

Heal-link: using NILDE to provide Public Organizations in Greece with articles from HEAL-Link's electronic subscriptions

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ABSTRACT

This paper is about the collaboration and cooperation in both software and policies between NILDE, Library of CNR and HEAL-Link. Moreover is about the need of HEAL-Link to acquire and use software in order to fulfill its requirements to setup a document delivery service for the Greek Public Organizations (Hospitals, City Libraries, etc.).

HEAL-Link was founded 15 years ago with the aim to provide electronic resources to the members of HEAL-Link. Main goals of HEAL-Link are:

- The collaboration among its members, by establishing common policy on journals subscriptions, to promote rational growth of journals' collections among members, and achieve both savings and access to a greater number of electronic sources in order to meet the educational and research needs of the users of the participating institutions.
- The joint subscriptions and the management of remote access to electronic resources and information services, including electronic journals. For many years a large number of Public Organizations have been consistently expressing their wish to become active members of HEAL-Link in order to have full-text access to the subscribed electronic resources. But this is very difficult and the main reason is their limited budget to contribute to the cost of the electronic subscriptions of HEAL-Link. Therefore, under the

NSRF (National Strategic Reference Framework) 2007–2013, we decided to take advantage of the interlibrary loan terms of the agreements we have with the publishers and setup a document delivery service. After research for software that is used among libraries internationally, we have decided to use the NILDE software. With the great cooperation of the people at CNR, together we managed to make all the necessary changes and modifications in the software so that it can be used for HEAL-Link's document delivery service. An agreement was signed between CNR and HEAL-Link describing the terms under which NILDE will be used and the terms of collaboration. After signing the agreement, we had a one-week training in Bologna on learning NILDE fundamentals and its source code, and also made most of the changes needed to implement the HEAL-Link version. We were very careful with each needed change in the software so as not to affect the total functionality of the software. As an example of the changes needed in our version only HEAL-Link acts as a lending library. The Libraries of the Public Organizations, that are not allowed to access directly the full-text of the electronic journals, can make a "Document Delivery Request" through NILDE. HEAL-Link sends a copy of the electronic scientific article to them according to the clauses included in the HEAL-Link license agreements with the publishers.

KEYWORDS

Greece, HEAL-Link, Interlibrary loan, Document Supply, Interlending, Library automation, Library cooperation, Libraries.

HEAL-LINK BACKGROUND

HEAL-Link is the child of necessity. In the 90s due to stagnant budgets, high yearly price increases in the subscriptions of print journals and high inflation on top most of the Greek academic libraries had accumulated debts. Till then each university library would order their own print journal with no cooperation among them. As a result, from the total number of subscriptions in Greece, a large number were multiple subscriptions of the same journals by different academic institutions. By 1998 the number of print subscriptions had shrank significantly and the local collections could not cover even the basic needs of the faculty.

A group of librarians came together and proposed that the academic libraries should build a consortium and aim for e-journals beginning with the publishers that consumed the larger portion of their budgets. At that time the Ministry of Education decided to fund projects for the academic libraries.

HEAL-Link started as one of the four action lines of a project funded by the Greek Ministry of Education under the umbrella of European Union Structural

Funding. The project aimed at developing cooperation involving all the academic libraries in Greece. The action line that brought HEAL-Link into being was a mandate for cooperation to face the problem of the ever-shrinking journal collections in Greek academic libraries (Kohl & Dervou, 1999).

HEAL-Link started operating in 1998 by signing its first agreement with Elsevier for access to the electronic journals in ScienceDirect. More agreements were signed during 1999 (for example, with Elsevier, Kluwer, Academic Press, MCB, and Springer), thus giving its members access to 3,500 full-text journals. OhioLINK has been the model for developing HEAL-Link (Xenidou-Dervou, 2001). Swets has been assisting HEAL-Link in negotiations and financial administration since the very beginning.

During its first three years of operation, HEAL-Link members were obliged to keep their print subscriptions, while the project shouldered the extra costs relating to license agreements. Following a proposal by the steering committee of HEAL-Link, the Council of Rectors of the Greek Universities decided that the consortium should move over to e-only agreements with mandatory cancellation of print subscriptions for the corresponding e-journals. Starting in 2003 HEAL-Link had agreements with twelve publishers, thus giving its members access to 7,500 full-text, peer-reviewed journals (Xenidou-Dervou, 2003). In November 2004 the ministry promised to continue the central funding for the next five years, until 2009.

Since then the budget of HEAL-Link is covered by the Ministry of Education from the public investment funds of the universities. Till 2006 the number of agreements with publishers and the collection of journals grew to cover more journals and more subject areas. 2006 was the last year that HEAL-Link expanded to new content. It was decided then that any further expansion would not be sustainable any longer from the budget we receive from the Ministry.

2006 was also the last year HEAL-Link received extra funding to buy backfiles of several publishers that had agreements with. So HEAL-Link bought the backfiles of the following publishers:

- ACS (American Chemical Society)
- Elsevier
- Emerald
- IOP (Institute of Physics)
- Springer
- Lippincott
- Taylor & Francis
- Wiley

Today HEAL-Link has license agreements with the following publishers for e-journals:

- ACM (Association for Computing Machinery)
- AIP (American Institute of Physics)
- American Chemical Society

- American Physical Society (APS)
- Cambridge University Press
- Elsevier (Sciencedirect)
- Emerald (MCB)
- IEEE
- IOP (Institute of Physics)
- Kluwer Law International
- Lippincott Williams & Wilkins
- Oxford University Press
- Project MUSE
- PsycARTICLES (APA)
- Sage
- Springer
- Taylor & Francis
- Wiley InterScience
- Wilson

NATIONAL STRATEGIC REFERENCE FRAMEWORK NSRF 2007-2013

For many years a large number of Public Organizations have been consistently expressing their wish to become active members of HEAL-Link in order to have full-text access to the subscribed electronic resources. But this is very difficult and the main reason is their limited budget to contribute to the cost of the electronic subscriptions of HEAL-Link.

Therefore, under the NSRF (National Strategic Reference Framework) 2007–2013, we decided to take advantage of the interlibrary loan terms of the agreements we have with the publishers and setup a document delivery service. After conducting research for corresponding software that is used among libraries internationally, HEAL-Link decided to use the NILDE software. With the great collaboration with the people at CNR, all the necessary changes and modifications in the software were made so that it can be used for HEAL-Link’s document delivery service. An agreement was signed between CNR and HEAL-Link describing the terms under which NILDE will be used and the terms of collaboration. After signing the agreement, there has been a one-week training in Bologna on learning NILDE fundamentals and its source code, where also most of the customizations needed to implement the HEAL-Link version of NILDE were incorporated.

Each customization was made in such a way as not to affect the total functionality of the software. As an example HEAL-Link acts only as a lending library and all other libraries of registered Organizations act only as borrowing libraries. The Libraries of the Public Organizations, that are not allowed to access directly the full-text of the electronic journals, can make a “Document Delivery Request” through NILDE. As a response to the request, HEAL-Link sends a copy

of the electronic scientific article to them according to the clauses included in the HEAL-Link license agreements with the publishers.

HEAL-Link's electronic resources department has implemented projects a number of projects for further development of existing services and creating new ones regarding HEAL-Link's electronic subscriptions. These projects have been incorporated in the NSRF 2007-2013 Project "Value added Services for libraries, and information services, other organizations and end-users." of HEAL-Link.

Due to the restrictions by the NSRF there has been an obligation to separate the projects in two categories, the ones that are going to be fulfilled by direct labor and those that should be developed by private companies through the process of public tenders. The percentage that could be fulfilled by direct labor was 40% of the total funding. Consequently, following the above rule the projects were separated to the ones that should be implemented by contractors working for the university, and to the ones that were converted to corresponding public tenders in order to be given as labor to private companies.

Before describing and analyzing HEAL-Link's collaboration with the Library of CNR in order to use NILDE to provide Public Organizations in Greece with articles from HEAL-Link's electronic subscriptions, a brief description of the services that are to be deployed through this European funding program follows:

- HEAL-Link Federation: Authentication and Authorization Infrastructure (AAI): Extend the functionality of single sign on via shibboleth by:
 - Providing more information regarding the service and incorporation into HEAL-Link Portal.
 - Creating and signing Agreements with our members pointing out their rights / obligations.
 - Creating a Virtual Home Organization (VHO). If a member of HEAL-Link does not technically support shibboleth or does not have an integrated user catalog, they can use the VHO service in order to access the electronic resources via shibboleth.
 - Extending HEAL-Link's shibboleth agreements with more publishers that support the service.
- HEAL-Link Portal Upgrade: With this upgrade the goal is to enrich the information and services regarding electronic resources in order to support library staff of HEAL-Link members and end-users of HEAL-Link members.
 - Using API (Application Programming Interface),
 - Adding automated procedures to various functionalities,
 - Creating newsletter and social network accounts,
 - Upgrading our Help-desk,
 - Changing the Web Interface.
- Document Delivery Service for Public Organizations (NILDE): The corresponding service will be described in detail below.
- Preservation of HEAL-Link's Digital Archives: Over the previous years HEAL-Link acquired digital archive copies of most content that is entitled

to perpetual access. The aim of this service will be to record and collect of all the archives under a specific software, which will be able to provide the content to HEAL-Link's users if it is ever needed.

The services that will be deployed by public tender are:

- HEAL-Link Cloud: Hardware that is to be acquired in order to host HEAL-Link's services including the backfiles.
- ERMS (Electronic Resources Management System) for HEAL-Link regarding resources, license agreements and statistics received from the publishers.

HEAL-LINK'S ELECTRONIC SUBSCRIPTIONS ILL

As mentioned above, in the last ten years a large number of public organizations have expressed interest to access HEAL-Link's electronic resources.

According to the fundamental policies of HEAL-Link all Academic Research Institutions under the auspices of the Ministry of Education are automatically declared members of HEAL-Link. In the recent years many other public organizations expressed their interest to join HEAL-Link. Among them, the interest came mostly from public and military hospitals, Higher Military Schools, and also from a few research organizations such as the EFET (Hellenic Food Authority) and National Organization of Medicine. Unfortunately, these public organizations, failed to obtain the necessary funds to support HEAL-Link membership. If they were added as members, there would have been a significant increase to the cost of HEAL-Link's license agreements, which would have to be passed to these new members respectively.

In order to overcome this problem HEAL-Link decided to create and develop the Electronic Document Delivery Service based on NILDE, where public organizations and institutions are served with electronic copies of scientific articles, upon request and only if it is allowed by the terms of the agreements that HEAL-Link signs with publishers. By creating this service and by using NILDE the participation cost of these organizations has been minimized.

Since the beginning of the service's development the aim was to provide document delivery to Greek organizations funded by the government. All private organizations, except from the non-profit and the non-commercial ones, are excluded from participation as it is not allowed by the publishers' terms. The delivery service is limited only to HEAL-Link subscriptions.

The primary goal was to use open source software in order to avoid acquisition or even subscription costs due to the limited budget of the service after the end of NSRF funding.

Here is a description of the stages of the above project:

- Study and identify the terms of the agreements regarding interlibrary loan in order to create and offer a legitimate service.

- Literature search for similar services offered by other consortia globally.
- Identify, evaluate and select the software that fulfills all the prerequisites and fits most to HEAL-Link needs.
- Customize, configure and install of the selected software.
- Draft Greek documentation and user manual.
- Identify as many as possible, public organizations that are eligible to participate.
- Provide information of the new service, mostly by email or phone.
- Prepare informational and educational material in order to familiarize the staff of the participating organizations with the service.
- Prepare Policy and license agreements for the participating organizations.

One-year pilot was started on September 2013. The pilot had been scheduled to start on June 2013 but was postponed for 3 months due to HEAL-Link's inability in fulfilling the contractual obligations with the publishers on time. The pilot period has been extended at least until the end of 2014.

TERMS OF THE AGREEMENTS

In the license agreements the clauses about interlibrary loan refer to:

- The status of the organizations that participate and use the service.
- Most of the publishers allow Document Delivery only to public, non-profit, non-commercial organizations and libraries.
- The way the request should be handled and delivered.

Most of the publishers have explicit terms that oblige to use secure document delivery software, where the electronic copy is automatically deleted from the server that hosts it, after its is printed. In addition and mainly for book chapters and journals backfiles issues the article must be printed, scanned and then sent to the user.

ILL AND SDD SOFTWARE SELECTION

As mentioned above HEAL-Link should set the prerequisites that ought to be fulfilled in order to select the software that should be used for the ILL (Inter Library Loan) and SDD (Secure Document Delivery) service.

The first and most important prerequisite was the origin of the software. It should be an Open-Source software thus to eliminate the cost of acquisition or subscription of a commercial software. This software should incorporate many of the features of corresponding commercial software and should include a module for SDD (Secure Document Delivery). The SDD module should not carry any subscription cost. A one time payment of a small amount would be acceptable. The software should be easy to install and customize and also simple to use by both staff and users. Constructive communication and cooperation with the

original developers of the software was of major importance due to the fact many customizations were to be made in order to use the software for HEAL-Link needs.

The selection of NILDE was inevitable because all of the prerequisites have been met. Below is a list of the reasons for the selection of NILDE:

- More than seven hundred (700) libraries and fifteen thousand (15,000) end users in Italy have been using it for more than ten years.
- It is reliable, as during the last decade it has been used to serve more than one million requests by libraries and end users.
- It has a simple and easy to use interface.
- It incorporates all the needed functionalities.
- Users can also store their data requests, thus using it as a reference manager.
- It incorporates a module for secure documents delivery. The document is stored on an ftp server and it is deleted automatically after the user retrieves it and prints it.

HEAL-LINK CUSTOMIZATION

As it has been previously mentioned NILDE needed to be customized, in order for HEAL-Link to use it, for the Documents Delivery Service. The Software Engineer and System Administrator of HEAL-Link went for one week to CNR headquarters at Bologna, Italy to be trained by NILDE team to get acquainted with the source code of the software. Most of the changes needed for the customization were made during this one-week collaboration and during the training. It is also important to point out that, for the customization, both parties tried to make the corresponding changes to the source code seamlessly and in a way that the software can be easily returned to its previous state. For example, if a change could be accomplished by interfering only to the frontend of NILDE, there has been a corresponding customization to the CSS (Cascading Style Sheets) of NILDE and not directly to its PHP code. You can find below a short list of the most important changes that were made to the software.

- There is a minor redesigned homepage. HEAL-Link created Usage Guides & Manuals in Greek. Furthermore NILDE was translated in Greek. The translation had been done both for HEAL-Link and the original NILDE because HEAL-Link version had many differences due to the customization and due to the fact that there were small details in the two languages that needed to be addresses in different ways.
- All functionalities inside NILDE concerning financial assets have been hidden or disabled (by CSS) at least during the pilot. I has not been decided yet how will HEAL-Link proceed with charging the participating organizations.
- One of the main differences from the original NILDE is that in HEAL-Link only one library (HEAL-Link) performs lending, all other libraries may only borrow and cannot lend.

- Other representative customizations include:
- Removing (by hiding) various fields from library and user records.
- Addition of explanations steps to the registration process.
- Changes in the Terms of use, rules & regulation and publishers' terms in Greek language.
- SEDD (i.e. Digital Hard Copy) module has not been enabled yet. It will be enabled it in the near future.
- The ALPE (licenses) archive is not used at all by HEAL-Link.

USAGE INFORMATION AND STATISTICS

So far 89 Public organizations are registered for HEAL-Link electronic document delivery service. They are comprised mostly of:

- Public/Military hospitals
- Public libraries
- Research institutions from other ministries
- Military training schools
- Organizations advisors to the government

The graphs below indicate usage reports regarding document delivery from NILDE. The above graph presents the total number of fulfilled requests handled by HEAL-Link inside NILDE since the beginning of the service (September 2013) and separated by year.

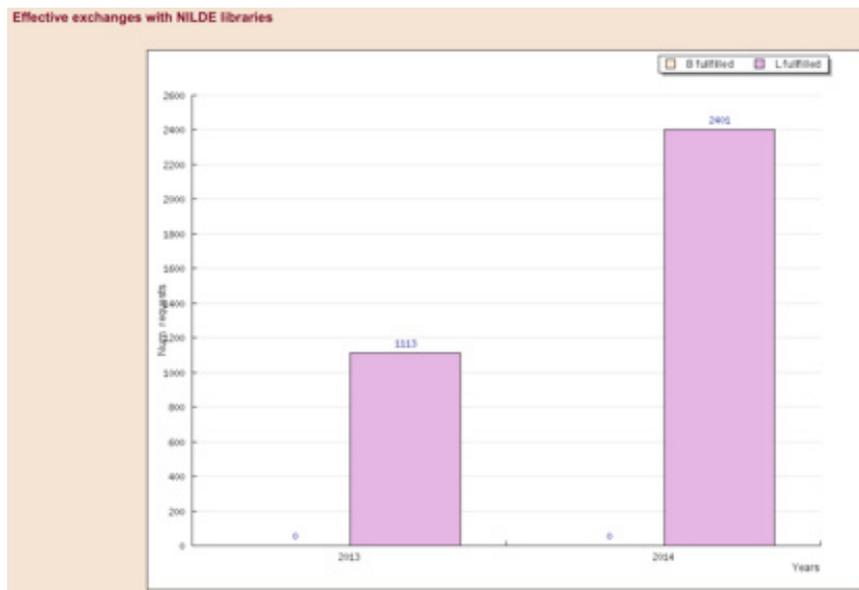


Figure 1: Successful document delivery from HEAL-Link to participating Organizations

Exchanges per month (2013)

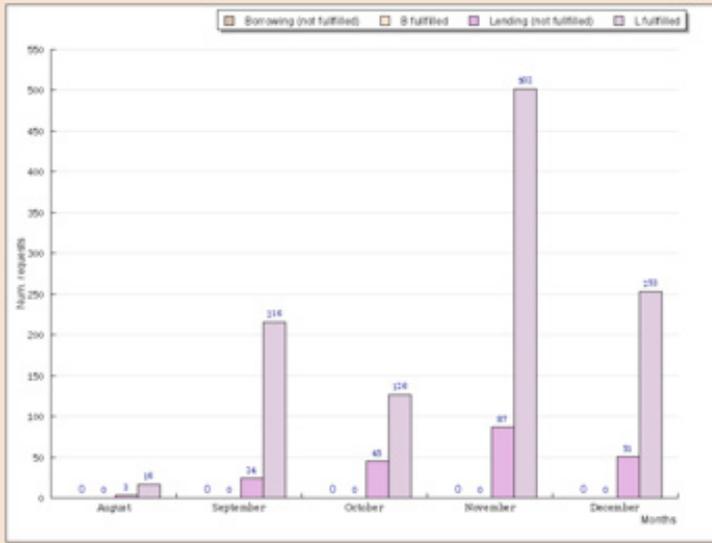


Figure 2: Successful document delivery from HEAL-Link to participating Organizations per month for 2013

Exchanges per month (2014)

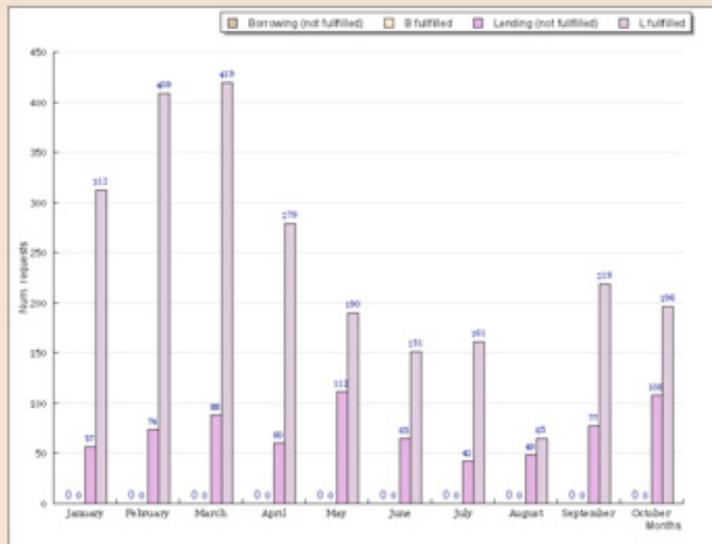


Figure 3: Successful document delivery from HEAL-Link to participating Organizations per month for 2014

The two figures above present the total exchanges (fulfilled and not fulfilled) handled by HEAL-Link and separated per month for years 2013-2014. As HEAL-Link acts only as a lending library there are no statistics for borrowing requests.

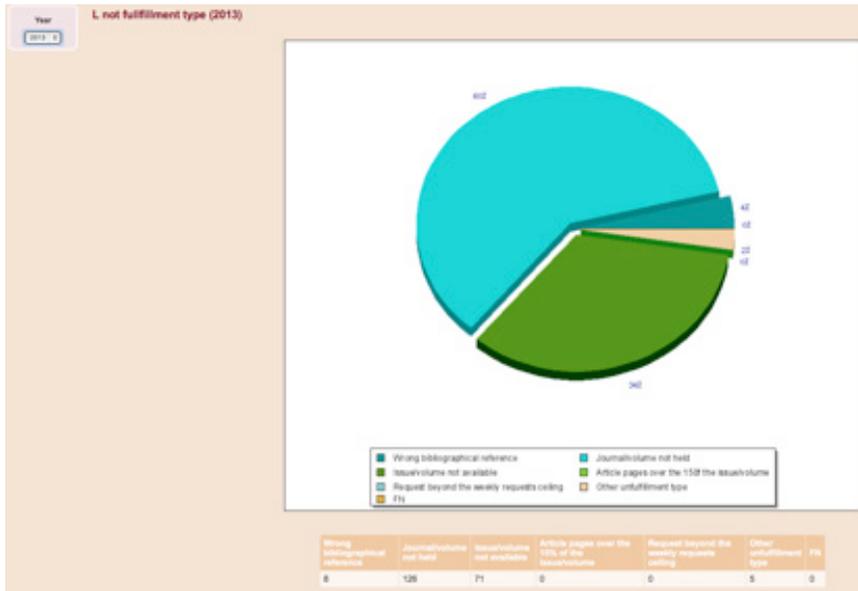


Figure 4: Reasons for rejection for 2013

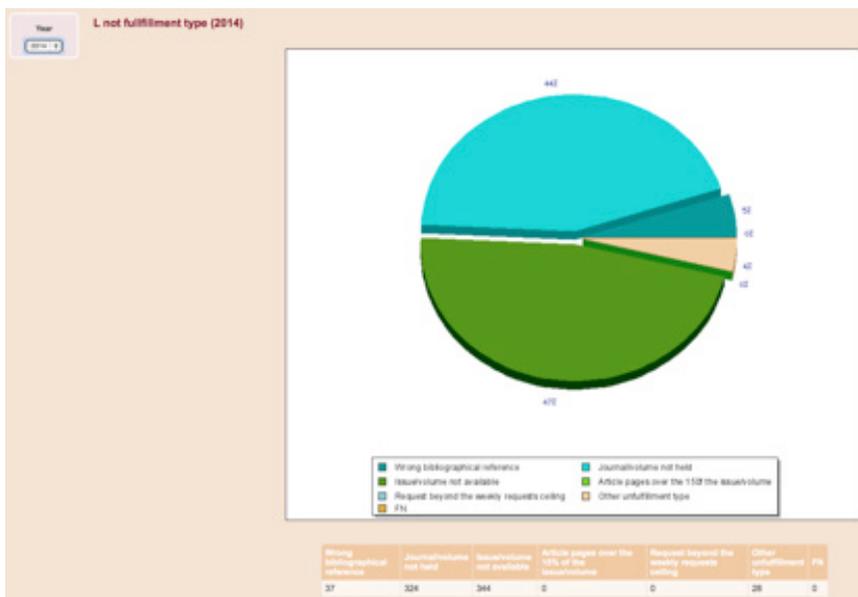


Figure 5: Reasons for rejection for 2014

It should be pointed out that the most common reason for the rejection of a request (not fulfilled) is that HEAL-Link does not have access to the specified resource due to the fact that there is no active subscription for the corresponding

period (Issue/Volume not held). There is also a percentage of rejections due to wrong bibliographical reference.

CREDITS FOR HEAL-LINK'S ELECTRONIC SUBSCRIPTIONS ILL

In conclusion HEAL-Link should point out the great collaboration with Dr. Silvana Mangiaracina "Head of Library and Information Systems" and Dr. Alessandro Tugnoli "System Administrator, Software Developer" from Library of CNR that developed and administer NILDE in Italy, and their great help and effort in order for HEAL-Link's service to become active and functional. Moreover HEAL-Link should thank them for providing, under specific terms and in the auspices of an agreement, the NILDE software and for their great contribution at the configuration of the software.

HEAL-Link's electronic subscriptions ILL service has been active since September 2013 (<http://nilde.heal-link.gr/>). There is a fair amount of interest from many public organizations that have already registered and use the service. In the future plans there are discussions in automation of the ILL process in such a way that is easier for the end users to use the service and there might be a further discussion with CNR in the frame of extending the collaboration.

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