### Purdue University Purdue e-Pubs

Proceedings of the IATUL Conferences

1997 IATUL Proceedings

# Towards the Electronic Library Service - Actions and Initiatives of the European Union

Ariane Iljon Head of the EU Libraries Section, DG XIII, European Commission

Ariane Iljon, "Towards the Electronic Library Service - Actions and Initiatives of the European Union." *Proceedings of the IATUL Conferences.* Paper 11. http://docs.lib.purdue.edu/iatul/1997/papers/11

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.



## TOWARDS THE ELECTRONIC LIBRARY SERVICE

## Actions and initiatives of the European Union

Ariane Iljon Head of the EU Libraries Section, DG XIII, European Commission, Luxemburg

Ladies and Gentlemen,

I am very honored to have been asked to give the key note speech in a session on the electronic library service - the session which wraps up your conference after you have examined the various elements which set the scene for change, from scientific communication to networks via publishing and the management of libraries.

This is an opportunity for me to put forward a few (I hope provocative) thoughts, to tell you about some of the Commission's actions and initiatives for libraries in the area of applied technology, assess where we are today and try to look a little towards the future - at least as far as the issues that we feel will be important for European libraries in the environment of increasing globalisation.

For many years, I have had on my shelf a volume entitled "Do we really need libraries?", which are the proceedings of a joint UK Library Association and Cranfield Institute of Technology conference published in 1983. Funnily enough the publication doesn't tell you when the conference was actually held. Perhaps this is symbolic of an attitude of mind at the time: the published word is outside time except for its intersection with the publication process which guarantees its authenticity. In today's electronic world, the word is firmly entrenched in the moment. The conference was mainly about performance assessment techniques and criteria in libraries. It didn't actually call libraries into question but expressed the then felt need to demonstrate cost efficiency. 15 years later, in a world which has been submitted to the Internet and Web revolution (both go hand in hand), this catchy title has quite different connotations. We cannot only justify the existence of libraries though these criteria are still part of the picture and are still important. We have to have deeper thoughts about the rationale and fundamental role of libraries and their services and simultaneously we have to look beyond the library to the changing universe - not only that of information but also the way of doing things - in order to understand the context in which libraries have to place themselves today and the directions in which they can or can't go.

At this point I would like to postulate:

- Libraries (and archives), as institutions, are older than the catholic church!
- This means that over the centuries, they have adapted to the requirements of the times, as was needed. The name has remained the same but the reality behind it and the connotations have been different according to the period.
- Its evolution has depended largely on external forces.
- The Library is therefore not a static institution, but there is a trade off to be found between continuity and the "new reality".

I believe that we are on the verge of a new reality - which we have in fact been preparing for 30 years in isolated "pockets" of information activities. All the information professions are now also facing change and the well-routined systems and accepted practices are being queried (for instance those of scholarly communication and publishing), not just of libraries. This is the pervasive of effect of technology information and communication technology - on our lives. It happened before, with other technologies. Society seems to be accepting it and so the individual institutions and professions must mutate too in order not to be discarded along the way to be replaced with new versions!

This is the backdrop of reality, the setting in which one has to place our work at the European Commission - with the added international or rather European dimension. We now have a history of over 10 years activity, starting at a time when expressions such as `digital library' were rarely heard and where the concept of a single distributed *"European library"*, far less a global one, was more often judged hallucinatory rather than visionary.

I would like to think that we have been visionary over those last 10 years and that we still continue to be so in the preparation of our future work - but visionary with a good dose of pragmatism and realism.

If you will bear with me, I shall give you a quick factual overview of this work.

#### **Factual overview**

Activities: To date, we have had 2 programmes defined in two different workplans, 5 Calls for proposals (our main mechanism for action) and have launched already 75 projects (including precursor ones and smaller-scale feasibility projects) with a further 20 or so likely to be negotiated in the second half of this year as a result of the latest Call which closed in April. In addition, there have been a wide range of technical and state of the art studies, and a number of platforms or Special Interest Groups launched to ensure cohesion of interests and common approaches at European level.

International scope All our projects must be international - ie have partners in a minimum of 2 Member States, and must involve at least one library in a serious, committed role. In practice, most of our projects have had consortia of 4-5 partners from 3-4 countries for smaller projects, and 8-12 partners over 6 countries or more for the larger ones. Recently we have started a number of activities related to the countries of Central & Eastern Europe (mainly the pre-accession countries)

culminating in a special effort to encourage their participation in the programme, either as partners in new projects or in awareness and technology transfer actions.

The programmes also cover all types of library (though academic libraries have been main players to date, there is increasing involvement of public libraries).

Financial impact. The Commission has invested altogether some 60 MECU so far. However, given that this probably covers mainly the added costs of international cooperation, we estimate the impact on the sector overall as being of the order of 180 - 200 MECU.

#### Strategy

Proportionally speaking our budget has been relatively modest and our strategy, therefore, has been devised accordingly to generate maximum impact. It can be summed up very simply in three key concepts: mobilisation; consolidation and integration; the future leads to expansion. These create a continuum across both our programmes to date as well as a link into our future planning for the next five years and our contribution to the Fifth Framework Programme for RTD.

#### Mobilisation

The objectives of our first programme were to catalyse and start a process of change among libraries in Europe and to foster a climate of cooperation. I would remind you that the European library environment in 1990 was very diverse, suffered from discrepancies in service provision, in penetration of technology between countries and between types of library, the market place for systems and tools was very fragmented; practical experiences of international cooperation and resource sharing were very limited.

A number of key areas were targetted:

**i** interconnecting - to test the interoperability between systems and to develop the ability for libraries to share resources. This was characterised by work on:

- Z39.50 (clients and toolkits, through projects such as EUROPAGATE, SOCKER, ONE, ARCA);
- on EDIFACT for messaging between libraries and booksellers/publishers (projects EDILIBE I and II);
- and on document delivery networks and on standards for their interconnection.

**ii** improvement of resource, with a first step being to improve the international exchange and use of bibliographic records. This was characterised by work on formats, on format conversion tools, on character sets and UNICODE and on sharing authority records. Many of these were instigated through the work of CoBRA (the concerted action for national libraries).

**iii** pilot services - these were set up, particularly in the areas of document delivery, electronic publications, to test both the technologies and new models of distribution of use. Examples of successful work in this area are DECOMATE, COPINET (including billing systems), FASTDOC, and EURILIA - a pilot distributed catalogue and central document delivery service in the area of aerospace.

**iv** imaging or digitising the materials in libraries - this is going to be increasingly important and tools and techniques still need to be widely tested in libraries. Small scale experiments especially with digitising rare materials from microfilm have been undertaken in projects like INCIPIT and BAMBI. Other projects (eg ELISE, VAN EYCK, HISTORIA) looked at setting up, describing and providing access to image-based materials.

#### **Consolidation and integration**

The second phase of our strategy has been to consolidate and integrate and it largely defines where we are now. Our focus has been on:

i the library's ability to open up access to their resources;

ii development of distributed library services

Access to resources. The first area concerns the library's ability to open up access to their resources, to handle electronic documents and to create appropriate management environments for electronic library services. In our present workplan Action Line A (networked oriented internal library systems) has three task areas - Integration tools and interfaces for library systems in the local network; tools and methods for the creation and use of library materials in electronic form; development and testing of tools for the management and administration of library services in an electronic environment.

Achievements. So far projects have concentrated mainly on the creation of local document stores either from bought in or scanned materials and testing the technologies for storage and for access. Our next group of projects will also be working on test-beds of access to manuscript and rare book materials as well as on technical issues arising out of handling and establishing long-term stores of electronic publications. Some significant groundwork, particularly towards developing effective collaborative approaches, has already been done through the work of the forum of national libraries (CoBRA+) and its Task Groups and through a major study on deposit collections of electronic publications.

**Distributed library services**. Our second major area of consolidation and integration targets the development of distributed library services by which we mean multiple libraries presenting themselves as one library to the user, who will access the services either through a library or through a third-party or neutral entry point. These services are not necessarily wholly electronic - delivery of print-based materials, eg via ILL, is part of such systems - and we

have a broad view of how distributed libraries might be defined - they could be based on subject, on geographic and linguistic proximity, or on existing cooperative arrangements.

The issues we have asked projects to test here are:

 $\cdot$  scaling up - not only the technical issues but also the testing of the EU-wide viability and validation of user-demand for the services. Projects will examine and test the factors for operational success, to support sustainable growth and development towards full scale operations after the life-time of the project.

- integrating access and retrieval protocols with those of delivery
- how to provide information on available resources and on services;
- establishing conditions of access & varying policies (charging, authentication, licensing)
- developing organisational frameworks and partnerships, and agreements
- $\circ$  and, underpinning these, standards.

Achievements. Again, a number of projects are developing services and testbeds, including some early document delivery pilots from FP3. We already have one large scale project, UNIVERSE, which will provide a distributed union catalogue as locator for document delivery services. Over the next 2-3 years, projects that provide test-beds in 4 or 5 different subject areas will be funded - testing access via OPACs to library resources, to electronic publications held in the library and to Internet resources. They should help us gain experience in handling mutilingual access, in metadata requirements from different sources and for different types of material, in managing the distributed environment, and in creating links with publishers to test different models for licensing and charging agreements.

#### Extension

The third strand of the strategy is extension, taking libraries in the context of the global environment and looking at actions that support and encourage their integration into the wider networked information world, with an emphasis on the role of libraries as mediators to information resources, to distance learning. This is the new element in our current programme and, allied with the distributed library services, it will create the platform for global access to resources.

Achievements. Action Line C encouraged projects that developed services where libraries added value to network information resources (either at the access stage, or on re-packaging and customising) - most of our projects fall into this category. Also emerging are projects which integrate access to library resources and to other resources leading to services based on access to different types of data and object. The extension is not just to information on the Web but also to developing cross domain services with libraries and other curatorial organisations, such as archives and museums. A number of

partnerships in this area exist - some from early projects such as ELISE, VAN EYCK and some from those submitted to the last Call.

#### Main outcomes

In summary, our main expected outcomes to date are:

In technical terms and results:

- resource access improved ability to access library catalogues, in different formats, languages and scripts, though there are many technical problems still to be solved and multilingual issues remain critical.
- interoperability between systems and services across borders
- limited test-beds of cross domain services ie libraries, archives and museums
- at EU level, services that will require metadata issues to be tackled and again multilingualism will be important.
- access to heritage cultural resources, including the collaborative frameworks to support such new services.

Supporting actions:

- platforms for the implementation of standards, at European and on the wider international level;
- o copyright platform for dialogue with publishers
- concerted actions between types of library national libraries, public, & in the sphere of music information

We have, therefore, quite a lot of the ingredients that will be needed towards developing electronic library services in Europe, that both respect the cultural diversity and richness of the different Member States and yet allow them to contribute to and to exploit the globalisation of information and knowledge.

How successful we will have been remains to be assessed. The results of individual projects are good and we've had some notable successes, especially with public domain software (like Europagate and UseMARCON), which are being integrated into numerous other projects.

Real success depends not only on greater visibility and on timely take-up and use of most, if not all, of our results, but also on the effect of these pilots on library policies. That is far more difficult to achieve, but that is what can provide leverage to the results achieved.

#### Challenges for the immediate future

What about the immediate future and the next 5 years. So far our focus has been on libraries, albeit with an encouragement to them to foster alliances with their suppliers - especially with the private sector in the development of tools as well as with publishers. There is a shift in context for the future where the environment will be wider and where libraries will have to find and sustain their role, in association with other organisations.

As many of you will know, we are currently in the planning stages for FP5 the next Framework Programme for Research & Development. The Commission's proposal has been published and is under discussion.

The areas previously covered by the three ICT programmes (ESPRIT, ACTS, and Telematics) are now treated together as a single Information Society Programme. There are 4 key actions - services for the citizen; electronic commerce; multimedia content and tools; and infrastructural and essential technologies.

Libraries figure in the Multimedia content action, along with museums and archives under the heading of knowledge acquisition, skills and cultural heritage. In addition to culture, the multimedia content action also embraces activities in the fields of interactive publishing, lifelong learning, language technologies, and information access and filtering.

At present, we are still at the planning stage and the actions are being defined at a highly synthetic level. Elaboration will come later. However, there are a number of key challenges facing all players in the cultural heritage and content area (libraries archives, museums).

**i** First is the need to strengthen and to extend alliances in the value chain with content creators and with learning providers.

**ii** Another challenge is making content accessible and here there are technical, organisational and societal issues to be addressed. On the technical side, are all the issues, functionalities and services associated with providing seamless access to mixed-media, mixed-object and large scale repositories. New organisational and service frameworks will be needed between libraries and other institutions. At the same time, steps are needed to ensure that there is equality of access to information, to culture, and to knowledge and learning. Libraries can recognisably play a key role in this.

**iii** A third issue is maintaining the availability of content for the future and this raises all the questions of digital repositories (responsibility for them, their organisation etc) and of preservation of digital materials.

These issues are identified as general problems which need to be tackled through RTD applications. However, they do reflect also the priorities of the library world which were identified through a series of brainstorming meetings held with numbers of experts in the field. These meetings identified the following five key challenges:

- societal role of libraries and the `equity issue', ie ensuring equality of access to all citizens and avoiding gulfs between information rich and information poor;
- integration of print and electronic media, together with the development of appropriate management structures and discovery tools/services;
- creating, archiving and ensuring long-term availability of EU digital resources;
- support for life-long learning;
- importance of alliances with other actors in the information scene.

These meetings also identified the pre-eminence of content over the technology. We have tried not to be a technology push programme, and have always had a strong user and library service orientation. However, the early projects had to look at the technical means, at the networks, at the tools/systems that needed to be in place before libraries could change and new services could be delivered. Ongoing work has an even stronger emphasis on the services.

If the ongoing and planned projects deliver what they promise and we expect, libraries, in the company of the other "heritage" institutions, should be in a good position to move forward to address the issues of electronic services in the global information society.

They will be on their way to their next metamorphosis.

Thank you for your attention.