

## The acquisition of publications in the Royal Library of Belgium: a question of long-term access and preservation

**Sophie Vandepontseele**

Contemporary collections, Royal Library of Belgium Brussels, Belgium.  
E-mail address: Sophie.vandepontseele@kbr.be

**Astrid De Spiegelaere**

Contemporary collections, Royal Library of Belgium Brussels, Belgium.  
E-mail address: Astrid.despiegelaere@kbr.be



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### Abstract:

*The Royal Library as a national library aims to ensure the long-term preservation of all Belgian publications. The law on legal deposit will soon be extended to digital publications. To ensure the long-term preservation of this new kind of collection, it is necessary to work out a preservation plan, covering both the content of the publications and their metadata. The formats of files and metadata are constantly evolving. What is considered long-term sustainability today may not be so in a few years. To anticipate this evolution and to be at the heart of what is happening in this field, the Royal Library positions itself as a proactive actor, discussing with stakeholders such as publishers, and with the various associations which develop standards for digital publishing.*

*The preservation function of the Royal Library of Belgium concerns the Belgian publications and is not extended to its international scientific collection. However, the transition from paper to electronic resources gives an opportunity to investigate the necessity of long-term access and the preservation of the acquired collection. This includes an analysis of the existing solutions and the current collection. Furthermore an acquisition charter is developed for potentially interesting publications.*

**Keywords:** Preservation, acquisitions, legal deposit, electronic publications, long-term access

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# **The acquisition of digital publications in the Royal Library of Belgium: a question of long-term access and preservation**

## **Introduction**

The National Library of Belgium (KBR) has a rich collection reaching from ancient manuscripts to contemporary research journals. This collection exists of a 50 years old legal deposit containing the Belgian publications and a historically grown collection in humanities including manuscripts, numismatics, cartography and music. To support research in the humanities and the core collections, international publications are acquired and collections supplemented. To ensure further research and to safeguard the Belgian publications, the KBR is taking further steps into the digital world.

Like other national libraries around the world, the KBR is challenged by new demands for access, digital curation and engagement, user experience, etc. The current organisational structure consists of two Operational Directorates and one Support Service Directorate. One of the core tasks of the Operational Directorate Contemporary Collections is to develop the contemporary collections: by applying the law of legal deposit, by acquiring the “belgicana” and international publications and by collections donations.

Until very recently, the development policy of the Contemporary Collections of the KBR has remained rather traditional and therefore essentially “paper”. To develop the digital publications in the existing collections, two strategies have been developed: the extension of the legal deposit to cover digital publications and the transition of the portfolio of international scientific periodicals towards digital versions where possible.

The issue of long-term access and preservation of digital publications is strategic because it must meet the needs of users. The way to answer this issue depends on the type of collection and the strategy for developing these collections. In the case of digital publications, acquired by legal deposit, the KBR wants to ensure the long-term preservation and access for future generations. In the case of international scientific periodicals, the long-term preservation is not a part of the core strategy. The long-term access of foreign publications meets other needs than those defined for the preservation of the Belgian publishing heritage.

### **A. Preservation of digital publications filed through the legal deposit**

#### **First step: the e-depot. A voluntary e-deposit for Belgian digital publications**

The current legislation does not provide a legal deposit for digital publications so far. In 2005 KBR started with a voluntary e-deposit, called e-depot, of the digital publications in Belgium. This e-repository retains nearly 50 000 publications mainly from public institutions and some free publications from commercial publishers. The e-depot is managed by DigiTool, which is no longer supported by its editor, Ex-Libris. At this moment, the tool does not respond anymore to the current needs not allowing for example file formats like EPUB3.

The legal deposit will soon be extended towards digital publications. KBR is preparing a new tool for the deposit of digital publications and their metadata. All files currently managed by DigiTool will be transferred into a new environment to guarantee their access and preservation. The data from DigiTool are saved on an internal storage platform at the KBR. When data from DigiTool have been cleaned and integrated into the library management system, the data will also be integrated into the federal long-term preservation platform. This means that the data from DigiTool will be kept by two separate platforms. Once the new digital legal deposit is operational, the DigiTool deposit platform will be deleted.

### **Archiving, access to content and integrity of digital publishing: a balancing act**

The legal deposit aims to collect Belgian publications for long-term preservation. If this notion is clear for printed publications, it is far more challenging in the case of digital publishing. The aim is to define a real long-term conservation strategy that should cover several aspects: file formats, reading software, storage media and reading equipment. All these elements, obsessed with obsolescence, must be part of this strategy.

Today, there is no guarantee that a current format will be readable in the future. All the stakes lie in the work of ensuring the accessibility, the continuity of the legibility of a publication while guaranteeing the integrity of the work. The question of its integrity or respect for the preservation of digital publication in its original format as well as its metadata is central. Metadata is as important as the document itself as it is essential for conservation. Finally, the challenge is to ensure that the original version is retained and migrated to a readable format, updated over time, and integrating the document's integrity.

While open and standardized formats such as PDF / A, XML and EPUB are now available to a certain extent, it is difficult to predict all technological developments and to know what will be the unique and universal formats of the future. The EPUB format is an open and standardized format that allows you to manage interactivity and animation by allowing you to integrate multimedia files. But these files are often proprietary files, it will also take into account this additional difficulty. In order to assess if a format could potentially be used for long-term preservation, several criteria had to be defined. These criteria are: non-proprietary format, open format, no DRM, use of format and no compression. Obviously, this is the theory and in the practice it will be necessary to compromise because it will not always be easy to convince the publishers to respect these rules during the deposit.

The challenge also lies in constant monitoring of this evolution and planning of migrations and regular adaptations to ensure optimal long-term conservation knowing that zero risk does not exist.

### **Legal deposit, a tool for consultation with book professionals**

Adapting the law will involve changes for the different depositors to the legal deposit. Next to the future extension of the law, the Royal Library is working on a new repository module

that will be accessible to all applicants: publishers, authors-publishers or authors. This module will be applicable for all publications, whether in paper or digital format.

To prepare for the long-term preservation of Belgian publications, a dialogue with publishers and authors is necessary. It's important to sensitize them to the question of the formats used and to ask them to use an open and standardized format. These files will have to be deposited without DRM because otherwise we will be unable to read them and therefore to proceed with their preservation.

In order to cope with these many changes and to better support publishing professionals and authors, KBR wishes to involve all the players in these developments, and this in the framework of consultations with the various representatives of the world of publishing. Information sessions have been organized and others will be held to discuss about format and metadata exchange.

### **B. Preserving the foreign scientific periodicals: making choices.**

The KBR has a tradition for preserving the acquired international scientific periodicals. With the transition to an e-only collection this preservation is being questioned due to the different nature of digital preservation. Furthermore, the preservation function of the Royal Library of Belgium concerns the Belgian periodicals and does not extend to its international scientific periodicals collection. So why should we preserve the international e-periodicals? Next to a general concern in information preservation, it's important to consider the needs of the scientific staff and our users for which an abrupt transition might be unfavourable. Moreover, the focus of the collection lies exclusively on human and social sciences where periodicals tend to keep their relevance longer than in exact sciences. Certainly, it can be important in some cases to buy the archives of a periodical and not pay for access year after year. However, it is not the intention to preserve the periodicals if there's no need. The vision of the KBR is to supply e-only access to scientific periodicals and ensure preservation only when necessary. To reach this vision, different projects were started answering following questions: is an e-only transition possible, when is preservation advisable and how to approach new periodicals? Before exploring the projects, the context is explained further.

The e-only transition is vital to ensure a constant and accessible stream to scientific information and to meet the expectations of our users. Furthermore, it fits in a context of price increases and lower budgets which often places libraries in a difficult situation; how can they provide the same amount of quality scientific information while dealing with less means? The KBR invests in different solutions including rationalising and shared acquisitions. The solution discussed in this paper is: going e-only. Initial savings are being made by cancelling the print version and although publishers often base their price on the printed edition they should be more budget friendly due to the elimination of print and distributions cost. In Belgium, the VAT on electronic periodicals is higher than for its paper counterpart, hopefully due to a recent change in the European legislation the VAT will decrease. Often the access to an e-periodical is bought, excluding its ownership. Long-term

access, meaning access even after the license expired, is not yet common. A post-cancellation option in the license can be a solution; this however does not ensure long-term preservation and is dependent on the publisher.

### **Project 1: an investigation of preservation options, a selection for the KBR**

Before starting the analysis of the collection, different options for long-term preservation were selected. The selection was primarily based on the research of Aude Alexandre, who investigated the long-term preservation options for the Belgian consortium BICfB.

For in-house preservation, the archives of a periodical are bought and preserved on the servers of the library. This is only possible when an agreement is made to buy the archives. This option asks for quite some resources of the institution including servers, backups, format conversion and furthermore the means to make the archives available to the public. Different software programs exist to help with in-house preservation. In-house preservation is not yet possible in the KBR but could be in the future. For the time being, we can take lessons from the implementation of the electronic legal depot.

Digital archive platforms provide access to the archives of periodicals and ensure their long-term preservation. They often work with moving walls, which means that periodicals are accessible after a certain period as agreed with the publishers. These moving walls (MW) ensure income for the aggregators for the most recent periodicals. Other periodicals are not yet accessible due to property rights. Digital archive platforms can have free access like Persée in France or paid access. Sometimes these platforms are linked to a specific country-like the dbnl which falls under the Royal Library of the Netherlands and preserves Dutch periodicals or e-periodica, a platform for Swiss periodicals.

Digital preservation tools focus specifically on electronic preservation on the long-term. Two types of archive are possible a 'light archive' where the institution has access to the acquired documents after a license ends with an aggregator and 'dark archives' where access is only possible if there's no other option. The periodicals are made available after a trigger event. For the analysis of the collection LOCKSS, CLOCKSS and Portico were selected.

### **Project 2: An analysis of the collection**

From the 1341 periodicals 391 are not available online, for the remaining periodicals a checklist for long-term access and/or preservation was made. By combining the data in a spreadsheet following questions were answered:

- Which periodicals are available in Open Access? Which years?
- Which periodicals are part of a database available in the KBR? Which years?
- Which periodicals are part of a digital archive platform or other online available archive (e.g. Persée, dbnl, e-periodica)? Which years?

- Which periodicals are part of a digital preservation tool (LOCKSS, CLOCKSS, Portico or other)? If popular, a further analysis can be conducted.

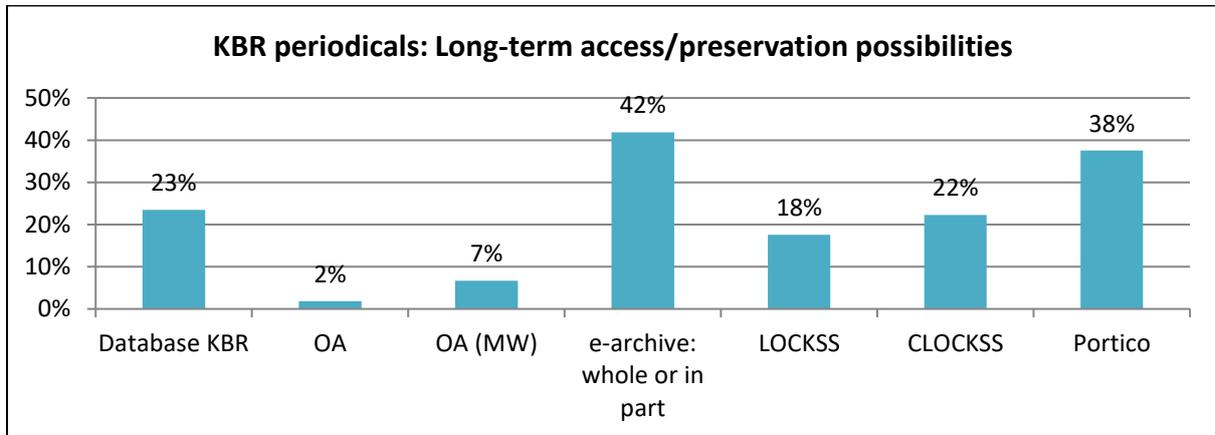


Figure 1 The table shows how many of the KBR periodicals are in different solutions for long term access and/or preservation and which are available in Open Access or acquired databases, overlap is possible.

Essentially the electronic available periodicals are divided in different groups determining the action to be taken. A periodical can occur in several of these groups in which case the most convenient solution is taken. For example, if a periodical is in Portico and fully available in Open Access or an available database, the decision is made to stop the print subscription and no further investigation is taken for its preservation. The most difficult group is the one where there's no immediate preservation option for hand. The KBR decided to only look further into electronic preservation if there's a need for research in the long-term or if sufficient arguments can be made. To make this decision the scientific staff and directorates will be consulted by means of a survey. For the selected periodicals further investigation is conducted in: the possibility to buy the archives, the availability in a nearby institution and the implementation of one of the digital preservation tools LOCKSS, CLOCKSS or Portico. When long-term preservation is needed but cannot be provided, it can still be considered to buy the paper version.

The implementation of e-only is conducted in different phases. For the periodicals where preservation is certain an immediate transition is made. For the other periodicals it needs to be determined if the periodicals keep their value in the long run. Additionally, the analysis permits a rationalisation of the collection by, inter alia, the abolition of doubles and cancellation of irrelevant titles. The investigation is still ongoing, due to analysing the collection and consulting the parties concerned decisions can be made.

### **Project 3: A charter for new periodicals**

So far, the discussed projects concerned the current collection of international periodicals. To avoid repeating the previous steps new publications will be tested and researched by means of an acquisitions charter. Such a charter can help set priorities and determine if an acquisition is advisable, moreover it helps to determine if long-term preservation is necessary from the

beginning. The charter will incorporate the vision of the KBR and a checklist for different types of publications including periodicals, books and databases. Considering the focus points of the collections, priorities are given to certain subjects including manuscripts, numismatics and music. Ultimately an evaluation is made taking into account: the availability in the acquired databases, the subject, the quality, the availability in neighbouring institutions, the long-term relevance, the electronic availability and the budget.

## **Conclusion**

The long-term preservation of the Belgian digital editorial heritage is a matter of balance between technical aspects and dialogue with the publishers. It's not possible to preserve all information. Choices will have to be made to ensure a representative panorama of the Belgian editions for future generations. Another issue is the investment in preservation platforms and the integration of the e-depot on future platforms. The Belgian federal government has decided to invest in a platform for the long-term preservation of digitized heritage collections. The goal is now to see how this new collection of digital publications can be integrated into this platform.

The KBR has a collection of international periodicals with a focus on human and social sciences. Currently the majority of these periodicals are bought in print, the KBR wishes to make the transition to an electronic collection. To reach this e-only vision different steps were taken. First it was important to investigate and choose different preservation options that are realistic to implement. Next a thorough investigation of the current collection took place, based on this the periodicals were divided in different groups determining the type of action. The investigation is still ongoing for the periodicals for whom no direct electronic preservation is possible. The KBR decided to only look further into electronic preservation for the long-term relevant periodicals. To determine which periodicals are selected the scientific staff and directories will be consulted. A last step was to develop an acquisition charter for new publications, which takes into account the electronic possibilities.

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