§7. Practical Issues in Management of the Cooperative Internet Information Retrieval Systems of Multiple Scientic Archives

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i) Current Status — Managing the archives facilities for records of activities of researchers, their communities, and academic institutions, in particular for scientific ones, is not an established practice in Japan. The NIFS collaboration program which supports the studies of this kind of tasks is very much appreciated by the people who are working on it. This collaboration is focusing on the practical issues of management of databases of such archives and the methods and facilities to promote effective use of them.

As already reported in previous NIFS Annual Reports[1], the database development has been practiced since a few years ago, and key issues are the following: (1) Multiple archives databases can be handled jointly so as to allow simultaneous search of related documents from various archives, (2) for this purpose the database structures must conform with well-accepted standards for the archival description, and (3) the database are available online by use of public network (internet). Such systems are referred as *Information Sharing System* in this report.

By this collaboration two classes of the database systems have been targeted and comparison of them are made:

[A] *The SOKENDAI Archival Information Database,* the collaborative archival databases of Sokendai and its parent research institues[2].

[B] A database server for *finding aids* (catalogue data) of *Memorial Archival Libraries of H. Yukawa, S. Tomonaga, and S. Sakata*[3].

These two systems have been operated fairly well with pre-designed functionalities for general purpose systems, however, they have not been developed sufficiently for real usages requirements. It is necessary to identify and adjust some unfavorable features which users may encounter in practical situations. In the following sections some of the issues studied in this project are described.

ii) Finding Niche of The Archives — It is observed during the collaboration is going on. (1) Scientific institutions are established only to envision their own goals of research activities and usually lack the offices and personnels to manage archival documents and records, therefore it is hard to define divisions or office for them inside the institutions with proper resources. This fact may be a serious obstacle for well-maintained long-term operation of the archives. (2) As previously reported, *The Public Records and Archives Manage-ment Act* has been ef-fective since 2011, and documents and records of Inter-University Research Institute Corporations must be han-dled accordingly. This law also describes that some regis-tered facilities may keep historical documents other than corporate official records. The archives of scientific in-stitutions may request to register its division or office as a such facility, but the merit of doing so is not clear. It may necessary to consult with lawyers or experts on this matter.

iii) Cost: Participating Institutions — Due to the above reason, the institution scientific archives rarely have enough budget to maintain the archives, and therefore it may not be easy to spare the money to participate APS server of the Sokendai Information Sharing System of [A] in usual situation. Considering this, alternative system for the database server are looked for, and a system developed by a Sokendai staff is now considered as a possible candidate.

iv) Maintenance: Open Software System — For further development of project [B], serious difficulty is that proper staffs with expert skills cannot be assigned to maintenance of the system long enough time span. Recently, *archon*, the open software adopted by [B], announced that its maintenance and further development will be ceased and that a different software system is recommended for replacement. However, the new system is developed with a slight different philosophy and it is not straight to follow the recommendation and obviously at least an expert has to work on this at the server cite. It is possible to maintain presently existing system as it is and it is decided to postpone the replacement until the archives are ready to do so.

v) Tentative Summary — The collaboration could locate some difficulties as described above, and they will be and must be able to get around. In spite of this, the archival description database can be maintained in rather satisfied manner in one way or another in the present situation. We need to solve the issues step by step.

1) Y. Takaiwa et al., Annual Report of NIFS, 2015, p.446.

2) `http://www.i-repository.net/il/meta_pub/G0000093OUDAN`

3) `http://yhal.yukawa.kyoto-u.ac.jp/archon/`