Visualising and defining effective library systems : Croatian academic libraries

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Abstract

Introduces briefly a history of the Library (NUL) and its continuous development since its foundation in 1607 to the present. The paper is focused on present implementation of the new library software in academic libraries in Croatia and the need to establish the conceptual model for its effective, efficient and collaborative functioning both nationally and internationally. The paper aims to present the results and guidelines of the Model of the University of Zagreb Library System, and to define the crucial and sustainable academic library functions that need coordination and collaboration nationwide.The development guidelines consider also the social factors and inevitable changes in management style of the university librarians and their liason with the university administration in a dynamic environment caused by the present reform in HE Sector.The described model of the University of Zagreb library System attempts to establish the user centered quality services approach and set new and accountable academic library environment that should be adopted in Croatia, in due time. The project, funded by the EU, involved 30 academic librarians from Croatia and professionals from the Low Saxony State and University Library in Goettingen, the National Library of Finland and the Royal Library of Denmark.

Introduction

INTRODUCTION

- The oldest library in the country is considered the library of Split Cathedral, which was probably established in the seventh or eight century.
- The oldest academic institution in Croatia was *Universitas Studiorum Jadertina*, established in
- 13 9 6 (today University of Zadar)
- The oldest and the most complex University is in Zagreb
- Six other universities: Osijek, Rijeka, Split, Dubrovnik, Zadar, Pula

The Republic of Croatia is situated in the central Europe. It covers the area of 56,542 sq. km streching from the Adriatic with the coastline of 5,835 sq. km, including 1,185 islands and to the to the lower slopes of the Alps and deep into the Pannonian Valley with its population of 4,437,460 (2001 census).

The oldest library in the country is considered the library of Split Cathedral, which was probably established in the seventh or eight century. The oldest academic institution in Croatia was *Universitas Studiorum Jadertina*, founded in 1396, but its development and activities were interrupted in the past and continued again in 1955. Since their foundation, in the seventeenth century, the majority of academic libraries in Croatia have followed and supported the development of higher education.

Higher education System in Croatia

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- The Act on Scientific Activity and Higher Education, adopted in 2003, is based on Bologna process
- The priority goals are: reorganzation for the study programs and curricula based on two main cycles, introduction of the practice of recognition of foreign higher education qualifications based on the Lisbon Convention and the development of the quality assurance system.
- By the end of 2005, the evaluation of more than 800 study programmes has been carried out

Today, seven public universities in Zagreb, Split, Rijeka, Osijek, Zadar and Pula, with approximatelly 88 faculties, twelve public and one private polytechnics and 12 schools of professional higher education form the HE infrastructure in Croatia. (Ministry for Science, Education and Sports, 2006).

The Law on Higher Education of 1993 was designed to make universities more efficient and autonomous, but also provided the separation of the university sector from vocational education, by creation of colleges and polytechnics. The concept of micromanaging every faculty separately, additionally had weakend the institutional autonomy of the university, and legislative changes in 1996, even more strongly prevented the ability of the universities to manage themselves. (Clark, 2003)

However, the academic community promoting the integration into the European higher education system, invited the international assessment of Science and Higher Education in Croatia. (Academia Europaea, 2000)

The Act on Scientific Activity and Higher Education, adopted in 2003, (Zakon, 2003) is based on Bologna process initiated by Bologna Declaration 1999, which promotes the European dimension of higher education. It highlights and brings several innovations: Bologna process in Croatia becomes legal obligation in building the legislative and administrative framework for its implementation. The priority goals are: reorganization for the study programs and curricula based on two main cycles, introduction of the practice of recognition of foreign higher education qualifications based on the Lisbon Convention and the development of the quality assurance system. By the end of 2005, the evaluation of more than 800 study programmes has been carried out under the guidance of the National Council for Higher Education and the Agency for Science and Higher Education-which was the most demanding Bologna priority. (Ministry for Science Education and Sports, 2006). According to the Act on Scientific Activity and Higher Education, higher institutions are autonomous in setting out the development strategy, developing the enrolment policies, recuitment of their staff, creation, execution of study programmes, establishing faculties, academies, departments, institutes, foundations, student centres, *libraries*, technological centres…, the management of those organisations established, creating and executing internal quality assurance mechanisms, distribution of funds, the lump sum mechanism.

There are two types of study programmes in Croatia: university (ISCED 5A and 6, called „sveučilišni studiji") and professional (ISCED 5B, called „stručni studiji"). Univesity can offer both university and professional study programmes. Croatia aims to establish a binary system, in which universities will offer only university programmes and polytechnics only professional programme.

The annual enrolment at higher institutions is about 35,000 students, but only 13 per cent of the working population holds a higher education degree. (Ministry of Science and Technology - National report 2003).

The common development of the University and the National and University Library

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- The Library is founded in 1607, the origin of the present National and University Library.
- The University of Zagreb, founded in 1669 is the oldest and the largest among seven universities in the state.
- Since its foundation, the present National and University Library has been its affiliated part.

The arrival of Jesuits in Croatia influenced the foundation of libraries alongside with their colleges and high schools. In Zagreb they founded the college in 1606, and the library followed in 1607, the origin of the present National and University Library.
The University of Zagreb, founded in 1669 is the oldest and the largest among seven universities in the state. Since its foundation, the present National and University Library has been its affiliated part.
When in 1773 the Academy of Sciences was founded, the library of the former Jesuit college became its part.The Library was a secular establishment and according to the school policy of the Austrian Enlightenment government, assumed a public importance. Of the utmost importance was the fact that the libraries of the academies should be for public use. In the same year 1777, cannon and historian Baltazar Adam Krčelić, bequested the library his private collection, conditional upon its public accessibility. When the University of Zagreb was founded in 1874. The library of the Law academy became the component part of the university, turning into a university library.The University of Zagreb was for the whole century the only university in the country. (The National and University Library in Zagreb, 2007)

Library and the University

- The University of Zagreb has 60,000 students, about 3,500 teachers and teaching assistants, as well as 2,000 administrative staff.
- It consists of more than 30 faculties, 3 art academies and one university study programme.
- 55 libraries
- NUL has cca 20,000 registered users
- Dual function
- " Library Open Door 24 hours " since 2007

The University of Zagreb has 60,000 students, about 3,500 teachers and teaching assistants, as well as 2,000 administrative staff. (Bjeliš, 2003).

It consists of more than 30 faculties, 3 art academies and one university study programme. At present, the University of Zagreb is still characterised by the diversity and granularity of the faculties which is also reflected in unefficient coordination among libraries. However, the University of Zagreb developmental and strategic plans are stronglly based on the fundamental principles laid in Bologna declaration – encouraging the coordinating policies and aiming at development of comparable criteria including university libraries, altogether 55.

The need for functional model of conceptually integrated library could be regarded as the basic structural level of the integrated university.

At present, the Act on Libraries from 1997 (Zakon, 1997) provides the general legislation framework for all types of libraries, the draft of the new Act on Libraries and Library Activities is in the course of evaluation at the Ministry of Culture. The national Standards for Academic Libraries, currently under revision, should ease the overall development of diverse academic libraries (faculty, departmental, special, institute) and their quality assessment at the university.

About the project

The project

- Funded by the European Commission
- The project object was establishing the functional model of the University of Zagreb Library network, including the National and University Library.
- The model was based on the concept that university library network should offer a reliable and up to date support to teaching, learning and research, providing both traditional and virtual services and be integrated and coordinated in a way to provide an efficient and accountable system within the university.
- 3 international partners : Lower Saxony State and University Library Goettingen, National Library of Finland, Royal Library , Copenhagen

Legislative framework for setting the functional university library network had its origin in the Act on Scientific Activity and Higher Education ; Articles 53 -the initial ordinance about the university, and 54, dealing with the organisation of the university prescribing that the statute of the university should define the status of the university library, as its constituent part.

The specific object of the project funded by the European Commission was establishing the functional model of the University of Zagreb Library network, including the National and University Library. The model was based on the concept that university library network should offer a reliable and up to date support to teaching, learning and research, providing both traditional and virtual services and be integrated and coordinated in a way to provide an efficient and accountable system within the university.

The second reason for involvement into the project was incompatible library software applied in libraries[1], becoming the serious technical obstacle in building the integrated library network. Libraries did not share the common library software, no union catalogues (except for foreign books and serials, which ceased to be updated), had the consequence of a very low coordination in acquisition, low cooperation in processing and service provision. But parallel to this situation, the National and University Library in Zagreb, being the central library in Croatia, moved to new premises, and was involved in organising various functions internally, but also nationwide. An example is constituting the *Centre for Continuing education of librarians,* a joined cooperation of the NUL, Croatian Librarians' Association, Department of Librarianship at the Faculty of Philosophy, University of Zagreb and the Zagreb City Library, including more and more distributed educational networks consisting of the main regional and public libraries, which today consist 2/3 rds of training courses. The National and University Library and some other libraries were also involved in international

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[1] The Governing Board of the National and University Library in Zagreb, in April 2005. , approved and decided to start with the process of public procurement for the new library software. Ministry of Sceince, Education and Sports, gave permission that the new library software to be purchased for all public academic libraries in Croatia.

professional associations and projects-CENL, CERL, LIBER, The European Library, TEMPUS etc..

The attempt to give the overall definition of the library information system in Croatia was NISKA project in 1996.[2]

The task and the objective, of the first SCM TEMPUS project, which is the theme of this article, was rather ambitious and demanding to accomplish in only one year, being involved in daily pressures and duties. The members of the project were from different types of libraries the National and University Library, and from libraries at the University of Zagreb. The overall support of european partners, university administration and the Ministry, was positive, but the most inspiring in this challenging endeavour, was the encouraging attitude of the majority of colleagues from libraries of the University of Zagreb and other universities in Osijek and Rijeka as well as faculty libarians which gave us the necessary enthusiastic motive.

European partners and their library systems

The possible international consortium partners in the project were chosen on the basis of resemblances in historical background and organisation with the present situation at University of Zagreb libraries and their relations with the NUL (dual functions, central university library, providing various cooperative functions and tasks), but also for their internationally recognised excellence and expert knowledge of their staff.The Lower Saxony State and University Library in Goettingen, the central libary for the Georg August University, serves, among many other functions, as the library fo the Akademie der Wissenschaften zu Goettingen, is responsible for Lower Saxony Central Catalogues (NZK) it officiates as national library for German Imprints of the 18th century, holds the legal deposit privilege for government publications of Lower Saxony, it is the office for the Lower Saxony Konsortium, retro digitization have also their offices in the Library.

The Royal Library - Det Kongelige Bibliotek, established in 1653, the first legal deposit relates the library with its national function in 1697.The University which was established in 1482, relates it to University of Copenhagen for the collections in humanities, law, social sciences and theology. It provides services for about 50 institutes and centre libraries to the University of Copenhagen.

The Helsinki University Library was established in 1640. It is also a research library open to general public and specializes in literature intended for advanced studies in the humanities. It carries various tasks relating to the national information infrastructure and is known, as other two partner libraries in the project, for its successful international library cooperation and professional excellence.

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[2] NISKA was the first project aiming to define national library information system in Croatia, in 1996 initiated jointly by the Minstry of Culture, Ministry of Education and Sports and Ministry for Science and Technology. Retrieved: http://www.niska.hr

The conceptual model of the Zagreb University Library System

- Structural changes and defining the university library network
- Common library software
- Definition of the main functions: acquistion, processing, services, preservation, development
- Mutual documents, guidelines and recommendations, codes and standards

The present situation in 55 libraries at the Zagreb University, which represent 88,65 % of all academic libraries in Croatia, was quite demanding and complex task. The project aimed at structural changes by upgrading the functional solutions of : acquisition of electronic resources, cooperative cataloguing (Hodak, 2000), access and provision of services, some of them to be organised nationwide for the academic community. The proposed model was based on questionnaires which provided additional information of each task group for their more objective conclusions in defining the Guidelines.

The functional framework has been discussed on various project meetings, numerous WG meetings, including also other colleagues not formally involved in the project.

Croatia, being relativelly small country, could be the advantage for some services (intra and interuniversity lending policies, organising user training, continuous education and training of academic librarians and assistants etc..)

Despite the prevailing positive opinion about the Model guidelines, librarians are aware that the model needs immeadiate follow - up activities, meaning : establishing the needed Library board, and committees, setting documents and mutual agreements regarding the standards, procedures, workflows, organising regular talks and task groups for various functions (training and education, electronic collections and reserves, ask services, involvement in selection and acquistion processes of electronic resources, and all tasks connected to implementation of new library software. My presentation is more focused on explanation of guidelines for special functions of the Model.

Acqusition

Acquisition and consortia

- proposed the need for written acqusition guidelines
- focused on setting the guidelines for consortially provided access to electronic resources nationwide.
- recommended a text of the founding document *Consortium of Crotian academic libraries.*

This part of the model recommended the coordinated acquisition, which was lacking gradually since the eighties, proposed the need for written acqusition guidelines but mainly focused on setting the guidelines for consortially provided access to electronic resources nationwide. The working group analysed past efforts and models of cooridination of collection acquisition since eighties and from 1992-2005 period when coordination for acqusition of foreign scientific journals was established. Some attention has been given to the working models of licencing the electronic resources in the period from 1995 until today, involving the National and University Library in Zagreb, Centre for Online databases and CARnet (Croatian Academic and Reserach Network. The efforts of this group were focused on guidelines and recommendations in organising cooperation in a national network, by establishing consortia, their organisational structures needed, work processes and the models of financing. In developing the guidelines we had a valuable and desirable model from the Finnish experience and the Nelli portal. The working group recommended a text of the founding document *Consortium of Crotian academic libraries.*

The group was aware of the existing problem connected with acquisition of textbooks, but it was decided that this issue should be better defined in Standards for the Academic Libraries and in the document *General Conditions and Working Code for Libraries at the University and their Services.*

Processsig- catalogues, bibliographies and classification

Processing- catalogues, bibliographies, subject shemas

- the most difficult and important tasks to be discussed
- parallel work of the *project group for implementation of the new library software*
- defined the policies and workflows for cataloguing,
- recommendations regarding the new MARC21 format,
- building the authority databases.
- special interest for subject classification and the need to establish the subject catalogue.
- various classification shemas should be implemented, some of them being internationally applied (MeSH, PACS, etc..)
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One of the most difficult and important tasks to be discussed in the working group for processing were the various catalogues and data bases existing at the University of Zagreb, but also the analysis of various technical solutions, applied at present. Parallel to our project, the project group for implementation of the new library software, had organised data gathering and analysis. At this level, two project groups had to agree upon the concept and model of database(es), because the National and University Library in Zagreb has dual function and unique responsibility for the national bibliographies.The Croatian Library Association, its Section on Special and Academic Libraries has organised their annual conference : *9th Days of Special and academic Libraries*, dealing, among other themes also with the various aspects of implementation of the new library software. (9.Dani - Conference Proceedings, 2007.)

This working group involved in the project describing the Model of the University of Zagreb had defined the policies and workflows for cataloguing, giving recommendations regarding the new MARC21 format, building the authority databases. Special interest was given to subject classification and the need to establish the subject catalogue. The working group was well aware of the fact that, various classification shemas should be implemented, some of them being internationally applied (MeSH, PACS, etc..)

Services and portal

Services and portal

- *Visibility* of the potential of 55 libraries at the university
- The core services: information and reference services, borrowing and on site usage and user training.
- *A General Conditions and Working Code for Libraries at the University and their Services,* including the rules for borrowing and lending and interlibary loan, or reciprocal borrowing.

One of the *main* reasons to start with this project, was above all, the intention to provide users (students, teachers, assistants, researchers, general public) the services they need, but not only the services dependent on personal attention and profesional skills, but services that could really add value to all in the process : university administration, founders, end-users, our colleagues as users, libraries and other institutions, as users. We also had in mind the technology that is influencing all aspects of our live, but libraries specially. We decided to provide the framework for services and e-services, based on knowledge and experience, but were unable to give, at the moment, the recipe.

The concept which is so often used on resources portals „ *For Librarians down arrow*" we wanted to turn, upside down, and add more *visibility* of the potential of 55 libraries at the university which at the moment don't share any common gateway – our main task was to define the content of the common portal.The proposal was to create the portal that would merge not only products of libraries (catalogues, databases and special collections) but to provide access to services. We started with discussion, who are our users, and which are the core services that every library can and should provide. We agreed upon that our users are students, teaching staff, general public, but also us, the librarians. Each should have a defined authorities and privileges connected to using the libraries and its services- this being completely new concept in Croatia. The core services are: information and reference services, borrowing and on site usage and user training.

We were aware that, in order to give some framework to our concept, we need to have a „tangible" support which we suggest to be - *A General Conditions and Working Code for Libraries at the University and their Services,* including the rules for borrowing and lending and interlibary loan, or reciprocal borrowing. Rules for reciprocal borrowing need to be set, which is one of the main tasks, and could gain the immediate benefit for the user, but on the other side, could cause the headache for operations, if not properly prepared and organised. In order to avoid possible negative effects, we defined the levels and steps in this process. Own library, being the first choice and the first level, other libraries at the same university being the second choice and the second level, and other libraries in Croatia the third level. In future, by following this principle the system can produce the reliable and aggregated

circulation transaction statistics, valuable for library assessment purposes, as well as interlibrary loans.

So, the expectation of reorganisation of libraries at the university, as its outcome need to have the strenght and professional recognition at the university. Only if it is a harmonised and well organised system - professional and visible, providing the quality product and tools and services we shall all benefit from it.

Preservation

Preservation

- Special attention to preservation of collection, because some faculties and departments hold valuable old collections that need a constant and professional attention
- Considered the common repository of the University.
- The e-repository was mentioned, without any further consideration.

Special attention was given to preservation of collection, because some faculties and departments hold valuable old collections that need a constant and professional attention, meaning preservation, adequate space and microclimate storage conditions, special usage. It was found out that not enough attention is given to preventive measures which are prescribed by the Code of protection of library material.

The group recommended several categories of material with the corresponding measures to be taken when necessary. In order to solve some of the urgent storage problems in libraires, they have considered the common repository of the University. The e-repository was only mentioned, without any further consideration.

Development and administration of the library network

Development and administration of the library network

- Appointing the core team or the committee for main library functions (for acquisition, for processing, for services, user traininig),
- National librarians' association lobbying and advocating for librarians' active role in reorganisation of university
- Conceptual acceptance and recognition of the Model by founders and university administration, unless followed and applied by the adequate management and organisational structures, could not be regarded as satisfactory, unless connected by the responsibliites for their outcomes.

As already mentioned, the Zagreb University doesn't have the library network, it has scattered and „indipendent" libraries cooperating mainly in provision of access to electronic resources, but not efficiently organised or involved in the processes of selection or usage analysis of the resources. There is also the obvious discrepancy between the libraries, primarily in the space they occupy, automation of their processes, capability of services provision, which are sometimes dependent on the attitude and plans of the present dean. What could be the action plans in order to initiate necessary changes ?

The priority, when dealing with libraries would be that University is willing to consider the restructuring the jobs, at the university level, maybe to think about the merger of some functions, including technical service departments, which could help libraries as well.This could create new jobs and not loosing them, but upgrading job requirements (new types of work, redefinition of certain functions-sharing of services and duties ..) (Husain A. Al-Ansari, 1999)

Appointing the core team or the committee for main library functions (for acquisition, for processing, for services, user traininig), should be one of the first tasks in the reorganisation effort of university administration concerning the libraries. It would, according to our opinion, help building the teams beyond the personal affiliation with any unit, faculty or department. The committee should think strategically from inside and urge the changes in liason with the Library board.

Another recommendation was concerning the involvement of „as much as possible" number of colleagues, which know their everyday operational problems and could be the best choice to propose the structural changes, specially pointing to weak spots. Participation, in my opinion, can have magical power and the needed informal structure and committment for necessary changes.

Slowly, but consistently developing the new working culture, based on collaboration, trust, innovation, integration, meaning „humane" and emotional needs that are more and more lacking today in our working environment. You can perfectly make contacts with our colleagues by various electronic channels, but when on the ground of decison making and organisations and structural changes, we have to be the team.

Very important in this is the participation of our national librarians' association in lobbying and advocating librarians' active role in reorganisation of university. Recently, we have witnessed the successful outcome of this, when concerning the job coefficients for professional levels which influence ocupational income in the overall higher education coefficient schema. I hope we shall witness some more professional recognition in the future.

Conclusions or follow-up ?

Conclusion

- Conceptual acceptance and recognition of the Model by founders and university administration, unless followed and applied by the adequate management and organisational structures, could not be regarded as satisfactory, unless connected with responsiblities for their outcomes

- Model of the University of Zagreb library system

- A Retrieved from (Digital Archive NUL)
- http://www.nsk.hr/UserFiles/File/dokumenti/tempus/knjiga%20modeli%20NSK-KB.pdf

Thank You for Your attention.

The project has successfully ended and has achieved the objectives. It has established the *Guidelines and recommendations* for the functionally integrated library system at University of Zagreb, with the timeline for its application.This is also the first published document which considers the possible organisation of the library network at its first level at Universtiy of Zagreb, being the most complex and urgent case, but which also envisions and gives the recommendations for the overall possible cooperation in building the catalogues, organising the access to electronic resources, provision of various services, having in mind the accountable and reliable library network, which could be assessed by quantitive as well as qualitative indicators. Professionals and the university administration are well aware that this framework and recommendations need strong support and constant care. Conceptual acceptance and recognition of the Model by founders and university administration, unless followed and applied by the adequate management and organisational structures, could not be regarded as satisfactory, unless connected by the responsibilities for their outcomes.We hope we shall have the necessary recognition and support to witness those changes occur for the benefit of users and development of the knowledge society in Croatia.

References

Bjeliš, Aleksa. Strukturne promjene na Sveučilištu – od analize do novih smjernica.// *Sveučilišni vjesnik*, 49 (2003), 1/2, pp. 70-76.

Clark, Nick. (2003). CROATIA Legal Framework. *WENR: World Education News & Reviews*, November/December, Volume 16, issue 6. Retieved June 10 2008, from http://www.wes.org/ewenr/03Nov/Croatia.htm

ISKORAK (transl. A STEP FORWARD) 2001.: razvojna strategija Sveučilišta u Zagrebu.// *Sveučilišni vjesnik* 49, 172(2003), pp. 3-42. Retrieved September 25, 2005 from http://www.unizg.hr/fileadmin/rektorat/dokumenti/iskorak2001/razvojna_strategija_svucilista_u_zagrebu.pdf

Iskorak prema novome knjižničnom sustavu Voyager : *zbornik radova / 9. dani specijalnih i visokoškolskih knjižnica, Opatija, 13.-16. svibnja 2007.* ; [organizatori Hrvatsko knjižničarsko društvo, Sekcija za specijalne i visokoškolske knjižice, Nacionalna i sveučilišna knjižnica u Zagrebu, Sveučilišna knjižnica Rijeka] : uredile Alisa Martek i Irena Pilaš .- Zagreb : Hrvatsko knjižničarsko društvo, 2008. 248 str. : ilustr., graf. prikazi ; 24 cm

Hodak, Vesna. Kooperativna katalogizacija u Hrvatskoj : rezultati rada u četveromjesečnom razdoblju.// *Vjesnik bibliotekara Hrvatske* 4, 43(2000), pp. 147-155.

Hrvatsko sveučilište za 21. Stoljeće. Idejno rješenje razvoja Sveučilišta u Zagrebu/ Marijan Šunjić, Jasna Helena Mencer, Mirjana Polić-Bobić i Petar Kraljević.// *Sveučilišni vjesnik*, 44(1998), posebni broj (special edition).

Husain A. Al-Ansari. Improving the organizational structure for an electronic environment: a case analysis of Kuwait University libraries. Library Review. Vol. 48, Number 3 1999, pp. 131-139. Retrieved August 28, 2007 from: http://www.emeraldinsight.com

Ministry of Science and Technology - National report, 2003. Retrieved June 10, 2008, from http://:www.bologna-bergen2005.no/Docs/Croatia/CROATIA.PDF

Ministry for Science, Education and Sports. Background information on the Croatian Higher Education System, December 2006. Retrieved June 10, 2008 from http://www.ondvlaanderen.be/horegonderijwijs/bologna/links/National-reports2007/National-Report-Croatia 2007.pdf

Model sveučilišnog knjižničnog sustava Sveučilišta u Zagrebu = A Model of the University of Zagreb library system / [urednica i koordinatorica projekta Marina Mihalić ; suradnici na projektu Sonja Avalon ... [et al.] ; predgovor Josip Stipanov], Zagreb : Nacionalna i sveučilišna knjižnica, 2006. 138 str. ; 30 cm
Other authors: Golubović Vesna, Jokić Maja, Klarin Sofija, Kovačević Radovan, Krajna Tamara, Lopina Mirjam, Majstorović Zagorka, Martek Alisa, Medić Irena, Mihalić Mirjana,

Mišetić Marijana, Murati Tomislav, Njegač Suzana, Orlović-Leko Palma, Pulišelić Lea, Telenta-Tomljenović, Milojka, Velenta Ankica, Luić-Vudrag Dubravka,Stipanov Josip.
Retrieved from (Digital Archive NUL)
http://www.nsk.hr/UserFiles/File/dokumenti/tempus/knjiga%20modeli%20NSK-KB.pdf

The National and University Library in Zagreb : 1607-2007 : on the occasion of the 400th anniversary / [translated by Graham McMaster ; photographs Darko Čižmek, Sonja Hrelja, Sanja Vešligaj ; editor Aleksandar Stipčević].- Zagreb : National and University Library, 2007. 155 str. : ilustr. (pretežno u bojama) ; 29 cm

Science and Higher Education in Croatia. Report on visit by the Academia Europaea, 7-11 June 2000. Retrieved May 20, 2008 from
http://rektorat.unizg.hr/fileadmin/rektorat/dokumenti/iskorak2001/science_higher_education_croatia.pdf

Zakon o knjižnicama. // Narodne novine br-105/1997. I 5/1998. Retrieved from
http://www.nn.hr/clanci/sluzbeno/1997/1616.htm

Zakon o znanstvenoj djelatnosti i visokom obrazovanju.// Narodne novine, 123/2003. Retrieved from http:// www.nn.hr/clanci/sluzbeno/2003/1742.html

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Marina Mihalić is Master of Information Sciences and a candidate for PhD in Librarianship at Zagreb University. Her working experience is already for twenty years in the National and University Library in Zagreb, seven years as acting deputy director. Her special interest is in establishing the efficient end-user services and their evaluation. She is an active member of the Croatian Library Association ; as a president of the Professional Board for two mandates, and as president of the Commission for Library Statistics. Her international professional contacts were regarding the implementation of international statistical measurements in libraries (ISO 2789 - 2006) as foundation for implementation of performance measurement. She was a member of the CENL WG for performance indicators for national libraries.
She has managed and coordinated international projects of the National and University Library in Zagreb ; establishing the Centre for Continuing Education of Librarians in Croatia – where she also teaches, and TEMPUS SCM, one year project: A Model of the University of Zagreb Library System.