Access to all information sources including grey literature in the Surveying Library

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Abstract

The Surveying Library has used the presented version of the INVENIO system not only as its digital repository, but also as a solution for uniform information access to all its funds. Searching and accessing the library catalogue, the bibliographical articles and the digital Kramerius library and access to electronic information resources, grey literature and internal documents are provided via the INVENIO system. INVENIO serves as a comprehensive library system. Part of this article includes a presentation of the BibCirculation module which secures the library's lending services. The Surveying Library is the first organization to use this module in the Czech Republic.

Keywords

Grey Literature, INVENIO, BibCirculation, Library System, Digital Repository, The Surveying Library

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The Surveying Library is part of the Research Institute of Geodesy, Topography and Cartography (VÚGTK). The library has a unique and exclusive position not only in the Czech Republic, but also on an international scale thanks to its collections and its specialization in the areas of geography, geodesy, geodynamics, cadasters and metrology. The library is involved in many international activities involving cooperation and the provision of scientific information resources from the areas of its competence. Its uniqueness has been confirmed by the registration of "The Surveying Library®" as a trade mark (hereafter simply referred to as the library) in the Register of Trademarks held by the Czech Industrial Property Office. The library cooperates with the Czech Land Survey and Cadastral Office (hereafter simply referred to as the ČÚZK) in the collection of expert travel reports for all the employees from the ČÚZK, research reports, industry regulations and standards, all resort directives, professional newsletters and journals and the proceedings of scientific conferences and meetings.

The demise of the library was threatened a few years ago. Fortunately, the library and its unique collection managed to survive. The library has had to solve the question of how to most efficiently transform itself so that it can offer the best possible services to all its users. One of the areas where the library has had to change involves the availability and accessibility of information about the library's collections and other information sources. The existing information resources in the library were fragmented. The paper card catalogue was the register of the library's collection.

Only part of the collection had been digitalized in the Tinlib library system which was already outdated and inadequate. The list of available online journals which the library periodically subscribes to was and still is only portrayed in a table on the website. Those customers interested in grey literature (research, annual reports and other materials) had to search in a variety of places and at different levels on the VÚGTK site. In addition, the library also used the Kramerius library system which stored and provided access to digitized documents. Kramerius represented another separate system where customers could search.

As well as the library's collection and the materials on the website, the VÚGTK still collects many other materials in digital form which are only available locally on the institute's network or on its employees' computers. This mainly involves the different standards of the ČÚZKC and the Surveying Office, materials from conferences, analytical and methodological materials, research data, promotional and training materials, output from projects, departmental directives, etc.

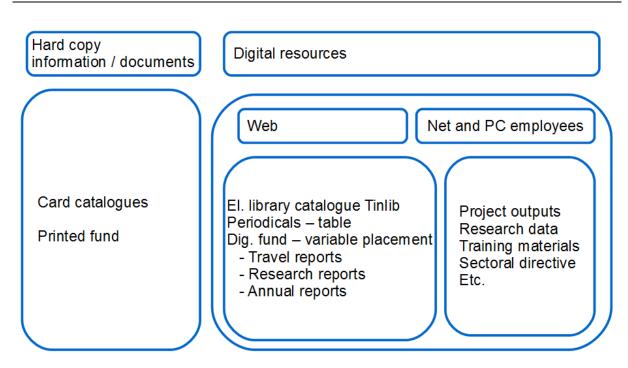


Figure 1: The original location of the information sources

The library, therefore, had to deal with two issues; it needed both a library system and a digital repository within the framework of insufficient finances and capacity building. From the perspective of maintaining the research needs of the VÚGTK, it needed to ensure the availability of a high-quality library and information resources for all its employees. The VÚGTK also wanted to act openly and to share its research output.

At this present time of permanent budget cuts, the library had difficulty in purchasing a completely new library system. This meant that purchases of books, journals and other information resources, as well as the register of readers and loans, were also limited, as was the possibility of cooperating with national portals and enabling searches using the Union Catalogue or the Uniform Information Gateway. These are mainly commercial library systems currently available in the Czech Republic and their prices are in excess of the VÚGTK budget. Open source library systems are not so common in the Czech Republic. The Evergreen [1] and Koha [2] systems are the two most popular.

Another problem which the VÚGTK had to address was how to preserve and make documents and research data available. Only a small portion of scientific output is published in journals, anthologies and monographs, while the remainder is hidden on the computers of the individual researchers or teams, including the primary data. Data back-up is often undertaken by the workers and it is usually non-systematic. The question is "how to disseminate information about your research, how to share primary data (the results of measurements, material analysis, etc.) and at the same time preserve its authorship?" The preferable solution is using an institutional repository with publishing solutions related to the auto-archiving of publishing activities and in an open access mode. As Jindra Planková stated, "At present, it is necessary to understand the access as an open access initiative, a global phenomenon" (Planková, 2007). Rosalia Ferrara mentioned that "OA should not be considered as just a set of standards and

¹ http://open-ils.org/

² http://www.koha.org/

protocols to ensure interoperability between archives and to share resources on a global scale, but as a factor of social growth" (Ferrara, 2007).

The absence of institutional repositories often leads scientists to try to build archives and disseminate them themselves, for example on CD/DVD media, as described in the case of the personal archives of Ing. arch. Jan Moučka (Vyčítalová, 2011). Currently, the VÚGTK has resolved the problem by publishing the data on its website. Many Czech research institutions have adopted this solution in the past and continue to do so. An example of this is the analysis of the presentation of the full texts from research and technical reports on the Czech web servers (Vyčítalová, 2007). However, this solution has been unsystematic and unsustainable due to the nature of the rapid changes in webpages and problematic from the point of view of finding and sharing the information.

The library sought a solution that would provide the widest range of users with access to all of its information resources from one place. The aim was to publish information about the library's collections and products, online resources, digitized documents stored in the Kramerius system and grey literature.

In 2011, the VÚGTK was approached by the National Technical Library (the NTK) with the request for cooperation with the National Repository of Grey Literature (hereafter simply referred to as the NUŠL). In order to promote cooperation with the NUŠL, the NTK offered the INVENIO system and open source methodology for storing, archiving and making available grey literature with options for its further expansion. The INVENIO system also contains a modular library system which can be localized to the Czech environment.

This offer was accepted, because, like other research organizations, the VÚGTK is focused on the development of information technologies and processes and it is methodologically guided and supported by the work of scientific publications and data. There is a lack of the technological and methodical assistance at the VÚGTK, as well as at other public research institutes, which is provided to large institutions such as the Academy of Sciences of the Czech Republic (ASCR) through the ASCR library. Large projects designed by the ASCR library, the National Library of the Czech Republic and the Moravian Library are not optimal for these small research institutions due to their robust and technical performance. The basic requirement for these institutions is a unified and simple system for managing, storing and disseminating scientific information and data. Another requirement is technical and personal unpretentiousness of the system. The VÚGTK does not have the capacity to provide and maintain multiple systems: a library system, repository publishing, a digital library and more.

The NTK offered a free system for processing preset INVENIO grey literature as one of the forms of cooperation. (Pejšová, 2011) The pre-setup INVENIO library system can be downloaded from the NUŠL website and installed on your own hardware. Installation instructions are also available. Furthermore, the library's INVENIO system can be edited according to the library's needs. The NTK also ensured the localization of INVENIO in Czech. Another important reason involved the fact that stable development was ensured. The European Organization for Nuclear Research (CERN) in Geneva ensures that the INVENIO system has a team of developers which develops the system, regularly publishes new INVENIO versions and has a clearly defined system development for INVENIO for the future. However, the most important reason for this involved the fact that the system library already had a built-in INVENIO module that was able to provide all the library's services. The CERN library fully activated the INVENIO system from the Aleph system in 2012 without any restriction of services.

The original intention to use the INVENIO system as a library system and a digital repository has grown to an idea to use Invenio system as the discovery system too (use it as a central search point for both the printed and digital collections). The library implemented this idea as follows. The printed catalogue of the paper collection and the article list were transferred from the obsolete TINLIB bibliography system to the INVENIO system. Already digitized titles stored in the Kramerius system have been revised and their records have been linked to the digitized texts in Kramerius. Import records for available prepaid titles of online magazines are being resolved. The records of freely available professional online magazines have been added. We started with the VÚGTK materials as grey literature and internal documents, but access to the internal materials is restricted.

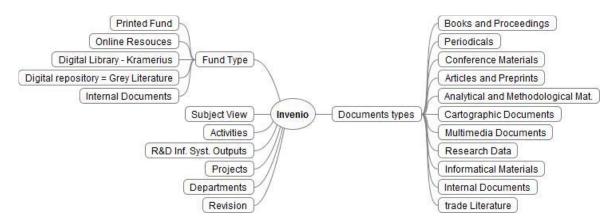


Figure 2: The schematic of the collections in Invenio

As has already been mentioned, various types of records have been recorded in INVENIO. These types are presented in detail in the following examples.

Primarily, they are records of the documents from the library. The library has carried out the conversion of the bibliographic records and/or units which were stored in the TinLib system and migrated them to the INVENIO system. Approximately 40,000 records of monographs, 3,000 records of scientific journals and 148,000 records of articles have been imported. An inspection of the imported records against the documents in hand is currently underway. We assume that the greatest number of records will be checked during the planned

reconstruction of the library. Templates for inserting new bibliographic records have been prepared.

In cases where TinLib records had connected units, those records were also imported into the INVENIO system. They are displayed alongside the record preview for the searched title in the folder marked "Holdings". If the user is logged in, he or she can enter a loan request for the selected units.

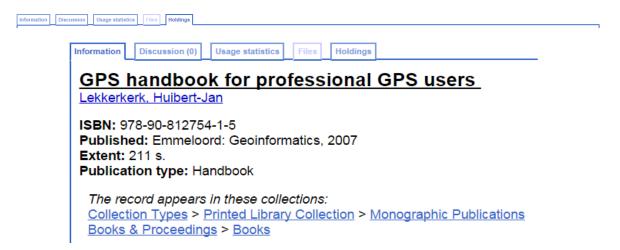


Figure 3: A preview of the imported bibliographic record for a monograph

Another type of records which is available through the INVENIO system involves online journals. Only freely available online magazines and journals have been included. We are currently looking for a convenient way of importing the online journals that the library regularly subscribes to. A link to the full text is displayed in the preview for the online magazines.

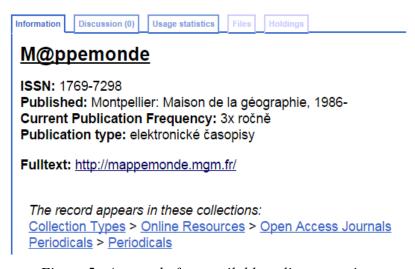


Figure 5: A record of an available online magazine

Part of the bibliographic records imported from TinLib included titles that the library had already digitalized and made available via the Kramerius system. The records have also been revised and supplemented with a link to the digitized text in the Kramerius system.



Figure 6: An example of a record with a reference to the Kramerius system

We have also started to include the grey literature in the INVENIO system. Part of the grey literature records is usually linked to full text files which can be opened directly in the INVENIO system. If it is necessary to restrict the access to the full text, this can be achieved using the system tools available at the time of the inclusion of the files. If the titles are also part of the library collection, they have the unit attached in addition to the attached file.



Figure 7: A record of a collection of grey literature with available full text

The INVENIO system is also used in the library to register internal documents. Only authorized users can access the records in these documents. After selecting the records, authorized users can see the details of the title and, if they have sufficient authorization, can also view the attached full text.



Figure 8: A record of an internal document with restricted access

The BibCirculation module has been activated in order to make full use of the capacity of the INVENIO system. All possible functions/services will be used in this module, including loan services (the register of readers), loan records (including borrowing under the interlibrary loan services), reminders, loan orders and reservations. The INVENIO system also has functions for acquisitions which the library will use in the future

After opening the BibCirculation module and finding the record of a reader, the librarian will receive basic information about the reader and a brief overview of the current number of loan requests, loans and Interlibrary loan services. The list also includes the reader's loans history and requests. Functions for the implementation of a loan, a new loan request or sending an e-mail to the reader are also available.

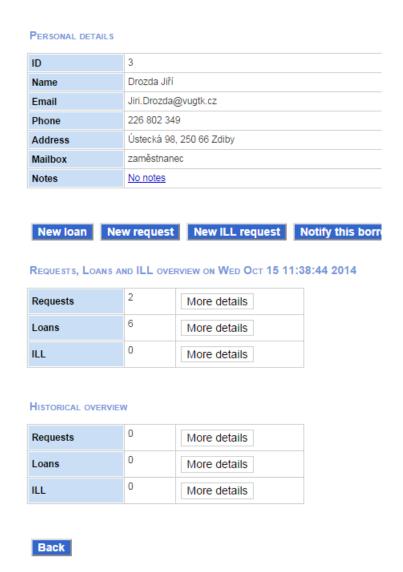


Figure 9: A record of a reader with a brief overview of his account

If the reader wants to borrow certain documents, the librarian finds user's account and performs borrowing through entering acquisition numbers of the intended units. During this process, the librarian has the option to add notes to the loan record or to verify the names of the loans. When a loan is returned, only the acquisition numbers of the returned units can be used.

Currently, the librarian must input the acquisition numbers. The library has started labeling its units with QR codes. The QR code also includes an acquisition numbers. The librarian scans the QR code and acquisition numbers is downloaded into the appropriate field in INVENIO. In addition, the QR code will contain the library's name and the reference number to the bibliographic record in the INVENIO system. The QR code will not only serve to record the borrowing and returning of loaned documents, but also as a source of basic information on the title, the author and the ownership.

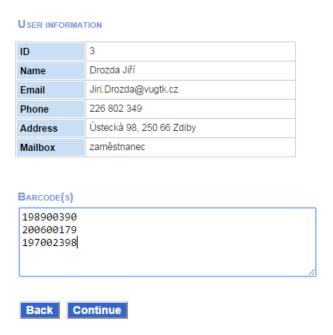


Figure 10: A loan of selected titles to readers based on the reference numbers

The librarian can view various reports; for example, the list of current loans, the list of overdue titles, the loan order summary and reservations. The appropriate functions which can be used with the selected record are always offered.



A user, who has also set up access to his or her reader account via the web interface, can check the status of his or her membership account online. If the loan period has not been exceeded,

the user can extend an existing loan and/or may cancel loan requirements for any titles which he or she is no longer interested in.

Your Loans

ltem	Loaned on 	Due date ◆	Action(s)≑
Praktičeskoje rukovodstvo po uravnovešivaniju setej geodezičeskich zaseček	2014-10-08	2014-11-07	Renew
Profilové zhuštění čs. sítě astronomicko-gravimetrické nivelace	2014-10-08	2014-11-07	Renew

Renew all loans

Your Requests

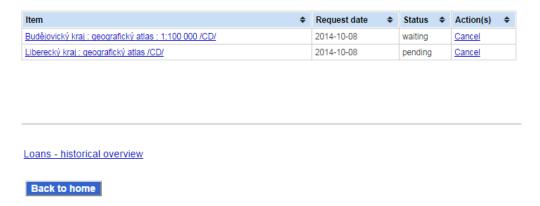


Figure 13: A current reader account with current loans and requests

If a user finds records which he or she wants to save in order to return to them later, work with them, borrow the titles and/or otherwise handle them, the user can save the records and sort them into so-called baskets (folders). The baskets are sorted into thematic groups. Each thematic group can contain multiple baskets. The user can add notes to the entire basket or to the individual titles.



Figure 14: A basket preview

If the user is logged on, the system will store the user's queries. The queries are kept in the history for the next 30 days. The user can use selected queries to set alert services. The results of a regularly set query can be sent via a specified e-mail and/or stored in the basket.

Set a new alert

This alert will notify you each time/only if a new item satisfies the following query:

QUERY: Pattern: Eurogeographics
Field: title
Collections: Zeměměřická knihovna VÚGTK

Alert identification name: EuroGeographics
Search-checking frequency: weekly
Send notification email? yes v (if no you must specify a basket)
Store results in basket? - no basket - v

SET ALERT
CLEAR DATA

Figure 15: Setting up an alert query

Although the library has used the INVENIO system that the NTK runs for grey literature within the NUŠL project, the library has also greatly expanded its use for many other purposes. The library stores not only the grey literature but also a variety of other types of documents, including its library collection too, into the INVENIO system, . Some records refer to sites outside the INVENIO system (Kramerius, the full text of available online journals and magazines).

Compared to the INVENIO version, which is run by the NTK, the library has also added some new elements such as MARC21, different templates and also the adjustment of the indexes for searching and displaying thumbnails of bibliographic records to its installation. A major extension includes the activation of the BibCirculation module and the loan service functions in this module. There has been no experience with this module in the Czech Republic to date. The activation of the BibCirculation module has brought new changes and tasks involving familiarizing the register readers with the available functions, entering orders, borrowing and returning all related instruments for the loan system. It also coincided with the need to localize the module into the Czech language. The localization has been time consuming and has still not been fully completed.

The main aim of the library is to fully satisfy both internal and external users and to always provide accessible and transparent information about the library's collection, subscribed and freely available online resources and other information materials that the library can offer all its users. The library is trying to achieve this goal by using the INVENIO library system which represents a single interface enabling searches in all the library's information sources. The use of the INVENIO system also provides access to many full texts which are attached to the bibliographic records or connected via a link to the bibliographic record. The access to the full text units naturally respects both the license rights for prepaid online resources and copyright and the internal nature of the information which is stored in the collections for grey literature and the internal institutional repositories. The access rights to the different user groups are distinguished using the INVENIO functions and features.

Another important function which the library fulfils is loan services. The librarians have all the necessary tools to the loans and the related information and information about the readers. After logging on, registered users can find a summary of their loans and orders. They are able to take advantage of the history of entered queries, to save selected records in a basket and/or to set a selected query so that it regularly informs them about new records related to the theme which they are interested in.

The library is still merging and optimizing the settings for the proposed procedures and processes within the beta phase. We believe that, after the planned reconstruction of the depositary and reading room, the library will be able to offer all the users its resources and services in the new cover. We believe, satisfied internal and external customers will be the result of these changes.

References:

FERRARA, Rosalia a Poltronieri, Elisabetta. Free on the Net: accessing digital research output with no barriers. In *INFORUM 2007: 13. annually conference* [online]. Prague: Albertina Icome, 2007, 11 p. [cit. 9. October 2014]. Available from: http://www.inforum.cz/pdf/2007/poltronieri-elisabetta.pdf>.

PEJŠOVÁ, Petra. National Repository of Grey Literature. In *Seminar on Providing of Grey Literature 2011 : 4th annually seminar*, 25. October 2011 [online]. Prague, NTK, 2011. [cit. 9. October 2014]. Available from: http://www.nusl.cz/ntk/nusl-97123>.

PLANKOVÁ, Jindra. Obecné souvislosti Open Access - zamyšlení nad aktuálním tématem. *Ikaros* [online]. Praha: Ikaros, 2007, vol. 11, iss. 10 [cit. 9. October 2014]. ISSN 1212-5075. Available from: http://www.ikaros.cz/node/4340>.

VYČÍTALOVÁ, Hana. Elektronické vědeckovýzkumné a technické zprávy zpřístupňované na českých webových serverech. *Ikaros* [online]. Praha: Ikaros, 2007, vol. 11, iss. 10 [cit. 9. října 2014]. ISSN 1212-5075. Available from: http://www.ikaros.cz/node/4341>.

VYČÍTALOVÁ, Hana. Osobní archiv Ing. arch. Jana Moučky v Národním úložišti šedé literatury (NUŠL). *Knihovna: knihovnická revue*. Praha: Národní knihovna České republiky, 2011, vol. 22, iss. 2, p. 48-58. ISSN 1801-3252.