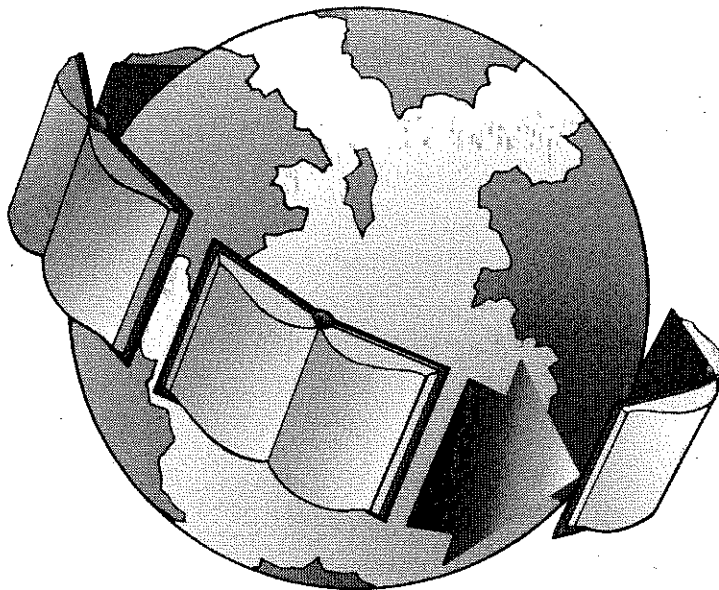


The Commission on
**Preservation
& Access**

The European Register of
Microform Masters —
Supporting
International Cooperation



May 1995

A private, nonprofit organization acting on behalf of the nation's libraries, archives, and universities to develop and encourage collaborative strategies for preserving and providing access to the accumulated human record.

The European Register of Microform Masters — Supporting International Cooperation

Dr. Werner Schwartz
Director of the Technical Department at the
Niedersächsische Staats- und Universitätsbibliothek
Göttingen and Coordinator of EROMM


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Commission Preface



When the Commission on Preservation and Access entered the global arena through its International Program, it was with the understanding that the world's printed heritage was at risk and that preserving it would be costly. With almost every country throughout the world doing microfilming, it is essential to find a way by which these vast stores of information are not unknowingly duplicated. It is vitally important that we know what has and has not already been put on microform. How can we help libraries, already struggling under severe financial cuts, marshal their resources? With reliable information on what materials have already been filmed, these institutions can work more efficiently and cost-effectively.

A significant contribution to this effort has been the establishment of the European Register of Microform Masters (EROMM), which came into being as an international central database with member partners in 1993 and is partially supported by the Commission on Preservation and Access. Originally headquartered at Bibliothèque nationale de France and then relocated to the Niedersächsische Staats- und Universitätsbibliothek in Göttingen, EROMM's initial partnership of four major international libraries (in London, Paris, Lisbon, and Göttingen) has more than doubled in 1994 and promises to keep growing. The mission of each partner is to contribute microform master records in compatible format, thus adding to the wealth of available records for worldwide access. EROMM is an important node for data collection, and by exchanging information with other nodes contributes to the efforts of creating a shared international data base capacity.

Dr. Werner Schwartz, Director of the Technical Department at the Niedersächsische Staats- und Universitätsbibliothek Göttingen and Coordinator of EROMM, herein details EROMM's history: the circumstances of its founding, how it operates, and the role it will play in preserving crucial documents while remaining vigilant of expense. This report, based on a talk given by Dr. Schwartz at the 1994 Annual Meeting of LIBER (Ligue des Bibliothèques Européennes de Recherche) in Göttingen (July 1994), outlines both an historical and contemporary understanding of EROMM. Dr. Schwartz stresses the need for microfilm as a considerable component in preservation and calls for a coordinated effort between European countries: it is the salvation of wisdom and the loss of culture that is at stake.

The European Register of Microform Masters — Supporting International Cooperation



When, in the years following the Second World War, libraries began microfilming their holdings, they saw it as a service to readers too geographically distant to read the originals within the libraries' own holdings. This microfilming revolutionized research, granting access to previously unobtainable materials.

The reasons for not circulating resources in their original paper format are many. A reference book, or one frequently used, must remain in a collection, at hand for the library's patrons. A work may be too valuable to allow for its being sent out, and damage through use is of real concern. Even if the resource does not leave its home institution, its fragile condition warrants limited use and suggests an alternative form. Then, too, a reader may wish to use materials for a longer period than is allowed by interlending regulations.

All of these considerations come into account when improving access to collections through microfilming. Initially, the aspect of preservation was the last, and least, motivation. Much has changed since then. Throughout the world the pressing problem of decaying paper has increased awareness of the need to preserve printed information.



Preservation

In the huge effort to develop preservation techniques during the last twenty years, librarians have concentrated on attempts to increase the life expectancy of original materials, particularly the book's paper and binding. Of the different methods that have become available, some have proven quite successful in the mass treatment of large numbers of books. Mass deacidification and strengthening have been pursued recently as a vital avenue toward preservation; however, the treatment of old and decaying material remains a critical problem.

The most widespread method of preserving printed information in embrittled books remains microfilming, and each year it increases in importance. In spite of new technical developments, microfilming will remain the most common way of reformatting — that is, converting information from its original paper into another format — for some time to come.

In terms of technology, preservation microfilming is a standard procedure. All major libraries have the capability of producing a microfilm according to national as well as international standards. Most of those institutions are able to provide duplicates on microform or paper.

Recent evaluations indicate that black and white silver microfilm will last about 300 years without significant loss of information. In comparison, electronic storage media do not have a comparable life-expectation. What may be more important still, computer technology is in a phase of intense innovation, and we can hardly expect to have electronic equipment in fifty years' time that will be compatible with electronic formats used today.

Conversion of printed information into microform has two decisive advantages over preserving the original book. First, the filmed book can be duplicated as often as needed and on either microform or paper. By using scanning techniques, computer files, too, may be produced directly from the microform. Secondly, for direct use of microform, readers and reader printers are available in every modern library. There is the added benefit that by replacing the original resource with microform, the original will be protected against the damage caused by handling.



Coordinated Effort

In terms of cost, microfilming is relatively expensive: a significant contribution to preserving as many books as possible can only be made if duplicate microfilming of books is avoided. Remember the problem we are facing. The literary and scientific production of the last 150 years, stored in print media, is in danger of being lost because of decaying paper. Theoretically no less than 80% of present library holdings are threatened.

In order to coordinate parallel filming activities of libraries, there must be a record of books already filmed. The titles of all filmed resources can, and should, be checked before being put under the camera to see whether or not they have been microfilmed elsewhere. Such checking would have to be done by every microfilming agency, and computerized registers have been created in a few countries. Collecting the relevant information on a national level alone, however, is insufficient, since filming activities cannot reasonably be restricted to books produced in one country. International exchange of print media is no modern phenomenon but almost as old as the art of printing itself.

In this context, the European Register of Microform Masters (EROMM) has been created as a central database of truly international character. Anyone who wishes to microfilm a work may check the Register to find out whether the title is already on the list of filmed books. If it is, a copy of the material in question can be ordered from the agency owning the master, and funds reserved for preservation microfilming can be used for reformatting other items. It is much more cost effective to acquire a copy than to unnecessarily repeat filming and related work.



The Project Phase

EROMM, set up as an international pilot database in January 1993 at the Bibliothèque nationale de France in Paris, has begun by filing data of microform masters from four European countries: France, Great Britain, Germany, and Portugal. The initial phase of the EROMM project began in February 1991 and ended in October 1993. As a European Union project, 60% was financed by the Commission of the European Communities and 40% by the Commission on Preservation and Access, Washington, DC (USA). The French national library was charged with managing the project, while the three other partner libraries were the British Library (London), the Instituto da Biblioteca Nacional e do Livro (Lisbon) and the Niedersächsische Staats- und Universitätsbibliothek (Göttingen).

As each partner library began its mission, it collected existing and new microform master data from its own computerized catalogue and from affiliated libraries and then converted records into the bibliographic format UNIMARC and sent them to Paris to be filed in the EROMM. All data were merged into one database using the extended UNIMARC format as the internal working format of this international pilot database. At this stage EROMM contained about 50,000 records of microfilmed items. Output has been provided on microfiche and magnetic tape during the project phase. The partners were thereby able to give information of works microfilmed elsewhere to all microfilming libraries in their respective countries.



EROMM as a Permanent Service

The last months of the project (ending in November 1993) and the time leading up to the final draft of the EROMM Agreement in May 1994 have been devoted to the task of defining the conditions under which EROMM can be run as a permanent service. Funding, legal and organizational status, admitting new partners, and technical options for the use and updating of EROMM have been the main issues considered.

The partners agreed on three guiding principles as a precondition for the inclusion of microform master records with EROMM:

- The agency producing microforms must adhere to international technical standards (ISO).¹
- Duplicates of microforms must be available on request.
- Unhindered and low cost exchange of microform master data is a precondition to preserving a significant part of the world's printed heritage by coordinated microfilming.

There are several options for organizing the exchange of data. The one being used is essentially the same as the one that had been practiced during the project phase, involving different infrastructure in different countries. One option is to have the national library with considerable microfilming and cataloguing activity of its own working as an EROMM partner (as is the case with the Bibliothèque nationale de France in Paris). A second possibility is to have a national library serve as relay for a number of cooperating libraries, which then merges the records before sending them to EROMM (which is happening with the British Library in London). The third scenario highlights a computing center serving a library network with interactive cataloguing of microform masters (as with the Niedersächsische Staats- und Universitätsbibliothek in Göttingen). After transforming the records into UNIMARC, these institutions, all working as direct EROMM partners, file the records onto data carriers and send these records to the EROMM host, who will load them on the EROMM database.²

The host will provide every partner with magnetic tapes of updated data. However, online access to the EROMM database is now the preferred option for most partners, as this will spare them the effort of running their own parallel database with identical information. All libraries affiliated to an EROMM partner will have this online access as well.

At present no direct online cataloguing is intended for EROMM. There are obvious reasons for this. Libraries in general do their microform master cataloguing in their own electronic catalogue; the effort of doing it a second time for EROMM would involve additional and unnecessary work. On the other hand, the extraction of microform master records for EROMM is comparatively inexpensive and easy once a routine process has been established.

Another compelling reason for not using the technical option of online cataloguing is the existence of differing cataloguing rules and local bibliographic formats. Uniform points of access for interactive cataloguing in different systems do not exist yet — though this might change soon. Already during the project phase two partners (Göttingen and Lisbon) have worked on tools that can help to overcome technical obstacles limiting EROMM participation to those libraries that work within a modern information network. By adapting two alternative PC running programs it is now possible to include libraries that cannot rely on much more than stand-alone PCs in the process of coordinated preservation microfilming.³



Administration

A word must be said on the administrative and legal basis of the EROMM service. After analyzing a number of different organizational models it has been decided to establish EROMM as a service provided by a host library. In contrast to the possibility of creating an organism of its own, this seems to offer the best chances to keep cost as low as possible. It is estimated that in routine function EROMM will not require more than one person working half time for administrative and library tasks and another working half time for computing. If this is true, it is not rational to employ personnel devoted to EROMM exclusively. Instead, qualified staff of the host library shall work for EROMM only as needed.

In order to supervise and direct EROMM's work and to evaluate questions of principle, a steering committee representing every partner has been formed. The presidency of the steering committee is taken by every partner in a fixed sequence. Meeting at least once a year, the committee receives the host library's reports and votes on the budget proposals for the coming year. The steering committee also reviews applications of institutions applying for membership in the EROMM group. In an effort to keep down costs, expenses incurred when attending meetings will not be covered by the EROMM budget.



Installing the EROMM Database

The pilot database for the EROMM project has been created by the Bibliothèque nationale de France. Early in 1994, as the project entered its working phase, the Niedersächsische Staats- und Universitätsbibliothek was chosen as EROMM host. Records were filed in the university's own system, which works with Pica software, renowned for its unique facilities for data access and diversified use.⁴ The new EROMM database was opened for the first time in December 1994 for online access from abroad.

Libraries that wish to use the EROMM data are given their own user ID and password. By the way of Internet or X.25 they then are able to search for titles of works they are scheduled to microfilm. If they do not find the work in question, they may proceed to do the microfilming. At the same time they are to produce records of all works microfilmed and send such records at short intervals to the agency charged with collecting and converting microform master records into UNIMARC at the regional or national level. From there it will be delivered to EROMM and consequently prevent other users of this database from duplicating the same job.

The effectiveness of EROMM in preventing duplicated effort in preservation microfilming may greatly increase when libraries announce their definite plans to microfilm a work even before putting the book under the camera. The EROMM record structure provides a tag where this information may be filed.



ACCESS

Clearly, preservation is but one aspect of microfilming. How will the user be given access to the works preserved on microform? A partial answer may be given in the event that the EROMM partners decide to use the following technical option: the Pica system used for filing the microform master records has an ordering facility by which a service copy of a retrieved title could be ordered from the agency where it is available. Technically, it will be possible to place an order for a service copy by using a simple command. The order could then be transmitted online to the responsible distributing agency if it accessible. If such a link does not exist, an automated fax transmission of the order may serve as an alternative.

Testing the capability and effectiveness of libraries and other agencies to provide service copies will alone prove whether coordinated preservation microfilming really lives up to our expectation. But it is obvious even before starting with such a test that we have to rely on the very diverse capabilities of libraries to respond to such orders. How much time will be needed, what price will be charged, and what quality will service copies have? Part of the responsibility of the EROMM partners and other relevant bodies will be to establish standards in this field.

Several models of interlibrary cooperation might well be an outcome. Individual libraries could choose to deposit printing masters made from their preservation masters with an agency whose duty it would be to provide service copies on demand from users and from other libraries. This would take the task of dealing with orders off the individual libraries and enhance standards of response in terms of time, price, and quality.



EROMM Systems

Installing the database and building routine relations between the host and the partners requires some effort on the part of the Niedersächsische Staats- und Universitätsbibliothek, which has taken on the function of EROMM host. The system on which the database runs is Pica using a Tandem computer, instead of the French BN-Opaline using a Bull computer.⁵ This change of system required adaptation work and establishing input and output facilities for full UNIMARC records carrying microform information.

Some records delivered to EROMM were produced by libraries using non-standard character coding in their own system. If these codes are not converted accurately to ISO standard, it could result in the misrepresentation of characters and diacritics in certain records. The EROMM partners collecting data from libraries affiliated to them and the EROMM host still have to invest further effort to bring character coding into line. In true routine functioning automated

conversion tables for different character codes should not require any additional work by the host's personnel.

It will also be the task of the four original partners and in particular the host's duty to help new partners become familiar with EROMM. The present EROMM group will have to design efficient measures to educate librarians in those institutions that intend to join. Some European institutions will require special attention in getting their systems adapted to minimal microform master requirements and in linking up with the EROMM database. It may be necessary to have an expert travel onsite to, among other things, help with installing computing tools on the spot.

For this period of installing permanent EROMM services, the Commission on Preservation and Access, Washington, DC, has offered financial support. During the first 18 months partners will have to share only 55% of the cost among themselves. Another positive note has been set by Lower Saxony, which supported the EROMM host (in this case, the Niedersächsische Staats- und Universitätsbibliothek) with more than half of the funds needed in 1994.

To be more specific, partners are asked to contribute not more than DM 3,500 for the year 1995. This is calculated on the basis of 15 partners cooperating. For the following year, 1996, even without the Commission contract, this amount will be the same if by then 30 partners have joined. By the end of 1994 five new institutions had joined, bringing the total number of partners to nine who serve libraries in eight European countries.⁶ In reviewing the response to EROMM to date I am optimistic that the number of EROMM partners may well rise above 30 in 1996. In the long run the effect of routine procedures for all exchanges between partners and host may further reduce real cost.

The central contribution of EROMM partners will of course be to send all microform master records they have available. It is expected that the total number of records filed when all present partners will have sent their data will be more than 300,000. With new partners joining, this number should soon be surpassed.

ENDNOTES



- ¹ISO 4331 (1986, rev. Oct. 1988). Photography - Processed photographic black and white film for archival records - Silver-gelatin type on cellulose ester base - Specifications. ISO 4332 (1986, rev. Oct. 1988). Photography - Processed photographic black and white film for archival records - Silver-gelatin type on poly(ethylene terephthalic) base - Specifications. ISO 5466 (1986). Photography - Processed safety photographic film - Storage practices.
- ²While at the project's beginning Paris served as the host, the host site is now located in Germany.
- ³The two programs are CDS/ISIS and Allegro-C. CDS/ISIS is produced for and distributed free of charge by UNESCO at Paris. Allegro-C is produced at Universitätsbibliothek der TU Braunschweig in Germany.
- ⁴Pica is software developed by the Pica foundation at Leyden.
- ⁵BN-Opaline is software developed in part by the Bibliothèque nationale at Paris. Tandem and Bull are computer trade marks.
- ⁶New partners are the national libraries of Denmark, The Netherlands, and Belgium, the library of the Eidgenössische Technische Hochschule (Federal Technical Institute) in Zurich, and the Deutsches Bibliotheksinstitut (German Library Institute) in Berlin.