

# Universal Bibliographic Control and International MARC Core Programme (UBCIM)



## *National Bibliographic Services at the Dawn of the 21st Century: Evolution and Revolution*

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In 1977, under the auspices of IFLA and UNESCO, the heads of national bibliographic services and experts in the field met in Paris to formulate recommendations for defining the basis of adequate bibliographic control criteria for each country (particularly developing countries). Their aim was the eventual creation of the Universal Bibliographic Control (UBC).

Upon reviewing the terms of the final report of the conference (1), the merit of the principles retained and the pragmatism of the recommendations, which are for the most part being put into action today by national bibliographic agencies, is striking. But equally striking are their over-cautiousness and limitations: they are visibly focused on paper documents, whereas the changes brought about by computers, which today we call new technologies, has already been widely discussed throughout the conference sessions.

The consensus struck was based on strong principles, was applicable by the largest number, would bring about, at the beginning of the 1980s, the creation of the basic components of national bibliographic control which are: legal deposit legislation, a national bibliography and a bibliographic agency - in the majority of cases, a national library - responsible for bibliographic services proper and in particular, the dissemination of bibliographic records.

Today, there are very few countries that do not have at least one of these three components of national bibliographic services, even if only at the planning stage (2). The absence of national bibliographic control is never a rejection of its principle, but is a result of the impossibility of achieving it, often due to economic reasons. Unfortunately, budgetary effort or patronage has a tendency to focus on more spectacular actions than those such as the perpetuation of the production of a national bibliography. This would be forgetting that the publishing identity of a country, and

therefore part of its cultural identity, is borne by its bibliographic system which serves as both a display case and a national memory. If a certain number of national bibliographies were not produced, we would, as was already pointed out by the stakeholders during the debates at the 1987 Brighton Conference (3), make the error of creating two streams of publications: one would be deemed important a priori while the other would soon disappear without a trace.

This triple combination of an agency, legal deposit and a national bibliography is very structured and provides the bibliographic control which had become necessary from the beginning of the 1980s. It was developed within the context of global publishing which is characterized by the pervasiveness of the printed document in all its forms; publishers, booksellers and libraries made little room for "other non-print material." More than 20 years have passed since the Paris Congress which brought with it recognized technological, cultural and economic changes. There is room for new reflection on national bibliographic services and as a consequence, on universal bibliographic control. Are the UBC principles still valid when the notion of access to documents and information is overturned by the metamorphosis of the object to be collected and made accessible, and when we are on the threshold of a century that will undoubtedly see the reversal of the role of "other non-print material" in relation to paper, and the progressive dematerialization of the information media?

In this paper, I propose to examine the different recommendations made in 1977 to underscore the reality of implementing each one and its possible evolution in light of new information media. I will emphasize a few emerging questions which are related to the electronic publishing for which new recommendations will be necessary.

## 1. Legal Deposit

(Recommendations 1977 numbers 1-4)

### 1.1. Implementation and developments

The 1977 Congress asked for the publication of a model of legal deposit legislation as a priority. This was published by UNESCO in 1981 following the work of the bibliography and national libraries sections of IFLA at the Manila Congress the previous year (4). After that date, legislation multiplied; its coverage went from a single printed document to "all material objects that contain information in any form and that are produced in multiple copies for distribution." This last phrase corresponds to the 1977 recommendations, but it does not have anything to do with the coverage recommended for national bibliographies, which is much more restrictive.

The legal deposit of electronic products is therefore often included in new legislation. However, the collection of these products is only just getting underway in most countries because of the weakness of production. But one knows already that their management within libraries is expensive and that it is not useful to include these products in the collection if nothing is laid out in the budgetary plan to allow the bibliographic agency to manage them

correctly (systems for installation, the control of conformity and media changes for communication and preservation).

With the creation of legal deposit legislation, one saw the affirmation of both the "control deposit," and, in a distinct manner, the notion of "documentary deposit" with a national library, confirming in a definitive manner the national value included in the legislation.

However, here again, the existence of legislation on legal deposit does not guarantee that the latter will run smoothly. Despite the 1977 recommendations, not all legislation has been the subject of review and evaluation allowing a library to make its views known on the merit of a revision et cetera. Furthermore, most legislation is not accompanied by incentives to optimize the completeness of the deposit and publishers do not always feel that they are involved enough in their implementation.

Therefore, there still remains some legal deposit legislation to be created, but there remains above all the clear defining of procedural requirements, and not only for Southern countries. National bibliographic agencies in Northern countries must also clearly define their policy in this area.

Furthermore, since 1977, the appearance of new media for documentary products susceptible to being withdrawn was not accompanied by a decrease in the number of documents on traditional paper support since new publishing techniques had increased the publishing and self-publishing fields.... The notion of exhaustiveness in relation to legal deposit therefore becomes a problem since the exhaustiveness of what is to be deposited is often unknown. Exhaustiveness is of course still a basic principle, but one must be realistic and if one cannot attain it, one must define precisely what must or must not be, collected in its entirety and announce the start of a possible sharing of preservation with other libraries; if not, there is a risk of a non-negligible part of the national memory disappearing.

Many evolutions have already appeared in certain national bibliographic agencies. These examples could serve as support for new recommendations:

- recommend systematic verification between the number of attributed numerations (ISBN, ISSN, ...) and the number of documents deposited to better grasp the percentage of exhaustiveness reached and to monitor the publishing output,
- include in the recommendations a liberty clause for each national library, allowing each one to freely effectuate the screenings and rejections it judges necessary, or on the contrary, to better clarify the reason for the deposit and multiply the application documents defining the criteria for deposit, selection, sampling and exclusion,
- evolve the concept of deposit from the container to the content, from the object deposited to the work preserved (reducing the number of copies for the same text: bound, stitched, book club, other publisher, etc., and changing the medium without the

obligation to preserve the original),

- share the responsibility of legal deposit among many documentary establishments The organizations managing legal deposit, through a network, according to the nature of the document, and with the national bibliographic agency acting as a co-ordinator.

## **1.2. The revolution of the legal deposit of an electronic on-line document**

A report by the European Commission on electronic documents in 1996 (5) confirms that the historic function and the responsibility of national libraries to amass the collective memory of the nation remains unchanged vis-à-vis the electronic edition.

However, the present situation is complex: most recently modified legal deposit legislation only concerns electronic products (USA, Germany, Finland, France, ...), others include on-line documents (Norway, ...); at the same time, some national libraries negotiate with publishers on an experimental and voluntary basis without the support of legal deposit legislation (Netherlands, ...). The situation becomes even more complicated when one discovers that the on-line document can sometimes be simultaneously an electronic version of a printed document, added to or substituted for, a specific document of an interactive multimedia type; a network document; a document distributed with hypertext links, software, games...; or even a complete WEB site.

Certainly, at the turn of this century just as 20 years ago, the mass of documents deposited and depositable is still mainly made up of hard copy documents. However, another mass of information that constitutes part of the famous "memory" for which national libraries are the guarantor, now passes through networks. The time seems right therefore to take into account in the recommendations the problem of on-line electronic documents. (And I stress, on-line, since it is here that the real change is found and not in the electronic product that is but the latest new medium added to the large range of media already taken into account throughout the centuries by legal deposit legislation).

Today, all national libraries are faced with this new potential deposit. Their heads have been discussing it for many years in ad hoc proceedings (CDNL, CENL) and the recommendations would no doubt be welcome before each implements its own solutions.

Many questions remain:

- what is an on-line document?
- what is a "legal deposit" for an on-line document? Is it a deposit (the national library becoming the keeper of "fixed editions" at a given date) or privileged access negotiated by the user with the producers/publishers?
- To whom does the obligation of a legal deposit apply for a globally accessible document

on the network?

- when the object being deposited is a virtual one, can a legal deposit be reduced to the "deposit" of an often changing URL address for a document? The national bibliographic agency would no longer be a server, but a turntable of addresses.
- what is the role of a bibliographic agency with respect to publishers in "collecting" this on-line document? Can legislation not specify a "right of use" particular to the national bibliographic agency in order to guarantee access and preservation, independent of commercial rights.
- Does the mass of information on the network not make selection criteria mandatory, therefore necessitating international co-operation in order to create them?

In its 1996 report, Deposit collections of electronic publications (5), the European Commission already established recommendations for the legal deposit of electronic documents. IFLA cannot ignore them.

## 2. The National Bibliography

### 2.1. Implementation and developments

Generally, one notices, in comparing the data of the study of Bibliographic Services in the World by UNESCO in 1975-1979 (6) and that of the Barbara Bell study conducted in 1998 (2), that numerous bibliographies have been created since 1977. Some disappeared after a few years, while others have great difficulty in appearing regularly. The act of creation is insufficient if not accompanied by methods of perpetuation and the necessary qualified human resources. The production of a bibliography is in itself not enough; the information needs to be distributed. The very long waiting periods for the publication of the survey do not allow for ensuring the receipt of correct information from researchers, nor the acquisition of documents indicated as very quickly out of print. That is why for matters concerning national bibliographies it seems necessary to first reinforce the recommendations related to uses and distribution.

Furthermore, in 1977, the national bibliography was defined in all its components in order to be published as a paper document. In 1998, many national bibliographies were also distributed on CD-ROM which are more ergonomic and which offer more satisfying research possibilities than the printed fascicles and their various cumulatives. Some countries have taken the step of eliminating the paper version. It would be interesting to know if considerations other than those of an economic nature caused them to do so, as users' desire to have a hard copy still appeared very strong in most studies and questionnaires.

Whatever the cause, a strong evolution effects even the production of the national bibliography. The step has been taken to move from the hard copy to the electronic medium

and some confusion may arise which could make it difficult to distinguish between the computerized catalogue of the library and the national bibliography. In the cataloguers' own opinion, the drawing up of bibliographic records is work "for the memory." It constitutes an affirmation of the model role of the national bibliography in setting the image of publishing at a given date.

### **2.1.1. Coverage**

(Recommendations of 1977 numbers 5 to 7)

The recommendations of the 1977 Congress, contrary to discussions held during the meetings, are very minimalist on the coverage of the national bibliography ("books and periodicals including official publications") and only recommend studies in order to learn about the documents that would be desirable to add as a priority. As no decision has been made since then, it is time to broaden the types of mandatory documents and to expand the recommendations.

The UBC and its national components seem to establish a direct link between deposited documents and surveyed documents in the national bibliography, but as one can see, this link does not exist.

Some countries very clearly disassociate the coverage of legal deposit and that of the national bibliography, assuming that anything that is in the collections and that may perhaps be the subject of a study 10 to 20 years from now does not require the processing of an announcement or the distribution provided by a national bibliography, insofar as one can identify the document, at a given moment, in the catalogue of the national library (that is the point where the risk of confusion may occur, as previously discussed). This also constitutes, in part, an answer to the constant concern of cataloguers and users regarding the reduction of the waiting period between the time of deposit and the appearance of the corresponding record in the national bibliography. The gap between what is deposited and what is announced in the national bibliography also creates a selection criteria that needs to be clarified through international reflection and, without a doubt, included in the recommendations. The computerized catalogue of the library becomes a kind of "retrospective" component of the UBC.

This question has already been posed in the studies on national bibliographic services, most recently being by P.J. Lor (7) for IFLA.

Furthermore, the coverage rates are not always well known or analyzed despite some recent works and questionnaires. The review of this situation is a subject for research to be carried out under the aegis of UBCIM.

### **2.1.2. Presentation and periodicity of the printed bibliography**

(Recommendations of 1977 numbers 8 to 11)

This may seem paradoxical, but it is in this field that the implementation of the 1977 Recommendations proved to be the least satisfying:

- for numerous Southern countries, a regular quarterly periodicity still remains an out of reach objective and bibliographies published late do not correspond to the uses of a national bibliography.
- a user, even a professional one, has trouble recognizing in 1998, as in 1977, the real content and the survey context of the documents in printed bibliographies. One rarely finds an indication of what is or is not surveyed, or of "who does what in matters of collection and processing for all documents and media" in a given country: the booklets requested in 1977 to accompany the national bibliographies did not see the light of day. The recommendation must be reaffirmed and reinforced. Indeed, whatever the distribution media of the national bibliography may be, including CD-ROM, the absence of this information paralyzes its use.

### **2.1.3. Content of bibliographic records**

(Recommendations of 1977 numbers 13 to 15)

All of the Recommendations concerning the content of bibliographic records remain pertinent and were for the most part followed up on. The studies recommended in 1977 to develop authority files and to clarify the minimal content of bibliographic records were completed: the results of the European program AUTHOR on the physical and collective authority people (8), like the publication by IFLA of the guide on the minimal functioning specifications (9), are the most recent applications. At the same time, the range of ISBD was extended to ISBD(ER) for electronic media documents.

Two strong evolutions of the national bibliography merit being followed up on and clarified:

- the identification of the document:  
one notes the reinforcement of international numeration as a guarantee of univocal identification of a wide variety of data (ISADN, ISAN, ISWC, ISMN, ISRN ...) (10): the role and responsibilities of agencies in allocating these numerations must be discussed with standardizing bodies;
- the production of the bibliography:  
one notes, on a national scale, a possible federalization of bibliographic surveys of different types of documents to form the "complete" national bibliography by allowing each to be responsible for something, but giving the bibliographic agency the role of co-ordinator. Is this not a reason for a recommendation regarding organization?

## **2.2. The revolution of the on-line document**

With electronic on-line documents, some "pillars" of bibliographic processing are going to require major changes. What impact must one expect on the bibliographic survey itself?

Since it was first used for monographs, the ISBD family has expanded in order to integrate a new documentary medium each time it was necessary. The decision made this year by IFLA to no longer update the ISBDs marks a new era in bibliographic description, liberated, in a certain way, from the structural a priori of the description of the book-object, to open itself, with the meta data, to the identification of network resources, independently of their media. From now on, it is not only a question of identifying the source of information (with bibliographic data that make up a part of the meta data), but also of better researching the exact address of a precise "document" appearing on a WEB site or on all other electronic on-line resources.

The DUBLIN CORE will be, without a doubt, the international description of the on-line document. It will be presented before the ISO to be adopted as an international standard in an accelerated review. There are still problems of integrity and authentication of on-line documents to be resolved and there will be choices to be made on whether to put new types of documents, (now identifiable thanks to the new granularity of the bibliographic description), into the national bibliographic surveys.

As we have seen, we resolve the question of document identification with the univocal number, but the need to resort to a new international number, DOI or URN, must still be specified as to its use among publishers and librarians.

Likewise, in terms of bibliographic format and the structuring of data, the family of MARC formats, without being abandoned in the automated surveys, makes room for on-line electronic documents (SGML, HTML and soon XML) in an evolutionary context where acceleration can become worrisome not to say non-manageable for libraries if they themselves are not at the forefront of technological development.

And it is indeed acceleration that poses a problem: what recommendations should be presented when changes multiply and when their control escapes the world of librarians? What role, what place do national libraries want to occupy? Will their mission in relation to bibliographic information change? As libraries align themselves more with the commercial sector, - a move considered desirable by part of the profession, in order to establish a unique processing chain, but one that often has difficulty starting up in the traditional sector of the paper document - will it be easier to establish themselves within the framework of the electronic publication and more particularly in the on-line publication? Projects like BIBLINK, that install a type of CIP from the electronic publication are vital for the future of library-publisher relations.

## **2.3. The national bibliography to be invented**



Twenty years after the proclamation of its optimal characteristics, has the national bibliography as we know it survived?

The series of questions related to national libraries is extensive.

The documentary source and the published object of the 21st century will be on the Internet; the WEB sites themselves are documentary products that can contain unpublished material. Should they be surveyed? Is a national bibliography of WEB sites foreseeable? But of which WEB sites?

The volume of information in circulation will require a more and more precise indexing: will indexing efforts focus on "pages" and "elements" rather than on the entire document? What part of the indexer's work will focus on expanding and improving the relevance of automatic indexing?

Increasingly, the descriptive elements will be provided at the source of the "publication" by the authors themselves: will the role of the bibliographic agency be to make these elements coherent for all media (text, image, sound)?

- what should the relationship be between the bibliography and the electronic document: the bibliography will not only be an identification tool, but a direct access tool to the document. One can foresee a meeting for common reflection on fundamental IFLA Programs: CBU, UAP and UDT.

There again, some answers have already been given by the European Commission (5) which very clearly details the difference between deposits and bibliographic control. Is it not necessary to revisit these 1996 proposals in an update of the Recommendations of 1977?

### 3. Other 1977 Recommendations

Paragraphs 16 to 23 of the Recommendations of 1977 concern certain particular elements of national bibliographic services such as intergovernmental publications and INGO publications (Recommendations 16-17), information systems (Recommendations 18-19), the ISDS (recommendations 20-21) and resource-sharing (Recommendations 22-23).

The Recommendations encouraging IGO and INGO to do their part for UBC remain pertinent. Although certain organizations have largely improved the surveys of their publications over the past 20 years, for others, these surveys still resemble more a sales catalogue than a bibliography.

Concerning information systems, one also recommends the use of national bibliography records as record sources in data bases, thus strongly confirming the role of the national bibliographic agency as a producer of reference records of national publishing. The necessity for compatibility of systems to facilitate the exchange of information has already been emphasized. The relevance of the recommendation remains complete; one can congratulate oneself on taking into account in recent

works the perfecting of bibliographic exchange formats, be they UNIMARC or Z3950 (which has now become ISO 23950), or the programmed success of universal converters like USEMARCON (11) ....

The entire ISDS system has progressed considerably since 1977. From 14 national centres in 1979 (6) to 68 in 1998, one can see the extent of its deployment and can understand the intense activity of the international Centre.

The penultimate Recommendation of 1977 was geared toward promoting the production of multinational bibliographies to overcome the insurmountable problems some countries face in publishing their national bibliography. This solution was used in an irregular and non-permanent manner for most titles, often because of a lack of resources within the organization responsible for drafting/publication. Today (2), a large number have ceased publishing. The Recommendation must be re-examined following a detailed inventory of current difficulties since the multinational bibliography remains the only practical solution foreseeable to integrate all countries in the UBC, especially those countries that cannot establish their national bibliographies themselves. But for that to happen, a better definition of the basis of this co-operation is needed.

Finally, the last recommendation addressed to the appropriate international organizations proposed: the production of a model of a national bibliographic agency, which was completed in 1981 by UNESCO (12); and the holding of international training seminars on all these questions - activities which have constituted a good part of the work of the UBCIM over all these years.

## 4. The National Bibliographic Agency

### 4.1. Missions defined in 1979 (12)

Although cited only in the last Recommendation, the national bibliographic agency is the structuring element that in large part allowed for the implementation of the other Recommendations. Thus, it can be said that for 20 years the body has existed without necessarily being called an agency. Implementation of its two primary missions (legal deposit and national bibliography) was very extensive and the positive results of those twenty years are visible. The existence of the agency provided the opportunity for numerous national libraries to subscribe or resubscribe to their policy, or even to their organizational chart and their responsibility for the collection and processing of national publishing activities.

Along with these two main missions, the number and scope of its other possible functions make an overall assessment difficult, but some points are:

- supplying records is undergoing change: if the exchange of national bibliography tapes planned since 1973 was delayed because of format conversion problems, other means of retrieval were found (need-based selective retrieval) to allow for the integration of records in local catalogues; at the same time, work is being done on the universal converter and on making systems interoperable. It must however be pointed out that one

cannot speak of "exchanges" of data: in fact, some large national libraries are only able to supply records;

- the medium for bibliographic products is changing (CD-ROM); the bibliography's necessary continuity for certifying identification of a document, both at a given point in time and over the long term seems to, for the moment, set back the prospect of updating the national bibliography only on the network: however, in spite of the already stressed desire for a hard copy of the bibliography, national libraries have already begun to manage the change in medium and the programmed abandonment of paper. Would it not be necessary to re-examine the recommendations in view of a bibliography on CD-ROM to ensure their appropriateness with regard to the new product?
- there have not been many national authority files added, other than those referred to in 1977, but their importance is proven and they are at the heart of numerous international works. A more precise definition of the role of the agency in the creation of different types of authority would avoid the still numerous points of confusion concerning the management of the indexes of bibliographic data bases and network search engines.

Finally, the physical people and collective authority files of national bibliographies could become support systems of references to resolve the omnipresent question of the management of the rights of the successors in interest and in this way open up new perspectives of collaboration between publishers and librarians.

#### **4.2. Should the organization be changed to better suit the network?**

- national bibliographic agencies are the focal point through which all activities concerning document identification and accessibility are increasingly directed. On the network, however, the world of libraries forms a distinct minority. How can we increase the value of this world on the network? Is this the time for the public sector to position itself against commercial services?
- should libraries rebuild their own services on the network with their own language or should they open up and integrate the world of information (publishers, media, etc.)?

### **5. Prospects by way of conclusion: evolution and revolution.**

Throughout this paper, I asked more questions than I answered, but this is the role of the first speaker; I tried to shed new light on the Recommendations of 1977, taking into account the achievements accomplished over the past 20 years and the major reflection that presently permeates the world of libraries.

I will finish with some comments:

- I think I have shown that the Recommendations of 77/81 have, over the past 20 years,

structured in a positive manner what we today call the national bibliographic services. Some should be reformulated or revised, in light of what remains to be accomplished. New recommendations should be formulated for sectors that had very little presence in 1977 such as bibliographic products and their distribution, retrospective national bibliographies, relations with publishers, etc.

- In practical terms, it is up to the participants of this Congress to model the new national bibliographic services by a decisive contribution at the two extremes of the spectrum;
- on the one hand, by better defining the procedures and support that will allow countries still having difficulty in integrating the UBC;
- on the other hand, by opening a new series of Recommendations concerning on-line electronic documents that will in turn structure the new national bibliographic servers at the dawn of the second millennium.

Our world is changing. Let us not say like Beaumarchais' Figaro: "These changes are surpassing us, let us feign being their organizers" (trans). For another 20 years, until the next Congress, let us be the organizers of the new world of information.

Paris, November 1, 1998

## Footnotes

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