

Patrice Landry

Coverage of Print Monographs at the Swiss National Library: A Preliminary Study

Abstract: This paper reports on the study conducted by the Swiss National Library (NL) in 2012 on its coverage of the acquisition of printed monographs published in Switzerland in 2010. Since the NL had never conducted a study of its acquisition coverage, a pilot project was set up to evaluate list checking techniques that would be the most appropriate in the context of the bibliographic tools available in Switzerland. After considering the methods proposed in ISO/TR 28118:2009, the study tested the list checking method developed at the Koninklijke Bibliotheek (KB) in the Netherlands to evaluate the results of the list produced by Swissbib, the Swiss union catalogue. The study found that the rate of coverage for commercial publications (with an ISBN) was 97.05% and that of grey literature (without an ISBN) was 93.96%. These results are discussed in the context of an analysis of a random sample of the Swissbib list which resulted in a high rate of rejection of records. It found that the search query used did not appropriately and efficiently select records that corresponded to the collection criteria of the NL. The relevance of valid records used in the study to establish the rate of coverage is discussed and arguments are put forward to support the validity of the results. The methodological findings of the pilot project will be integrated in the planning of an official study to be conducted later in 2014.

Patrice Landry: Management Support Officer, Swiss National Library, Berne, Switzerland, and DInfSc candidate, Robert Gordon University, Aberdeen, Scotland
Email: Patrice.Landry@nb.admin.ch

Introduction

The Swiss National Library (NL) regularly conducts evaluations of its services as part of its contract agreements with its main funding agencies. Up to now, the evaluation of the library's key activities was conducted using mutually agreed indicators. In conducting these performance evaluations, the library could not monitor and benchmark its results with other similar national libraries. One of the

constraints faced by the NL was the lack of commonly accepted performance indicators that reflected the specific nature and functions of national libraries. In particular, fundamental functions such as collecting, compiling the national bibliography and long term preservation lacked proper evaluation methods. However with the publication of *ISO/TR 28118 Information and Documentation – Performance Indicators for National Libraries* in 2009, national libraries now have a comprehensive list of performance indicators that reflect the “special needs and conditions of national libraries” (Poll 2008, 114).

This paper will present the study conducted in 2012 on the acquisition coverage of printed monographs published in Switzerland in 2010. Since the NL had never conducted a study on its acquisition coverage, a pilot project was set up to evaluate the possible methods and the resources needed for such a study. In 2014, an official study, which will benefit from the methodological findings of this pilot project, will be conducted as part of the NL's evaluation of its activities as laid out in the 2012–2015 government performance agreement.

Issues in Building National Deposit Collections

In most countries, national libraries have been given the mandate to collect the national published heritage. While national libraries' missions and functions have evolved over the last fifty years, the building of a national deposit collection has always been one of the core functions of modern national libraries as proposed in various guidelines and statements (Humphreys 1966; Sylvestre 1987; Line 1989; Cornish 1991). Some, like Line (1988), have argued for decentralised deposit collections based on format and/or subject whenever this solution is considered more efficient and economical. Regardless of who performs the fundamental functions normally associated with a national library, it is its role to store and record “the intellectual output of a nation” (Lang 1996). As Lang states, it is a role entrusted by a nation to one or a few institutions to ensure “comprehensive collection and recording of the national

published archive” and for “some organizations ... to take responsibility of ensuring that all of this is properly organised, that the necessary legislation is in place, and that the system is properly understood, by users and publishers as well as by librarians” (Lang 1996, 47).

Most countries rely on legal dispositions to build the national heritage collection using compulsory laws such as a stand-alone legal deposit law, copyright law or articles embedded in the national library act (Larivière 2000). These laws stipulate that the publisher and/or the author must deposit one or more copies of a publication produced in multiple copies and publically distributed, to a designated national institution. Using a legal deposit law has generally been advocated (Sylvestre 1987; Cornish 1991) as the preferred method of building the national collection according to the collection mandate given to the national library. In return, national libraries ensure that the collection is properly preserved, documented through the compilation of a national bibliography and accessible to the public. Jasion (1991) states that these four aspects or objectives: exhaustiveness as stipulated by the library’s collection policies, preservation, information and access, represent the fundamental principles of legal deposit legislation.

A few countries, for political, legal, cultural or economic reasons, have proceeded by other methods to constitute the national collection, for example, with agreements with national publishers associations (Jasion 1991; Lajeunesse 2008). In Europe, The Netherlands and Switzerland have chosen the latter method. In the Netherlands, the Koninklijke Bibliotheek (KB) has an agreement with the Dutch Publishers Association to encourage its members to deposit a copy of their publications on a voluntary basis (Voorbij and Lemmen 2006). In Switzerland, the Swiss National Library (NL) has established agreements with the two national publishers associations: Schweizer Buchändler- und Verleger-Verband (SBVV) and l’Association suisse des diffuseurs, éditeurs et libraires (ASDEL) (Clavel-Merrin 2007). These agreements are non-binding and the publishers deposit their publications on a voluntary basis. The Swiss ISBN agency also encourages authors and publishers to deposit a copy of their work at the National Library when they request ISBN numbers.

Implementing legal deposit or voluntary deposit does not necessarily ensure that national libraries will automatically receive all publications according to the stipulations of the law or agreements. Some publishers and authors consider legal deposit as “a form of expropriation without compensation” (Vitiello 1994, 112) and will often passively resist complying, regardless of sanctions. To encourage deposit, Vitiello (1994) argues that national libraries need to create “a good harmonization of interests among the vari-

ous actors involved (libraries, publishers, producers), in particular by providing timely and efficient national bibliographic services.” Even with services provided by the national libraries to the publishing communities in the form of bibliographies and support to booksellers, the perceived added value of contributing to the heritage collection may not be sufficient incentive for publishers to contribute. Already in the 1990s, with the growth of information and publications, national libraries were challenged in meeting their heritage and access mandates. As Cornish states, “increasingly publishers are less benevolent in their attitudes to legal deposit for their materials, both because the actual cost of books and journals is increasing year by year and because they are more and more anxious about the wider exposure (and therefore exploitation) that their products receive in libraries generally” (Cornish 1992, 126).

So what is really known about the effectiveness of legal or voluntary deposit legislations and agreements? How are national libraries reporting on the proportion of the national publications production they are acquiring? Our literature survey has pointed out that very little documented evidence of national libraries’ collection effectiveness has been published in the last 20 years.

In 1992, the Commission of European Communities (EC) published a report on the situation of legal deposit in the EC member states (Manzoni 1992). The basis of this report was a survey conducted by Giuseppe Vitiello in 1992 on behalf of the Commission which consisted of a questionnaire sent to the directors of the national libraries of the EC member states. There were 14 responses from 12 national libraries. One question referred to the effectiveness of legal deposit where library directors were asked to give an assessment of their coverage according to various document types and formats. For example, the rate of coverage of printed monographs ranged from 95% in France and Spain, 90% in the United Kingdom, Denmark, Luxembourg and the Netherlands, 80% in Germany, Belgium, Ireland and Portugal while two national Italian libraries (Rome and Florence) reported a 70% coverage rate. Commenting on this report, Vitiello (1993) stated that the results could not be considered as reliable. He asserted that, “few national libraries have a good idea of what proportion of the national output they are acquiring.” For Vitiello, the survey indicated a lack of data collecting quality in national libraries surveyed where he considered that the information is “unreliable or uneven or, for certain kinds of format, non-existent.” Commercial publications data may be somewhat reliable but not for local and ephemera or grey literature data. For non-book documents, such as electronic publications and audiovisual, the reliability is considered by Vitiello as poor. Our own literature survey

on the rate of coverage reported by these same national libraries in 1991/1992, found neither results nor reports of studies, nor relevant information in any annual reports.

Our literature search did identify two national libraries that had published data on the rate of coverage of their national printed publications. The Koninklijke Bibliotheek (KB) has published three studies up to now. The first one was undertaken in 1996 to evaluate the rate of coverage of printed documents (books, academic publications, grey literature and periodicals) published in 1993 (Voorbij and Douma 1997). It reported that the coverage was 97% for publications with ISBN, 99% for dissertations, 74% for valid grey literature titles and 87% for periodicals. The KB used the list checking methodology to determine the level of coverage of each type of publication studied. The second one was done in 2005 with the aim of measuring the rate of coverage of Dutch printed monographs published in 2003 at the KB (Voorbij and Lemmen 2006). Again the KB used the list checking methodology, comparing the data from its own database with the national Pica database. The coverage of monographs with an ISBN was assessed at 93.5% while that of monographs without an ISBN (grey literature) was estimated at 70%. The third study (Voorbij and Lemmen 2007), also conducted in 2005, focused on the coverage of periodicals at the KB. It also used the list checking method, using a Dutch list of current periodicals and the Pica national database to compare the holdings of the KB. From a random sample of titles from both sources, the study reported coverage of 94% and 94.8% (two scenarios) using the periodical list and between 81.5% to 87.1% using the Pica database.

The second library, the National Diet Library of Japan (NDL), published a study in Japanese in 2008 of an assessment made in 2005 of their rate of acquisition of government publications and commercial publications (Tokuhara 2008). It reported a coverage rate of 89.8% for commercial government publications, 46% for non-commercial government publications and 88% for commercial publications. Hashizume (2008) reported on the 2005 assessment as well as on a 2007 trial evaluation based on the draft ISO/TR 28118:2009. These two reports did not present or explain the methodological aspects of the studies undertaken at the NDL.

Swiss National Library Collection Mandate and Goals

The NL aims to be the most important source worldwide of written material on all things related to Switzerland. To-

gether with other federal, cantonal and local institutions in Switzerland, its goal is to safeguard the cultural heritage of the country and make accessible its collections to national and international users. To this end, the library collects all Helvetica published since the federal state was founded in 1848 as well as selected archival materials, prints, drawings and photographs. The term 'Helvetica' covers all information published in printed or electronic form, either produced in Switzerland or connected with Switzerland.

The collection mandate of the library is defined in the rules and regulations of the NL (2000)¹. It indicates what is collected comprehensively (printed documents, graphic materials, photographic documents, tapes, compact disks and other documents on digital supports); selectively (for example, translations, official publications of communal administrations, publications of religious communities, of commercial organisations and of associations); and not collected (for example, bachelors and masters dissertations, patents, administrative and commercial documentation).

The library's Monograph Acquisitions Service has eight staff members (FTE) who oversee what is acquired by the library and use different sources and methods to verify which documents have not been received. The Swiss ISBN list is regularly checked and annotated to indicate which publications have been published and sent to the library. A number of regional, national and international databases and bibliographies as well as publishers' catalogues are consulted to find titles which have not been received.

Methodological Issues for the Swiss National Library Study

The aim of the study undertaken by the NL was to find out how and with what resources the level of coverage of the deposit collection could be determined. The main research question asked how we can best measure the level of coverage of printed monographs published in Switzerland in 2010. It acknowledged that each national deposit library has a particular collection mandate and distinct guidelines for the acquisition of specific types and formats of publications it wishes to acquire. The study also recognised that the relevant bibliographic sources needed

¹ See <http://www.admin.ch/ch/f/rs/4/432.211.fr.pdf>. The *Ordonnance sur la Bibliothèque nationale suisse du 14 janvier 1998 (état le 8 février 2000)* is the regulation that applies the Federal Law on the Swiss National Library 1992.

to compare what is published in a particular country with what is actually acquired by the national deposit library may also be specific to each particular country. In considering these conditions, the pilot study sought to answer the following three methodological questions:

- How to determine the number of printed documents published in Switzerland in 2010?
- How to determine which titles would normally be collected either comprehensively or selectively to be part of the deposit collection?
- How to determine as precisely as possible the appropriate rate of coverage of the deposit collection as represented in the national bibliography, “The Swiss Book”?

The initial task was to consider the most appropriate method that would yield the best results in determining the rate of coverage. Our literature review had identified two sources: the ISO/TR 28118:2009 and the KB studies (1997 and 2006).

The first stage of the study was to conduct an analysis of the methods proposed by the ISO/TR 28118:2009’s indicator A.1.1 “Percentage of national publications acquired by the national library.” The main objective of this indicator is “to assess to what degree the library covers the national production” to determine what knowledge the library has of the national publishing environment as well as its efficiency in claiming titles missed, i.e. lacunae. To achieve this, the ISO standard suggests using the list checking technique. This is a technique used frequently by libraries to measure their holdings “against authoritative lists of what has been published” (National Library of Australia 2012). The ISO proposes three methods to calculate “the percentage of the national imprint in all possible formats that has been acquired by the national library” (ISO 2009, 15). In its definition of “national imprint,” the ISO includes commercial and non-commercial publications. The three methods aim to assess the coverage of commercial publications, non-commercial publications and both commercial and non-commercial publications.

Since no national library has published, up to now, a study of its national coverage using the ISO/TR 28118:2009 indicator A.1.1, our aim was to analyse each of the three methods proposed in order to determine which of the methods if any would be appropriate for our study. For the coverage of commercial publications, the standard proposes two techniques. The first one suggests counting “the number of publications listed in all publishers’ catalogues or in a central database of publishers that have been published during the previous three years” and comparing these to the total of these publications acquired by

the national library (indicator A1.1.4.2 a). An analysis was performed to see if this method would be appropriate in the context of the publishing environment in Switzerland. There is a great deal of publishing activity in Switzerland with over 300–400 active publishers with annual fluctuations as new ones arrive on the scene while others discontinue their publishing activities. As there is no central publishers’ database, it is not exactly known who makes available a listing of their publications. For the publishers who produce a catalogue or listing, it usually contains the listing of current titles still in print or commercially available. The second problem is accessing these catalogues; some are printed and sent to the library while others are electronic lists of titles usually accessible on the publisher’s website. The third problem is accessing the catalogues or lists of institutions (i.e. universities, research groups), associations and organisations which are involved in commercial publishing activities. Our experience in gathering this information with the assistance of the library’s Monograph Acquisitions Service has been that it is tedious and labour intensive with the impression that we were not sure to what extent we were actually covering most of the publishers.

The second technique, proposed for commercial publications (indicator A1.1.4.2 b), called for counting titles in a sample of publishers’ catalogues and comparing these to those who have been acquired by the library. The indicator gave no information on the size and distribution according to type of publishers, languages and geographic regions. In the context of Switzerland, with its four national languages and English and the diversity of publishers, we considered this method would not yield the appropriate information on the state of our level of coverage.

For non-commercial publications, the indicator also suggests that the sample method be used (indicator A1.1.4.3). It suggested that samples of catalogues and bibliographies listing titles of the previous three years be compared to those acquired by the national libraries. The sample method proposed for calculating our coverage of non-commercial publications raised similar concerns as we had for commercial publications. In addition, we were not convinced of the practicality and efficiency of locating catalogues of non-commercial, usually “grey literature” type of publications.

A final method is proposed to access both the commercial and non-commercial publications (indicator A.1.1.4.4) using the national ISSN and ISBN listing of the previous three years. Our analysis focused on the possible use of the Swiss national ISBN listings. The NL receives on a monthly basis a list of recent attribution of numbers given to individuals and publishers. For the batch num-

bers assigned to publishers, the library is informed of only the first number of the batch and no information is given on the number of ISBN given in a batch. Since the ISBN list lacked precise information of ISBN batch numbers, this method was not retained for our study.

It is important to mention that no best practice evidence of these methods recommended was provided in the standard (A.1.1.6 Examples and further reading). It did provide information on the 2005 printed monographs and the periodical studies conducted at the Koninklijke Bibliotheek (KB) as well as some data from the NDL study.

After reviewing and testing the methods proposed by the ISO/TR 28118:2009, we opted for the method developed by the KB. Our goal was to apply the list checking methodology used by the KB in the 2005 study (Voorbij and Lemmen 2006) which consisted of comparing the number of titles acquired by the KB to the total number of similar titles acquired by all libraries in the Netherlands as listed in the national Pica catalogue. In their study, Voorbij and Lemmen conducted two separate analyses: one on the coverage of books with an ISBN using two different lists: a checklist of titles from the Dutch ISBN database and the Pica database; the other one on the coverage of books without an ISBN using the Pica database only. In their conclusion of the coverage of books with an ISBN, the authors noted that the “ISBN database was less appropriate as a resource for the study than was expected” (Voorbij and Lemmen 2006, 194). The reason for this was a fairly large discrepancy of 11,856 relevant titles not in the ISBN database; the Pica database held 29,137 titles compared to 13,443 titles in the ISBN database. At the end, the list checking using the Pica database for both books with and without ISBN turned out to be more reliable and appropriate.

Outline of the Swiss NL Study

The first step of our study was to determine how many monographic titles published in Switzerland in 2010 had been acquired by the NL according to its deposit collection mandate. Two searches were conducted in July 2012 in the National Library’s online catalogue, Helveticat: the first one consisted of an expert search in the general catalogue (sd:2010 & bl:m & td:s & (ty:a + ty:e) - f:s)². This search resulted in 21,437 records. The second search was con-

ducted to find out how many titles had been listed in the Swiss national bibliography, ‘The Swiss Book’ (sd:2010 & prod:sb & bl:m & td:s & (ty:a + ty:e) - f:s)³ which yielded 20,053 records. This second search seemed more relevant to our enquiry as the criteria of the national bibliography correspond more closely to those of the deposit collection mandate. It excluded records of documents acquired for specific collections and which did not correspond to the deposit collection mandate, as for example, Master’s Degree dissertations acquired for the NL’s open stack library science collection. After retaining the 20,053 records from ‘The Swiss Book’ search, we undertook with the support of the library’s IT staff to identify the number of commercial publications within those records. This time the criterion “ISBN” was added to the search which resulted in 11,043 records as potential commercial publications. In summary, we determined that the National Library acquired 11,043 commercial publications (55%) and 9,010 books without an ISBN (45%), considered as grey literature, published in 2010.

The second step was to measure the level of coverage of the 20,053 records in relation to what had been published in Switzerland in 2010 that corresponded to the deposit collection mandate of the NL. In our methodological review, we had discarded the methods suggested by the ISO/TR 28118:2009 and had retained the union catalogue list checking approach (Pica) used by the KB. Having concluded that the Swiss ISBN database also lacked the reliability and completeness needed for an accurate analysis of the level of coverage, our study focused on selecting the appropriate Swiss union catalogue source. In 2008, a project was undertaken in Switzerland to bring together the resources of the principal library holdings in Switzerland which led to the creation of the Swissbib database⁴. This database gives access to more than 18 million records from 880 Swiss libraries. At the time of our study in 2012, the database was still at the beta phase of its development and work was still proceeding on the indexing of the database. It nevertheless provided the opportunity for our pilot project to evaluate the use, resources and results involved in the list checking approach.

The search was conducted by Swissbib using the same search criteria used in our Helveticat study, with the addition of excluding NL holdings from the result. The search yielded 19,977 records. Our initial reaction was that these numbers were not credible; it did not seem realistic that the NL would have a lacuna of 57% of monographs pub-

² Expert search: sd :2010 (date of publication), bl: m (monographic work), td:s (unique known date), ty:a (textual material – book), ty:e (cartographic material) and excluding f:s (electronic publication)

³ This is similar to the previous search except for the addition of the criteria “prod:sb” (listing of records in The Swiss Book).

⁴ See <http://www.swissbib.ch/TouchPoint/start.do?Language=fr>

Table 1: Swissbib sample analysis data

Random samples set	1-300 (300 records)	301-600 (300 records)	601-1,003 (403 records)	1,004-1,502 (499 records)	1,503-2,003 (501 records)	Total
Records not used	242 (80.2%)	240 (80.1%)	348 (86.5%)	425 (85.2%)	403 (80.5%)	1,658 (82.78%)
Holdings NB	90	75	133	142	182	622 (31.04%)
Duplicate records	8	32	14	17	45	116 (5.8%)
Deleted records	0	0	5	0	1	6 (0.3%)
Non relevant records	15	25	17	19	17	93 (4.64%)
Theses (pre-PhD levels)	129	108	179	247	158	821 (41%)
Records retained for further analysis	58 (19.3%)	60 (20%)	55 (13.4%)	74 (14.7%)	98 (19.5%)	345 (17.22%)
Missing document without ISBN	29	20	19	29	24	121 (6.04%)
Missing document with ISBN	6	7	12	11	23	59 (2.95%)
Non relevant documents	23	33	24	34	51	165 (8.23%)

lished in 2010. In order to determine more precisely the relevance of the Swissbib list, a random sample of 10% of records (2,003 records) was analysed in order to find out if a) these represented titles that the National Library would acquire comprehensively or selectively, b) these titles had already been acquired by the National Library. Five series of sample analyses were undertaken using a sample selection that varied from 300 and 501 records. Each sample group contained titles chosen randomly according to the alphabetical order of titles.

The results of the analysis provided the following:

- 622 titles (31%) were actually in the NL collections and in the Helveticat catalogue
- 116 duplicate records (5.8%). These duplicates are records produced by two different libraries for the same title.
- 93 records (4.6%) did not correspond to the search criteria of the study (non-helvetica, non monographic formats, other types of publications, i.e. articles)
- 56 records deleted (0.3%) since the list was produced in July 2012
- 821 records (40.9%) were academic works not collected by the NL (i.e. post-secondary; bachelor; post-bachelor, Master's diplomas, essays, and dissertations)

Analysis

Our study on the level of coverage of the deposit collection at the NL for the year 2010 used the list checking method, generally considered to be a reliable method to evaluate library collections. In considering various methods such as experts' opinions, citation analysis, use and users studies, Voorbij and Lemmen (2006) considered the list checking method as the only appropriate method to assess collections on the basis of a 100% coverage. Their successful use of the Dutch union online catalogue, the Pica catalogue, as their main checking source constituted a viable example for our study.

Our primary research question was to determine the level of coverage of printed monograph publications, published in Switzerland in 2010 and our main methodological problem was to determine how many of these publications had been published during that time. As no reliable and ready to use lists of publications for any given year were available, including the ISBN listing, the only viable option was to compare the results of titles listed in the Swiss national bibliography, The Swiss Book, with the results of the search conducted in the Swissbib database. The unexpected high number of Swissbib records (19,977) of documents not in the NL deposit collection that seemed to indicate a very low level of coverage of Swiss printed monographs by the NL (57% coverage) was considered questionable at the very least. It was obvious that an analysis of the data was needed in order to properly evaluate the quality of the results and to investigate the

type and format of documents which had been included in the results. An analysis of a random sample of 10% of the Swissbib was undertaken over a two month period. The control of the selected Swissbib metadata and search in the Helveticat database (records comparison) was done manually, taking 100 hours.

The rejection rate of 82.78% of the Swissbib records (see Table 1) meant that the search query did not appropriately and efficiently exclude records that we assumed would not be part of the result set. Two categories of records were particularly problematic. The first one consisted of students' dissertations that accounted for 821 of rejected records, 40.9% of the sample selection (2,003 records) or 49.5% of the rejected records. These represented student dissertations from the post-secondary level to the master's level, a type of document not collected by the NL. In principle, student dissertations are considered monographic works, and it is only by excluding this category using the MARC 21 fixed field 008, positions 24–27, that these would not be retrieved. Further discussions with Swissbib will focus on their level of indexing of the 008 field as well as the use of that field in the cataloguing process of the participating libraries. The second category of problematic records was NL's holdings in the result set. The search query had been programmed to exclude the holdings of the National Library in order to show only what was lacking in the collection. These accounted for 622 records, 31% of the sample selection and 37.5% of the rejected records. An analysis was conducted on 200 of these records to determine why these holdings were not rejected. Our findings indicated that in the majority of cases there were sufficient differences in the record descriptions of the Swissbib records and of the NL records to consider these as different records. Generally, the differences occurred in the title statement and the statement of responsibilities. There were also differences in the year of publication and publishing information. These can be accounted for by the use of various cataloguing codes and by various applications of the AACR2 cataloguing code rules. Again, discussions with Swissbib will focus on refining the indexing process.

The final result of our analysis concluded that 345 records (17.22% of the sample set) were considered valid records for our study on the level of coverage of the deposit collection. These were monographs that could have potentially been acquired by the national library: monographs with ISBN, reports from institutions/associations, official publications, artists' books, exhibition catalogues, self-published works, and pamphlets. Photocopies of the full Swissbib records were given to the NL Head of the Monograph Acquisitions Service to determine if these

titles would be claimed according to the collection mandate. After a careful review, 165 records (8.22% of the sample set) were considered not relevant because they did not correspond to types of publications the library would acquire.

The remaining 180 (8.99% of the sample set) were considered to be publications that were not held by the NL and thus should be acquired by the library. Of these, 59 (2.95%) were commercial publications (with ISBN) that the library would collect in a comprehensive manner and 121 (6.04%) would be documents collected selectively. This means that, on the basis of the sample selection, the rate of coverage for commercial publications at the NL is 97.05% and grey literature (non ISBN publications) is 93.96%.

Can these results be used to quantify the number of documents published in Switzerland that should be acquired by the National Library? Or, can we confidently state that the levels of coverage of 97.05% for commercial publications and of 93.96% of grey literature are valid? Two answers can be given to these questions: a methodological answer and an expert answer. In regard to the first one, the major methodological issue of our study is the margin of error that we estimated at 4.9%. The calculation using the useful data from the Swissbib list (345 records) represent a low sample size in relation to the survey size (the Swissbib metadata list of 19,977 records). At a 95% confidence level, the 4.9% margin of error would be too high to properly establish a viable and acceptable prediction. Nevertheless, the standard deviation of the sample set indicated fairly stable results in each of the five sets. Records samples for documents with ISBN registered a standard deviation of 1.9% while the records samples without ISBN indicated a 5.4% standard deviation. This percentage can be seen to indicate that the 2,003 records random sample set selection was fairly constant and homogeneous. While these results do not compensate for the high margin of error rate, it does signify that the useful data used to establish the rate of coverage was reliable.

So what do these percentages mean in real terms? If we extrapolate the overall rate of coverage of documents of 91.01%, it would indicate that 1,802 printed monographs published in Switzerland in 2010 were not acquired by the NL. Of these publications, there would be 591 (2.95%) printed monographs published with an ISBN and considered commercial publications lacking and 1,211 (6.04%) printed monographs published without an ISBN and considered as grey literature. So are these numbers realistic? The 97.05% coverage level for commercial publications seems to be fairly accurate. The perception of the NL Monograph Acquisitions Service is that com-

mercial publishers generally comply with the agreements that the NL has reached with the country two national publishers associations. Commercial publications are generally received within the year of the publication. For the publishing year of 2010, only 466 documents of the 11,034 published that year were received during the following two years. It is then easier for the acquisitions staff to control the ISBN list for missing titles as there are fewer numbers to check. For unique ISBN attributed, these are regularly checked and publishers are contacted after one year to see if the ISBN will be used. When a particular publisher chooses not to participate in the agreements, the NL will systematically purchase the titles from the publisher. From past experience, publishers who have not submitted a copy to the national library are usually new publishers who have forgotten to do so. In our analysis of the 59 missing monographs, most of the publishers had forgotten to submit a copy. Two publishers were not aware of the agreement. The NL Monograph Acquisitions Service contacted the publishers to claim the publications and all of the 59 missing monographs were successfully integrated in the deposit collection.

As for the publications without ISBN, the coverage level of 93.96% also seemed to be fairly accurate. The grey literature publications are collected selectively. Besides dissertations and government publications that are deposited consistently, some associations and organisations will routinely deposit their publications. A good part of the publications are claimed from information gathered by the acquisitions staff. They regularly check publication information from regional bibliographies, and public announcements of special events of interest to the NL.

Discussion

Regardless of the level of confidence in the results of list checking, it would be preposterous to claim that the results correspond exactly to the reality of the collection coverage level at the time of the study or in the future. Studies on the level of coverage should be at best considered a barometer of the evolution and growth of collections. Voorbij and Lemmen (2006) claimed appropriately that no definitive conclusion could be drawn from these studies for three reasons: “uncertainties about the appropriateness of the checklists, difficulties in assessing the relevance of missing titles, and the possibility that coverage increases over time due to late arrival of publications.” Our experience in assessing our coverage level for the year 2010 would concur with their conclusions.

Firstly, the list of publications provided by Swissbib did not provide us with the relevant information needed to make an appropriate evaluation of the coverage level. There is no guarantee that when the list is refined in our next study that it will necessarily include all the titles published in Switzerland. The issues surrounding the proper indexing of the metadata and search criteria used in the query should warrant a cautious interpretation of the results. The second factor concerns the quality of the bibliographic data necessary for identifying publications lacking in the collections. Diverse cataloguing practices, incomplete or too brief bibliographic records in library catalogues and bibliographies constitute real constraints to properly identifying documents and determining if they should be acquired. In our study, this led to improper identification of potentially relevant titles that seemed to correspond to the library collection criteria. A case in point concerned students' dissertations that appeared to be published monographs; often no mention of the type of publication was noted. And thirdly, it is almost unavoidable that any coverage level studies will give an incomplete status of the collection since publications will be acquired or deposited many years after being published. Our study was conducted two years after the date of publication similarly to the KB 2005 study. While both studies showed a high level of coverage during the first two years after a work is published, in reality, the library continues to receive publications many years after publication. We would support a timeline of two years as it offers the possibility of evaluating current practices promptly and the efficiency of the deposit programme, including deposit promotion efforts and claiming procedures.

Regardless of the constraints in obtaining a definitive statement on the level of coverage, we consider that these studies provide an essential assessment of the efforts and resources deployed by national libraries and memory heritage institutions to build a national heritage collection. As this is a fundamental task, which most of the national libraries recognize through their library's mission statements, it is important that some indication be given as to their level of efficiency and success in their efforts in building their heritage collections. For one, a good level of coverage signifies that the national bibliography is considered a trusted source of information by researchers, booksellers and librarians. The national bibliography must be able to provide information on published works, regardless if they are obscure publications or from established publishers. For the library's stakeholders and funding bodies, any statement on the level of coverage will provide indications on how well the library is managing its resources and collaborating with strategic partners in ac-

quiring publications through legal deposit and voluntary agreements. It would be important to know how well the library's policies and practices actually apply government regulations and legislations. And finally, the results of coverage studies will show, as suggested by the ISO 28118, that "the library has adequate knowledge of the national production and whether its claiming procedures are effective" (ISO 2009, 17). Any service evaluation should be the opportunity to identify strengths and weaknesses in procedures, staff training and collaborative agreements and find ways to optimize them.

Studies such as those performed by the Koninklijke Bibliotheek (KB) have provided guidance in methodological approaches as well as providing some benchmark results. But, besides the studies published by the KB and the NDL of Japan, there are no other published studies on level of coverage in national libraries and heritage institutions. Voorbij and Lemmen (2006) remarked that this gap prevents libraries from comparing their results with others. Our study has benefited from the KB studies, not only for their methodological considerations but also from the actual coverage level results. It is somewhat reassuring to be able to measure and analyse results using benchmark data. We would argue that more studies are needed to test out the methods proposed by the ISO 28118 performance indicator A.1.1, "Percentage of national publications acquired by the national library." As no indication is given in the standard on how these methods were developed and applied, it seems important to provide documented information on how these compare with the list checking approaches used by the KB and the NL. Without new documented testing, the standard may not be considered a viable reference for national libraries in their coverage level evaluations. In particular, further studies will need to take into account the new landscape of e-deposit in national libraries.

Our 2012 pilot project was a first attempt in assessing the coverage level of the NL deposit collection using the list checking technique. In considering various list checking techniques, either proposed by ISO ISO/TR 28118:2009 or by other studies and guidelines, it was considered essential that one particular technique be tested and evaluated at the NL. The list-checking approach of the Koninklijke Bibliotheek (KB) of using the national Pica catalogue provided the NL with a proven and tested technique. In applying this method at the NL, it provided the opportunity to evaluate the advantages and constraints of using the Swissbib list. The results of our analysis of the Swissbib metadata will certainly lead to improvement of the usefulness of this list. The methodological findings of the pilot project are being integrated in the planning of the official

study that will be conducted in 2014 as part of the evaluation of NL activities as laid out in the 2012–2015 Swiss government performance agreement. That study will be documented and will hopefully contribute to the ongoing discussions on the print deposit coverage of national libraries.

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