



Grey Literature and Legal Deposit: The Approach of the Royal Library of Belgium

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ABSTRACT

The Belgian Science Policy Office, which includes the Royal Library of Belgium also known as KBR, has launched an institutional Open Access Repository for Federal Organisations (ORFEO). KBR has been involved at two levels in this project: by the integration of the publications from its researchers and as a partner for the development of the repository. In the context of the latter, an analysis was conducted in order to consider the future of ORFEO and its possible integration in KBR's collections. This analysis included a reflection about how a national library, whose mission includes legal deposit, can play a role regarding grey literature. This article presents the initiatives for Open Access at a federal level, the particularities and the current situation of the Belgian legal deposit and how grey literature can be taken into account. Finally, the three analysed approaches to take over ORFEO are detailed.

KEYWORDS

Grey literature; legal deposit; open access; data exchange; national library

Introduction

The Belgian Science Policy Office, BELSPO, brings together many researchers employed by Belgian federal museums and research and heritage institutions. All the research results of these scientists (in the fields of human and natural sciences) are now deposited in an institutional repository called ORFEO.¹ This repository aims to provide free access to the results of scientific research that was financed by BELSPO and its scientific institutions. This tool is the first Open Access initiative from the Belgian Government.

The Royal Library of Belgium, now known as KBR, is one of the ten scientific institutions under the supervision of BELSPO.² The main legal mission of the national library is to enforce the law on legal deposit. Considering this legal obligation and KBR's competence in catalogue management, BELSPO wishes to develop a structural collaboration for ORFEO's data management with the national library.

This cooperation, which is the starting point of this analysis, is a real opportunity for KBR to reflect on its various collaborations with data and content producers that are directly linked to legal deposit. The following analysis aims to show precisely the links between three issues: what are the benefits for both institutions, what are the technical challenges and finally what are the different approaches possible to make the most appropriate decision for the two institutions, KBR and BELSPO?

What is ORFEO?

In 2014, BELSPO launched an Open Access project with the objective to make publications resulting from research financed by BELSPO available online for free, when the copyright permitted it. This



project has several phases including the creation of an institutional Open Access Repository for Federal Organisations, named ORFEO, and the development of an Open Access policy.

BELSPO has defined an Open Access mandate³ for the publications which emanate from research wholly or partially financed by their Office. This policy was developed in compliance with international policies (Budapest Open Access Initiative, Berlin Declaration, European Commission's Recommendation on access to and preservation of scientific information⁶ etc.) and was validated in 2017.

The institutional Open Access repository was developed with DSpace software and its pilot phase was launched in the autumn of 2014. This centralised repository concerns fifteen federal and scientific organisations, ten of which are Federal Scientific Institutions including KBR. 7,382 items have currently been submitted to ORFEO: articles, books, book chapters, reports, reviews, working papers, dissertations, theses, etc. To date, all references to scientific work created by members of staff at KBR are available in ORFEO. Whenever copyright permits it, the content itself is also made available in ORFEO.

The Belgian legal deposit and its developments

KBR applies the law on legal deposit which came into force on 1 January 1966⁷. This law prescribes the deposit of two copies of monographic publications and one copy of periodical publications. Thanks to this legislation, KBR acquires and preserves all publications printed in the Belgian territory and all those published abroad by authors residing in Belgium. The law was extended in 2017 to include digital publications.

All digital publications, regardless of their medium or form, have to be deposited. But until the technical and organisational specifications are regulated by a Royal Decree, digital publications may still be submitted via the voluntary deposit launched in 2008.

The deposit of publications published abroad by authors residing in Belgium is a Belgian specificity. Indeed, many French- and Dutch-speaking authors publish in France and in the Netherlands respectively. Therefore, this type of deposit has to capture publications more widely, beyond Belgian borders.

In 2018, after two years of development, KBR launched a website dedicated to legal deposit, 10 which aims to offer a platform where Belgian publishers and authors can announce and submit their new publications. This project which was developed in the context of KBR's new library management system, had three objectives. Firstly, the modernisation and dematerialisation of the legal deposit process to the benefit of both the institution itself and the relevant audience (publishers and authors). Secondly, the integration of the voluntary digital deposit collections since 2008 in the main catalogue and thirdly the extension of the law on digital legal deposit.

The procedure for declaring publications to legal deposit is now entirely digital. 11 All applicants can file their declarations online and integrate the metadata of their publications. If the publication is digital, they also upload it 12 to the module. The front-end of the platform offers different forms according to the type of publication that publishers and authors declare: print or digital, book or serial, etc. 13 The documents integrated in the website are then visible in a dedicated catalogue¹⁴ until the document is treated. After that, publications that entered the collections via legal deposit are integrated in OPAC. Every user of the website can follow the journey of the book until it is made available to the public. Indeed, two status are visible for readers: publication announced and publication received by KBR (processing ongoing). Then, the classification number is visible to the public. It means that the document will be soon available for consultation.

Regarding the back-office, each form creates a bibliographic record in Syracuse, 15 which is the integrated library system in place since September 2018. Librarians can use the metadata given by publishers and authors as a basis for cataloguing. Moreover, each step of the treatment process (both for print and digital editions) is accompanied by a status: declaration, reception, cataloguing and publication in the Bibliography of Belgium. 16 This bibliography makes inventories of catalogue records of all nonperiodical publications (monographs, brochures, offline electronic documents, ...) submitted to legal deposit. It is published every month.

The objective for KBR is to establish collaborations with its various partners and all the actors in the book processing chain as well as those with interesting data for KBR's catalogue. This kind of



collaboration will allow the integration of the largest amount of metadata as soon as they are created by the partners, in order to facilitate the formalities of legal deposit and cataloguing work. In return, for example, KBR could provide corrected and improved data through data quality processing.

Is grey literature subject to legal deposit?

According to the definition given by the Luxembourg Convention (1997/2012), grey literature is "information produced on all levels of government, academics, business and industry in electronic and print formats not controlled by commercial publishing i.e. where publishing is not the primary activity of the producing body". 17 Taking this definition into account, grey literature is a type of publication that is also subject to legal deposit.

The question of whether a national library should be responsible for the preservation of grey literature is very relevant. Naturally, grey literature is also associated with academic libraries that have launched institutional repositories. National libraries should also study the interest of collecting and preserving grey literature. At an international level, the cases of China and Iran could be cited. The National Library of China has collected grey literature since the 1920s but it's only in the 1980s that a task force began to investigate, collect and organise grey literature. Since then, strategies have been regularly revised. 18 In the case of the National Library of Iran, grey literature represents 28% of their collections. These resources are collected indifferent ways (depository law of non-book resources, donations, purchases or exchanges) and organized and made available to users. 19 At the European level, we can cite the examples of Portugal and Iceland. The National Library of Portugal has implemented the LIZA initiative in the 2000s, which "aims to enhance awareness, access and use of Portuguese scientific and technical grey literature and also its preservation". 20 In Iceland, grey literature has been included in the legal deposit since its beginning in 1886 although it has also been subject to change. A study conducted by Júlíusdóttir shows the effects of legal changes such as the establishment of the new legal deposit act in 2002 for publications on e-media on access to grey literature both on the level of bibliographic descriptions and access to the publications themselves.²¹

Before answering this question, it is important to refer to the legislation. There is no indication in the legislation that grey literature is excluded. Even before KBR formally asked the question and without having specifically identified it as grey literature, KBR has preserved publications belonging to the grey literature category since the creation of legal deposit. For example, KBR receives and preserves a copy of master theses that have not been subject to a traditional commercial publication from Belgian universities as part of legal deposit. As such, KBR has established agreements with most universities to ensure that these theses are systematically preserved. Besides, the Belgian legal deposit law includes also the brochures which are listed, by GreyNet, as document type in grey literature.²² KBR should also keep in mind that grey literature could be created by public administrations and consequently also fall under the law on Archives.²³

ORFEO's repository includes both publications published by the traditional commercial channels (e.g. contributions to monographs) and grey literature, which consists of documents published in a limited circle subject to intellectual property and not distributed by commercial publishing (e.g. reports from research projects funded by BELSPO). As ORFEO includes publications mainly pertaining to grey literature and since legal deposit does not exclude, a priori, publications of this type, ORFEO's publications are therefore works subject to legal deposit. It is interesting to note that grey literature mainly covers documents that are exclusively digital.

KBR's collection development charter

Most libraries have a charter for the development of their collections. This tool, which defines the collection development policy, is essential to determine the main principles of collection development. It is also an essential communication and management tool in a heritage institution. KBR is currently working on its



own collection development charter for both contemporary and heritage collections. It is a collaborative effort of the management, the curators of the various heritage sections and the Contemporary Collections Department of KBR. This charter defines the criteria that must drive the choices made in terms of acquisition. This covers purchases, publications concerned by legal deposit and donations.

In the matter of digital collections, even more than with printed collections, it is necessary to define precise rules for their acquisition. This is particularly the case with regards to web archives. Indeed, the web is so large that it is essential to define clear selection criteria. One of the most common approaches is to combine a broad selection that is limited to a superficial capture of all websites on a national domain with a more selective approach in which specifically selected websites are captured at greater depth. Together with the States Archives, KBR is working on defining a strategy for archiving the Belgian web as a part of the PROMISE research project.²⁴ This strategy also includes a proposal for selection. This proposal, once approved by the KBR's management board, will also be incorporated into the Collection Development Charter.

As for grey literature, although not explicitly included in the charter, it is logically found at different levels. When publications pertaining to the grey literature category are offered for the enrichment of KBR's collections, these works have to meet the criteria defined by the charter, such as having a clear link with Belgium or with the existing collections (mostly oriented to social and human sciences).

It will in all likelihood be necessary to adapt the charter to include a specific point relating to grey literature in order to clearly define the role of KBR outside of the legal deposit obligation.

ORFEO at KBR?

As a national library and research institution, KBR promotes and raises awareness about Open Access and has been logically involved in the project. In 2015, when KBR started to be associated with the project, the national library had no common repository to centralise publications from its researchers and only a few were listed in the integrated library system. In order to catch up, the following submission policy was outlined: a librarian will be in charge of the integration of the publications published from 2010 onwards in ORFEO. This strategy still applies, but in the future, each researcher at KBR will be responsible for the deposit of his or her work.

Besides, KBR has also widely promoted ORFEO to its researchers in order to stimulate the deposit of their publications both for preservation and valorisation of their work. Since the beginning of ORFEO, KBR has positioned itself as a supporting institution by offering to host the server within its walls and to provide technical support for the website.

Obviously, the links between ORFEO's purpose and KBR's missions no longer need to be demonstrated. However, it is necessary to analyse how a national library can link its needs and missions with those of an Open Access repository in order to support the development of legal deposit. Concretely, if ORFEO is considered as a metadata provider partner, a structural collaboration would avoid requiring depositors to deposit their publications twice, once in ORFEO and a second time via the legal deposit platform. The idea would be to have the data and content available automatically.

Furthermore, ORFEO is not a long-term preservation tool and does not preserve its digital publications. In this perspective, KBR, whose mission is to guarantee the preservation of its collections, has to be able to recover files and metadata deposited in order to ensure their preservation.

Three different approaches

BELSPO and KBR are working together to choose the best option that will allow them to answer the specific needs regarding legal deposit and Open Access within federal institutions. Three different approaches, each of which include pros and cons, have been studied.

The first approach that consisted of developing a specific module in Syracuse was quickly set aside. Indeed, this solution had the drawback that new technical developments and consequently



new expenses would have been necessary. Moreover, it would have resulted in the multiplication of platforms which could create confusion among the researchers.

The second option is to integrate ORFEO into the library management system, Syracuse, via the new module dedicated to the declaration of legal deposit documents. The idea would be to create a specific form for ORFEO filings that would be directly linked to the legal deposit module. This form would include specific fields adapted to the requirements of Open Access in general and of the mandate published by BELSPO. In concrete terms, the user interface would be specific to the ORFEO project, but in the back office, processing would be the same as the one set up for legal deposit. With this approach, the implementation of the repository is really seen as an opportunity to cover the concerned publications as far as possible by the legal deposit law. Once added through the dedicated front office, grey literature will follow the same process than publications deposited via the legal deposit website. Indeed, data submitted in the context of ORFEO will be checked at two levels: (1) validation of the deposit (ideally realised by the researcher's institution); (2) quality control of the bibliographic record.

KBR would migrate existing ORFEO data to its catalogue and would create a dedicated page and forms for future filings. In this case, a distinct communication to ORFEO applicants must be made. This second approach requires technical development that can be done internally. The integration of ORFEO offers the benefit that file recovery would be easier to implement.

The objective and advantage of working with a single tool is to simplify the deposit of digital publications by authors and researchers alike and to raise awareness about legal deposit. Indeed, with the specificity of the Belgian legal deposit being that authors who are publishing abroad have to deposit their works themselves, KBR observes there is a tendency among Belgian researchers to publish abroad.

With this option, KBR should also take into account the fact that some institutions involved in ORFEO's project are using internal databases, usually managed by librarians. Therefore, as for legal deposit, two kinds of deposit will be possible: individual item and batch import.

The third option is to harvest the data in ORFEO. In this case, BELSPO maintains ORFEO and KBR would regularly harvest the repository. To ensure data harvesting, KBR must first implement this solution. The harvesting option is a sustainable option that can be extended to data exchange with all potential partners.

These potential partners are all actors in the book chain and are also, for example, Belgian universities that have institutional directories and whose publications are subject to legal deposit. Harvesting ORFEO would also be a case study that KBR could use as a test collection to be harvested.

This solution implies that BELSPO continues to manage ORFEO as it currently exists with the DSpace tool. BELSPO will then have to update it. A transitional period will be necessary before the ORFEO database can be harvested. A major element to take into account is the guarantee that the harvesting also allows for the proper recovery of files for preservation and access while respecting the defined rights. This precaution will not be necessary in the second option.

For this third option, data access would also be granted via Syracuse. For both the two institutions, this solution generates recurring costs for updates and imports of data and files. Quality control is also needed to avoid the importation of duplicated items. In addition, KBR is working to improve its "author" authority data. This large-scale cleanup of a database could serve as a reference base for heritage institutions in Belgium that manage databases integrating the notion of author.

Whatever the final option is, KBR also needs to take into account the fact that numerous items introduced on the ORFEO repository are only bibliographic references without digital versions of the document. Quality control could not be realised without having the document at hand and the interest of integrating bibliographic references to KBR's catalogue is relatively nonpertinent.



KBR's proposal

After drawing these different options, KBR has made calculations in terms of the amount of data to manage, needs of human resources and technical costs. Currently, the maintenance of the DSpace platform that hosts ORFEO is no longer supported. If ORFEO is integrated into Syracuse, it will no longer be necessary to perform this maintenance. In addition, the integration of ORFEO would also reduce the cost of importing the data since this import will only have to take place once; whereas, in the case of harvesting, there will be regular import costs. The Syracuse integration solution also gives KBR the ability to manage itself the reception of files and metadata. Moreover, the decision to work with a common tool for the two repositories will also help minimize the duplication of the same documents. Whichever option is chosen, the integration of the ORFEO data will result in an increase in the volume of data to be checked by the librarians.

Taking these different elements into account, KBR favours the option of integrating ORFEO into its library management system, Syracuse, as a solution for ORFEO data management in the context of legal deposit. For data recovery from other partners, such as data from institutional repositories at universities, the third option is also the preferred solution although it will be implemented independently.

Conclusion

KBR has addressed the issue of grey literature as part of the launch of a coordinated federal policy for the Open Access repository of publications by federal researchers. Although grey literature was already present within KBR's collections before the creation of ORFEO, this project has allowed for a more global and structural reflection.

As a national and research library, KBR logically positions itself as the institution responsible for the preservation and promotion of publications deposited within the framework of ORFEO. These publications are part of the Belgian heritage and are subject to legal deposit, and as such, KBR must ensure that these documents are treated in the same way as all publications submitted to legal deposit. KBR wishes to increase the coverage of publications subject to legal deposit and the processing of publications deposited under ORFEO fully contributes to this objective.

At this stage of the project, KBR has submitted this proposal to BELSPO and the final decision should be made by the end of 2020 at the latest. What is interesting here is to see the progress made in developing this proposal. The question of integrating ORFEO data into the KBR catalogue allows to ask questions that either consolidate or shake up KBR's choices. In both cases, this allows the library to make progress in the technical developments necessary to allow the exchange and availability of its data.

In addition, this project shows how much collaboration has become necessary for a library to develop its own data ecosystem. In the digital age, it is not possible to work alone. Collaborations are essential to move forward and to fulfil national library's core missions. If KBR wants to offer a high-performance preservation service for its collections, it has to work with all its potential partners and build lasting partnerships.

For national libraries that would like to develop their collections regarding grey literature documents, here are some recommendations:

- To embrace grey literature. Naturally grey literature is not regarded as publications covered by legal deposit. With the emergence of technologies and repositories, grey literature has gained more visibility and should be as seriously considered as other types of material such as selfpublished documents and web archives. In her article, Čirković explained well the importance of this material: "Grey literature plays an important role in the rapid and timely distribution of in-depth, recent, scientific and technical information, and also provides access to a broad range of information and often contains new ideas. Research that is not published in journals but available in other formats (such as reports, theses or conference proceedings) is often more detailed, more recent and sometimes more rapidly disseminated."²⁵
- To see grey literature as specific material and include it in the collection development charter of the library. To have a strategy will enable creating specific collections (folk literature in China



- for example²⁶). The National Library of Iran recommends also to pay attention to all methods of collecting in order to have a rich collection. Moreover, they recommend "to develop a long term and continuous program for providing all grey literature in the National Library". 27
- To analyse the current legal deposit legislation in order to see if grey literature can be integrated and if not, benefit from other modifications (extension to digital publications for example) to adapt it.
- To analyse the possibility to develop collaborations with existing repositories and institutions that share similar objectives.

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Disclosure statement

No potential conflict of interest was reported by the authors.

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