other areas) to search for common ground and open discussion towards ways to improve society.

What roles does institutional repository play in each aspect? In the first aspect of social responsibility, institutional repository has already served as “research showcase”. Some research universities and funding agencies have mandated open access of journal articles produced by their supports. Data sharing via institutional repositories, which is expected to reduce redundant experiments and equipments and thus total costs of academic activities in the macro-level, is a trend in Europe in the

context. It is strange that, although partly derived from this model as in Europe and US, the current evaluation system of researchers and institutions in Japan do not generally require them to allow access to their products of activities for general public.

It is the second aspect that may well be elaborated for demands for science communication. Intended audience of scholarly information thus should not be limited to researchers in the very field of interest, but to all stakeholders. It follows again that open access to scholarly information is required in the sense. Of course open access by itself is not satisfactory for the purpose of science communication as openly providing information is just a prerequisite for building common ground of discussion. Non-trivial process toward mutual trust calls for sustained efforts with tolerance and mutual respect in every stakeholder in addition to information open to them.

Moreover, the demand for communication also calls for the future references for next generations. It drives preservation of not only scholarly information but also administrative archive of academic institutions. Digital preservation does not require physical space any more than paper. It may however need professional treatment for data format conversion and media deterioration, and thus digital preservation cost is expected to be expensive than paper. Future users of the information, who may include historians of science and researchers of scientific policy and management, need of information about the context of the research activities. They will need editing and commentary as well as accessibility to such information.

Institutional repository is mere information infrastructure. Commitment of researchers and academic institutions to open access is essential for institutional identity. Involvement of interdisciplinary groups of researchers, librarians, and technicians of information preservation is also indispensable for facilitation of information in the future.

This work was conducted under NIFS Collaborative Research Program (NIFS08KVXA001).