

## The DRF (Digital Repository Federation) report during 2006-2008

DRF Coordinating Committee

### Introduction

Problem on IR arisen from DRF

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Hokkaido University / Chiba University / Kanazawa University have organized Digital Repository Federation (DRF: 25 universities and 58 universities participated in 2006 and 2007, respectively) and worked on cooperation activities with support from CSI (Cyber Science Infrastructure) in order to form an IR community for IR promotion.

Main activities are:

- (1) Construction of mailing list for information exchange on IR / Open Access and Wiki.
- (2) Workshop for IR / Open Access
- (3) International symposium for IR / Open Access
- (4) International survey on cooperation model for IR
- (5) Discussion on ideal future IR community

We have clearly recognized problems through these activities.

Firstly, library staff must be able to explain the meaning of publishing academic achievements in IR to universities / institutions and researchers. We believe that information transmission by IR is an activity across the academic fields and aim to share the basis of IR, which is a new way of carrying out accountability in the information open access society. IR should be coming to be more and more important for universities / institution libraries.

Secondarily, it is crucially important to increase contents of IR and improve their quality. Therefore, it is necessary to seek strategy to increase the researchers who register academic achievements.

Thirdly, all library staff should be able to manage IR. In order to correspond to the unavoidable personnel relocation, it may be good to add IR management to the nationwide training course. Then it will be easier for us to cooperate with each IR.

Fourthly, it is necessary to confirm if IR was helpful for the researchers who

registered their academic achievements and those who accessed the information. We wish to analyze attribute of users at least.

It has not been long since DRF started. However, what has made IR progress firmly is CSI project of NII and support from universities / institutions, and devotion of the library staff participates in DRF. We respect and thank all of these.

### **Chapter 1 Purpose and achievement**

The commissioned project of Institutional Repository Program (2007-09, hereinafter called NII cooperation project), which is a project of Cyber Science Infrastructure (hereinafter called CSI), started and 19 universities started working on establishments of repositories as a commissioned project of NII in 2005 (positioning of pilot project in the first year). Introductions and progresses of the repositories in the 19 universities were utilized as leading examples in other libraries and have become a factor for the spread of repository with support from NII.

In 2006, NII collected universities that participate in the commissioned project by public issue and the cooperation project has become an official project. In 2007, we collected even more universities and consignees have increased to 70 institutions in total. As the project progresses, repositories have been established one after another in institutions other than the consignees and institutional repositories are spreading rapidly in domestic. For the number of establishment, Japan is fourth in the world behind the U.S., U.K. and Germany.

On the basis of such progress of the CSI project, we describe the purpose and achievements of DRF here.

The public issue for the cooperation project in 2006 was conducted for two areas, Area 1 and Area 2. The theme of Area 1 is "Construction / Operation of Repository" and that of Area 2 is "R & D project for Pioneering Repository".

Digital Repository Federation (hereinafter called DRF) is a program commissioned / conducted as a commissioned project of the NII cooperation project and the theme at the time of subscription was "Activation of Institutional Repository Community".

In the "Activation" program, Hokkaido University is a project manager and Chiba University and Kanazawa University are applicants as cooperating universities and Hokkaido University acts as a main consignee. Therefore, Hokkaido University receives the project cost and is in charge of budget implementation while it hosts servers for Wiki and the DRF mailing list. Chiba University and Kanazawa University are in charge of business related to a training course and process management of the project,

respectively.

In Europe such as the U.K. and the Netherlands, pilot projects of institutional repositories are conducted in several high educational institutions by support programs of financing organizations and case studies have been carried out. The most famous project is FAIR Program by JISC support in the U.K. FAIR consists of a lot of small programs and each program is conducted by almost different plural high educational institutions to achieve required results, while the experience is shared in the U.K. and has become a base for spread and promotion of institutional repositories. There is DAREnet by support of SURF in the Netherlands as a nationwide integrated program in one country. DARE is not an aggregation of plural initiatives by plural institutions such as FAIR but is a single national program. This is a successful case of the institutional repository program that is suited for a comparatively small country.

The cooperation project of NII is a program that is quite similar to the U.K.'s FAIR and we can say that incentives by sponsorship have promoted the establishment of repositories in our country. The original organizational goal of NII is not a function as a financing organization such as JISC however there is a historical significance for providing the incentive that promotes the nationwide distribution of academic contents as a commissioned project to university libraries in our country.

On the other hand, initiatives in Europe and the U.S. consisting of plural universities and high educational institutions have been proceeded by information sharing and experience by collaboration of plural universities / institutions. The aforementioned experience of FAIR has been arranged and conducted for each category such as experience in sharing of institutional advocacy for repositories and open access, digitization of thesis and standardization of metadata, development of metadata profiles, trial operations of a search site for repositories in the entire country and creation of copyright database. It has also been assisting introduction / promotion of repositories in other universities, contributing to the national provision of infrastructures for promoting open access of academic information resources.

The financial support from JISC has been developed in various ways even after the completion of FAIR with the background of continuous financial support and is a great driving force for spreading the repository project in the U.K. SHEPRA PLUS, led by Nottingham University and RSP, that began mainly by the SHEPRA group are representative financing initiatives. RSP is a program that standardizes storage and experience of repository projects in individual institutions and shares it with other libraries, standing at a position to support repository communities in the entire country. Concretely, it holds workshops and summer schools in the each district in the U.K. and

supports repository administrators according to their levels. Moreover, UKOLN, based in University of Bath, established JISC-Repository Mailing List and contributed to domestic repository information exchange. These are programs operated by the financial support from JISC and assist institutions that cannot receive financial support.

Activities of DRF allow universities / institutions to share experience and information about institutional repository operations with the goal "Activation of institutional repository communities". The main purposes are to secure the stability of repositories and to establish an ideal form of initiative-like actions (community model) through supporting repository projects.

In this background of these purposes, there is an understanding that many of the advanced repositories such as those in the U.K. are supported by cooperation activities between institutions and by advocacy activities of repositories, and the open access is realized by sharing experience of individual institutions among universities. Activities of SHERPA and RSP are the representatives.

Repositories are activities to cover plural "similar" works such as contents collection in institutions and organizational activities to spread repositories (and method), standardization of metadata, setup of systems, sharing of various technical tools and sharing of data related to copyrights and educational campaign with the expansion of contents as the central focus. Therefore, collaboration by sharing of information and experience is vital to realize effective repository operations and continuous spread. Therefore, fulfilling communication tools such as Wiki and mailing lists, and strengthen of community functions by "face to face" interactions such as workshops will have a great impact and important meaning.

In fact, in the mailing list of DRF, the workload of newly-participating libraries is reduced by sharing and referring input method of metadata for each content such as theses or reports to Japan Society for the Promotion of Science, acquisition method of a handle name and negotiation for multi-year payment, introduction of various system tools, inquiry formats for copyright, academic society and associations, repository permission format of theses, repository promotions in the schools and experience on agreement formation in the schools and it has become easy to operate / promote repositories. Practical information and experience have been provided in many details of the above. The libraries already participating answered most of inquiries from newly-participating libraries.

Workshop materials have been published in Wiki and useful information for the establishment of repositories and advocacy activities for researcher are going to be

shared. Planning of title lists of proceedings that are going to be digitalized in repositories, and glossaries of repository-related terms ("DRFpedia") are performed cooperatively and the active cooperative activities are being realized.

The workshops are serialized and they have contributed to promotions of open access that activate cooperative projects and exceed the boundaries of cooperation projects. The workshops contain lectures of researchers who are advisers for and also provide information to help persons in charge understand the background of repositories. We support a project execution of the portal training of NII systematically so as to allow repository staff to share past experience.

In this way, various DRF activities provide functions same as those of representative support programs after FAIR in the U.K. to repository communities, aiming at assisting continuation of the project with a global viewpoint. They are meta-level activities aiming at supporting the entire repository project while being one of the commissioned projects of NII.

The voluntary activity "initiative" is actively performed in libraries in Europe and the U.S. Many of these carry out a cross-sectional activity with key staff receiving grant. There are a number of library consortiums in our country however there are only few examples of activities that cross library types and establishments with one theme like DRF. Furthermore, there are only few examples of the activities in which not only library staff but also researchers and publishers exchange information and opinions through mailing lists. In this sense, exploration of new ideal inter-library activities (cooperation model), the initial purpose, was achieved at a certain level.

However, there are doubts about whether it is the "initiative" that other participating libraries and individuals can join crossing the three universities as a head office. It can be said that this is a task that we have to work on in the future.

## **Chapter 2 Activity content**

We have promoted cooperative activities based on information sharing by mailing lists and websites and on exchange activities by collective events such as workshops. Moreover, we have supported cultivation of institutional repository staff in universities in our country, cooperating project planning for NII academic portal staff training (2006-2007, twice in each year).

### **1. Information sharing by mailing list and website**

The mailing list was subscribed from 394 addresses in total (including participants by representative addresses for the mailing list). There have been 1,390 information

exchanges by e-mail since the establishment in October, 2006 (Figure 1).

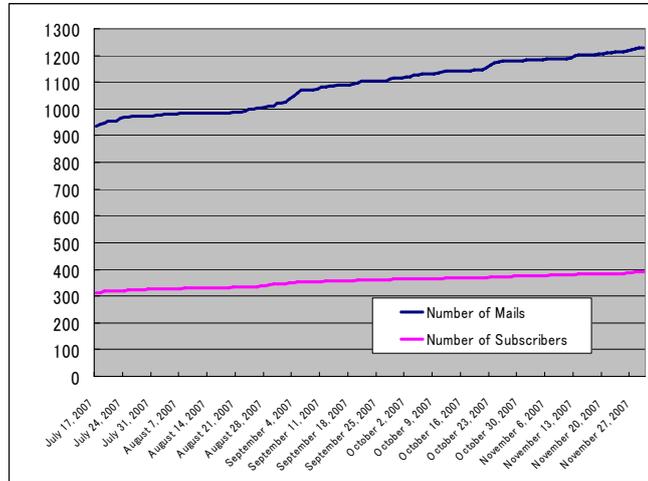


Figure 1. Transaction of the number of subscribers and flow rate of the mailing list (partial)

The web site was constructed by Wiki and there have been 16,845 accesses (top page) since its open in October, 2006. Contents are notice and record of collective events, references related to institutional repositories and open access, software information and archives of the mailing list. Figures 2-7 show representative contents.



Figure 2. Archive of material presented in event



Figure 3. References related to OA and IR



Figure 4. Publishing procedure in IR establishment



Figure 5. Software information



Figure 6. Proceeding list hosted in IR



Figure 7. Glossaries related to OA and IR

## 2. Exchange activity by collective event

As shown in Table 1, we held nation-wide workshops three times, an international conference inviting an expert from overseas once and local workshops that focused projects / activities in a certain area three times. See accompanying material for the details of each event.

Schedule	Event name	Place	Participant institute	Participant individual
Nov 17, 2006.	1st DRF Workshop	Keyaki Hall, Chiba University	67 institutes	103
Feb 8, 2007	2ndDRF Workshop	Waseda University	76 institutes	140
Nov 9, 2007	3rd 回 DRF Workshop	Pacifico Yokohama	145 institutes	278
Nov 22, 2007	DRF Local Workshop (Chugoku / Shikoku area)	Okayama University Library	21 institutes	35
Jan 30-31, 2008	DRF International	Ginnan Hall, Osaka	8 countries	193

	Conference 2008	University	96 institutes	
Feb 7, 2008	DRF Local Workshop (Hokuriku area)	Kanazawa University Library	8 institutes	35
Feb 18, 2008	DRF Local Workshop (Hokkaido area)	Hokkaido University Library	24 institutes	75

Table 1. Workshops (listed according to the date of event)

### Chapter 3 Tasks for the future

For proceeding to the second period of the NII cooperation project, we have agreed on "Activate institutional repository communities (DRF) and determine sharing / public release project of copyright policy of society and associations in the country (SCPJ) by discussing at the head office of content operation / cooperation, giving consideration to continuous / steady operations" (Institutional Repository Program / Public issue of the commissioned project for 2008-2009). According to the above, the three DRF head offices have started discussing on the activities for the next period.

The base of the daily DRF activity is to provide information by the mailing list and Wiki. In this sense, wide cooperation activities have been carried out, being not limited to the DRF participant universities / institutions. However, as mentioned in Chapter 1, other DRF activities such as workshops were planned and drafted and by the three head office universities and we requested for cooperation working and general participation in the planning work at the time of practicing them. As a result, all those workshops ended in succeed by quite a lot of participants. It is accomplished by the support from the participant libraries. However, it is hard to say that the chance to "exchange ideas " was provided sufficiently. As a result of this, submissions in the mailing list that is limited to participant universities was extremely limited.

On the other hand, an executive committee and a local organizing committee were organized in DRF International Conference 2008 held in Osaka University in January, 2008 (DRFIC2008). The former was delegated to plural DRF participant universities of Hokkaido University, Chiba University, Waseda University, Shinshu University, Kanazawa University, Osaka University, Hiroshima University and Kyushu University and the preparation work was performed actively through email. The latter was delegated mainly to Osaka University, in which the conference was held, and the host work was assumed jointly by cooperation from a local consortium called University Library Kinki Initiative. It is notable that these are the substantial interactive

activities not limited to the three head office universities and are valuable experience for consideration of the future DRF activity model.

DRFIC2008 was held with the purpose of reviewing the past repository projects and considering the orientation for the future, taking the end of the first period of NII project into account. Report from each country made us aware of future tasks from an international viewpoint. We can say that these are common bases (infrastructure) of repositories in each country and the tasks that we should consciously work on.

Now, in accordance with the projects in progress in Area 2 of the NII project, we organize the problems thought to be important in the future by categorizing them as follows.

(1) Establishment of search route of repository

Search routes of repositories' contents are still being sought at home and abroad. JuNii+ and AIRway are used in Japan and crossover search services such as DRIVER or intute are provided in the U.K. and Europe. However, these are not regarded as "standard". It is necessary to discuss what information environment the repository administrators maintain and how the information should be provided to end users, considering search engines such as Google or Google Scholar and the relation with digital identifiers of contents.

(2) Store of content and identifier

In our country, permanent identifiers given to repository contents have not been discussed. Many universities collect handle names about DSpace however repositories with no permanent identifiers exist in universities employing other systems. From a viewpoint of storing national academic information, it is necessary to consider development of national identifiers.

(3) Copyright database and international cooperation

Each country works on copyright-related information for repository as a common problem. SCPJ of Tsukuba University, British RoMEO and JULIET in the U.K. and OAK Law List in Australia are a typical example and Korea is going to work on it as well. We have heard that SHERPA in the U.K. is planning to perform multilingualization of the RoMEO database (multinationalization) and introduce a country-by-country franchise system. It is wished to develop a frame of international coordination according to the situations in each country. It is important to improve "visibility" of repositories in our country by international cooperation.

(4) Frame of repository validation

For the orientations of institutional repositories, it is essential to validate contents

at first. ROAR of University of Southampton in the U.K. has already developed a tool to validate repository activities in the institute, using several indices. It is desired to develop a frame to validate the "quality" of repositories by developing performance indices and a standard tool in our country as well.

(5) Improvement of visibility of repository by cooperation with research information system

In the U.K., as a tool for (RAE), repositories are going to be incorporated in validation of studies conducted in universities. In the Netherlands, research information systems that are same in the whole country are introduced and systematic cooperation with repositories are being planned. Cooperation with such a database that is a foundation of a university is becoming a trend and Ewha Women's University in Korea introduces cooperation with achievement database experimentally. We need to discuss on a common problem including feedback of implementation in the universities, seeing that the considerable number of universities are thinking about similar cooperation in our country as well.

(6) Handling of scientific data in repository (e-Science)

In Europe, America and Australia, model demonstrations have started for the handling of scientific data in repositories. In the future, it will be needed to discuss not only on texts but also on combination of texts and experimental and numeric data, and models for handling of large-scale data. In such discussions, universities and NLL will need to jointly discuss the information environment including protocols such as OAI-ORE.

(7) Verification of economic model of repository by local joint repositories

An economic model for the maintenance of repositories is a base of a repository project. In particular, there are many institutes that face difficulty in operating repositories independently for staff and budget reasons such as minor universities in local regions. Aiming at spread of repositories, it is important to discuss a frame to solve such a bottleneck jointly. The joint repository that Hiroshima University and Yamagata University are currently attempting will be a base for such discussions.

(8) Impact evaluation of open access contents

One of the purposes of repositories is to realize open access of papers for which referee reading is completed. It is said that the advantage is that citation of open access contents exceeds contents of Toll Access and it is regarded as a motif of the open access activities. It is extremely important to demonstrate this as an advocacy of institutional repositories.

(9) Community for the repository maintenance = strengthening / maintaining

combination function

To secure the durability of repository, community functions and maintenance of combination between institutions are important. Extension and qualitative development of the project have been succeeded in major repositories in Europe by formations of communities. It is important to specify "tasks to be jointly worked on" that has been mentioned so far by strengthening a combination such as DRF even more for establishment of national base of repositories.

#### **Chapter 4 Questionnaire result**

In DRF, from the 1st workshop to DRFIC2008, the first international conference, we had questionnaires to collect opinions and refer them. In addition, after the completion of DRFIC2008, we had a questionnaire for the participant libraries with a purpose of referring the responses for summaries of the past activities and activity contents for the next period.

In this chapter, we describe the questionnaire about DRF activities. (See attached materials for the details of the questionnaire result)

##### (1) Respondent

27 universities responded among 58 universities in total. About a half of the universities responded.

##### (2) Response content

As for motivations to participate in DRF, the top answer was the advantage of information acquisition, followed by the activation of repositories of the own university and in the country. As for the web pages, mailing list and DRF workshops, most of the respondents answered that they were useful therefore we can say that we achieved the information exchange and the purpose of the study. As for the information needed for the web page and mailing list, and contents of the workshop, we obtained various requests such as systems, metadata, activities in the university, copyrights and open access. This result suggests that there still are various tasks for repositories. As for the system construction, we need not only an initial construction but also information to improve the system continuously, we presume. As for the DRF activity for the next period, most of the respondents desired the current activity form led by the head office universities rather than the form with which plural universities participate in separately. We suppose this result indicates that "ideal participation forms" are different in each university.

As for an ideal institutional repository in the future, many respondents answered that they would recognize it as one of the basic projects of a university library. Even the

respondents who answered "should be discussed" and "individual choice" agree on recognizing that institutional repositories should be involved in university libraries as a premise, we suppose.

### (3) Free opinion

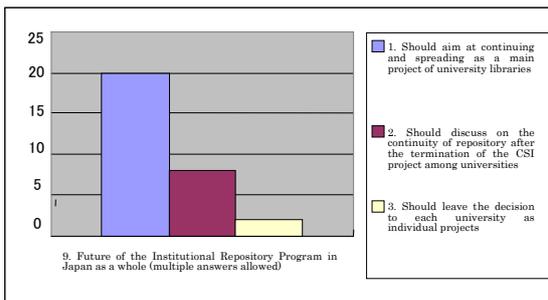
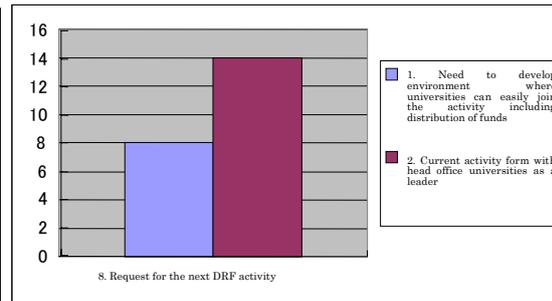
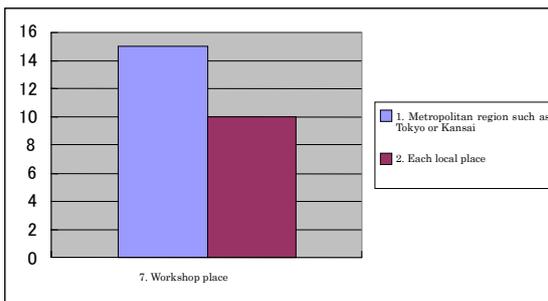
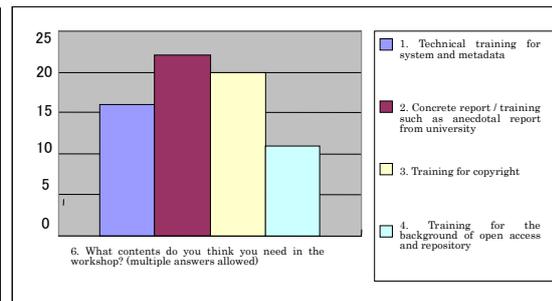
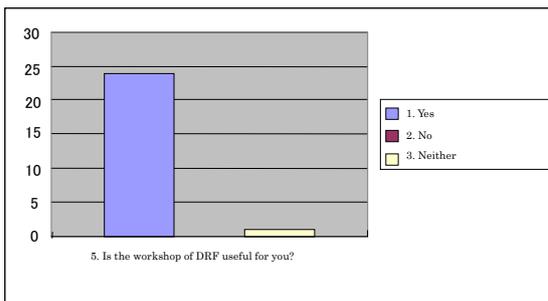
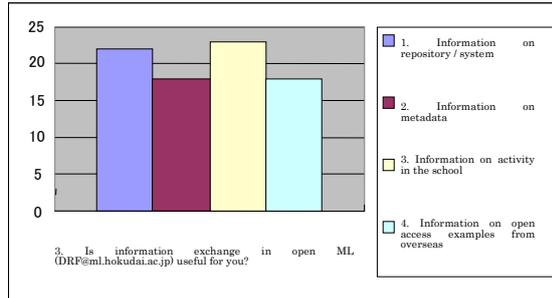
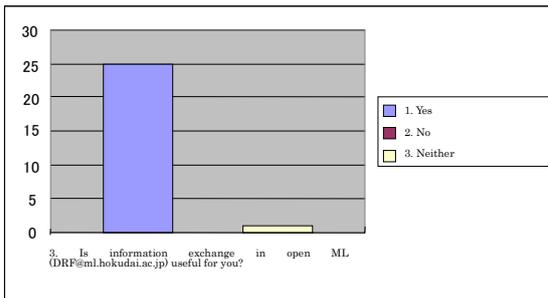
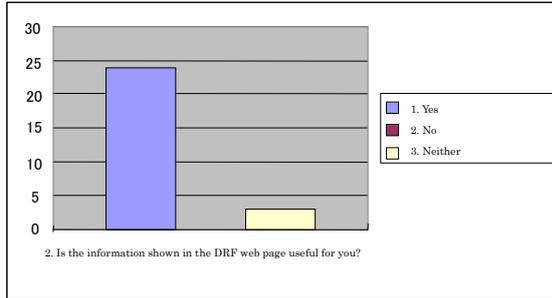
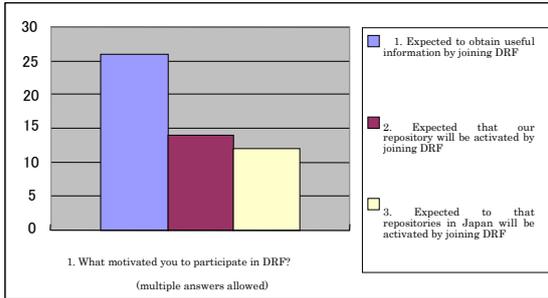
In the free opinion space, we collected various opinions that were not mentioned in the other questions. As for the workshop, we obtained votes for all items in the questions however they did not mention the necessity of subject-specific workshops and general remarks however some of them suggested shifting from the general to the particular.

As for requests for the DRF activities of the next period, some respondents answered that they hope IR activities will be a trigger to bear human resource development and exchanges in the library field regardless of the rank and scale of universities and DRF will be a motivator for it. As for the future of the Institutional Repository Program, we obtained a number of opinions about a role of NII and position in library work, repository evaluation and operation in the future.

### (4) Conclusion

Viewing the results including free opinions, we have found that each university and individual have various opinions and ideas. In addition, comparing with the questionnaire results from the 1st workshop, it is seen that each university has acquired experience and has come to deeply consider problems since the step where the primary objective was the "construction of repositories". In these few years, we are in a chaotic state that but we go into the next phase without solving problems and new work has arisen. DRF activities seem to receive a certain level of reputations in the questionnaire however there still are many problems we have to work on such as the collection of opinions from of DRF participants, organization of problems shown in the mailing list and so on. In the chaos where problems arise, each institute will seek for ideal repositories for them, we suppose. As one of the characteristics, DRF activities are bottom-up activities different from the conventional university library activities. One of the identities of DRF is to absorb bottom-up problems in the future.

## Questionnaire result for DRF participant library (Feb. 2008) (27 universities)



## **Free opinion**

### **1. What motivated you to participate in DRF? (multiple answers allowed)**

I regret that I didn't recognize the existence of the archives (as soliloquy).

### **2. Is the information shown in the DRF web page useful for you?**

\* Some staff said that in their idea, they exchange information through the ML and don't visit DRF Wiki often. I think both ML and Wiki will be activated if new contents are introduced in ML when they are added to DRF Wiki.

### **3. Is information exchange in open ML (DRF@ml.hokudai.ac.jp) useful for you?**

\* Any information required by the participants are useful. I want it to be activated more. Isn't it better if the DRF project manager / cooperating universities take the leadership?

\* It will be even more useful if data piled up are compiled and become searchable.

\* We haven't constructed our repository yet so I cannot follow hi-level questions about practical use.

\* Quantity of mails is too large so I sometimes pass through without reading them. Also, plural users read them so it will be better if writers show their names and institutes they are attached to. Many of writes don't show them.

### **4. What kind of information do you need in the DRF web page and mailing list? (multiple answers allowed)**

\* Introduction of various customized functions (commodities) (statistics of use)

\* Information about copyright policies of publishers

\* All of the above. As for the DRF web page in particular, I hope the advantages of Wiki will be utilized and various information will be updated in the future, too.

\* Any information related to the publishers' actions for IR and that related to academic organizations such as the Japanese government or the Science Council.

\* OA information in Japan. It should be effective if we could discuss on reports submitted to Grant in Aid for Scientific Research.

\* Information on to practical work is very useful.

\* I recognize all are important information, including chats. I hope this good mood will be kept in the future as well.

### **5. Is the workshop of DRF useful for you?**

\* Information about copyright

- \* Not only giving presentation materials but also we want the organizer to follow up questions and answers, and topics arisen after the workshop is finished. (e.g. the organizer or several cooperators specified beforehand send reports by ML)
- \* I often get hints for our university's repository activities from presentations in the workshop.
- \* I haven't participated yet.
- \* It is difficult for universities in countryside to join the workshop though it is held in some local districts.

#### **6. What contents do you think you need in the workshop? (multiple answers allowed)**

- \* It will be better if we can work on themes other than those discussed in "Academic portal staff training" of NII and "Training session for copyright work of library staff" of Agency for Cultural Affairs. Also, for the contents, it will be better if we can discuss on themes for beginners and universities that are going to work with repositories in near future, led by long experienced persons and universities. As for the metadata technology, I presume it will be better if it's left to NII, which established JuNII2. As a background of repositories, I think the trend since the electronic library was established, shown in "Position of Institutional Repositories in University Libraries in Japan - Comparison with "Electronic Library" - " presented as a poster presentation in DRFIC2008, is important so I wish it will be presented orally and published as a research paper.
- \* I think advanced activities such as CSI Area 2 and examples from other countries are necessary as contents because we can see how the own IR should be managed, considering future and present measures.
- \* I'm sorry for requesting too many. I believe 2, 3 are necessary because they are directly related to practical work.
- \* Training and workshops are important for small universities, which have less chance to see new information and technologies, and can be a strong binding power and a motivation for brainstorming. I hope various meetings will be held often with various contents in the future.
- \* All of the above are necessary. Workshops are held in each district recently but I feel the necessity of subject-specified workshop.
- \* (I may be too ambitious) I think contents attractive for teachers are needed.
- \* I think it's the time to shift from introduction stage to specialized study.

#### **7. Workshop place**

- \* I think that metropolitan area is good but traveling expenses are high for members in

Hokkaido.

\* I hope a large-scale exchange meeting that most of the members can join will be held in a metropolitan area once a year. It is necessary to grasp current situations. I hope it will be held in other districts if possible.

\* Transportation in Tokyo / Osaka is convenient and access is easy from local regions.

\* I think that it is necessary to hold workshops in local but I prefer workshops in a metropolitan area since I can get information from all over Japan.

\* For universities in local cities, it is a rather serious problem to raise traveling expenses so I feel it's a disadvantage comparing with universities in the Tokyo metropolitan area and metropolis. I hope that a new way to join workshops will be introduced such as those with Internet so that members in distant place can join as well as for financial support for joining workshops.

\* Supplement to 1: It is preferable to separate into central areas and local areas by the purpose in which transportations and accommodations are important.

#### **8. Request for the next DRF activity**

\* Nothing in particular

\* An activity form that utilize the characteristic as a gently-knit community, which has been established in these two years.

\* I believe that IR activities will be a chance to find new human resources in the library field, regardless of rank and scale of universities. I hope activities with DRF as a key will be developed in the future.

\* It is necessary to maintain flexible and sharp organizational operations.

\* I feel sorry for the workload imposed on head office universities but I think we need to have universities that take leadership. Also, if we divide the funds and give them to plural universities, it would be difficult to squeeze out expenses needed for events like workshops, I guess.

\* Results obtained from the present activities are big but it will be necessary to establish a system for continuous activities.

#### **9. Future of the Institutional Repository Program in Japan as a whole (multiple answers allowed)**

\* I think one of the advantages of repositories is "There are repositories in other universities so we can read documents without applying for ILL" so communications between universities are important.

\* I hope NII will work on JuNII2 format in particular and data quality of OAI, taking a leadership.

\* The authorized organizations that manage university libraries must discuss on it actively as one of the main projects of university libraries. We should consider the direction for our future.

\* My answer is 1 as a conclusion. Also, it will be much easier if it becomes a routine practice like listing and browsing. However, some members are saying that they are working for IR everyday, thinking if the situation that IR constructions are going on at a rapid rate since the establishment of the CSI project is really right. So, we need to discuss on it including evaluation of IR in the future but it is difficult to say it thoughtlessly.

\* I think it will be better if we have chance to learn basics of repository constructions to obtain useful information so that more private universities will join DRF.

\* The number of universities that have piled up experience through the actual IR work is increasing so self-evaluations are necessary at the current stage, I think, though I'm not sure if it should be discussed in DRF. (not only evaluations of repositories but also those for the position of repositories in the circumstance that staff and costs are reduced in university libraries, from a macro viewpoint)

\* We should aim at the continuation and spread of IR as one of the main projects of universities.

\* It 's really a shame to terminate the repository construction project that has been recognized in a nationwide scale as one of the main projects of universities only within the frame of the CSI project. I believe that we should continue the project as a all-round project of a national academic information institutions in Japan under the initiative of public institutions as possible as we can.

\* I think that repositories are very important as a space to publish achievements of universities in educations / researches conducted in universities. I think it will be better if there is environment where small universities and universities with few contents can easily introduce repositories.

Supplement to 2:

If we go on with the current operation form, the spread of repositories will peak out in the future. We must fix our eyes on the stakeholder of repositories and the ideal form to seek for the position of repositories. Is it a task imposed on each university to discuss and solve this problem?