INSTITUTIONAL OPEN ACCESS POLICIES

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Abstract: The Open Access initiative is one of the most impressive global approaches on promoting free access to information for all users. Open Access removes the barriers to access and permission to scholarly information. The most generalised definition describes Open Access as a digital, online, free access to literature, without most restrictions on copyright and licensing. Nowadays, more and more groups and research centres, universities, associations, funding agencies, publishing houses are developing their institutional open access policies. Scientific research funders are beginning to mandate, in an increasingly active manner, open access to the research they fund. Institutional policies are currently developed for three types of organisations: scientific research institutions (universities, laboratories, departments); scientific research funding agencies; publishers of scientific journals. For each type of organisation, open access policy registries are created. The analysis of the three types of institutional open access policies is hereby presented.The academic community has two important roles in ensuring public access to research results. The first consists of working together with politicians and decision makers at all levels, with a view to encouraging sustainable open access mandates and policies. This means raising awareness of decision makers not only at the level of their own institution, but also of funding agencies, as well as at national and international political level. The second role consists of continuously creating resources with open access to information. The study findings suggest the need to develop an institutional OA policy for universities.

Keywords: open access, institutional p olicies, academic communication, publishers, universities, authors

INTRODUCTION

By open access policies, we shall understand international, national and institutional policies of supporting open access to the results of scientific research, promoted by international organisations, central or local governments and various institutions (universities, research institutions, funding agencies, libraries, publishers etc.).

The approval of policies at national and institutional level could not be achieved without launching international initiatives and supporting them by the most diverse international, European and interstate organisations.

FIRST STATEMENTS ON OPEN ACCESS SUPPORT

The policy actions of the various organisations are designed to support and promote the scientists' willingness to publish, free of charge, the research results in reviewed journals, as well as to provide society with free and gratuitous access to the results of such research.

The policy actions undertaken primarily at international level led to the approval of a series of statements. Open access to scientific research findings is currently supported by the international initiatives of Budapest, Berlin and Bethesda.

In December 2001, the *Open Society Institute* (OSI) organised, in Budapest, a meeting of the supporters of open access to literature and scientific journals. At the meeting, discussions were held about issues related to the identification of the most appropriate means of dissemination and access to scientific publications. As a result of this meeting, on 14 February 2002, the *Budapest Open Access Initiative* (BOAI) was approved [2].

The Open Access Initiative states the basic principles for new access opportunities for scientists to electronic editions, providing review, preservation, archiving of scientific

publications, copyright compliance and, at the same time, wide and free access to the authors' publications. Open access provides that all expenses are covered by the author or institution within which the author acts, unlike traditional models of access to scientific information, where the costs are borne by the organisation providing access to information by subscribing to periodicals. BOAI equally supports two complementary strategies: *self-archiving* and *open access journals*, which could be used to more efficiently and more equitably build a scientific communication system. According to BOAI, open access must be ensured by the author's consent, and copyright belongs to the authors or institutions, organisations that will provide their consent to open access both by self-archiving and by open access journals [2].

In accordance with the spirit of the Budapest Declaration, in October 2003, the *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities* was signed. The importance of the Declaration consists of the fact that, for the first time, the funding bodies and research organisations explicitly recognised that their mission "of disseminating knowledge is only half complete if the information is not made widely and readily available to society" [1]. New possibilities of knowledge dissemination not only through the classical form but also increasingly through the open access paradigm via the Internet have to be supported. The Declaration signatories agreed to further promote a new open access paradigm in order to gain the most benefit for science and society through various means, including by encouraging researchers to publish their work according to the principles of the open access paradigm, developing means and ways to evaluate open access contributions and online journals to continuously maintain the standards of quality and good scientific practice, advocating that open access publications be recognised in evaluation promotion and stability. The signatory organisations have realised the need to find solutions that support further development of the existing legal and financial frameworks in order to facilitate optimal use and access to scientific information. Interest in policies started in the US, in 2003, by signing the *Bethesda Statement on Publishing Policy*. The purpose of this Statement was to stimulate discussion within the biomedical research community on how to achieve open access to primary scientific literature [1]. The Statement proposes concrete steps of operative editing and promoting open access publications. In this respect, the Statement addresses all organisations conducting and supporting scientific research, the scientists who generate the research results, the publishers who facilitate the peer-review and distribution of research results, the scientists, librarians and others that access to this knowledge depends on.

FIRST OPEN ACCESS POLICIES

New policies were proposed not only by funding agencies, but also by libraries, publishers, working groups of scientists and scientific societies. Thus, "scientific societies agree to affirm their strong support for the open access model and their commitment to ultimately achieve open access for all the work they publish" [1].

In the US, changes began at political level. In 2004, the US Congress instructed the *US National Institute of Health* (NIH), the largest medical research funder in the US, with an annual budget of 28.9 billion USD, to develop a new policy of access to the research it funds. In the draft policy, issued by NIH for consultation, the copies of all documents of research funded by NIH must be deposited in *PubMed Central* (NIH's digital and free repository of biomedical and life science journals) for six months as of publication. However, in the final policy document, issued in 2005, the period of embargo was changed – from six up to 12 months from the date of publication. This unsuccess of the proposed policy meant that there was not enough public access to the reports and data of the results of research funded by NIH [11, p. 4].

In the summer of 2007, the US Congress took measures to ensure that the demand for open access should become a mandate. The policy of open access to publicly funded research was approved by the US Congress. Therefore, the US President signed the Consolidated

Allocation Act of 2007, which includes a provision for NIH to provide the community with online open access to the research it has funded [12, p. 402]. This law came into force in April 2008 [9].

We need to mention that the issue of open access to publicly funded research is not limited to the area of biomedicine. Given that the benefits of open access cover all areas, the draft law on *Federal Research Public Access Act of 2006* was submitted, originally proposed in 2006. It was reintroduced in 2009 in the US Congress, which requires that the research supported by the 11 largest government funding agencies should adopt open access for all research activities [4, p. 67].

The issue of public access to publicly funded research is also discussed in the United Kingdom. In 2004, the Science and Technology Committee of the UK Parliament published its report entitled *Scientific Publications: Free for all?* [10] recommending all higher education institutions to organise institutional repositories, and researchers to deposit a copy of their personal articles in the repository, and even create a fund that would provide financial support to authors for publication of articles in open access journals. The Committee's Report is also known by suggestions for self-archiving. The Committee recommends fund allocation to universities for creating open access archives, and authors must self-archive their articles for a month after publication; scientific research funders should seek self-archiving of all publications reflecting the results of the work funded; the British Government must act with a view to supporting the changes both in the United Kingdom and internationally.

Another similar project in the UK, focused on the open access position, was launched by *London's Wellcome Trust* Foundation, a strong financial organisation that supports research in biomedicine. The Foundation requires researchers to self-archive their articles for six months after publication. Since 1 October 2006, other UK research institutions have also introduced a mandatory condition for open access to research results.

Policy actions have been undertaken in several countries: Canada, Italy, France, Germany, Netherlands, Australia etc. in order to establish the access regime for digital research in the public domain, and to provide a broader audience to the research results both by reducing access costs and by easing reuse conditions.

The initiative was supported at the level of international organisations, including by the Organisation for Economic Co-operation and Development (OECD) which approved the Declaration on Access to Research Data from Public Funding. OECD supported the idea of providing access to research results, funded by the State, noting that: "[...] the international exchange of data, information and knowledge contributes decisively to the advancement of scientific research and innovation, and open access will maximize the value of the community's investments in research" [15]. OECD has shown that access to public sector data has economic benefits greater than the income that can be achieved from the sale of access to data [13, p. 24].

In January 2006, the European Commission published a study on the economic and technical evolution of the scientific publication market in Europe, which sought to provide open access to publicly funded research results and recommended that scientific publications supported by the European funding agencies should be made available through open access archives [16]. In addition to this general conclusion, the study has a series of useful and reasonable recommendations to improve public dissemination of the funded research results. Moreover, the issue of quality metrics was also acknowledged. The impact factor is a good indicator to determine the relative quality of journals. However, there are fewer metrics to track individual work and results of research that have not been published through traditional ways (peer-reviewed journals). The study proposed (Recommendation A3) extending the range of quality rankings, ensuring that the new dimensions related to the quality of dissemination will be tracked and possibly valued by research funding bodies. This confirms

once again that the current system of scholarly communication does not always ensure the widest dissemination of scientific information.

The study addressed the technological issues related to scholarly communication. Overall, the study indicates that the improvement of interoperability would facilitate discoveries, access and online dissemination of research. Recommendation A5 of the study provides for the need to support the development of new interoperability tools and to promote current tools, access and online dissemination of research. However, the most important recommendation, from the specialists' point of view, was *Recommendation A1*, which requested guaranteed access to publicly funded research. The study authors agreed with the opinion of other analysts and researchers from the UK, USA, as well as from independent organisations who studied this topic, that there will be great benefits from public access to publicly funded research. The Recommendation states that research funding agencies "should promote and support the archiving of publications in open repositories, after a time period [...] to be discussed with publishers. This archiving could become a condition for funding" [16, p. 11]. The study notes that this recommendation may be adopted both at European and at national level.

As a result of publication of the Report, the European Commission gave all stakeholders the possibility to express their views on this subject. Feedback was generally positive, except the negative opinion of certain publishers. In the context of these discussions, a conference on scholarly communication followed, hosted by the European Commission (EC), in Brussels, in February 2007, which aimed at "bringing together stakeholders in the issue of access, dissemination and preservation of scientific data and publications and proposing solutions for scientific publishing under FP7 and in the European Research Area [441]. In January 2008, the European Research Council (ERC) implemented a mandatory policy of public access to research funded by ERC. The policy applied requires that all peer review publications, developed under the ERC-funded research projects, be deposited, on the date of publication, in a scientific repository (available according to the domain), such as PubMed Central, arXiv or an institutional repository and, subsequently, to be in open access within six months as of publication [5].

The European Commission proposed several scholarly communication policies. In 2007, the *Green Paper on the European Research Area: New Perspectives* was drafted [7]. The Green Paper identifies that generation, diffusion and exploitation of knowledge are at the core of the research system and that, in the European Research Area (ERA), knowledge must "circulate without barriers throughout the whole society" [7, p. 22]. The paper promotes the idea of continuous stimulation of accessible and interlinked scientific information. There is no distinction between general interest raw data and scientific publications and thus they should not have different access regimes.

In this respect, the position exposed in the Green Paper is very important, which states that not only the generation, diffusion and exploitation of knowledge is the basis of the research system in the European Research Area but, more than that, the document describes how Europe will rely on knowledge sharing, which should provide: "open and easy access to the public knowledge base; [...] innovative communication channels to give the public at large access to scientific knowledge, the means to discuss research agendas and the curiosity to learn more about science" [7, p. 11].

The Green Paper aimed at stimulating debates on boosting the efforts on the European Research Area. As a result of these debates, the EC published a report summarising the rather consistent responses to an online questionnaire, received from individuals, universities, funders, from the public authorities at national, regional and European level, NGOs, business companies, associations representing the commercial and non-commercial interests, chambers of commerce, unions etc.; from EU Member States, associated countries and the European

Parliament, the European Economic and Social Committee and the Committee of the Regions. The analysis of the 685 responses to the online questionnaire and 145 freeform responses show that 84% of the respondents require "immediate and improved access, and dissemination of publicly funded scientific publications" [3]. The report also presents the concrete proposals of institutions interested in open access to scholarly information. Thus, one of the most important views about the role of the European, national and regional policy in establishing the European Research Area is that "the EU should be more active [...] in creating open access repositories and supporting academics in the use thereof" [3, p. 29].

One of the strategic directions of the European Union is the European "economic competitiveness" and this can only be achieved on a "knowledge-based economy". Thus, it was concluded that the current arrangements for the dissemination of research results through the articles published in specialised journals impose certain barriers that cannot be overcome by the increasingly diminished budgets of information-documentary structures. The EU seeks to overcome such obstacles by specific measures and by setting up tools, networks, services to be placed in the service of efficient dissemination of results of publicly funded research programmes. This policy applies to the pilot project of the European Commission – *Science in Society* under the Seventh Framework Research Programme (FP7), launched in August 2008 [6]. The proposed project provides an electronic infrastructure and support mechanisms for identification, depositing, access and monitoring of FP7 and ERC-funded articles. Within this pilot project, the grant beneficiaries in seven areas (energy, environment, health, information and communication technologies, research infrastructures, science in society, social sciences and humanities) will have to: (a) deposit in an online repository the reviewed scientific articles or preprints, but also the articles presented at conferences, when they are considered to be significant and result from FP7 projects; (b) endeavour to ensure, as efficiently as possible, open access to these articles, either within six months (for health, energy, environment, information and communication technologies, research infrastructures) or twelve months (for social and humanitarian sciences, science in society) from the date of publication.

In recent years, after the approval of BBB international statements, in several countries appeared an increase in legislative actions for enacting open access to scientific information. The transition and developing countries took certain actions in order to expand access to scientific information for researchers in these countries. Thus, statements on open access were discussed and approved nationwide, and the national policies were enacted with respect to open access to scientific information in Brazil, Australia, Lithuania, Ukraine, China, India etc. [17].

Nowadays, more and more groups and research centres, universities, associations, funding agencies, publishers develop their institutional open access policies. Scientific research funders are beginning to mandate, in an increasingly active manner, open access to the research they fund. Currently, institutional policies are developed for three types of organisations: scientific research institutions (universities, laboratories, departments); scientific research funding agencies; publishers of scientific journals. For each type of organisation, records on open access policies are created.

Institutional policies are developed in accordance with the recommendation of the Berlin Declaration and are recorded in the *Registry of Open Access Repository Material Archiving Policies* (ROARMAP). The institutional policy on self-archiving open access (institutional mandate) is recorded after creating the repository and registering the institutional archive in the *Registry of Open Access Repositories* (ROAR). According to the ROARMAP data, in mid-2014 (23 April 2014), 410 mandates were recorded (Fig. 1) for open access (207 institutional mandates, 44 department mandates, 89 funder mandates, 110 mandates for PhD theses and 9 multi-institutional mandates). Romania has no record here.

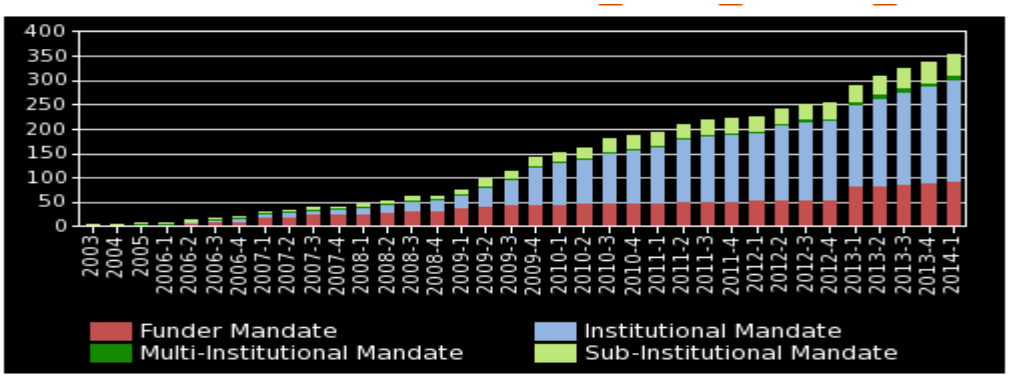

Fig. 1: Registry of Open Access Repository Material Archiving Policies

Open Access institutional policies are recorded in ROARMAP in the form of institutional mandates authorising open access to the results of publicly funded scientific research. It should be noted that open access institutional policies are based on the self-archiving policy model, developed by Professor Stevan Harnad from Southampton University [18, p. 8].

In recent years, decision-making institutions of countries in transition have also been actively involved in building open access models and developing open access policies. Thus, pursuant to the Report on the Strategy of Research Publishing Activity Development in South Africa, the Academy of Science of South Africa approved the business model of open access to scholarly journals. The "Middle East" Technical University of Turkey requires academic researchers to deposit, in the academic repository, both copies of all published articles, those under review, as well as Master's degree and PhD theses. At the same time, the university takes responsibility to promote and support the authors in publishing their articles in open access journals.

An analysis of institutional policies in 15 European countries showed that 51% of digital repositories have a voluntary depositing policy, while 25% have a policy of mandatory or partly mandatory depositing. The other 24% of institutional repositories do not have an official determined policy [8, p. 49]. Thus, the mandatory policy on material depositing covers publications of academics, dissertation theses, articles published within national research etc. The most widely spread institutional policies (more than 50% of the digital repositories) are integrated with other systems of the institution [8, 49], which allows the retrieval of information in all the institution's resources.

SITUATION IN ROMANIA

The "Transilvania" University of Braşov implemented the DSpace system, thus creating the first Romanian institutional repository called ASPECKT (Analize Statistice şi Previziune a fenomenelor Economico-sociale şi Cercetări de marKeTing – *Statistical Analyses and Forecasting of Socio-economic and Marketing Research Phenomena*) (Fig. 2), where researchers can archive materials on their own. This archive for open access to scholarly information is a rich source of information and documentation.[14]

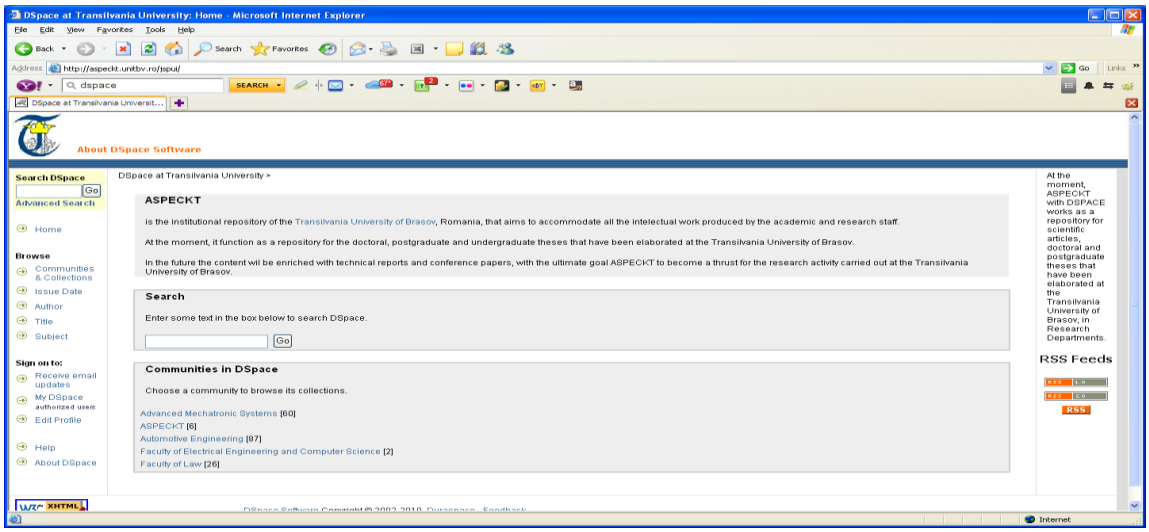

Fig. 2 DSpace system at "Transilvania" University of Braşov (*http://aspeckt.unitbv.ro/jspui/*)

In Bucharest, the "Carol I" Central University Library created another institutional repository using the open source DSpace platform as well, entitled IRCULB (the Institutional Repository of "Carol I" Central University Library of Bucharest) (Fig. 3).

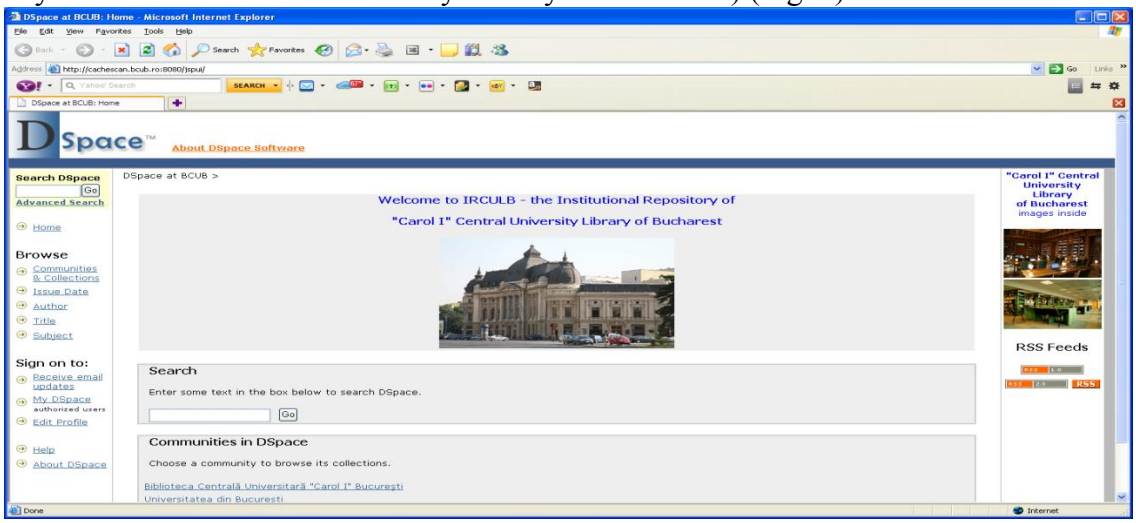

Fig. 3 The DSpace system at "Carol I" Central University Library of Bucharest (*http://cachescan.bcub.ro:8080/jspui/*)

CONCLUSIONS

Our community has two important roles in ensuring public access to research results. The first is to cooperate with politicians and decision makers at all levels, with a view to encouraging sustainable open access mandates and policies. This means raising awareness of decision makers not only at the level of their own institution, but also of funding agencies, and at national and international policy level. The second role is to continuously create resources with open access to information.

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BIBLIOGRAPHY

[1] Bethesda Statement on Open Access Publishing [online]. 2003 [citat pe 14.03.2014]. Disponibil: http://www.earlham.edu/~peters/fos/bethesda.htm

[2] Budapest Open Access Initiative (BOAI) [online]. 2002 [citat pe 14.09.2013]. Disponibil: http://www.soros.org/openaccess/read.shtml

[3] Commission of the European Communities. Results of the public consultation on the Green Paper „The European Research Area: New Perspectives" [online]. 2008, 98 p. [citat pe 14.03.2014]. Disponibil: http://ec.europa.eu/research/era/pdf/era-public-consultation-results_en.pdf

[4] eIFL-IP Advocacy pentru accesul la cunoştinţe: dreptul de autor şi bibliotecile. Chişinău: „Print-Cago" SRL, 2009. 88 p.

[5] ERC Scientific Council Guidelines for Open Access [online]. 2008 [citat pe 14.03.2014]. Disponibil: http://erc.europa.eu/pdf/ScC_Guidelines_Open_Access_revised_Dec07_FINAL.pdf

[6] European Commission. Open Access Pilot in FP 7 [online]. 2008 [citat pe 14.03.2014]. Disponibil: ftp://ftp.cordis.europa.eu/pub/fp7/docs/open-access-pilot_en.pdf

[7] European Research Area: New Perspectives: Green Paper 04.04.2007 [online]. Brussels, 2007. 32 p. [citat pe 14.03.2014]. Disponibil: http://ec.europa.eu/research/era/pdf/era-greenpaper_en.pdf

[8] GRAAFT VAN DER, Maurits; EIJNDHOVEN, Kwame. The European repository landscape: inventory study into the present type and level of OAI-compliant digital respository activities in the EU. Amsterdam: University Press, 2008. 149 p.

[9] KURTZ, Michael J.; HENNEKEN, Edwin A. Open Access does not increase citations for research articles from the Astrophysical Journal [online]. 2007 [citat pe 14.03.2014]. Disponibil: http://arxiv.org/ftp/arxiv/papers/0709/0709.0896.pdf

[10] OECD. Science, technology and innovation for the 21st century. Final Communiqué Annex I Declaration on Access to Research Data from Public Funding [online]. 2004 [citat pe 14.03.2014]. Disponibil: http://www.oecd.org/document/15/0,2340,en_2649_34487_25998799_1_1_1_1,00.html

[11] PROSSER, D.C. Current (European) developments in scholarly communication. In: *Liber Quarterly*. 2008, vol. 18, nr.3/4, pp. 399-412.

[12] PROSSER, D.C. Public policy and the politics of Open Access. In: *Liber Quarterly*. 2007, vol. 17, nr. 2, pp. 1-10.

[13] PROSSER, David C. Evoluţii (europene) actuale în comunicarea ştiinţifică. În: *Revista Română de Biblioteconomie şi Ştiinţa Informării*. 2008, nr. 3-4, pp. 24-30.

[14] REPANOVICI, Angela. Open Access to Informational Resources in Pedagogical Approach of Information Literacy. In: *"The First International Conference in Romania on Information Literacy: Conference Proceedings. April 21st – 23rd 2010, Sibiu, Romania"*. Sibiu: "Lucian Blaga" University of Sibiu, 2010, p. 155

[15] Scientific Publications: Free for all [online]. London, 2004 [citat pe 14.03.2014]. Disponibil: http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/399.pdf

[16] Study on the economic and technical evolution of the scientific publications market in Europe: Final Report [online]. 2006 [citat pe 14.03.2014]. Disponibil: http://europa.eu.int/ comm/research/science-society/pdf/scientific-publication-study_en.pdf

[17] ŢURCAN, Nelly. Estimarea productivităţii ştiinţifice a savanţilor din Republica Moldova. În: *Studia Universitatis*. 2011, nr. 8 (48), pp. 206-212.

[18] ŢURCAN, Nelly. Politicile accesului deschis. În: *Studia Universitatis*. 2010, nr. 3(33), pp. 41-56.