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European National Libraries: a Review of the Year's Activities

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I. Introduction

This review of the activities of the National Libraries in membership of the Committee of European National Libraries during the past year has been compiled from the summary reports for 1996 submitted by the Directors to the CENL Secretariat at Die Deutsche Bibliothek. The reports varied enormously in both their length and their coverage and, inevitably, the highly selective nature of this review does less than full justice to most of the libraries. For this I apologise, as I do for any misinterpretation of the detail in the reports. I am aware also that where a library has reported the main events and activities with commendable brevity, it too has been highly selective and has therefore left unsung many of the achievements which others have thought worthy of inclusion. Whilst I have exercised my judgement in excluding a great deal, it has not of course been possible to include achievements which have not been reported to CENL! review concentrates exclusively on a number of themes which seem to be at the heart of the work of the European National Libraries. I have not reported in detail on the normal every day work of the libraries and the fact that all seem to be more heavily used than ever. I deliberately leave out details of acquisitions during the year, and the statistics that some libraries sent, not because these are unimportant, but simply because of lack of space, and because these can generally be acquired by those who need them directly from the libraries concerned. Nor have I given details of expenditure where these have been reported, since, unless I were to convert all expenditure to ECU, no comparative assessment could be made. It is however safe to say that while there are a small number of comparatively wealthy libraries, there are many poorly resourced ones, and whilst the rich do not seem to have got richer during the year, neither have those that are poor. Overall, European governments are under-investing in their National Libraries, and the libraries in their turn are seeking to do more with lower units of resource. What is also clear from all of the reports is that, whatever the resources available to a National Library, its greatest assets are its staff. The achievements reported by the Directors are evidence that their staffs are highly skilled, highly enterprising, highly enthusiastic and highly overworked!

II. Buildings

Planning for new facilities

Some 80% of the reports received from the National Libraries refer to building projects planned or in the course of completion. Anyone who has been involved with the planning of a new library building will be aware of the enormous effort that is required. This is not only so at the stage of briefing the architect, but at all stages of the planning process and during the preparations to make the building ready for occupation and for the relocation of staff, collections and services ready for its opening. Too often in the past, libraries have been more concerned with translating existing working practices lock, stock and barrel into a new building. They have briefed their architects to design a larger,

technically more sophisticated building modelled on what their needs appeared to be at the time without recognising that the way things were organised was not because that was the most effective way but because the constraints of the building had dictated that organisation, and familiarity and tradition had hallowed it. The changes which libraries are now facing in the way they work have led many to recognise that a far-sighted brief which encourages the architect to design a building which has the maximum flexibility for future use is essential, and that the architect must be dissuaded from creating a national shrine to the book. In recent years, many libraries have benefited from the experience of others in their preliminary planning and it is encouraging to find that, in general, libraries are now using the opportunity that planning a new building gives to remodel services and methods of working. The National Library of Portugal, for example, has been engaged in discussions on the best options for new services, and is seeking to incorporate new concepts of collection management and access in remodelling its plans for a new building and for the incorporation of new functions in its present one. The National Library of Finland, which is undertaking extensive renovation of its old building and an adjacent building, has been taking the opportunity afforded by its extended programme of work to introduce new services and modernise older ones. restructuring its staff to create a team of subject specialists, and developing networked services and telephone services to its users. In the reconstruction, the new building will be largely devoted to meeting the needs of researchers using its special collections. The building will also house an American Resource Centre, run as a joint service between the Library and the US Information Service.

Renewal and renovation

Many national libraries are working in old buildings, and are faced with the difficulties of adapting these to provide the services

demanded by their readers and the technical facilities to allow for the extensive use of computers and networking. Even some new libraries built in the last ten or twenty years are now in urgent need of extension or major renovation if they are to meet the demands of the next century. The changes in the ways libraries work as they embrace new technological methods have been rapid and far reaching. Many buildings designed to meet the needs of the traditional library are quite unsuited for current needs. Offices are too small and badly located, electrical circuits and telecommunication lines are inadequate, and to rewire complete buildings is not only expensive but can result in major disruption to the work of the Library over many months. Nor is it only the staff working areas of the library that are found to be out of date. Many libraries find that their reading rooms, often designed as grand halls to reflect the important status of the national library, with solid reading tables and fixed book stacks, are not easy to adapt for the new technology, with its need for 'work stations' (and greater space to accommodate them) and for electrical supplies and computer lines at a large number of desks. The modern library needs not only quiet reading space but areas for group work, and areas where those using equipment and machinery as part of their normal way of working in a library can do so without the noise of the machinery disturbing others. (The new British Library was designed with small enclosed typing rooms so that the comparatively few readers using portable typewriters at the time the building was planned would not disturb the great majority of readers using pencil and paper. It now seems that almost all readers use portable computers, and that the typing rooms might be more suitably used for those readers wanting to work in complete quietness!)

As the technical sophistication of library buildings increases, the cost of renewal and replacement is extremely high. In a number of libraries the limitations of buildings designed some years ago with high technical specifications are already becoming

apparent. In some, the technical facilities, plant and equipment, although perhaps 'state of the art' at the time of building, are already out of date or in urgent need of replacement and the costs of replacement may be more than the annual operating budget can afford. For example, the *Turkish National Library* which moved into its new building in 1983, reports that its conveyor system, installed when the building was constructed, no longer functions and that it is planning to install a new system to facilitate book circulation. It is also short of space for the provision of new services. However, the modular design of the building makes it possible to enlarge the main structure and new modules are being planned to house the printing house, data processing centre and the Cultural Centre.

The libraries of Central and Eastern Europe have particular problems to contend with as they seek to renovate older buildings or undertake repairs to the fabric with very limited resources. The Czech National Library, for example, has had to completely replace its heating systems, and in the summer of 1996 had to shut down the library's public services for six weeks to allow for the work associated with the first stage of this renovation. Perhaps the Albanian National Library's problems are not untypical, although one hopes that others are faring rather better. Director reports that the lack of space in the stacks is most acute, and that 250 archive, book and periodical collections are lying on the floor, although money had been found to repair some 150 damaged stacks and to erect 70 new ones. During 1996, the whole ceiling of the old library building had to be repaired, and new electrical circuits installed. The water supply system also had to be renovated, but he reports that there is as yet no new water supply and that the problem must be urgently solved by the Administration Department. His comment is one that many directors must have made as they have struggled to get even the basic building repairs done: "I am of the opinion that the Ministry of Culture must support more powerfully this institution and not hamper our problems by dragging them on and on. Since November 1996, we have sent the Ministry eight projects on the improvement of the whole Library!"

Many other building projects have been long drawn out and subject to many changes in completion date. Even with the best planning in the world such delays are not uncommon. Often, the starting date for building is postponed, or progress on completion is delayed, for financial reasons as is the case with the National Library of Russia's large new building in St. Petersburg. This has suffered many delays since work started in 1985, but it is hoped that the construction of the storage areas will at last be completed by the end of 1997. There are of course other reasons for postponements, which can be no less trying when the library is forced to make temporary arrangements to deal with the shortage Problems relating to the site are of space and facilities. increasingly common and it is these that have forced the National Library of Slovenia to delay the laying of its foundations until late autumn 1997. Not only have archaeological excavations to be undertaken, but the Library has also to deal with other problems connected with the moving of tenants in the buildings which have to be demolished before the site can be fully cleared.

Various libraries report major alterations that are in progress to provide new facilities and additional storage space. In the National Library of Austria, construction of new accommodation for the library training department and for the papyrus collections are in hand. The earlier phase of restoration and adaptation of the existing buildings to provide improved accommodation for the broadsheet, poster and ex libris collections has now been completed and planning is well advanced for a spacious new exhibition area beneath the Hall of State. In the *National Library of Ireland*, a separate building to house the Library's photographic collections has been completed and will be known as the National Photographic Archive. Another additional building to house the microfilming, conservation and binding services should be ready

for use in September 1997, and will allow the Library to proceed with a collaborative programme for the microfilming of newspapers as part of the Newsplan project. The National Central Library of Florence, also facing severe problems of space, is remodelling two of the stack towers in its main building in order to increase its storage capacity by a further 24 kms.

Planning to move.

Whilst a library may look forward to its new home with renewed excitement as the building starts to rise, there remains a great deal of planning work to be completed. The Danish Royal Library is presently in the midst of this work in preparation for its major new extension. The size of the extension in Copenhagen presents even more challenges than building on a completely separate site, since the building work requires areas of the existing building to be cleared. Thus, for the whole of the contract, there is inevitably a massive disruption to the normal working of the Library that affects both staff and readers. As the Library reports, "A total of almost 300 people have been moved in one way or another in 1995 and 1996, most of them once, a few twice, about 2,000 cubic metres office furniture and materials have been moved, 80 tons refuse has been removed and just over 30,000 running metres of books, periodicals, newspapers and microfilm have been reshuffled or moved. While the personnel have been under a lot of pressure from the construction work, with preparations, moves and reshuffling in both 1994 and 1995, the public did not really notice the inconvenience until July 1996, when service was curtailed. The library is in a serious dilemma; on the one hand, preparations for the new extended facilities have to be made; on the other hand, the public have to be served here and now. If the distribution of resources is changed in favour of better service to the public now, the consequence will be that work on the new facilities will not be ready in time, and a large

number of obstructive build-ups and backlogs will hamper library service and the re-establishment of normal conditions in the years after 1998."

Those looking for models to use in planning for their own new buildings will find much of value in the work of a group of libraries that have been involved in this challenging area of librarianship for a number of years. (They should also look at the planning undertaken by a number of University Librarians in recent years, much of which has been studied in some depth by the LIBER Library Architecture Group, and reported regularly in the LIBER Quarterly). Amongst those libraries which have now reached the stage of moving into completed libraries are: the National Library of Sweden, the Bibliotheque Nationale de France, Die Deutsche Bibliothek, and the British Library.

The British Library has now at last taken over its new building at St. Pancras, and is beginning to obtain the benefits of its immaculate planning for what is thought to be the largest book The first staff moved into the building in move in history. November 1996, and the library began to move the collections on schedule in December 1996. By early spring, some 26 km of material had been transferred to the 340 km of shelving now available in the new building, mainly in the deep basement storage areas. The Library will open the first of the new reading rooms in St. Pancras in November 1997, the Rare Books Reading Room in March 1998 and the Exhibition Galleries and other general areas in April of that year. The final stages of the book move will not be completed until May 1999. Whilst the move is continuing, books already transferred to new building are being made available to readers on request in the Bloomsbury buildings.

The good humoured race between the British and the French to open their services fully to the public in their new libraries is almost settled (and the cases of vintage champagne which each has promised the other if it is first are no doubt resting deep in the St. Pancras basement, or high in one of the towers at Tolbiac ready for delivery). The Bibliotheque Nationale de France has formally opened the upper level reading rooms of the Tolbiac building, the 'haut-de-jardin', after three days of celebration following the inauguration by the President of the Republic on December 17 1996. Whilst it is still too early too evaluate the impact that the new general public reference library of the 'hautde-jardin' will have, during the first months the number of visitors exceeded the number of readers, and the building is clearly a major addition to the tourist itinerary in Paris. December and March, 11,000 season tickets and 74,000 daytickets had been sold. The majority of the users of the 'haut-dejardin' are students, and the largest attendance is on Sundays. Whilst the opening of the 'haut-de-jardin' has been a major public event - the opening exhibition held in both the new building and at the Richelieu building, 'Tous les savoirs du Monde', attracted over 75,000 people - preparations continue for the opening of the research library in the 'rez de jardin'. The opening is scheduled for June 1998, and the main collections will begin to be moved into the building next December. The Versailles building, where most of the periodicals collections have been housed, closed at the end of March. The collections are being transferred to Tolbiac, and are also made accessible to readers at Richelieu. Planning for the organisation of the Richelieu building after the book collections have been moved to Tolbiac has already begun under a special team of planners commissioned by the Government.

For both *Die Deutsche Bibliothek* and its users, the most significant event of 1996 was the completion of the new library building in Frankfurt am Main. The keys to the new facility were officially turned over to the Director General by the Federal Building Ministry and the Construction Supervisor on December 12th, 1996. This ceremony marked the end of the building phase and signalled the official commencement of moving activities á which had already begun for the 6.5 million books in September á for the library as a whole. Although a new building was being

planned for the Frankfurt library in the 1980's, a thorough review of the possible alternatives for a national library representing the reunified Germany was conducted. The Bundestag gave final approval for the new building project for unified library in 1991. The foundations were laid in 1992; the topping-out ceremony held in 1994, and the building was ultimately completed on schedule. Thus the final cornerstone of the unification concept has been put in place. Formulated by the librarians of the Deutsche Bücherei Leipzig and the Deutsche Bibliothek Frankfurt am Main in April 1990, this concept has been implemented in a step-by-step process with the support of the German government as well as German publishers and book-traders. With its two book archives in Leipzig and Frankfurt am Main and its music archive in Berlin, Die Deutsche Bibliothek is now well equipped to collect, catalogue and make available all books published in the German-speaking countries of Europe. But more than that, the new building in Frankfurt am Main allows the Library to respond fully to the demands of society for digital information, and to the impact of information and communication technologies on publishing. In addition to meeting the new needs of users from the academic and business communities, it also offers a solution for problems relating to the long-term preservation and availability of digital publications.

Other national libraries reporting on matters relating to their buildings and facilities include the *Netherlands*, where a new entrance hall has been built which gives access to eleven other institutions housed in the KB premises. A new underground store is being planned for the National Library of Hungary, and in the *National Library of Switzerland* work is in progress on its new underground stacks. The *National Library of Spain* continues the remodelling of its 19th century building in line with its 1989 plan. The Library has opened new work and reading rooms for the Servicio de Bellas Artes, and moved the fine arts collections to new stacks in the remodelled building.

III. Organisation and staff structures.

All libraries face the pressure of change as the century draws to a close and they seek to adapt to the needs of the twenty first century. Patterns of organisation that have developed over many years are often found to be inadequate in dealing with the new demands being made upon the library. They are too cumbersome and bureaucratic to allow for the effective management of change. The need to reduce the cost of staff and to replace staff intensive processes with automated routines often acts as the immediate spur to reorganising the structure of the library. Other factors may be no less significant. Changes of structure may be necessary because of new buildings, or severe financial constraints or the critical requirement of finding ways of becoming more efficient and effective as demand upon the library from an information hungry world increases. They are also frequently undertaken as a result of the appointment of a new Director who wishes to reshape the organisation of the library to reflect his own views of the most viable structure, or by other staff changes, such as the retirement of long serving heads of departments. Whatever the cause for the restructuring, it is often a painful and difficult time for the staff of a library, as the old certainties disappear to be replaced by a period of considerable instability as changes are brought into effect. One thing appears to be certain however. The old stability of organisational structure which has generally pertained in National Libraries, where hierarchical structures of departments have tended to reinforce the natural conservatism of large institutions, is disappearing. All libraries seem to be moving towards a more flexible, leaner structure, where the line of authority and responsibility is both short and clearly defined. The pace of change seems to demand more frequent reassessments of the adequacy of the library's structure to support that change.

During the year the *British Library* implemented a further phase of management re-structuring as part of a process begun in

1995. The new structure is based on function and incorporates all the major changes seen as necessary for effective development and management of the Library for the longer term as it centralises its work on two major sites - the new building at St. Pancras and the extensive northern estate at Boston Spa. first phase saw a realignment of the Library's directorates into two broad functional groups, irrespective of location. This second phase makes particular provision for the structural changes identified in the Library's major strategic initiatives on Collection Development, Collection Management, Access Improvement and User Satisfaction. A managerial focus for Digital Library Developments has also been established. The opportunity has been taken to continue the process of removing the structural boundaries deriving from the Library's origin as a number of separate organisations and to introduce shorter and more efficient lines of communication. Restructuring has also accompanied by a more flexible pay and grading system following the delegation of responsibility for pay and grading to the Library. The reorganisation of the staff has also led to modification of a number of the Advisory Committees as they have been realigned to represent more closely the new functional structure.

Merging formerly separate institutions, and re-identifying the functions of each part of the new organisation, has been of particular importance in Germany. Die Deutsche Bibliothek, with the completion of its new building at Frankfurt am Main (as noted previously in this review), has completed the formal structure for the reunification of the Deutsche Bücherei Leipzig and the Deutsche Bibliothek Frankfurt am Main based upon the equality of the two library locations. An essential contribution to the integration process was made by Dr. Gottfried Rost, Director of the Deutsche Bücherei in Leipzig and Permanent Deputy Director General since early 1991. At an impressive ceremony on November 14th, 1996, Gottfried Rost officially retired after 40 years of professional life. Summarising the unification process, he

remarked: "It is of historic interest to reflect that two similar cultural institutions have, in a forward-looking and systematic approach, accomplished the reunification of Germany in their own dimension not only without loss of substance, but that they have concentrated and intensified their activities, emerging from the process with the prospect of a shared future and a common purpose."

In *Denmark*, the new extension to the *Royal Library* has led to a reconsideration of the functions of the various parts of the Library. The IR project (Information and Reference project for The Royal Library) completed a total policy review in 1995. This states the general principles for the three service centres of the library, Slotsholmen, Fiolstræde and Amager when addressing the information and reference services and collections. In 1996, the work continued with more detailed stipulations about the contents of the single information and reference location. In addition to this, the selection of specific titles to support the service has begun in close co-operation with the subject specialists in the library.

Structural and organisational issues are also being addressed by the National Library of Hungary. It has commissioned a British firm of management consultants, Ernst & Young, to audit and analyse the organisation and work processes of the library and to make proposals for organisational changes which will result on the one hand in a reduction in the numbers employed and on the other will improve efficiency and service. The work is currently under way. M. Line and R. Heseltine of Great Britain are also working on this project as experts, with the support of the *British Council*.

Change, after a long period of stability, and conservatism can of course be stimulating and exciting and this is obviously so in the National Library of Sweden. The Library, after being without a Director for some time, has taken the opportunity provided by the appointment of a new Director and a major extension of its building to undertake a radical programme of reorganisation to

create a structure closely related to major functions. The staff are reported as being very enthusiastic about the project, which was the first major structural change for some eighteen years, and were very closely involved through working groups and a decision making board which included trade union representatives. The new organisational pattern began to be implemented in July 1996 and by December all staff had been assigned to their new positions and duties. The KB states with great and well placed confidence that it is now in a position to meet the new century and the challenges from the IT revolution.

Planning for new management practices and a revised internal organisation has also produced a number of important results in the National Library of Finland. The aim has been to replace the traditional vertical hierarchical organisation by a flatter more flexible organisation where relationships are mainly horizontal. The Library is remodelling its internal processes in such a way that processes are not split up by internal organisational 'walls'. The Library intends to change from being a process driven organisation into a user-driven organisation, a task which although it may sound simple and self-evident, in practice requires a complete rethinking of the way in which the library works. It requires the creation of new relationships between the readers' services and internal processes. The goal is to make the Library function like a service company with emphasis upon meeting its users needs. Achieving an understanding of cost-benefit is an essential part of these efforts. The Library considers it to be essential to get the organisation to accept activity-based budgeting and to recognise that goals can be revised and the tasks of the staff can change. The reorganisation is based on the principle that responsibility and decision making is devolved to the right level and that staff must accept that responsibility and not seek to delegate difficult or unpleasant issues upwards.

IV. Information Technology.

Almost without exception the European National Libraries report new and rapid developments in the way that they exploit information technology. Information technology processing now underpin all of the work of the library, from straightforward housekeeping routines, through to highly sophisticated services to readers. In Western Europe the larger libraries have had many years experience with the automated systems they use. Some of those with the earliest systems are now having to consider seriously the level of re-investment that they can currently afford to take advantage of the latest hardware and software. Unfortunately, when a library has built up complex integrated systems over many years, the cost of renewal can be extremely high, and the process of change can be very disruptive. Libraries that have adopted automated systems more recently have often the clear advantage of being able to invest in hardware and software that reflects the present state of the art. They can also benefit from the experience of others, learning both from their mistakes and their successes. As a result they can often make very rapid progress in developing their automated services, and 'leapfrog' over the intermediate stages and the first and second generation systems that others are still Notwithstanding the problems of funding, the progress made in modernising library processes to take advantage of automated systems has been particularly impressive in Central and Eastern European countries. There, a number of libraries have moved straight into the latest generation of software and hardware, although there remains much to be done in converting existing data. One hopes that as these developments proceed, libraries that are implementing the new technology will not hesitate to reassess their methods of working to take full advantage of the information retrieval capacity of the technology. Too often in the past libraries have sought to impose all the overheads attached to their existing manual systems on to the computer system, and often, as a result, they make their systems somewhat idiosyncratic and create difficulties in communicating data to other libraries.

Standards

Even without this extra complexity, the various national cataloguing rules and standards and the different communication formats used frequently cause interference in the transfer of data between libraries. These make the goal of a 'virtual' European library, where catalogues from various sources can be commonly accessed by readers in a remote library, even more difficult to realise. The importance of compatibility between systems has been stressed in the work of COBRA (Computerised Bibliographic Record Actions), the European Union funded project involving eight of the national libraries in promoting research on sharing bibliographic data. Activities under the COBRA programme have included work on standards for character sets and exchanging data between national and public libraries. Good progress is also being made in developing the concept of each national library holding responsibility for the development and promotion of national authority files. important step has been the recognition that it is not simply a matter for European libraries. World wide co-operation between libraries is required if we are to achieve the compatibility necessary for records exchange and common access to catalogues. It is therefore encouraging to find that the number of European Libraries collaborating with the Library of Congress in the area of authority work is growing steadily. The British Library has been collaborating closely with it for some years with the in the development of a common standard name authority file, as well as more recently discussing ways of harmonising US/UK MARC. Die Deutsche Bibliothek is also currently conducting negotiations with other national libraries, but most notably with the Library of Congress, for the purpose of establishing procedures for the mutual exchange of authority files. While the title data published by *Die Deutsche Bibliothek* are not authority files in the strict sense of the term, their widespread use in libraries and affiliate systems gives them the character of de facto standards. The *National Library of Lithuania* has now also joined the ranks, being confirmed as a member for the co-operative cataloguing programme with the Library of Congress and thus obtaining a right to participate in the compilation of the Library of Congress Subject Headings. This work of establishing authority files is of course equally important to libraries of all types as derived and shared cataloguing develops through the use of machine readable records.

The virtual library

The expansion, control, and linking of on-line authority files including subject authority files are among the key pre-requisites for the development of the 'virtual' European library, not only for cataloguing purposes but also for inter-system networking and precise search entries by users of the Internet. The dream of a virtual library is brought closer to realisation by the CENL GABRIEL, a world wide web service GABRIEL Project. launched last year, allows European libraries to pool news and service information and provides access to their on line services. GABRIEL began routine operation on the Internet on September 30th, 1996, offering the services of 38 national libraries under a single Internet address and thus representing a virtual European The computer at the Royal Library in The Hague functions as the master server. It is supplemented by three mirror servers in London, Helsinki and Frankfurt am Main.

The development of Web Sites is proceeding rapidly in a number of libraries. The sites not only provide access to on-line catalogues and bibliographic record data bases, but increasingly to a range of library services and special data bases, including digital texts. The British Library's Portico server provides a good example of the developments now taking place. Portico (www http://portico.bl.uk) provides a range of information about the Library, its reading rooms and its general programmes, including publications, events and exhibitions and also now provides access to a wide range of on-line catalogues, as well as to its bibliographic services and document delivery services. BLAISE-LINE, the Library's priced information retrieval service, was made available on the World Wide Web in May 1996. At the end of the year, work was continuing on plans to make the Library's OPAC available over the Internet from May 1997. INSIDE, a new and innovative integrated current awareness and document delivery service has been successfully launched. The INSIDE database contains bibliographic information of the 20,000 most requested journals from the British Library Document Supply Centre including 14,000 in the STM field as well as 15,000 conferences. It can be browsed to article level using interfaces designed with end-users in mind, thus recognising the varying levels of searching experience and expertise possessed by members of the user community. Document delivery includes a range of fax options depending on customer urgency and budget as well as the slower forms of delivery by courier or post. The success of INSIDE owes much to its flexibility Most importantly it gives publishers a comprehensiveness. revenue stream. For every item supplied this way the publisher of that item will receive a royalty; in other words, it is a copyright paid service. Recognising this, Elsevier Science has signed an agreement with the British Library on the use of electronic versions of STM material. The agreement will allow the British Library to incorporate bibliographic data into INSIDE and, on an experimental basis, to use the electronic full text of some of these journals as a source of satisfying document delivery requests.

The power of the World Wide Web servers and the Internet to gain new and highly sophisticated access to a library's services is only now beginning to be fully appreciated and exploited. Through the British Library's Portico gateway a remote user can move from consulting the catalogues of the lending collections through to requesting the supply of a particular document via its ARTEL service. He can access the records of the reference collections and undertake bibliographic research or verify that an edition or title exists from a PC at home or in the office. The user can also see selected colour images from the treasures of the library, and hear appropriate sound recordings. Future developments include the facility to browse through an electronic picture library containing photographs of images in the collections which have been created over a large number of years to meet requests from readers for photographic images. The concept is to allow the user a single point of access from any remote location to the full services of the Library, and, where documents can be supplied by electronic delivery, fax, or photocopy, to allow these to be ordered through this single gateway. In the first year of the pilot Portico service (1995-6), over a million user transactions were logged.

Other libraries are following the same concept. The *Danish National Library*, for example, is developing a wider national information web. It has gained extra resources for its networking developments from the Ministry of Research and the Ministry of Culture in return for advanced web services. The Library has already operated the cultural IT initiative central server for Culture Net Denmark, and has been the WebHotel for State cultural institutes and information technology projects. The benefits of this form of collaboration are considerable: the Library can gain access to a wide range of data bases supported by other institutions and can also get additional support for its programmes of digitisation. Although the contract with the Ministry of Research expired, and "http://www.fsk.dk" was moved to

TeleDanmark, the Research Councils and the Ministry of Culture The project Dansk on the web permanently. Kulturtidsskrifter 1917-1945 (Danish Cultural Periodicals 1917 -1945) was launched with money from Culture Net Denmark, and just under 1,000 pages of Clarté and Kritisk Revy were put on the net, "double digitised", both as graphics and as full text. Part of the Library's service has also been to provide help so that institutes and projects can come on the server with home-page and information. It is generous in the hospitality it gives to others on its site, including such European organisations as LIBER and CERL. It is an impressive and efficient gateway to a wide range of information, catalogues and services. In all, the servers operated by the Danish project have some 10,000 referrals per day.

The National Library of Sweden is also expanding and widening its network. For a number of years the Library has been responsible for the national bibliographic network LIBRIS, which serves as a union catalogue for Swedish research libraries. It has recently had the approval of the Ministry of Education to reconstruct and expand the network to fulfil new IT demands. It intends to make the system more user friendly and to host catalogues of all the Swedish public and research library collections. The Libris services will be available free of charge throughout Sweden.

National Libraries are increasingly acting as network providers to a range of libraries within their countries either as a central service from the national library or through co-operative agreements and the creation of consortia led by the national library. In 1995 seven major *Estonian* research libraries, including the National Library, signed an agreement to form the *Consortium of Estonian Libraries Network (ELNET)*. The Consortium is not, however, permanently limited to its present membership; its current structure and statutory duties will form a solid basis for the all-Estonian library network in the future. Its aims are the co-

ordination of the design, implementation, development and financing of the Information System of Estonian Libraries. One of the first tasks of the Consortium was the selection of the information system's software, and in April, 1996 it chose ILS INNOPAC. The implementation of the INNOPAC system in Estonia in 1997 will be the first use of the system in the Baltic republics. A significant milestone in the development of electronic access for the whole country took place at the end of February 1997, when the National Library opened the first public Internet Centre in the Republic. The Centre provides eight working places, making electronic information accessible free of charge. The facility is understandably highly popular.

The National Library of Finland also runs the centralised network services for all Finnish university libraries and makes a number of databases available, one of them being the union catalogue of the major public libraries. The library is now preparing for a migration to the next generation of software based on a client-server architecture. The immediate task is to reach agreement among all university libraries to use the same software. It is recognised that this will require a major effort on the part of the Library as well as discussions with the participating libraries. In Russia, such discussions have already taken place between the Russian National Library and the Russian State Library and they have reached agreement to introduce a common technology and shared network. They are jointly tendering for a common integrated automation system to provide the opportunity to share resources and to establish a bibliographic network in Russia. The Czech National Library is collaborating with others in CASLIN (Czech And Slovak Library Information Network). A Union catalogue has been created comprising 210,000 records. The cooperation is based on contracts binding the libraries involved to adhere to UNIMARC or CS Exchange standards, as well as to a minimum structured record recommended by the National Library. In addition, a catalogue of some 40,000 foreign and Czech serials for the period since 1965 is available. In *Iceland*, the National Library's Libertas system, known as Gegnir in Icelandic, is used also for seven other Icelandic libraries, and a database of 44,000 records has been built indexing articles in Icelandic journals. The system holds a union catalogue of books and foreign serials in more than 60 Icelandic libraries and research institutions. Many of the bibliographic records in the system have been obtained by derived cataloguing using OCLC as the main source.

Strategic Planning for IT

The development of automation systems and networks calls for considerable resources. Finding these either by obtaining new funds or by switching resources becomes a major task for the library and calls for good strategic planning. A number of libraries have either put in place or are creating strategic plans for Information Technology. The British Library's developments have been based upon an Information Systems Strategy published and widely circulated in 1995. This sought to place the British Library development centrally within strategy for systems development of the Library as a whole, and took account of the broad aims set out in the Library's strategic plan. It placed particular emphasis upon the service developments required for its new building at St. Pancras, and its policy of widening access to the collections. Even more importantly, it sought to identify the role that the library should be playing in the national and international provision of networked information services in the digital age and how it should collaborate with others to provide a seamless web of services. The Information Systems Strategy was generally warmly welcomed by other United Kingdom libraries, who appreciated the opportunity this gave for closer collaboration between libraries in the development of a national information strategy. The National Library of the Netherlands in its new IT Strategic Plan for 1997-99 has set as its aims the consolidation of office automation, a programme of innovation to improve services to the public, and the development and maintenance of a technical infrastructure to support innovative projects. National Library of Portugal strategic plan also sets a number of ambitious goals. The first, the acquisition of new equipment to allow the use of new software and to facilitate multimedia access, internal network and Internet services, was completed in 1996. A new set of access services is now available in the reference rooms. This includes networked access to databases in CD-ROM (national bibliographies and other reference works), selected access to Internet available databases and, of course, the National Union Catalogue - PORBASE. Secondly, it sought to establish a local area network throughout the building in order to complete the access to the PORBASE database and to provide the facilities indicated above; and thirdly, it called for the study and preparation of a tender to acquire a new automation system to host PORBASE. This work has also been completed and the call for tender is about to be issued. The change of automation system (to a GEAC 9000) provides the National Library with "state-ofthe-art" technology to manage information in a networked environment. It will also the enhance the production and/or use of electronic information resources thus contributing to promoting the National Library as the country's widest information provider.

Catalogue conversion and retrospective cataloguing

If Libraries are to provide networked access to their collections, it is obviously of critical importance that their collections are well represented in their automated catalogues. As automation has been introduced to libraries, priority has normally been given to recording current acquisitions in machine readable form and only in recent years have resources been found for the retrospective conversion of older records. A number of

libraries have already completed major retrospective cataloguing and conversion programmes and now make their comprehensive on-line catalogues available for public access. Others report substantial efforts to undertake this work. In the National Library of Austria the retro-conversion project started in Autumn 1995 on the Austrian central catalogue of foreign monographs 1981-1991. Some 300,000 records have been entered into the Austrian Library Associations Network System. In a second project, the Library is converting the main catalogues for printed books: the name catalogues covering works published between 1501 and 1991 together with their subject index catalogues. The first phase of the project plans to scan all four card catalogues (totalling over 6 million catalogue cards) by the end of 1997. A new software programme developed at the Austrian National Library will allow graphic images to be retrieved on WWW. Scanning began in May 1996 and is scheduled to end later this year. The printed book holdings will then become available on INTERNET.

In the Czech National Library, more than 3 million cards of the general catalogue have been scanned as the first step of a three stage programme for retrospective conversion. The Library is preparing to make this graphic image form of the catalogue available to readers whilst the second stage, inputting records requiring either OCR or manual retyping, and the third stage of converting the record structure into UNIMARC format, are being undertaken. (A new version of the Library's graphic home page is available on http://www.nkp.cz). The Slovenian National Library has benefited from a grant from the Open Society Foundation's Regional Library Programme in Budapest for its retrospective programme. It has completed the scanning of 110,000 catalogue cards, a method chosen because it wished to save the image of the cards, and is now transcribing the data into a structured electronic format. Ten students of librarianship were trained to undertake the work. Like several other National Libraries, the library is a member of the Consortium of European Research Libraries (CERL) and intends to send records for the period 1450 to 1830 for inclusion in the Consortium's Hand Printed Book Database. It will also use records from the retro programme to assist with the preparation of the National Bibliography for the period 1911 to 1945. Conversion of card catalogues into electronic format is also making good progress in the National Library of Finland where about 85 per cent of the catalogues are already available on the network. Two special projects are being The remaining elements of the National undertaken. Bibliography will be fully converted by the summer of 1998 and the catalogues of the Slavonic Library and its internationally wellknown Russian collections will be also completed by the summer of 1998. Services are being partly bought from the National Library of Estonia in Tallinn.

The Danish National Library's on-line catalogue, REX, contained over 2 million bibliographic records at the end of 1996 but not all the card catalogues have yet been converted. The Royal Library's Retro section over the years has gained great experience in using the method it developed for the semiautomatic conversion of card catalogues to records in MARC By the end of 1996, almost one million retrievable records had been created by this process. During the year, the Retro Section converted a further 300,000 records, of which over a third have been added to REX, while some 200,000 are accessible in a newly-developed database on the library Web. This database contains the Manuscript Department's letter index, one of the most heavily used catalogues in the department. Bibliotheque Nationale de France has also been preparing its catalogues for some years to create the information system upon which the new library will be so dependent. Its retrospective cataloguing programme is now almost completed. version of the single on-line catalogue, created by merging the various separate databases now in use in the reading rooms, should be available in March 1998. The National Library of Switzerland has also completed the first phase of the conversion of its catalogues, and has now started to convert the Swiss Union Catalogue containing of 6 million records.

The database of the National Library of Spain, ARIADNA, has migrated from a mainframe to a UNIX system. Two new software developments have been integrated in ARIADNA that permit the quality control of bibliographic records before they are loaded in the database. The acquisitions module includes EDI software, which has been developed under the EDILIBE project financed by the European Commission. Another new service in ARIADNA generates tapes in IBERMARC, UNIMARC or USMARC format, which simplifies the process related to the publishing or exchange of tapes. During this year two subdatabases were developed and included in ARIADNA: Union Catalogue of Periodical Publications and the database of Spanish libraries. Whilst more than 50,000 new bibliographic items were catalogued on-line from January to December, retroconversion of the card catalogue added another 69.000 records to The database now holds 814,000 bibliographic records, 1,500,000 authority records and 1,400,000 holdings statements.

Digitisation of the collections

In line with their policies for developing improved access to their collections, and particularly in making texts available to readers by remote access, national libraries are increasingly undertaking programmes of digitisation.

The Bibliotheque Nationale de France's programme for digitising the collection of 100,000 books, is probably the most comprehensive programme to be followed in Europe to date. The Library estimates that it will have digitised some 30,000,000 pages by the time the project is completed. The work is now almost finished and the questions of how the documents will be used and

what restrictions may be imposed by copyright are now being addressed. The library signed an important agreement with the French national union of publishers in March 1997. This allows the library to use, but only within its building, the digitised versions of documents that are in copyright (about 45% of the collection) for an experimental period of two years. After this period, new agreements will be negotiated in the light of the use made of the material. Whilst the publishers have agreed to inhouse use of the digitised documents, it has not been possible to achieve agreement on their remote use, and further discussions with the publishers will be required. However, in spite of the limited and provisional nature of the agreement, the Library believes it represents an important milestone in co-operation between the Library and the copyright holders, marking the end of years of mutual suspicion. The Library is now preparing to make some 3000 titles that are not restricted by copyright available on an experimental basis in the French regions and on the Internet. This project, known as ARCOLE, will go live in the autumn of 1997. It will be seeking to assess how much use is made of the digitised titles by remote access, and whether digitised texts have the same attraction as the digitised pictures which are now so heavily used in the highly successful Audio-visual room at Tolbiac.

The British Library also reports good progress with its digitisation programme established under its Initiatives for Access Strategy, although it has had to modify the original programme because of Government funding cuts. The Library's electronic Beowulf project, which began with the digitisation of this remarkable Anglo-Saxon manuscript, has continued to attract much attention on the Internet, and an electronic facsimile has now been published on CD ROM. The Library continues to seek partnership arrangements under the Government's Private Finance Initiative (PFI). Under the PFI, the library looks to the private sector to share in the provision of the resources it needs to develop and manage digital collections to meet its statutory

obligations. In return, the private sector is given the opportunity to develop and exploit the market for content-based digital services and products. Over one hundred companies have responded to the Library's announcement that it was seeking private sector partnerships to develop its digital plans, and among them have been the key players in software, hardware, telecomms and multi-media developments. At the same time, the Library is working with publishers and with its legal advisers to ensure that rights holders of any material which the library might make available for digital supply are fairly treated in accordance with the copyright legislation. A senior member of staff has been appointed to lead these developments.

The National Library of Finland has launched two major projects to develop new full-text services. The projects are, so far, financed by the Ministry of Education in the framework of its information strategy programme and involve a number of other institutions. The first, project Elektra, will develop a production environment for a service offering current journal articles in electronic format from those held in the Library's bibliographic database of journal articles. Among the issues addressed by this project will be copyright and royalty payments and the Library is collaborating with the Finnish collecting agency, Kopiosto, to find practical solutions to the difficult problems in these areas. The second, project Muisti (Memory), will develop facilities for the digitisation of printed collections and pictures. The National Library of Iceland has now completed the digitisation of about 220 historical maps of Iceland from 1500-1900. They are accessible on the Internet with cataloguing records and a description of each map (http://egla.bok.hi.is/kort). The project has been funded by a special grant from NORDINFO supplemented by Icelandic grants, and with technical assistance from the Nordic Digital Library Centre (NDLC) in the Norwegian National Library Department in Mo i Rana.

Further financial support for digitisation of the Library's Old Icelandic literature collections has been offered by the Trustees of the Andrew W. Mellon Foundation. They approved a grant of US\$ 600,000 to the Library over a period of approximately three years to create, in collaboration with Cornell University, the Icelandic National Digital Library (INDL). The project consists of the digitisation of approximately 500,000 pages of manuscripts and printed material á old Icelandic literature, and the Icelandic sagas in particular á to make them accessible through the Internet. As the Fiske Icelandic Collection at Cornell is the second largest collection of Icelandic printed material outside Iceland, this cooperation is of great importance. The Arnamagnæan Institute in *Iceland* also participates in the project and is contributing about 40,000 manuscript pages. The Mellon grant is conditional on the Library finding matching funds of US \$700,000. This has been secured by contributions from the Icelandic Government, the Icelandic Research Council, Cornell University, the National Library and private enterprise.

On line information services

Most libraries are now offering their readers access to on-line information services from Internet connections and, as is most frequently the case, from CD ROMs. The National Library of Turkey is not untypical in seeking to expand the range of information it can offer from CD ROMs and also from the Internet which it accesses through the X29 Turkish Packet Switching Data Network, and a leased line. The National Central Library of Florence, which offers a wide range of information services, has joined the many libraries that now make use of juke box facilities for accessing CD ROMs, whilst the National Library of Austria has, like a number of others, established a CD ROM network within the library for users and staff offering a selection of the most heavily used CD ROMs.

V. Legal deposit

Two major issues have continued to dominate the discussions in respect of the legal deposit of materials in the national libraries: the practical application of the right of libraries to receive publications under legal deposit legislation and the extension of legal deposit to include non-print materials.

A number of libraries, particularly in Central and Eastern Europe, still have considerable difficulty in ensuring the deposit of published materials even when the law provides for this. A major cause of this difficulty has been the breakdown of highly centralised state control of publishing. This breakdown has led to the growth of commercial publishing houses that either do not know of the law of deposit or choose to ignore it. The libraries themselves may have little authority to compel publishers to deposit and the penalties for failure to deposit, where these exist, may be quite inadequate. It is only too often the case that the library itself may be unaware of the existence of a large number of publications as no agencies now exist to regulate publishing and no trade organisation exists or takes the responsibility for listing new publications. (Even in Western Europe the growth of desk top publishing has meant that many new publications are not deposited and libraries may have difficulty in either knowing of the publication or of obtaining a copy if the print run is very short.)

The problems faced by the National Library of Albania, although very severe, are not untypical. Much of its collection development is based on material received under Legal Deposit Decree 6703, but this has never been full implemented. A number of large publishing houses have not deposited all their publications. Matters are made worse by the newly established publishing houses, of which there are over 40, either not recognising the legal deposit decree, or neglecting to ensure all publications are sent. This creates major gaps in the holdings of

the national imprint. Further gaps result from the lack of deposit by the many Albanian publishing houses who publish their work abroad and by the large number of small scale desk top publishers whose work is not always known about. The Library is seeking to publicise widely the need for legal deposit and to use a variety of means for obtaining information on what has been published. Meanwhile, the Library is also seeking to complete a definitive national bibliography. Its Department of Bibliography is seeking to complete a retrospective bibliography of books published in Albania and of Albanian books published abroad. Material has been gathered for the years 1929-1934, but has yet to be collected for 1935-1936 because of shortages of staff. The department has published the bibliography of Albanian books printed abroad for the years 1990-1995. The work in compiling the definitive national bibliography has been assisted by the grants made from the Open Society Foundation and from the Ministry of Culture to acquire Albanian publications from England, whilst a number of staff or university researchers are helping to compile lists of books relating to Albania in a number of European Libraries. The Library has also obtained sponsorship from the Pro Helvetia Foundation for the publication of the latest volume of the National Bibliography listing books and periodicals published in 1992.

The lack of completeness of the national collection of imprints under legal deposit is reported also from the *Czech National Library*, which despite the new legal deposit legislation of 1996 estimated that it fails to obtain some 30% of all items known to have been published.

The need to extend legal deposit to cover non-print publications is now generally recognised. In those countries where legal deposit only applies to printed material, there is a growing concern that they are failing to acquire important material that is now only published in electronic formats, and that the national published archive is increasingly less than complete.

The case for receiving material published in tangible non-print formats, such as CD-ROM's, microforms, and sound recordings, is recognised as being a much clearer one to establish. It is based upon identifying and claiming physical objects and can be regarded as a close parallel to the case for obtaining books or journals, although there are particular problems relating to the legality of downloading material from a CD-ROM or networking the data it contains. The extension of legal deposit to electronic journals and other information which only exists in non tangible electronic formats is much more problematic. Whilst the need to preserve electronic data is widely recognised, defining a legal framework for its deposit is difficult, and it is not altogether clear whether the permanent preservation of electronic texts and images should be primarily the task of a national library or some other agency.

Among the several libraries reviewing their existing legislation are the National Library of Turkey (which in addition to extending the coverage of the Legal Deposit Act of 1934 wishes to increase its enforcement powers), the National Central Library of Florence, the National Library of Hungary (which is seeking both a new Library Act and a new legal deposit act), and the National Library of Portugal (where a working group has been established to draft a new law). Revision of the legal deposit law is still awaiting decision from the Ministry of Education in Finland, but the National Library is already receiving electronic publications, and in particular those on CD-ROM, from publishers on a voluntary basis. In *Ireland*, where at present the National Library is administratively part of a government department, the National Cultural Institutions Bill which gives the Library greater autonomy under a Board of Management received parliamentary approval in March 1997. The legislation includes, for the purposes of legal deposit, an extension of the definition of 'published materials' to include photographs, play scripts, film, microfilms, videos, diskettes, and magnetic tapes. Legislative orders can,

however, be made allowing the National Library to transfer some of these materials to other institutions. New controls on the export of library materials will also be introduced under the same legislation. In *Slovenia*, progress in preparing new texts of the Library Act and Legal Deposit Act has been slow because of the Parliamentary elections which were held in December 1996. A new government has been formed and new ministers for Culture Education and Science, the three ministries whose work covers libraries, have been nominated. New negotiations will now have to take place with all three ministries. The National Library has the additional task of finding solutions for some unresolved problems arising from the new Act on Municipalities regarding the funding of public libraries. It is also preparing the regulations for the Library and Information System in the light of the changes resulting from the new Copyright Act.

The National Library of Spain has also proposed new legislation but this too has been delayed by the new government which in order to reduce the cost of the Spanish administration has merged the Ministries of Education and Culture and has created the Ministerio de Educación y Cultura, with a Secretary of State for Culture and a Secretary of State for Education. The Biblioteca Nacional continues to be an autonomous institution of the Secretaria de Estado de Cultural of the Ministerio de Educación y Cultura. Under the Library's new director, Mr. Luis Alberto de Cuenca, one of the main objectives will be to submit a new legal deposit law to parliament based upon a proposal made in 1994. The Library hopes that the bill will be passed in 1999.

The British Library had also hoped to achieve new legislation in the lifetime of the last UK Parliament, but with the change of government must now queue for a new place in the legislative timetable. With the support of the other four UK legal deposit libraries, the Library submitted a proposal to the Government in January 1996 for the extension of legal deposit legislation to non-print publications. The Ministry wished to consider the proposal

in the wider context of a review of the existing arrangements for legal deposit. The review of the Library's policies towards the legal deposit arrangements for printed materials was undertaken Dr. JM Smethurst, the Library's former Deputy Chief Executive. It recommended establishing the six UK legal deposit collections more formally as a national published archive and the creation of a distributed National Bibliographic Resource which would include records relating to British and foreign publications held by a range of libraries. It proposed greater collaboration between the British Library's Legal Deposit Office and the Copyright Libraries Agent (who is responsible for arrangements for claiming material for the other UK legal deposit libraries), a greater measure of selectivity at the point of receipt of legal deposit material by the British Library; and the establishment of clear disposal policies. In February 1997, the UK Government published "Legal deposit of publications: a consultation paper" seeking respondents' views on a number of specific questions relating to legal deposit of all types of published materials. The Consultation Paper stated: "The Government's view is that it is essential to the United Kingdom's continuing pre-eminence in the field of information provision that some means should be found of providing for comprehensive deposit in our national published archive of material published in forms other than print".

In Denmark, the main basis for the building up of the collection in the Danish Department is the Lov om Pligtaflevering (Act on Legal Deposit) from 1927. This Act covers everything that is printed in Denmark but excludes electronic and audio-visual media. The Royal Library therefore attaches great importance to the work of the Committee on Libraries in the Information Society (UBIS), set up by the Ministry of Culture. This committee submitted (in June 1996) its report Delbetænkning 1: Pligtaflevering (Partial report 1: Legal Deposit). This contains proposals for a new bill under which all works that are issued, irrespective of the media or content, must be deposited in the

Royal Library, so that the complete Danish cultural heritage is safeguarded and preserved. The building up of a retrospective national bibliography meanwhile continues with work on Danske Provinstryk 1482-1830 (Bibliography of local imprints).

Although the National Library of the Netherlands relies entirely upon voluntary deposit for printed materials, it too recognises the importance of building a deposit collection of electronic publications. Research and preparations for this continued. Research included a market survey concerning the production of electronic publications (online and off-line) in the next five years, and criteria for the selection of deposit material. As a follow-up to the recommendations of the Dutch Publishers Association a substantial number of publishers were requested to deposit CD-ROM's and other off-line publications. The response of the publishers is promising and more publishers will be approached in the coming months. On the basis of a national deposit licence, journals published by Elsevier Science and Kluwer Academic Publishers with a Dutch imprint were deposited as electronic files. These will be available for on-site online access. A survey of the coverage of the deposit collection of printed material showed the success of the voluntary arrangements in the Netherlands. Nearly 97% of the Dutch books with ISBN, 90% of the periodicals and 70% of Dutch grey literature can be found in the national library.

Die Deutsche Bibliothek which has not yet mandatory right of deposit for networked publications, has proposed postponing new legislation in order to gain experience in handling and archiving the data in co-operation with the publishers and to pursue the long term preservation of electronic data as a project. The Publishers' Committee of the Börsenverein des Deutschen Buchhandels has since recommended that all publishers submit a complimentary archive copy of their networked publications to Die Deutsche Bibliothek.

Publishing and the National Bibliographic Services

Whilst the resolution of legal deposit issues continues to occupy the attention of a number of national libraries, the important work of establishing and developing bibliographies and promoting national bibliographic services continues. The Icelandic National Bibliography 1995 was published in July 1996. A total of 1522 volumes was listed. The Bibliography of Icelandic Sound Recordings is published as a supplement to the Icelandic National Bibliography. The number of Icelandic sound recordings published in 1995 showed a considerable increase on previous years whilst book production in Iceland has remained stable over recent years. This stability seems to be exceptional, for most countries report a substantial increase in the number of books being published each year. In France, the number of books deposited and entered into the national collections for the first time in 1996, reached 50,000 titles. This record figure increased the work load for the bibliographic services considerably but the work has been reorganised and the delay between deposit of the book and its registration and cataloguing has been reduced. It is quite clear that the paperless society, forecast with the advent of information technology in the 1960's, is no nearer arriving, and that libraries have no need to fear the death of the book. Nevertheless the number of electronic publications as a proportion of total publications is increasing, and in Germany Die Deutsche Bibliothek estimates that digital publications on physical data media account for 2% of all accessions. The 227,935 publications cited in the Deutsche Nationalbibliographie provide the foundation for a variety of bibliographic user services. The Title Card Service comprised 3.1 million title cards. An extremely high rate of growth was recorded in the sale of bibliographic records in machine readable formats: a 60 % increase over 1995 resulting in a total of 16.7 million bibliographic records being supplied. The total number of available bibliographic records

includes those of the *Deutsche Nationalbibliographie* in the MAB and UNIMARC formats, records from the *British National Bibliography* and *Casalini* redistributed by *Die Deutsche Bibliothek* and the SWD and PND authority files. Among the major reasons for the growth in sales were the large number of records ordered by libraries converting their catalogues and seeking retrospective data, the expansion of the floppy disc service and the intensified use of authority files. It is now possible to retrieve title and authority data online via FTP using the WEB-Z.39.50 gateway. Significant work was also accomplished in preparation for the integration of the *Deutsches Musikarchiv* into the online system of *Die Deutsche Bibliothek (ILTIS)* during the reporting year. Full integration is scheduled to take place during the first six months of 1997.

The importance all libraries attach to the work of improving the bibliographic control of their national literature is clear, and nowhere is this felt more strongly than in some of the smaller countries and new republics where the national literature is a very important element in the confirmation of their distinct national culture. Two examples serve to illustrate this. In San Marino, one of smallest nation states of Europe, the National Library has, under its automation project, created a National Bibliographic Centre and begun the work of creating the San Marino bibliography in machine readable formats using ISBD. The work will include monographs, periodical and manuscripts relating to the history of the country. In Slovakia, the Parliament of the newly independent republic has passed a new law which defines the National Library as a legal body in Matica slovenska, and allows a much more independent role for the National Library. This independence has allowed it to co-operate with a commercial company in the publication of the Slovak National Bibliography on CD-ROM. It contains some 63,000 records of books published since 1977.

VI. Preservation and conservation

Despite the lack of funding for preservation reported by a number of libraries, much has been accomplished by the European National Libraries as part of a renewed effort to preserve the written heritage. A number of libraries have extended or developed their conservation laboratories, or opened new facilities. The Bibliotheque Nationale de France has, for example, concentrated its preservation work in its purpose built new preservation centre at Marne-la-Vallee, although shortages of staff have unfortunately limited the extent of its work during the year. (The British Library, like the BNF, has also had to reduce the resources available for conservation and preservation as part of the overall cut-back necessary to provide adequate funding for its move into the new building, and Die Deutsche Bibliothek reports that it cannot turn temporarily approved posts into permanent staff posts in the Leipzig Zentrum für Bucherhaltung. It is seriously considering privatisation as a possible solution to this dilemma. It is a cause for great concern that three of the largest libraries in Europe, with between them a very high level of expertise in library conservation work and, of course, some of the richest collections of European books and manuscripts, are having to make cut backs in staffing and in resources for conservation. Highly skilled staff are essential if the technical processes are to be undertaken to a high standard and new methods introduced. Once lost by a library they can rarely be won back).

The increased awareness in Europe of the need for active conservation policies is most welcome and it is encouraging to report considerable co-operation between European libraries in this important work. Some of this co-operation has undoubtedly been stimulated by the programmes of work that the new Preservation Division of LIBER has been planning, by the continued efforts of IFLA, by the UNESCO Memory of the World Project and by the European Commission on Preservation and

Access. the important conferences and seminars Among arranged during the year, the large international conference jointly sponsored by Die Deutsche Bibliothek and the European Commission on Preservation and Access was particularly valuable. Held in Leipzig at the same time as the 1996 Book Fair, the Conference was attended by more than 200 delegates from 30 different countries. Under the theme Choosing to Preserve: towards a strategy for long-term access to the intellectual heritage, it focused on the massive problem of the long term preservation of printed and written materials in archives and libraries, with a particular emphasis upon the problems faced by European libraries and the need for a collaborative approach to their resolution.1

The Dutch Royal Library, which has received a grant of NLG 18 million from the government for the implementation of a four year programme of conservation of literary works, newspapers and Dutch imprints, organised a European Meeting on Paper Preservation in March. The recommendations of the meeting will be presented to the Council of European Ministers of Culture later in the year. Three international seminars were also held in the Lithuanian National Library, which in May became the headquarters of the UNESCO programme "Memory of the World". These covered a wide range of technical issues: the preservation of library materials, the restoration of leather covers and the restoration of 16th - 19th Century French books.

A number of libraries report that they are actively participating in the UNESCO "Memory of the World" programme, either in preservation projects or in its technical subcommittee concerned with international standards. The *Czech*

The proceedings have been published: Choosing to preserve: towards a cooperative strategy for long term access to the intellectual heritage. Papers of the international conference. [Leipzig], March 29-30, 1996. Edited by Yola de Lusenet. Amsterdam, European Committee on Preservation and Access, 1997.

National Library is involved in the Series Bohemica programme and has presented a report to UNESCO on the structure of digitised old books and manuscripts with the aim of promoting standards for unified access to electronic documents. (See URL: http://www. nkp.cz/ externi/digit/digit.htm). It draws upon its experience in digitising older materials, including some twenty valuable and frequently used Jesuit manuscripts.

The preservation of manuscripts and older materials is given a high priority by most libraries. The restoration department in the National Library of Albania has been giving special attention the preservation of a number of badly damaged manuscripts from The Slovak National Library has restored some 50 volumes printed in the 15th and 16th century, as well as a large for the Literary Archive of Matica number of documents Slovenska.. It too has been closely involved with the UNESCO programme and with digitising early texts. In co-operation with a commercial company, it has produced a CD-ROM of the Chronica Hungarorum by Johannes de Thurocz (1488) and has also prepared Antiphonarium Bratisvalense II- Codex of Haan for digitising. However, it requires further external funding to complete the work.

Almost all libraries report substantial programmes of microfilming for rare books, manuscripts and periodicals, although reader resistance to microfilm remains strong. (The National Library of Spain, however, reports that almost 3 million orders were placed during the year by the public for microfilm and photographic copies following its systematic plan for microfilming its special collections and newspapers.) The National Library of Liechtenstein. as small library with considerable a accommodation problems, decided to pursue a long term project to film all its titles of Liechtenstein literature as safeguard against a disaster, and has already completed the filming of its national newspapers. Whilst these microfilming programmes remain the dominant means of creating surrogate texts, there is currently a

great deal of interest in digitisation as a method of conservation. A large number of experiments and projects to digitise texts are already in place, or being planned as libraries review their conservation and preservation policies. The National Library of for example, in remodelling its Preservation Department, lays considerable stress upon launching a digitisation programme. It will promote this with a collection development and disaster plan in order to co-ordinate preservation, conservation and access strategies. There remains, however, a general uncertainty of the value of digitisation as a method of long term preservation of text in a surrogate form and microfilming is still the preferred method for long term preservation of content. Much of the uncertainty regarding digitisation is related to the longevity of digital material, the risk of corruption of the digitised text, the problems of standardisation, and the adequacy of hardware and software. There is nevertheless a growing recognition of the benefits that can be gained by improving access to rare documents and texts through CD-ROM 'facsimiles' and in reducing the wear and tear caused by frequent handling of the original. The distinction between using digitisation to conserve the original artefact by reducing access to it, and using digitisation to create a surrogate copy for preservation of the text of a document that is already badly damaged or at grave risk of destruction is not always generally understood. The issue is further complicated by the need to preserve that information which is only available in digital formats, whether they are CD ROMs or non tangible formats, such as electronic documents. A number of strategies and policies are being considered and it is already clear that there must be a common international standard relating to the long term preservation of what are sometimes called 'transitory' digital publications. Conversion, refreshing and migration of data seem to be the preferred solutions and a great deal of valuable work is being done both in Europe and in America on these strategies. Die Deutsche Bibliothek, in

collaboration with a commercial firm has developed a multimedia provider system (MMB) which offers a variety of conversion and migration options. The library is also involved with others in the European Union's Telematic Program to establish the technical requirements for a virtual European deposit library for digital material.

Whilst the technical issues relating to conservation of new media are still being defined, the technology relating to the preservation of printed materials is much more highly developed, and it is now reaching the stage where mass processing of books can be undertaken as a routine matter. In terms of process technology, the Leipzig Zentrum für Bucherhaltung, has become a genuine success story for Die Deutsche Bibliothek. The process of mass book de-acidification, developed in co-operation with Battelle, has successfully introduced industrial-scale capacity which allows as many as 200,000 volumes to be processed annually. The quality of the process is high, and the rate at which a large number of books can be treated can be appreciated when one sees the trolley loads of books which have been processed during a normal day's work. The capacities which can be handled by the processing chamber can be further increased in the future without loss of quality. Leipzig has also pioneered the technique of mechanical paper-splitting to stabilise and strengthen heavily damaged single pages. Currently, about 2,000 sheets can be treated per day á ten times more than could be processed The process is well suited to unbound newspaper sheets. Eventually, it is hoped that the process developed by the Becker company will be able to handle 10,000 sheets per day.

Despite the general shortage of funds for conservation work, a number of libraries have been able to invest in new equipment. The *Danish Royal Library*'s Bookbinding and Conservation Workshop has for example procured a CMI Box Machine from the USA. The machine can make four different types of boxes and tied files according to individual measurements, so the library

can now "custom-tailor" boxes for the particularly fragile material, without entailing unnecessary waste of space in the stacks. The *Slovak National Library* has installed a new computer-controlled paper leaf casting machine. The machine was a gift from the Bayerisches Staatsministerium für Arbeit in Munich, and the installation was arranged by the good offices of the Munich Institut für Buch und Handschrifftenrestauriereung.

Work on other technical innovations is reported by a number of libraries. The Preservation Department of National Library of Denmark has two projects: one, examining the effects of freezedrying on paper is expected to be finished in 1997; the other is a pilot project for sound and sound tape conservation. The results of these projects will be incorporated in the future plans of the library for handling large-scale water damage, for example after a fire, and for ensuring that the extensive sound-tape collections in the library can be preserved. The National Library of Russia, as one of the major scientific centres for preservation in the country, is carrying out research in paper ageing and paper strengthening. It has a well developed technology and a skilled staff that includes chemists and microbiologists as well as conservators and binders. A research programme for testing mass deacidification treatment of books is continuing also at the *National Library of Switzerland*.

Sponsorship

Sponsorship continues to be of great assistance to a number of libraries in undertaking preservation and conservation work. The *Slovenian National Library* is the latest to follow an Adopt a Book Programme, and a substantial sum raised under this programme, together with a special grant from the Ministry of Culture, has allowed it to microfilm older Slovenian newspapers and current volumes of two of the most important daily newspapers. The Austrian National Library has almost completed its major project to assess the condition of its older collections and to clean the

books in the Hall of State under a book sponsorship programme financed entirely by donations. Joint partnerships with commercial firms and with other institutions also assist in the development of microfilming and digitisation programmes. The *National Library of Lithuania*, which already has a substantial microfilming programme for Lithuanian periodicals and Judaic materials, has signed a new agreement with the University of Osnabrück with the intention of microfilming selected literature in its collections. This is the Library's third joint microfilming project with foreign partners.

The European Register of Microform Masters, (EROMM), a joint project sponsored by a number of National Libraries, has been widely supported and the automated files are now growing quite rapidly as more libraries inform the register of their holdings. The Register is available on line and is also incorporated in RLIN, which holds the US Register developed by the Commission on Preservation and Access.

VII. International Co-operation

Developing international co-operation at a practical level continues to be a strong feature of the work of the European The work of COBRA (Computerised National Libraries. Bibliographic Record Actions) in the European Commission's Telematics for Libraries programme has continued. The COBRA Forum consists of the National Librarians of eight European countries and is chaired by the British Library's Chief Executive, Dr. Brian Lang. COBRA's life has recently been extended and it is now known as COBRA+. The Forum has been responsible for proposing a number of projects for which the Commission has provided funding. These include: AUTHOR, for networking national name authority files; BIBLINK, linking publishers and national bibliographic services for electronic publications; CHASE, which has been looking into standardisation of character sets; DELICAT, for automatic error detection in bibliographic records; and FLEX, on file labelling. Other European Union projects gaining a range of support from the National Libraries include MALWINE, (Manuscripts and Letters via integrated Networks in Europe), which aims to establish a joint network of European Literary Archives, DANCER (Digital Archive for Network Communication and Electronic Research) for the digitisation of picture documents through a joint network, and EPOC which involves the cataloguing and digitisation of holdings of posters and the publication of a catalogue on CD-ROM.

Discussions with the Federation of European Publishers (FEP) on matters relating to copyright issues and networked access to electronic data and CD ROM publications continue under the FEP/CENL Joint Committee on Electronic Publications. During a year in which electronic publications have been increasingly acquired by European libraries and when interest in obtaining and using them through the legal deposit privilege has been high, considerable efforts have been made to prepare a new project for submission to DGXIII for the joint development of a generic demonstrator for a Networked European Deposit Library(NEDLIB).

The Open Society Foundation (SOROS) has given considerable support to libraries in Central and Eastern Europe under its various European Regional Library Programmes. It has provided a number of grants to individual libraries and the range of projects to which it gives assistance remains wide. It has, for example, supported the working visits of younger librarians from Central and Eastern Europe to the *British Library* under the programme funded jointly by the *British Library* and the Foundation. The programme, now in its third year, has been very successful. Each year, three librarians have been selected in open competition to work for a period of several weeks in the *British Library*, attached to different departments according to their skills.. The Foundation has also supported an international project

for the supply of periodicals from the University of New York, and the Albanian National Library records with gratitude that it received some 80 British and American titles free of charge. Other libraries have received grants for the retrospective conversion of catalogues and other automation programmes.

The commitment of a number of libraries to the UNESCO Memory of the World programme is noted earlier in this review. The CENL also continues to support the UNESCO programme for the Rehabilitation of the Russian State Library.

In addition to these more formal collaborations and joint projects, the national libraries continue to develop informal cooperative arrangements between themselves for sharing resources, and for closer collaboration. The links often provide for the exchange of publications, and this has been particularly important for a number of libraries in countries that do not have strong currencies and that are severely limited in their purchase of foreign books and serials. It is encouraging to note that under various 'friendship' or cultural exchange programmes considerable support is given for acquisition programmes, for automation projects and for staff exchanges or visits. In particular, the British, French, German and Scandinavian Cultural Programmes have been greatly helpful in assisting and supporting libraries in less favoured European states. But more can always be done and many directors are seeking to establish new links. The National Library of Estonia, for example, has now established relations with institutions in over 60 countries, although the closest contacts are with the increasingly important regional grouping of Scandinavian and Baltic National Libraries. Other libraries are signing more formal agreements with 'partner' libraries, for particular aspects of collaborative work. The National Library of Russia has now completed such agreements with the British, Canadian, Czech, Hungarian and Polish National Libraries as well as with the University Library of Bremen and New York Public Library. It is also undertaking joint projects with the National Library of Finland and Israel.

The CENL obviously plays an important role in the overall high level of co-operation between European libraries, and it continues to attract new members. Other European associations are also promoting close co-operation with the support of the national libraries. The Consortium of European Libraries, engaged in a major project to create a database of the hand printed book in Europe, continues to grow and includes many National Libraries among its members. LIBER, which in recent years has done much to revitalise itself and to encourage the closest co-operation between European research libraries through its access, collection development, preservation and management programmes is rapidly gaining respect as an organisation which offers valuable opportunities to European research libraries to work together at all levels.

VIII. Conclusion

It is not possible to record here in any detail the many major acquisitions of the libraries, and the importance of these in preserving our European printed and written heritage. Even though libraries throughout Europe are generally short of resources, the acquisition of important manuscripts, maps and printed books is still given high priority. Collection development for the real, as well as the virtual, library continues to be at the heart of the work of National Libraries. Nor is it possible to list the very many important exhibitions staged by the national libraries during the year often drawing upon the treasures and rarities in their collections. A number of these have been linked to important commemorative events such as centenary or bicentenary celebrations. Very many fine catalogues and facsimiles have been produced as a result of these exhibitions and of the

publications programmes that are now being so actively undertaken to exploit the collections. These exhibitions and publications are important celebrations of the wisdom and energy of the librarians of previous generations in acquiring, and preserving the European book and manuscript. They also underline the cultural significance of the national library in Europe at the end of the twentieth century. The reports of the work of the 26 European National Libraries which have informed this review suggest we can be confident that future generations will also be able to celebrate the cultural significance of the National Libraries of Europe in the years to come.