

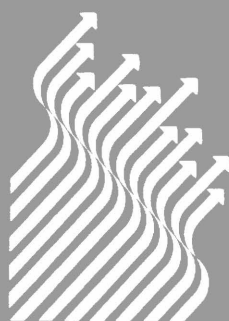


ISSN 1018-5593

Commission of the European Communities

information management

STATE OF THE ART OF THE APPLICATION OF NEW INFORMATION TECHNOLOGIES IN LIBRARIES AND THEIR IMPACT ON LIBRARY FUNCTIONS: A REASSESSMENT



Report
EUR 14085 EN

Blow-up from microfiche original

COMMISSION OF THE EUROPEAN COMMUNITIES

information management

Libraries programme



**State of the art of the application
of new information technologies in libraries
and their impact on library functions:
a reassessment**

IRELAND

University College Dublin
Dr. Michael Casey, John Steele
Belfield
IRL-DUBLIN 4

LIB/2 update Report

Directorate-General
Telecommunications, Information Industries and Innovation

Directorate
Information Industry and Market

**Published by the
COMMISSION OF THE EUROPEAN COMMUNITIES
Directorate-General
Telecommunications, Information Industries and Innovation
L-2920 LUXEMBOURG**

LEGAL NOTICE

Neither the Commission of the European Communities nor any person acting on behalf of the Commission is responsible for the use which might be made of the following information

Catalogue number: CD-NA-14085-EN-C

© ECSC — EEC — EAEC, Brussels - Luxembourg, 1992

CONTENTS

EXECUTIVE SUMMARY

LIST of TABLES

GLOSSARY of ABBREVIATIONS and ACRONYMS

INTRODUCTION	1
METHODOLOGY	2
RESULTS and CONCLUSIONS	3
1. GENERAL NATIONAL OVERVIEW	3
1.1 Libraries in the Republic of Ireland	4
1.2 Library Cooperation	5
1.3 Commercial Suppliers	5
1.4 General Trends in Library Automation	6
2. COMPUTERISED CATALOGUES	8
2.1 Computerised Catalogues in Education Libraries	9
2.2 Computerised Catalogues in Public Libraries	15
2.3 Computerised Catalogues in Special Libraries	21
2.4 Cooperatives, Suppliers of Machine Readable Records	26
2.5 Network Access to Machine Readable Records	29
3. COMPUTERISED LIBRARY HOUSEKEEPING SYSTEMS	31
3.1 Library Housekeeping in Education Libraries	32
3.2 Library Housekeeping in Public Libraries	34
3.3 Library Housekeeping in Special Libraries	35
4. COMPUTER-BASED USER-RELATED SERVICES	37
4.1 Access to Online Databases (Excluding Videotex)	38
4.2 Access to Videotex Services	41
5. SUMMARY of RESULTS	42
APPENDIX 1	Postal Questionnaire
APPENDIX 11	Interviews

EXECUTIVE SUMMARY

This is a report on an update of a 1986 study on the applications of new information technologies in libraries in the Republic of Ireland. The update study was undertaken from October 1990 to March 1991 by the Department of Library and Information Studies, University College Dublin, under contract to the Commission of the European Communities. The results summarised below refer to the status of library automation in the period in which data was collected i.e. October to December 1990.

THE OVERALL FINDINGS OF THE STUDY WERE AS FOLLOWS:

General.

The library population in Ireland comprises the following:

- 1 National Library
- 31 Public Library Authorities
- 32 Education Libraries
- 64 (approx) Special Libraries

A total of 30 new computerised catalogues was identified in the update study i.e. in 9 Education, 5 Public and 16 Special libraries.

A total of 21 new computerised library housekeeping systems was identified i.e. in 6 Education, 5 Public and 10 Special libraries. Education and Public library systems are running on integrated packages such as DYNIX, URICA and INMAGIC, while a wide range of software is used in Special libraries.

A total of 7 DYNIX and 4 URICA automated library systems is now installed in major education and public libraries.

Education Libraries.

There is currently a total of 17 computerised catalogues and 16 computer based library housekeeping installations in the 32 education libraries in Ireland.

University library catalogues have been significantly enhanced since 1986 and 9 new education library catalogues have been identified.

COM catalogues in Education libraries are being replaced by online campus catalogues (OPACs) but there is still no evidence of any significant interlibrary catalogue linkage. Access via wide area networks is currently available to three university library catalogues (TCD, UCD and UL), and is technically possible to others.

Public Libraries.

There has been promising development in the Public library arena with the introduction of library automation in 4 major public Library Authorities (Limerick, Mayo, Roscommon and Waterford), the majority opting for DYNIX.

There are now 6 computerised catalogue and 6 computer based library housekeeping installations in the 31 public libraries in Ireland.

All public library computerised catalogues are run within closed Branch to Host networks.

Special Libraries.

A government review of the semi-state sector from 1987 onwards has resulted in some reorganisation of Irish Special libraries.

Twenty three of a total of 64 Special libraries in Ireland now possess machine readable catalogues and 14 operate computer based library housekeeping systems.

Substantial growth is evident in library automation in the Special library sector - 16 new systems were identified. All libraries produce catalogue records internally and most have purchased 'off the shelf' software. Most systems are micro based, with the exception of the larger libraries. Computerised catalogues are generally not directly accessible by end users and in some cases access is via library staff only. This means that the technology is actually restricting direct access to Special library collections by end users.

Some of the large Special libraries make their catalogues available to staff over closed intraorganisational, national and international wide area networks e.g. CTT, ESB, FAS and Guinness Ireland.

Computer based User related Services

An analysis of computer-based user-related services in libraries shows an increase in online database use by Special libraries and a significant drop in overall connect time to videotex services since the abolition of PATRIC, the Irish videotex service.

Cooperation.

A National Bibliography Preparation Project is being undertaken by NLI, TCD and UCD to computerise the 1990 edition of the national bibliography, Irish Publishing Record.

Input to ESTC from Irish libraries has improved since 1986.

LIST OF TABLES

TABLE	TITLE	PAGE
2.1A	Education Libraries: Sources of Catalogue Records	11
2.1B	Education Libraries: Proportion of Catalogue Records Computerised	12
2.1C	Education Libraries: Catalogue Access	13
2.1D	Education Libraries: Catalogue Hardware and Software	14
2.2A	Public Libraries: Sources of Catalogue Records	17
2.2B	Public Libraries: Proportion of Catalogue Records Computerised	18
2.2C	Public Libraries: Catalogue Access	19
2.2D	Public Libraries: Catalogue Hardware and Software	20
2.3A	Special Libraries: Sources of Catalogue Records	22
2.3B	Special Libraries: Proportion of Catalogue Records Computerised	23
2.3C	Special Libraries: Catalogue Access	24
2.3D	Special Libraries: Catalogue Hardware and Software	25
3.1	Education Libraries: Acquisition and Circulation	33
3.2	Public Libraries: Acquisition and Circulation	34
3.3	Special Libraries: Acquisition and Circulation	35

GLOSSARY OF ABBREVIATIONS and ACRONYMS

ACL	An Chomhairle Leabharlanna (The Library Council)
AERTEL	an Irish Teletext service
AGRILINE	an Irish Videotex service
AIB	Allied Irish Banks
BL	British Library
CERT	Body responsible for education, recruitment and training in the tourism industry
COACT	College of Art, Commerce and Technology
COGNOTEC	an Irish Videotex service
COLICO	Committee On Library Cooperation in Ireland
CSO	Central Statistics Office
CTT	Irish Export Board
DCU	Dublin City University
DepLIS	Department of Library and Information Studies
DIT	Dublin Institute of Technology
DPL	Dublin Public Libraries
EIRPAC	an Irish digital communication network
ENFO	an Irish ENvironmental inFOrmation service
EOLAS	Irish Science and Technology Agency
ERU	Environmental Research Unit
ESB	Electricity Supply Board
ESTC	Eighteenth Century Short Title Catalogue
FAS	Training and Employment Authority
HEA	Higher Education Authority
HEANET	network for higher education Colleges
ICLS	Irish Central Library for Students
IPR	Irish Publishing Record (national bibliography)
LAI	Library Association of Ireland
LAN	local area network
LGCSB	Local Government Computer Services Board
NCAD	National College of Art and Design
NCIR	National College of Industrial Relations
NLI	National Library of Ireland
RCS	Royal College of Surgeons of Ireland
RIA	Royal Irish Academy
RTC	Regional Technical College
RTE	Radio Telefis Eireann
SHIRL	Serial Holdings in Irish Libraries
TCD	Trinity College Dublin
TEAGASC	Agriculture and Food Development Authority
UCC	University College Cork
UCD	University College Dublin
UCG	University College Galway
UL	University of Limerick
WAN	wide area network

INTRODUCTION.

This is a final report on an update of an earlier study undertaken in 1986 on libraries in the Republic of Ireland (Casey, Michael, Steele, John and Fitzgerald, John, *Applications of new information technologies in libraries: an overview of the Republic of Ireland, Dublin, National Board for Science and Technology, 1987, ISBN 0-86282-079-0, 56 pp.*).

The purpose of the update study was to provide factual information on the following key areas in the Republic of Ireland:

* Machine-readable Record Resources

- availability of computerised library catalogues :
- cooperatives and suppliers of catalogue records
- network access to catalogue records

* Computerised Library Housekeeping Systems

* IT-based User Services in Libraries

The Irish study was undertaken in the context of a European Community - wide review of information technology applications in libraries which was sponsored by the Commission of the European Communities (CEC). The results of parallel studies in EC member states will be used by the Commission to proceed with the Libraries Action Programme. The latter has been undertaken by the Commission in response to a Resolution, adopted on 27th September 1985, by the European Council of Ministers. The Resolution requested the Commission to take swift action to assist libraries to facilitate the interconnection, across Europe, of computerised catalogues on the basis of existing systems, and to prepare a Work Programme to speed up the development of library activities, thereby contributing to the promotion of cooperation between libraries at Community level.

The methodology used to undertake the study is outlined below. Results and conclusions are presented in five sections and are arranged to match, as closely as possible, the contract specification. A general national overview is presented in Section 1 and a summary of the results of the investigation is presented in Section 5. Detailed observations are presented in Section 2 on machine-readable catalogues, suppliers of catalogue records and network access to machine readable resources. Section 3 covers computerised library housekeeping systems and Section 4 deals with computer-based user-related services.

The six month project was undertaken by Dr. Michael Casey of the Department of Library and Information Studies, U.C.D. with research assistance from Mr. John Steele who was seconded from U.C.D. Library for half of the contract period (three months).

METHODOLOGY

Data Collection.

The methodology for data collection was as follows:

- (a) A review and analysis were undertaken of any literature pertaining to the:
- enhancement of IT applications by libraries in the Republic of Ireland which were wholly or partially automated in 1986.
 - adoption of IT applications by libraries not automated in 1986.
 - reorganisation of public bodies in the semi-state sector from 1987/88 onwards, resulting in significant changes in some government funded special libraries.
 - developments in the supply sector.
- (b) A postal survey of all libraries, except those known not to have installed automated library systems, was undertaken between October and December 1990. The questionnaire was designed to identify libraries that had introduced new information technology applications since 1986, and served as a basis for a subsequent interview and/or telephone survey list. Thirty one public library authorities, 32 education libraries and 47 special libraries were circulated with questionnaires. The overall response of 85% was increased to almost 100% by follow up telephone enquiries. A copy of the questionnaire is presented in Appendix I.
- (c) Interviews were held with representatives of selected libraries and appropriate representative, national and other bodies. The organisations interviewed are listed in Appendix II.
- (d) Liaison with the Commission and contractors in other member states was maintained by means of an introductory meeting in Luxembourg and regular contact with the Libraries Project Team.

Data Analysis.

All survey responses were analysed on a Microsoft WORKS spreadsheet package by extracting information from precoded questionnaires. Tabulated data in the text of the report was prepared on Microsoft WORD 5.

RESULTS AND CONCLUSIONS

1. GENERAL NATIONAL OVERVIEW

1.1 LIBRARIES IN THE REPUBLIC OF IRELAND

Several organisational and other changes have taken place in Irish libraries since 1986 i.e.

The National Library of Ireland (NLI).

The administration of the National Library of Ireland has been transferred from the Department of Education to the Department of An Taoiseach (Prime Minister).

Education Libraries (Total 32).

The National Institutes of Higher Education (NIHES) in Dublin and Limerick have been granted University status and have been renamed as Dublin City University (DCU) and the University of Limerick respectively.

Carysfort College, a former teacher training college based in Dublin is now closed.

Public Libraries (Total 31).

The Longford/Westmeath Public Library Authority has been replaced by separate public library authorities in Longford and Westmeath.

Wicklow County Library has assumed responsibility for the library services formerly administered by Bray Urban District Council.

Special Libraries (Total 64).

Following a major reorganisation of the public sector from 1987 onwards, the following changes have been implemented at semi-state level:

The National Board for Science and Technology (NBST) and the Institute for Industrial Research and Standards (IIRS) were merged in 1987 and reconstituted as EOLAS, the Irish Science and Technology Agency.

ACOT, the Agricultural Advisory and Training Body, and An Foras Taluntais, the Agricultural Research Institute, have been amalgamated since September 1988 as TEAGASC, the Agriculture and Food Development Authority.

An Foras Forbartha (AFF), the National Institute for Physical Planning and Construction Research, was dissolved in 1988 and the former AFF library has been absorbed by the newly established Environmental Research Unit (ERU). The latter is a statutory body responsible for the provision of national environmental research and related services. A new information agency, ENFO, the Environmental Information Service has recently been established

by the Government to provide an environmental information service to the general public.

FAS, the Training and Employment Authority was established in January 1988, following the merger of AnCO, the Industrial Training Authority and YEA, the Youth Employment Agency.

1.2 LIBRARY COOPERATION.

The Committee on Library Cooperation in Ireland (COLICO) continues to function as a representative body in library cooperation in Ireland.

A cooperative project, the *National Bibliography Preparation Project*, is at present underway between the National Library of Ireland (NLI), Trinity College Dublin (TCD) and University College Dublin (UCD). The immediate aim of the project, which began in December 1990, is to computerise the 1990 issue of *Irish Publishing Record* (IPR), the Irish national bibliography. Production of the IPR was transferred from UCD to the NLI in early 1990. The *National Bibliography Preparation Project*, which is in receipt of EC funding, will adopt UNIMARC as the preferred output format for national and international exchange (*Irish Library News*, Number 122, December 1990).

Library networking facilities are currently available in Ireland via EIRPAC, HEANET, JANET, EARN, BITNET etc, but the level of library traffic is still relatively low in comparison to other countries such as the UK.

The formation of a Government Libraries Group within the Library Association of Ireland (LAI) has resulted in improved cooperation between libraries in the government sector.

1.3 COMMERCIAL SUPPLIERS.

Significant penetration of the Irish library market has been achieved since 1986 by DYNIX and McDonnell Douglas URICA systems. DYNIX holds a dominant position in the public library sector and has a major share of the education library market. There is no evidence of 'home grown' commercial Irish automated library systems.

An obvious trend which will please commercial suppliers is that 'off the shelf' bought in software packages have steadily replaced in-house systems since 1986.

1.4 GENERAL TRENDS IN LIBRARY AUTOMATION.

The National Library of Ireland.

The National Library of Ireland, in cooperation with Trinity College Dublin and University College Dublin, is engaged in the *National Bibliography Preparation Project* already noted above. The NLI has recently completed a study on the feasibility of automating its catalogue records and intends to proceed with preparatory work in 1991 to install an integrated library system.

Education Libraries (Total 32).

Automated library systems which existed in the education sector in 1986 have been considerably enhanced e.g. in Dublin City University, St. Patrick's College Maynooth, Trinity College Dublin and University College Dublin.

Other education libraries have reported the installation of new automated systems in the interim. Examples include University College Galway, the Royal College of Surgeons of Ireland, Carlow Regional Technical College (RTC) and Cork RTC.

Machine readable catalogues are now installed in all eight university libraries, in both Colleges of Technology (Kevin St. and Bolton St., Dublin, each administered by Dublin Public Libraries), in four of the nine regional technical college libraries, and in three other colleges, i.e. 17 of the 32 education libraries in Ireland operate machine readable catalogues (Tables 2.1A-2.1D). Computer based library housekeeping systems are now installed in 16 of the 32 education libraries (Table 3.1).

Public Libraries (Total 31).

The Local Government Computer Services Board (LGCSB) established a Working Party in 1986 to examine the extent of public library automation and to make recommendations for future coordinated development. The Working Party recommended a single preferred vendor, DYNIX, for public library automation and this was accepted by the LGCSB in October 1988.

In 1986 only two public library authorities, Dublin Public Libraries and Dun Laoghaire Public Library, had installed automated library systems. In the meantime, three public libraries have adopted DYNIX software (Limerick City, Roscommon County and Waterford County) and one has opted for the McDonnell Douglas URICA package (Mayo County), i.e. six of the 31 public library authorities now operate computerised catalogue systems (Tables 2.2A-2.2D). All of the above libraries have also set up computer based library housekeeping systems (Table 3.2). Four other public libraries (Cork City and County, Donegal County and Wicklow) claim to be at an advanced stage of planning for installation of library automation.

An Chomhairle Leabharlanna (The Library Council) has also set up an in-house library package (Tables 2.2A-2.2D).

Special Libraries (Total 64).

In 1986 three major special libraries, AnCO, AFF and ESB, and five smaller libraries (Bord na Mona, Guinness plc, the Industrial Credit Corporation, Meteorological Office and the NBST) had automated library systems.

A further sixteen special libraries have reported the acquisition of library automation and these include libraries in the central government Departments of Agriculture and Food, Education and Health.

Twenty three of a total of 64 special libraries now possess machine readable catalogues (Tables 2.3A-2.3D) and 14 operate computer based library housekeeping systems (Table 3.3).

RESULTS AND CONCLUSIONS**2. COMPUTERISED CATALOGUES**

2.1 COMPUTERISED CATALOGUES IN EDUCATION LIBRARIES

Details of computerised catalogues in Education libraries are summarised in Tables 2.1A - 2.1D. A total of 15 libraries is listed, including 8 university, 4 Regional Technical College (RTC) and 3 other college libraries. Two Colleges of Technology - Bolton St. and Kevin St., Dublin (not listed), also operate computerised catalogues within the Dublin Public Libraries system. Developments in libraries identified in the 1986 survey are highlighted by the inclusion of both 1986 and 1990 data in the Tables.

Libraries Having Computerised Catalogues in 1986.

These comprise the following:

- Dublin City University (NIHE Dublin in 1986) (DCU)
- St. Patrick's College, Maynooth
- Trinity College Dublin (TCD)
- University College Cork (UCC)
- University College Dublin (UCD)
- University of Limerick (NIHE Limerick in 1986) (UL)

Table 2.1A shows some movement in the use of external machine-readable catalogue sources. St Patrick's College Maynooth has changed from BLAISE LOCAS to OCLC; TCD is now taking records from CURL Online; UCD has opted for BLCMP; and UL has changed to BLAISE Online and OCLC. There has been an overall shift to the use of externally produced catalogue records.

Table 2.1B indicates a predictable increase in the volume of library holdings over four years and a significant increase in the proportion of catalogue records in machine-readable form.

Table 2.1C reflects two main trends i.e. (i) the replacement of COM by online catalogues for both library staff and end users and (ii) the emergence of onsite local area networks (LANs).

Table 2.1D shows movement from in-house to proprietary software, e.g. see TCD and UCD, and the emergence of DYNIX on the Irish library market. An enhancement of hardware across the board is also evident.

New Computerised Catalogue Installations.

New computerised catalogues have been installed in the following Colleges:

- Royal College of Surgeons (RCS)
- University College Galway (UCG)
- Athlone, Carlow, Cork and Dundalk RTCs
- National College of Industrial Relations (NCIR)

St. Patrick's College, Drumcondra
National College of Art and Design (NCAD)

Three Colleges (UCG, St. Patrick's College Drumcondra and NCAD) are taking records from OCLC, while the others are generating all records internally. Two university Colleges and two RTCs are providing online access to users while others are offering COM, printout or access via library staff. A selection of software packages is represented in the new installations including URICA and DYNIX in the universities and OCLC, dBASE III+, DATATREK DTI and INMAGIC 7.2 in other Colleges.

Catalogue record formats in university libraries are mainly MARC based. In general, libraries taking OCLC records use LCMARC format, while those taking BLAISE or BLCMP records employ UKMARC format. The formats of catalogue records displayed on OPAC/LAN terminals represent selected, sieved information, extracted from the original MARC record, and vary according to software default output formats and to each library's requirements.

TABLE 2.1A: COMPUTERISED CATALOGUES: 1990

EDUCATION LIBRARIES: SOURCES OF CATALOGUE RECORDS

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY		External Record Source	% Records Produced Externally	% Records Produced Internally
---------	--	------------------------	-------------------------------	-------------------------------

UNIVERSITIES

DUBLIN CITY UNIVERSITY	1986	OCLC	100	0
(Ex NIHE Dublin)	1990	OCLC	95	5
ROYAL COLLEGE SURGEONS	1990	NONE	0	100
ST PATRICKS MAYNOOTH	1986	BLAISE LOCAS	53	47
	1990	OCLC	90	10
TRINITY COLLEGE DUBLIN	1986	BL MARC tapes	50	50
	1990	CURL O/L + BL MARC tapes	64	36
UNIVERSITY COLLEGE CORK	1986	NONE	0	100
	1990	NONE	0	100
UNIVERSITY COLLEGE DUBLIN	1986	NONE	0	100
	1990	BLCMP O/L	75	25
UNIVERSITY COLLEGE GALWAY	1990	OCLC	99	1
UNIVERSITY OF LIMERICK	1986	BLAISE LOCAS	70	30
(Ex NIHE Limerick)	1990	BLAISE O/L OCLC + BNB CD	75	25

REGIONAL TECHNICAL COLLEGES

ATHLONE RTC	1990	NONE	0	100
CARLOW RTC	1990	NONE	0	100
CORK RTC	1990	NONE	0	100
DUNDALK RTC	1990	NONE	0	100

OTHER COLLEGES

NAT COLL INDUS RELATIONS	1990	NONE	0	100
ST PATRICKS DRUMCONDRA	1990	OCLC	100	0
NAT COLLEGE ART & DESIGN	1990	OCLC	70	30

TABLE 2.1B: COMPUTERISED CATALOGUES: 1990

EDUCATION LIBRARIES: PROPORTION OF CATALOGUE RECORDS COMPUTERISED

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY		Total No Book Volumes	% Books on Computer Catalogue	Catalogue Standard Used
UNIVERSITIES				
DCU	1986	30,000	100	AACR2
	1990	55,000	100	AACR2
RCS	1990	80,000	20	AACR2
St PAT MAYN	1986	170,000	15	AACR2
	1990	200,000	43	AACR2
TCD	1986	2-3 Million	33	AACR2
	1990	3+ Million	33	AACR2
UCC	1986	300,000	48	AACR2
	1990	400,000	75	AACR2
UCD	1986	750,000	14	AACR2
	1990	880,000	35	AACR2
UCG	1990	95,000	100	AACR2
UNIV LIM	1986	90,000	100	AACR2
	1990	105,600	100	AACR2
REGIONAL TECHNICAL COLLEGES				
ATHLONE	1990	22,000	100	
CARLOW	1990	18,000	100	
CORK	1990	37,000	11	
DUNDALK	1990	22,000	99	
OTHER COLLEGES				
NCIR	1990	8,600	100	
St PATS DRUM	1990	100,000	25	AACR2
NCAD	1990	Bks 35,000 Slides 40,000	100 (OCLC) 100 (WSTAR)	AACR2

TABLE 2.1C: COMPUTERISED CATALOGUES: 1990

EDUCATION LIBRARIES: CATALOGUE ACCESS

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY		Catalogue System By-Products	Library Staff Access Mode	Library User Access Mode	Network Access
UNIVERSITIES					
DCU	1986	COM, bibs	COM	COM	-
	1990	-	O/L	O/L	LAN
RCS	1990	-	O/L	O/L	-
St PAT MAYN	1986	COM	COM	COM	-
	1990	COM	COM, O/L	COM	-
TCD	1986	COM, Bibs	COM	COM	-
	1990	-	O/L	O/L	LAN+WAN
UCC	1986	COM	O/L	COM, O/L	LAN
	1990	COM	O/L	O/L	LAN
UCD	1986	COM	O/L	COM	-
	1990	COM	O/L	O/L	LAN+WAN
UCG	1990	-	O/L	O/L	LAN
UNIV LIM	1986	COM	O/L	COM, O/L	LAN
	1990	-	O/L	O/L	LAN+WAN
REGIONAL TECHNICAL COLLEGES					
ATHLONE	1990	-	O/L	lib staff	-
CARLOW	1990	printout	O/L	O/L	-
CORK	1990	accs, CA	O/L	printout	-
DUNDALK	1990	-	O/L	O/L	LAN
OTHER COLLEGES					
NCIR	1990	cards, bibs	O/L	card	-
St PATS DRUM	1990	COM, accs	O/L	COM	-
NCAD	1990	COM, accs	O/L	COM	-

TABLE 2.1D: COMPUTERISED CATALOGUES: 1990

EDUCATION LIBRARIES: CATALOGUE HARDWARE and SOFTWARE

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY	HARDWARE			SOFTWARE	
	Type	Make/Model	Share or Dedic		
UNIVERSITIES					
DCU	1986	Mic	IBM PC M300	D	OCLC
	1990	MF	VAX 8250	S	DYNIX
RCS	1990	SMini	McDon Dg 19075	D	URICA
St PAT MAYN	1986	Mic	SIRIUS ACT 1.2	D	CORTEX (BL)
	1990	Mic	NCR PC 6	D	OCLC
TCD	1986	MF	DEC 20/20	S	In-house
	1990	MF	VAX 8350	D	DYNIX
UCC	1986	MF	IBM 4341	S	DOBIS/LIBIS
	1990	MF	IBM 9370	D	DOBIS/LIBIS
UCD	1986	MF	VAX 11/750/780	S	In-house
	1990	Mini	DATA GEN MV 9500	D	BLS
UCG	1990	Mf	VAX 3900-ULTRIX	D	DYNIX
UNIV LIM	1986	Mini	McDon Dg M68	D	URICA
	1990	SMini	McDon Dg 191505	D	URICA
REGIONAL TECHNICAL COLLEGES					
ATHLONE	1990	-	-	-	-
CARLOW	1990	Mic	Northstar	D	In-house
CORK	1990	2 Mic	IBM & Wang 386	D	d-BASE III+
DUNDALK	1990	Mic	Olivetti	D	DATATREK DTI
OTHER COLLEGES					
NCIR	1990	Mic	KAPRO	D	INMAGIC 7.2
St PATS DRUM	1990	Mic	IBM 300	D	OCLC
NCAD	1990	Mic	IBM Work Station	D	OCLC

2.2 COMPUTERISED CATALOGUES IN PUBLIC LIBRARIES

Details of computerised catalogues in Public libraries are summarised in Tables 2.2A - 2.2D. A total of 7 libraries is listed, including An Chomhairle Leabharlanna (The Library Council) which serves as the Irish Central Library for Students (ICLS).

Libraries having Computerised Catalogues in 1986.

Dublin Public Libraries (DPL) and Dun Laoghaire Public Library had computerised catalogues in 1986. DPL continues to take BL MARC tape records but also uses the CDROM version (Table 2.2A). Dun Laoghaire has abandoned BLAISE LOCAS in favour of internal record generation. Both libraries now have almost half of all bookstock on machine readable catalogue (Table 2.2B).

Several branches of DPL have online access to the catalogue and a network is in the process of being set up in the Dun Laoghaire system (Table 2.2C). DPL continues to operate an in-house DUPLICS software system, while Dun Laoghaire has recently opted for DYNIX.

New Computerised Catalogue Installations.

An Chomhairle Leabharlanna, Limerick City, Mayo, Roscommon and Waterford Counties have installed computerised catalogues since 1986. An Chomhairle Leabharlanna and Waterford County generate catalogue records internally, while Limerick, Mayo and Roscommon are downloading records from BNB CDROM to generate their catalogues (Table 2.2A). The Castlebar Branch of Mayo County Library has fully converted its catalogue to machine readable form using BNB (65% hit rate) and internally generated catalogue records (35%). Following retrospective conversion, the Branch is now producing all catalogue records internally (Table 2.2A).

The proportion of bookstock on computerised catalogues varies from 5% to 78% (Table 2.2B). The majority of new public library catalogue systems are being made available online only, i.e COM catalogues are not being produced (Table 2.2C). Most libraries intend to install Branch access to the main City or County library catalogue, but the proposed methods vary from an online network to a microcomputer based distributed system, operating on the basis of downloading/uploading data on diskette from/to Branch microcomputers overnight (Table 2.2C).

The Local Government Computer Services Board (LGCSB), which advises on information technology applications in public libraries, established a Working Party in 1986 to examine the extent of public library automation and to make recommendations for future coordinated development (*Irish Library News, Number 116, March 1990*). The Working Party recommended a single preferred vendor, DYNIX, for public library automation and this

was accepted by the LGCSB in October 1988. There are now three DYNIX systems, running on Bull Ultimate machines, operating in public libraries (Table 2.2D) and another is about to be installed in Waterford. Waterford County Library was already committed to a Wang CSS system, running on a Wang microcomputer, until it recently decided to install DYNIX on a Bull Ultimate. Mayo County library has chosen the URICA library package which is installed on a Mc Donnell Douglas Spirit mini computer.

Catalogue record formats in public libraries, which use externally produced machine readable records, are mainly UKMARC based. The formats of catalogue records displayed on OPAC/LAN terminals represent selected, sieved information, based on the original MARC record, and vary according to software default output formats and to each library's requirements.

TABLE 2.2A: COMPUTERISED CATALOGUES: 1990

PUBLIC LIBRARIES: SOURCES OF CATALOGUE RECORDS

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY		External Record Source	% Records Produced Externally	% Records Produced Internally
COMHAIRLE LEABHARLANNA	1990	NONE	0	100
DUBLIN PUBLIC LIBRARIES	1986	BL MARC tapes	70	30
	1990	BL MARC tapes and CDROM	60	40
DUN LAOGHAIRE	1986	BLAISE LOCAS		
	1990	BLAISE LOCAS Retr Conver'n NONE-Current	100 0	0 100
LIMERICK CITY	1990	BNB CDROM	70	30
MAYO COUNTY	1990	BNB CDROM		
		Retr Conver'n NONE-Current	65 0	35 100
ROSCOMMON COUNTY	1990	BNB CDROM	65	25
WATERFORD COUNTY	1990	NONE	0	100

TABLE 2.2B: COMPUTERISED CATALOGUES: 1990

PUBLIC LIBRARIES: PROPORTION OF CATALOGUE RECORDS COMPUTERISED

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY		Total No Book Volumes	% Books on Computer Catalogue	Catalogue Standard Used
ACL	1990	40,000	5	AACR2
DPL	1986	2-3 Million	5	AACR2
	1990	2-3 Million	50	AACR2
DUN LAOGH	1990	220,000	45	AACR2
LIMRK CITY	1990	100,000	34	AACR2
MAYO COUNTY	1990	175,000	14	AACR2
ROSC COUNTY	1990	200,000	14	AACR2
WATERFD COUN	1990	100,000	78	AACR2

TABLE 2.2C: COMPUTERISED CATALOGUES: 1990

PUBLIC LIBRARIES: CATALOGUE ACCESS

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY		Catalogue System By-Products	Library Staff Access Mode	Library User Access Mode	Network Access
ACL	1990	bibs	O/L	lib staff	-
DPL	1986 1990	COM COM	O/L O/L	COM COM	- LAN Branch NW
DUN LAOGH	1990	-	O/L	O/L	Branch NW
LMRK CITY	1990	-	O/L	O/L	-
MAYO COUNTY	1990	-	O/L	O/L	-
ROSC COUNTY	1990	-	O/L	O/L	-
WATERFD COUN	1990	-	O/L	lib staff	Branch NW

TABLE 2.2D: COMPUTERISED CATALOGUES: 1990

PUBLIC LIBRARIES: CATALOGUE HARDWARE and SOFTWARE

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY		HARDWARE			SOFTWARE
		Type	Make/Model	Share or Dedic	
ACL	1990	Mic	ICL Quattro	S	d-BASE II
DPL	1986	MF	ICL ME 29/37	S	In-house DUPLICS
	1990	MF	ICL ME 29/37	D	In-house DUPLICS
DUN LAOGH	1990	Mini	Bull Ultimate Model 1425	D	DYNIX
LIMRK CITY	1990	Mini	Bull Ultimate Model 1400	D	DYNIX
MAYO COUNTY	1990	Mini	McDon Dg Spirit4 Model 19030	D	URICA
ROSC COUNTY	1990	Mini	Bull Ultimate Model 1400	D	DYNIX
WATERFD COUN	1990	Mic	Wang 386	D	Wang CSS
	1991	Mini	Bull Ultimate Model 1460	D	DYNIX

2.3 COMPUTERISED CATALOGUES IN SPECIAL LIBRARIES

Details of computerised catalogues in Special libraries are summarised in Tables 2.3A - 2.3D. A total of 19 libraries is listed, ranging from very small private company libraries to large government Department libraries.

Libraries having Computerised Catalogues in 1986.

Three libraries operated computerised catalogues in 1986 i.e. the Environmental Research Unit, ERU, (then named An Foras Forbartha - AFF), the Electricity Supply Board (ESB) and FAS (then named AnCO), the Training and Employment Authority. FAS has discontinued BLAISE LOCAS as a source of catalogue records, while the ESB now takes records from a variety of sources including COMPENDEX and ABI on CDROM and the online services DIALOG and INSPEC (Table 2.3A).

The ERU catalogue was available online as part of the PATRIC videotex database in 1986, but as the PATRIC service has been terminated, this catalogue is no longer accessible outside ERU (Table 2.3C). The ERU catalogue hardware and software have been replaced since 1986, while those of the ESB and FAS remain unchanged (Table 2.3D).

New Computerised Catalogue Installations.

Sixteen new computerised catalogue installations have been identified in Special libraries (Table 2.3A). All new systems operate on the basis of internally generated catalogue records. There is a wide variation in the proportion of bookstock on machine readable catalogue and half of the libraries (8 of 16) use some form of in-house cataloguing standard (Table 2.3B).

Most libraries produce accessions lists (accs) and bibliographies (bibs) as by-products of the computerised catalogue (Table 2.3C). In most cases, library users must approach the library staff to obtain information from the catalogue, although printouts of the catalogue are available in some libraries. Cards are usually available for older material not on the computerised catalogue (Table 2.3C). CTT, the Irish Export Board, and Guinness Ireland catalogues are accessible to staff over the organisations' international wide area networks (wans). Apart from Radio Telefis Eireann (RTE), where staff have LAN access to its audiovisual catalogue, no other use of networking was reported.

Table 2.3D provides a summary of hardware and software systems used by Special libraries. Eleven of the 16 new catalogues are microcomputer based and the remainder run on superminis or mainframes in large organisations. The interesting point to note is that, with the exception of two libraries, all software systems are 'off the shelf' packages such as INMAGIC, CAIRS and BOOKSHELF.

TABLE 2.3A: COMPUTERISED CATALOGUES: 1990

SPECIAL LIBRARIES: SOURCES OF CATALOGUE RECORDS

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY		External Record Source	% Records Produced Externally	% Records Produced Internally
AIB GROUP	1990	NONE	0	100
CERT	1990	NONE	0	100
CTT	1990	NONE	0	100
DEPT AGRIC & FOOD	1990	NONE	0	100
DEPT OF EDUCATION	1990	NONE	0	100
DEPT OF HEALTH	1990	NONE	0	100
ENFO	1990	NONE	0	100
ENVIR RESEARCH UNIT (Ex AFF)	1986 1990	NONE NONE	0 0	100 100
EOLAS	1990	NONE	0	100
ESB	1986 1990	NONE COMPENDEX CD ABI CDROM DIALOG O/L INSPEC O/L	0 50	100 50
FAS (Ex ANCO)	1986 1990	BLAISE LOCAS NONE	70 0	30 100
FISHERIES RESEARCH CENTR	1990	NONE	0	100
GPA BOLTON LIBRARY	1990	NONE	0	100
GUINNESS IRELAND	1990	NONE	0	100
LAW LIBRARY	1990	NONE	0	100
RADIO TELEFIS EIREANN	1990	NONE	0	100
STATE LABORATORY	1990	NONE	0	100
TEAGASC	1990	NONE	0	100
WOOD & ASSOC	1990	NONE	0	100

TABLE 2.3B: COMPUTERISED CATALOGUES: 1990

SPECIAL LIBRARIES: PROPORTION OF CATALOGUE RECORDS COMPUTERISED

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY	Total No Book Volumes	% Books on Computer Catalogue	Catalogue Standard Used
AIB GROUP 1990	200	100	In-house
CERT 1990	3,000	100	In-house
CTT 1990	5,000	100	AACR2 In-house
DEPT AG & FD 1990	100,000	3	AACR1
DEPT EDUCAT 1990	8,000	50	AACR2
DEPT HEALTH 1990	7,500	33	CAIRS Std
ENFO 1990	3,000	100	In-house
ERU 1986	40,000	100	In-house
ERU 1990	45,000	100	In-house
EOLAS 1990	15,000	25	AACR2
ESB 1986	80,000	100	In-house
ESB 1990	90,000	100	In-house
FAS 1986	16,000	75	AACR2
FAS 1990	20,000	75	AACR2
FISH RES CEN 1990	6,000	87	
GPA BOLTON 1990	12,000	12	AACR2
GUINNESS 1990	8,000	75	In-house
LAW LIBRARY 1990	85,000	25	AACR2
RTE 1990	video 40,000 film 20,000 photo 500,000 books 20,000	100 100 100 0	In-house
STATE LAB 1990	2,500	100	In-house
TEAGASC 1990	20,000	15	In-house
WOOD & ASSOC 1990	500	100	In-house

TABLE 2.3C: COMPUTERISED CATALOGUES: 1990

SPECIAL LIBRARIES: CATALOGUE ACCESS

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY	Catalogue System By-Products	Library Staff Access Mode	Library User Access Mode	Network Access
AIB GROUP 1990	-	O/L	lib staff	-
CERT 1990	accs, bibs	O/L	print O/L	-
CTT 1990	accs, bibs	O/L	lib staff	LAN, CTT WAN
DEPT AG & FD 1990	accs, bibs	O/L	lib staff	-
DEPT EDUCAT 1990	-	O/L	card + lib staff	-
DEPT HEALTH 1990	bibs, CA, SDI	O/L	lib staff	-
ENFO 1990	bibs	O/L	O/L	LAN
ERU 1986 1990	COM, bibs bibs	O/L O/L	COM, O/L O/L	WAN PATRI -
EOLAS 1990	-	O/L	lib staff	-
ESB 1986 1990	- bibs, SDI	O/L O/L	O/L O/L	WAN ESB WAN ESB
FAS 1986 1990	bibs bibs, accs	O/L O/L	O/L O/L	WAN AnCO WAN FAS
FISH RES CEN 1990	bibs	O/L	O/L	-
GPA BOLTON 1990	-	O/L	lib staff	-
GUINNESS 1990	bibs, accs	O/L	lib staff	LAN WAN Guinn
LAW LIBRARY 1990	bibs	O/L	card, O/L	-
RTE 1990	-	O/L	O/L	LAN
STATE LAB 1990	bibs, accs	O/L	lib staff	-
TEAGASC 1990	accs	O/L	printout lib staff	-
WOOD & ASSOC 1990	bibs, accs	O/L	lib staff	-

TABLE 2.3D: COMPUTERISED CATALOGUES: 1990

SPECIAL LIBRARIES: CATALOGUE HARDWARE and SOFTWARE

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY	HARDWARE			SOFTWARE	
	Type	Make/Model	Share or Dedic		
AIB GROUP	1990	Mic	Wang 240/3	D	INMAGIC
CERT	1990	Mic	IBM Compat 286	D	BOOKSHELF
CTT	1990	SMini	Wang VS 100	S	Wang PACE + I/H
DEPT AG & FD	1990	Mic	Zenith 386	D	CARDBOX
DEPT EDUCAT	1990	Mic	Zenith	D	INMAGIC
DEPT HEALTH	1990	2 Mic	IBM 386 PCs	D	MICROCAIRS
ENFO	1990	Mic	Microvax 3100	D	DECNET
ERU	1986	Mic	BBC2	D	PATRIC
	1990	Mic	Phillips 386	D	Q and A
EOLAS	1990	Mic	Mitsubishi 286	D	OASIS
ESB	1986	MF	IBM 4381	S	IBM STAIRS
	1990	MF	IBM 4381	S	STATUS
FAS	1986	MF	VAX 11/780	S	BASIS TECHLIB
	1990	MF	VAX 11/780	S	BASIS TECHLIB
FISH RES CEN	1990	MF	Northstar Netware 2.0.2	S	INMAGIC* 7.2
GPA BOLTON	1990	Mic	III Extra	S	ask Sam
GUINNESS	1990	Mic	Elonex 386	D	CAIRS
LAW LIBRARY	1990	Mini	Spirit 6210	D	URICA
RTE	1990	MF	ICL VME DME 2800	S	In-house
STATE LAB	1990	Mic	Bondwell 286	D	INMAGIC + SEARCHMAGIC OPAC
TEAGASC	1990	MF	VAX 750	S	In-house
WOOD & ASSOC	1990	2 Mic	Ericcson, Atari	S	ASSASSIN

2.4 COOPERATIVES, SUPPLIERS OF COMPUTERISED RECORDS.

The Committee on Library Cooperation in Ireland (COLICO) continues to function as a representative body in library cooperation in the Republic of Ireland. The formation of a Government Libraries Group within the Library Association of Ireland (LAI) has resulted in improved cooperation between libraries in the government sector. The Group organised a series of demonstrations of microcomputer software products in September 1989 and followed up with a one day evaluation seminar and a publication outlining recommendations for selecting library software.

The Irish Joint Fiction Reserve Scheme, an interlibrary cooperative programme described in the 1986 report, is at present under review as part of a study in Ireland and the UK on behalf of CONARLS (Circle of Officers of National and Regional Library Systems) (*Irish Library News*, Number 122, December 1990).

SHIRL and The ISBN Region K (Ireland) LIST.

An Chomhairle Leabharlanna (The Library Council) is the only indigenous library supplier of national database records in the Irish Republic. As indicated in the 1986 survey, An Chomhairle Leabharlanna compiles:

SHIRL (Serial Holdings in Irish Libraries), an Irish union catalogue of serials, and the

ISBN Region K (Ireland) List, in cooperation with the British Library.

The NATIONAL BIBLIOGRAPHY PREPARATION PROJECT.

A cooperative project, the *National Bibliography Preparation Project*, is at present underway between the National Library of Ireland (NLI), Trinity College Dublin (TCD) and University College Dublin (UCD). The immediate aim of the project, which began in December 1990, is to computerise the 1990 issue of *Irish Publishing Record* (IPR), the Irish national bibliography. Production of the IPR was transferred from UCD to the NLI in early 1990. The *National Bibliography Preparation Project*, which is in receipt of EC funding, will adopt UNIMARC as the preferred output format for national and international exchange (*Irish Library News*, Number 122, December 1990).

The EIGHTEENTH CENTURY SHORT TITLE CATALOGUE (ESTC).

Irish libraries have contributed to ESTC over many years, but because of the resources necessary to sustain input to the project, supply has been irregular and has depended largely on the interest and enthusiasm of a small number of individuals.

There is now a renewed interest among Irish librarians in ensuring the inclusion of Irish library holdings of early printed books in the ESTC. This interest has been partly generated by a visit to Ireland in 1989 by Professor Henry Snyder of ESTC/North America, when he undertook an all Ireland tour of library collections, as part of an ESTC promotional programme. He estimated Irish library holdings to be in the region of 100,000 to 150,000 ESTC items and another 100,000 English and Irish imprints before 1701 (*ESTC News*, 1990). An Irish Steering Committee, chaired by the Director of the National Library of Ireland, has been set up to coordinate input to ESTC from Ireland. It is also hoped to secure funding from ESTC North America to accelerate the rate of input.

By December 1990, the following Irish libraries (in alphabetical order) had contributed catalogue entries to ESTC:

National Library of Ireland	29,000 records approx
Royal College of Physicians	2,000 records approx
Royal Irish Academy	12,000 records approx
St. Patrick's College Maynooth	4,000 records approx
Trinity College Dublin	20,000 records approx
University College Dublin	2,300 records approx

The following libraries have agreed to participate in the ESTC project:

Republic of Ireland

- Cashel Diocesan Library
- Central Catholic Library
- Dublin City Library
- Dublin Diocesan Library
- Kilkenny Diocesan Library
- Kings Inns
- Marshe's Library
- University College Cork
- University College Galway
- Waterford Diocesan Library

Northern Ireland

- Armagh Public Library
- Derry Diocesan Library
- Linen Hall Library
- Queen's University Belfast
- University of Ulster

OVERSEAS SUPPLIERS OF MACHINE READABLE RECORDS.

The following overseas library cooperatives and suppliers provide online, magnetic tape and optical disc records to the Irish library market:

BLAISE LOCAS
BLCMP

British Library BL MARC, BNB
CURL
OCLC

Catalogue records are also downloaded from online services such as DIALOG, INSPEC etc and CDROM databases such as COMPENDEX, ABI, BNB etc.

2.5 NETWORK ACCESS TO MACHINE READABLE RECORDS.

Library networking facilities are currently available in Ireland via EIRPAC, HEANET, JANET, EARN, BITNET etc, but the level of library traffic is still relatively low in comparison to other countries such as the UK.

In November 1990 COLICO recommended that studies be undertaken on the feasibility of establishing transparent links between existing library databases and on the provision of electronic messaging between participating libraries (*Irish Library News, Number 122, December 1990*).

Details of network access to machine readable catalogue records are summarised in Tables 2.1C, 2.2C and 2.3C above.

Education Libraries.

Most of the universities have campus local area networks (LANs) which may be used for onsite catalogue access (Table 2.1C). The University of Limerick and DCU reported use of OPTINET for onsite access to CDROM databases.

Education libraries may download catalogue records from library cooperatives and suppliers as summarised in Table 2.1A. The main suppliers to the universities are based in the UK i.e. BLAISE LOCAS, BLCMP, the British Library and CURL, and in North America i.e. OCLC.

Although the education libraries may use HEANET, an Irish higher education digital network, there is no evidence of any significant exchange of catalogue records on the network. The UK network, JANET, is also accessible by Irish education libraries, but this tends to be used for electronic mail and occasional document transfer between Irish and British university libraries, rather than for catalogue record exchange.

Three major Education libraries, Trinity College Dublin (TCD), University College Dublin (UCD) and the University of Limerick (UL), reported that access to their catalogues is available over wide area networks (HEANET and JANET specified). Most university campuses have X25 connections to wide area networks, but some have not yet linked the university's catalogue database to the gateway. Dublin City University's (DCU) catalogue is expected to be accessible over wide area networks in the near future.

Public Libraries.

Table 2.2C above summarises network access in public libraries. Several branches of Dublin Public Libraries (DPL) have online access to the catalogue and a network is in the process of being installed in the 4 Branch Dun Laoghaire system.

Most public libraries that have installed automated library systems since 1986 intend to provide Branch access to the main City or County library catalogues. However, the proposed methods of access vary from a county wide online network to a microcomputer based distributed system, operating on the basis of downloading/uploading data on diskette from/to stand alone Branch microcomputers overnight (Table 2.2C).

Public libraries do not import catalogue records over networks, the favoured method being to download from CDROM and/or to generate records internally. As retrospective conversion of public library catalogues proceeds, it is likely that the use of CDROM downloading will diminish and the majority of records will be produced internally.

All public library computerised catalogues are currently based on closed Branch to Host networks. However, the Local Government Computer Services Board (LGCSB) is examining the feasibility of setting up a national Local Authority network, which could, in principle, offer public access to machine readable public library catalogues at some stage in the future.

Special Libraries.

Some of the large special libraries operate closed intraorganisational, national and international wide area communications networks. These include CTT (The Irish Export Board), the ESB (Electricity Supply Board), FAS (The Training and Employment Authority) and Guinness Ireland. The library catalogue of each of the above organisations is accessible by staff on the intraorganisational communications network (Table 2.3C).

RESULTS AND CONCLUSIONS

3. COMPUTERISED LIBRARY HOUSEKEEPING SYSTEMS

The housekeeping systems examined in the survey focused on computerised acquisition of monographs and periodicals and on computerised circulation control systems, including fully integrated and stand alone systems.

3.1 LIBRARY HOUSEKEEPING IN EDUCATION LIBRARIES

Libraries having Computerised Housekeeping Systems in 1986.

Libraries having some degree of computerised housekeeping in 1986 included the following (Table 3.1):

Dublin City University (DCU) (NIHE Dublin in 1986)
 Trinity College Dublin (TCD)
 University College Cork (UCC)
 University College Dublin (UCD)
 University of Limerick (NIHE Limerick in 1986)
 Athlone, Cork, Donegal, Galway and Waterford RTCs

DCU and TCD are replacing 1986 systems with the fully integrated DYNIX package but continue to use some earlier systems in the interim - e.g. Shelton dBASE II at TCD for monograph acquisitions. UCD has incorporated housekeeping within the integrated BLS package.

New Computerised Library Housekeeping Systems.

New computerised housekeeping systems have been installed at

Royal College of Surgeons
 St. Patrick's College, Maynooth
 University College Galway (UCG)
 Cork and Dundalk RTCs
 National College of Industrial Relations (NCIR)
 National College of Art and Design (NCAD)

The two university libraries, RCS and UCG, have integrated software, URICA and DYNIX respectively and are progressing with the setting up of housekeeping as part of the general installation programmes. St. Patrick's College, Maynooth uses BIBBASE for monograph orders and SWETS for serials. The two RTCs, at Cork and Dundalk are using dBASE III+ for acquisitions and DATATREK for circulation control respectively. NCIR operates all three housekeeping functions on INMAGIC.

TABLE 3.1: COMPUTERISED LIBRARY HOUSEKEEPING SYSTEMS: 1990

EDUCATION LIBRARIES: ACQUISITION and CIRCULATION

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY	Computerised Acquisition		Computerised Circulation Syst	
	Monographs Syst	Serials Syst		
UNIVERSITIES				
DCU	1986	OCLC	-	ADABAS I/H
	1990	DYNIX	OCLC SC350	DYNIX
RCS	1990	-	-	URICA
St PAT MAYN	1986	-	-	-
	1990	BIBBASE	SWETS-not O/L	-
TCD	1986	SHELTON dBASE II	-	In-house
	1990	SHELTON dBASE II	-	DYNIX
UCC	1986	DOBIS/LIBIS	-	DOBIS/LIBIS
	1990	DOBIS/LIBIS	-	DOBIS/LIBIS
UCD	1986	-	-	PLESSEY
	1990	BLS	BLS	BLS
UCG	1990	DYNIX	-	DYNIX
UNIV LIM	1986	URICA	-	URICA
	1990	URICA	URICA	URICA

REGIONAL TECHNICAL COLLEGES

ATHLONE	1986	-	-	In-house
	1990	-	-	In-house
CORK	1990	dBASE III+	-	-
DONEGAL	1986	-	-	In-house
	1990	-	-	In-house
DUNDALK	1990	-	-	DATATREK DTI
GALWAY	1986	dBASE II	-	-
	1990	Yes	-	-
WATERFORD	1986	-	-	In-house
	1990	-	-	In-house

OTHER COLLEGES

NCIR	1990	INMAGIC	INMAGIC	INMAGIC
NCAD	1990	-	SWETS-not O/L	-

3.2 LIBRARY HOUSEKEEPING IN PUBLIC LIBRARIES

Dublin Public Libraries (DPL) was the only public library reported to be using computerised housekeeping in 1986. Since then, a Wang CSS, one URICA and three DYNIX systems have come on stream (Table 3.2). As indicated above, the Wang CSS system at Waterford County Library will be replaced by DYNIX in 1991. The implementation of all new computerised systems in public libraries is at an early stage and full integration of most housekeeping modules is expected to be complete by the end of 1991.

TABLE 3.2: COMPUTERISED LIBRARY HOUSEKEEPING SYSTEMS: 1990

PUBLIC LIBRARIES: ACQUISITION and CIRCULATION

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY	Computerised Acquisition		Computerised Circulation Syst	
	Monographs Syst	Serials Syst		
DPL	1986 1990	DUPLICS I/H DUPLICS I/H	- -	DS Sys 3 DS Sys 3 Plus
DUN LAOGH	1990	-	-	DYNIX
LIMRK CITY	1990	-	-	DYNIX
MAYO COUNTY	1990	-	-	URICA
ROSC COUNTY	1990	DYNIX	-	DYNIX
WATERFD COUN	1990	-	-	WANG CSS

3.3 LIBRARY HOUSEKEEPING IN SPECIAL LIBRARIES**Libraries having Computerised Housekeeping Systems in 1986.**

The Environmental Research Unit, ERU (AFF in 1986), the Electricity Supply Board (ESB), FAS, the Training and Employment Authority (AnCO in 1986) and the Fisheries Research Centre each had a computerised housekeeping system in 1986 (Table 3.3). The only significant change has been at the ESB, which has replaced STAIRS with STATUS software.

New Computerised Library Housekeeping Systems.

The following libraries have implemented computerised housekeeping since 1986 (Table 3.3):

Allied Irish Banks (AIB) Group
CERT
CTT (Irish Export Board)
Dept of Agriculture and Food
Department of Health
ENFO
EOLAS (Irish Science and Technology Agency)
Guinness Ireland
Law Library
State Laboratory

Note that all new systems are 'off the shelf' software packages.

TABLE 3.3: COMPUTERISED LIBRARY HOUSEKEEPING SYSTEMS: 1990

SPECIAL LIBRARIES: ACQUISITION and CIRCULATION

(Source: DepLIS LIB2 Update Survey: Oct 1990)

LIBRARY	Computerised Acquisition		Computerised	
	Monographs Syst	Serials Syst	Circulation Syst	
AIB GROUP	1990	-	-	INMAGIC
CERT	1990	BOOKSHELF	-	BOOKSHELF
CTT	1990	-	-	Wang PACE + I/H
DEPT AG & FD	1990	CARDBOX	CARDBOX	CARDBOX
DEPT HEALTH	1990	MICROCAIRS	MICROCAIRS	MICROCAIRS
ENFO	1990	DECNET	-	-
ERU	1986	-	-	In-house
	1990	-	-	In-house
EOLAS	1990	OASIS	-	OASIS
ESB	1986	-	STAIRS	STAIRS
	1990	-	-	STATUS
FAS	1986	BASIS TECHLIB	-	BASIS TECHLIB
	1990	BASIS TECHLIB	-	BASIS TECHLIB
FISH RES CEN	1986	INMAGIC	INMAGIC	INMAGIC
	1990	INMAGIC	INMAGIC	INMAGIC
GUINNESS	1990	CAIRS	-	-
LAW LIBRARY	1990	URICA	URICA	URICA
STATE LAB	1990	INMAGIC	-	INMAGIC

RESULTS AND CONCLUSIONS

4. COMPUTER-BASED USER-RELATED SERVICES

4.1 ACCESS TO ONLINE DATABASES (Excluding VIDEOTEX)

Education Libraries.

The following Education libraries reported use of online databases in the 12 months preceding October 1990:

COACT, Limerick
 DIT, College of Commerce Rathmines
 DIT, College of Marketing and Design
 DIT, College of Technology, Bolton St.
 DIT, Dublin College of Catering
 Dublin City University
 National College of Industrial Relations
 Royal College of Surgeons
 RTC Athlone
 RTC Dundalk
 RTC Waterford
 St. Patrick's College Maynooth
 Trinity College Dublin
 University College Cork
 University College Dublin
 University College Galway
 University of Limerick

The following host services were named as having been used in the 12 months preceding October 1990:

BLAISE
 CELEX
 DATASTAR
 DIALOG
 ECHO
 ESA/IRS
 ITELIS
 LEXIS
 OCLC
 PERGAMON
 PROFILE
 SDC
 STN
 TEXTLINE

The total number of online connect hours, excluding access to catalogue cooperatives and suppliers, reported by Education libraries, was about the same as in 1986 i.e. a total of approximately 900 connect hours in the 12 month period. There is some variation in individual library usage e.g. UCC reported 150 connect hours in 1986 and 50 hours in 1990. Corresponding figures for the University of Limerick (UL) were 100 hours (1986) and 180 hours (1990). It is interesting to note that although UL now offers a wide range of CDROM databases on its campus wide OPTINET network, the connect time to remote online databases has

increased by 80%. However, UCD (200 hours) and UCG (120 hours) reported identical figures for 1986 and 1990.

Public Libraries.

No Public libraries reported using online databases for user-related services.

Special Libraries.

The following Special libraries reported use of online databases in the 12 months preceding October 1990:

Allied Irish Bank (AIB) Group
 Central Statistics Office (CSO)
 Commission of the European Communities
 Coopers and Lybrand
 CTT (Irish Export Board)
 Department of Health
 Electricity Supply Board (ESB)
 ENFO
 EOLAS
 European Foundation
 FAS (Training and Employment Authority)
 Guinness Ireland
 Law Library
 Oireachtas Library
 Radio Telefis Eireann (RTE)
 St. Vincent's Hospital Medical Library
 State Laboratory
 Teagasc
 Wood & Associates

The following host services were named as having been used in the 12 months preceding October 1990:

BIM HELPLINE
 BLAISE
 BRS
 CELEX
 DATASTAR
 DIALOG
 ECHO
 ESA/IRS
 EUROBASIS
 ITELIS
 LEXIS
 OCLC
 PERGAMON
 PROFILE
 SDC
 STN
 TEXTLINE

The total number of online connect hours, excluding access to catalogue cooperatives and suppliers, reported by Special libraries, in the 12 month period preceding October 1990 was about 1,300 hours, a significant increase on the 1986 figure of 830 hours. Libraries reporting 100 or more connect hours included the Commission of the European Communities (Dublin Office), CTT, ERU, ESB and EOLAS.

4.2 ACCESS TO VIDEOTEX SERVICES

The following libraries reported use of videotex services in the 12 months preceding October 1990:

Education Libraries.

DIT College of Commerce Rathmines
Trinity College Dublin
University College Dublin
University of Limerick

Public Libraries.

None

Special Libraries.

Commission of the European Communities (Dublin Office)
CTT (Irish Export Board)
Environmental Research Unit (ERU)
Electricity Supply Board (ESB)
EOLAS
FAS (Training and Employment Authority)
Teagasc

The following host services were named as having been used in the 12 months preceding October 1990:

AERTEL
AGRILINE
COGNOTEC
EOLAS Industrial Database
MINITEL
PRESTEL

Exact figures for contact hours are not available, but it is clearly evident that connect time is down considerably since the closure of the Irish videotex service, PATRIC, which was being used as a Libraries Database. The ERU, for example, logged 500 hours on PATRIC in 1986 and zero hours in 1990.

RESULTS AND CONCLUSIONS

5. SUMMARY OF RESULTS

5.1 ORGANISATIONAL CHANGES IN LIBRARIES

The most significant changes since 1986 have been as follows:

The two NIHEs in Dublin and Limerick have been awarded university status and have been renamed as Dublin City University (DCU) and the University of Limerick (UL)

Carysfort College, a Teacher Training College in Dublin, has been closed.

The National Board for Science and Technology (NBST) and the Institute for Research and Standards (IIRS) have been merged to form EOLAS, the Irish Science and Technology Agency

ACOT, the Agricultural Advisory and Training Body, and An Foras Taluntais, the Agricultural Research Institute, have been merged to form TEAGASC, the Agriculture and Food Development Authority.

An Foras Forbartha (AFF), the National Institute for Physical Planning and Construction Research, has been abolished and the former AFF library has been absorbed by the newly established Environmental Research Unit (ERU).

AnCO, the Industrial Training Authority and YEA, the Youth Employment Agency have been merged as FAS, the Training and Employment Authority.

5.2 COOPERATION

An EC funded *National Bibliography Preparation Project* is underway to computerise the current edition of Irish Publishing Record (IPR), the Irish national bibliography. The project partners are the National Library of Ireland, Trinity College Dublin and University College Dublin.

Cooperation between government libraries has improved since the formation of a Government Libraries Group within the Library Association of Ireland (LAI).

The Irish Joint Fiction Reserve Scheme is under review as part of a combined Irish and UK study

Input from Ireland to the Eighteenth Century Short Title Catalogue (ESTC) has improved considerably since 1986 and an increased number of Irish libraries is involved in the project.

5.3 COMMERCIAL SUPPLIERS

The Pick Resources Centre in Dublin has been very successful in promoting the DYNIX automated library system to the large Education libraries and to the public libraries. A total of seven installations is now in operation in the Republic of Ireland. The Mc Donnell Douglas URICA system has also been successful in penetrating the Irish market. There are now four major installations in the Republic of Ireland.

5.4 COMPUTERISED CATALOGUES

Current Status of Computerised Catalogues in Ireland.

Of the 32 education libraries, 31 public library authorities and 64 special libraries in Ireland, the following operate computerised catalogues:

17 education libraries
 6 public library authorities and An Chomhairle Leabharlanna
 23 special libraries

Update on 1986 Catalogues.

University library catalogues have been significantly enhanced since 1986. UCD has installed the BLCMP library system and DCU and TCD have both purchased DYNIX, while St. Patrick's College, Maynooth has changed from BL's CORTEX to OCLC. There has been an overall shift in the education library sector to the use of externally produced machine readable records, and a significant increase in the proportion of catalogue records in machine readable form. Another obvious trend is the emergence of onsite local area networks (LANs) and the move from COM to online catalogue access. There is also a migration away from in-house systems to proprietary software and an across the board enhancement of hardware is evident.

Of the two Public libraries having computerised catalogues in 1986, Dublin Public Libraries now has approximately half of its bookstock catalogue in machine readable form (5% in 1986) and continues to run with DUPLICS, an in-house software package. Dun Laoghaire Public Library has purchased DYNIX and has converted its original BLAISE LOCAS catalogue.

Two of the three Special libraries operating computerised catalogues in 1986 have undergone organisational changes: AFF is now ERU and AnCO is now FAS. There has been no major change in the catalogue status of these libraries, apart from software replacement.

New Computerised Catalogues.

A total of 30 new computerised catalogues was identified in this (1990) survey i.e.

- 9 Education library catalogues
- 5 Public library catalogues
- 16 Special library catalogues

In the Education library sector, two university, four RTC and three other libraries account for new catalogue systems. URICA software was installed at the Royal College of Surgeons and DYNIX at University College Galway. The RTC libraries have taken microcomputer based systems and a variety of software packages, while two of the remaining libraries have opted for OCLC.

New automation in Public libraries is accounted for by DYNIX installations at Limerick City and Roscommon County and URICA in Mayo County. Waterford County has a Wang CSS system which it is currently replacing with DYNIX. An Chomhairle Leabharlanna has a microcomputer based in-house system.

All new computerised catalogue installations in Special libraries operate on the basis of internally generated catalogue records and a wide range of 'off the shelf' software support including BOOKSHELF, CAIRS and INMAGIC.

5.5 NETWORK ACCESS TO MACHINE READABLE RECORDS

Networks available to libraries in the Republic of Ireland include EIRPAC and HEANET, which may be used to gain access to overseas networks such as JANET, EARN and BITNET. There is, however, little traffic generated on these networks by Irish libraries for the purpose of accessing the catalogues of other libraries in Ireland or overseas.

Most universities have campus local area networks (LANS) which may be used for onsite online catalogue access, but there is no evidence of inter university catalogue linkage on HEANET i.e. the situation remains as it was in 1986. Some libraries use JANET for administrative communication with UK education libraries, but not for catalogue access. Education libraries may download catalogue records from cooperatives and suppliers such as BLAISE LOCAS, BLCMP, BL, CURL and OCLC.

Access via wide area networks is currently available to three university library catalogues (TCD, UCD and UL), and is technically possible to other university libraries.

A Branch communications network has been developed in Dublin Public Libraries and similar developments are underway in other public libraries which operate automated library systems. In some

cases online access may be available for library staff only and not for end users. Public libraries, unlike education libraries, do not import catalogue records over networks, but prefer to use magnetic tape or CDROM databases.

All public library computerised catalogues are run within closed Branch to Host networks.

Some of the large special libraries such as CTT, ESB, FAS and Guinness Ireland, operate closed, intraorganisational, national and international wide area networks on which their catalogues are available to staff.

5.6 COMPUTERISED LIBRARY HOUSEKEEPING SYSTEMS

Housekeeping functions examined in the study included computerised acquisition of monographs and periodicals and computerised circulation control systems.

Of the 32 education libraries, 31 public library authorities and 64 special libraries in Ireland, the following operate computer based library housekeeping systems:

- 16 education libraries
 - 6 public library authorities and An Chomhairle Leabharlanna
 - 14 special libraries

Update on 1986 Library Housekeeping Systems.

DCU and TCD are replacing 1986 systems with the fully integrated DYNIX system, but continue to use some earlier housekeeping software until DYNIX is fully operational. UCD has incorporated housekeeping within the integrated BLS package.

Dublin Public Libraries continues to use DUPLICS and DS Sys 3 for housekeeping purposes, while Dun Laoghaire has recently acquired DYNIX.

No change has been observed in housekeeping procedures at the ERU, ESB, FAS and the Fisheries Research Centre, except that the ESB has replaced STAIRS with STATUS software.

New Library Housekeeping Systems.

A total of 20 new computerised library housekeeping systems was identified in this (1990) survey i.e.

- 5 Education library housekeeping systems
- 5 Public library housekeeping systems
- 10 Special library housekeeping systems

Two university libraries, RCS and UCG, have housekeeping facilities included in their URICA and DYNIX systems respectively. The other three Education libraries operate housekeeping on dBASE III+, DATATREK and INMAGIC.

The five public library housekeeping systems run on DYNIX and URICA integrated software.

Ten Special libraries run housekeeping functions within software systems such as BOOKSHELF, CAIRS, CARDBOX, INMAGIC, OASIS, STATUS and URICA.

5.7 COMPUTERISED-BASED USER-RELATED SERVICES.

Two changes relating to computer-based user-related are evident from the present study:

There was an increase in the use of online databases by Special libraries in 1990 (total 1,300 hours over 12 months) compared to 1986 (total 830 hours over 12 months).

Videotex connect time by Irish libraries is significantly reduced since the closure of the Irish videotex service, PATRIC, which served as an Irish Libraries Database.

APPENDIX I: POSTAL QUESTIONNAIRE

EC PROPOSED ACTION PLAN FOR LIBRARIES

LIB2 UPDATE STUDY: 1986-1990

For Office Use

Name of Library _____

Address _____

Telephone _____ Fax _____

Contact Name _____ Position _____

12345

Questions 1-10 relate to the situation in your library on 31 October 1990.

Question 11 covers any future plans relating to information technology applications.

1. COMPUTERISED CATALOGUING.

Is the library catalogue wholly or partially computerised ?

Yes ___ No ___ (Go to 2)

1 2

If Yes, was the system introduced since 1986 ?

Yes ___ No ___

3 4

2. COMPUTERISED LIBRARY CIRCULATION SYSTEM.

Is any part of the circulation system computerised ?

Yes ___ No ___ (Go to 3)

1 2

If Yes, was the system introduced since 1986 ?

Yes ___ No ___

3 4

3. COMPUTERISED ACQUISITIONS: BOOKS.

Is book ordering computerised ?

Yes ___ No ___ (Go to 4)

1 2

If Yes, was the system introduced since 1986 ?

Yes ___ No ___

3 4

4. COMPUTERISED ACQUISITIONS: PERIODICALS.

Is periodicals ordering computerised ?

Yes ___ No ___ (Go to 4)

1 2

If Yes, was the system introduced since 1986 ?

Yes ___ No ___

3 4

5. COMMUNICATIONS.

Does the library have access to the following ?

Telex Yes ___ No ___ 1 6

Fax Yes ___ No ___ 2 7

E-mail Yes ___ No ___ 3 8

Local Area Network(s) (LANs) Yes ___ No ___ 4 9

Wide Area Network(s) (WANs) Yes ___ No ___ 5 10
(Please specify)

6. ACCESS TO ONLINE DATABASES (EXCLUDING VIDEOTEX).

Does the library have access to external online databases ?

Yes ___ No ___ (Go to 7)

1 2

If Yes, please specify the main Host services used

e.g. BLAISE, DATASTAR, DIALOG, SDC etc

3 4 5 6

Please estimate the approximate Total Connect Time, i.e. to all Host services, over the last 12 months

Total Connect Time (in last 12 months)= _____ Hours 1 2 3 4

Please estimate the approximate Total Expenditure on the use of online database services, i.e. using all host services, over the last 12 months. Count direct costs only i.e. Host annual subscription fees, communications, database searching charges, printout etc.

Total Expenditure (in last 12 months)= Ir£ _____ 1 2 3 4

If exact information on Online expenditure is unavailable please indicate approximate expenditure below

Tick

IR£	50 -	250	___	5
IR£	251 -	500	___	6
IR£	501 -	750	___	7
IR£	751 -	1000	___	8
IR£	1001 -	2000	___	9
IR£	2001 -	3000	___	10
IR£	3001 +		___	11

7. ACCESS TO VIDEOTEX SERVICES.

Does the library have access to external videotex services ?

Yes ___ No ___ (Go to 8) 1 2

If Yes, please specify the main Host services used

_____ 3 4 5 6

Please estimate the approximate Total Connect Time, i.e. to all videotex services, over the last 12 months

Total Connect Time (in last 12 months)= _____ Hours 1 2 3 4

Please estimate the approximate Total Expenditure on use of videotex services, i.e. using all videotex services, over the last 12 months. Count direct costs only i.e. Host annual subscription fees, communications, database searching charges, printout etc.

Total Expenditure (in last 12 months)= Ir£ _____ 1 2 3 4

If exact information on videotex service expenditure is unavailable please indicate approximate expenditure below

	Tick	
IR£ 50 - 250	___	5
IR£ 251 - 500	___	6
IR£ 501 - 750	___	7
IR£ 751 - 1000	___	8
IR£ 1001 - 2000	___	8
IR£ 2001 - 3000	___	10
IR£ 3001 +	___	11

8. MICRO COMPUTERS.

Does the library provide micro computers (other than for catalogue access) for use by library patrons ?

Yes ___ No ___ 1 2

9. OTHER INFORMATION TECHNOLOGY BASED USER SERVICES.

Has the library introduced any information technology based user services since 1986, other than facilities relating to catalogue, periodical or circulation control ?

Yes ___ No ___ (Go to 10) 1 2

10. ONLINE CATALOGUE ACCESS.

Is online interactive computer access to the library catalogue available by means of:

(a) a local area network (LAN) Yes ___ No ___ 1 2

(b) a wide area network (WAN) Yes ___ No ___ 3 4

If Yes, please specify WAN _____ 5 6 7 8

11. FUTURE PLANS.

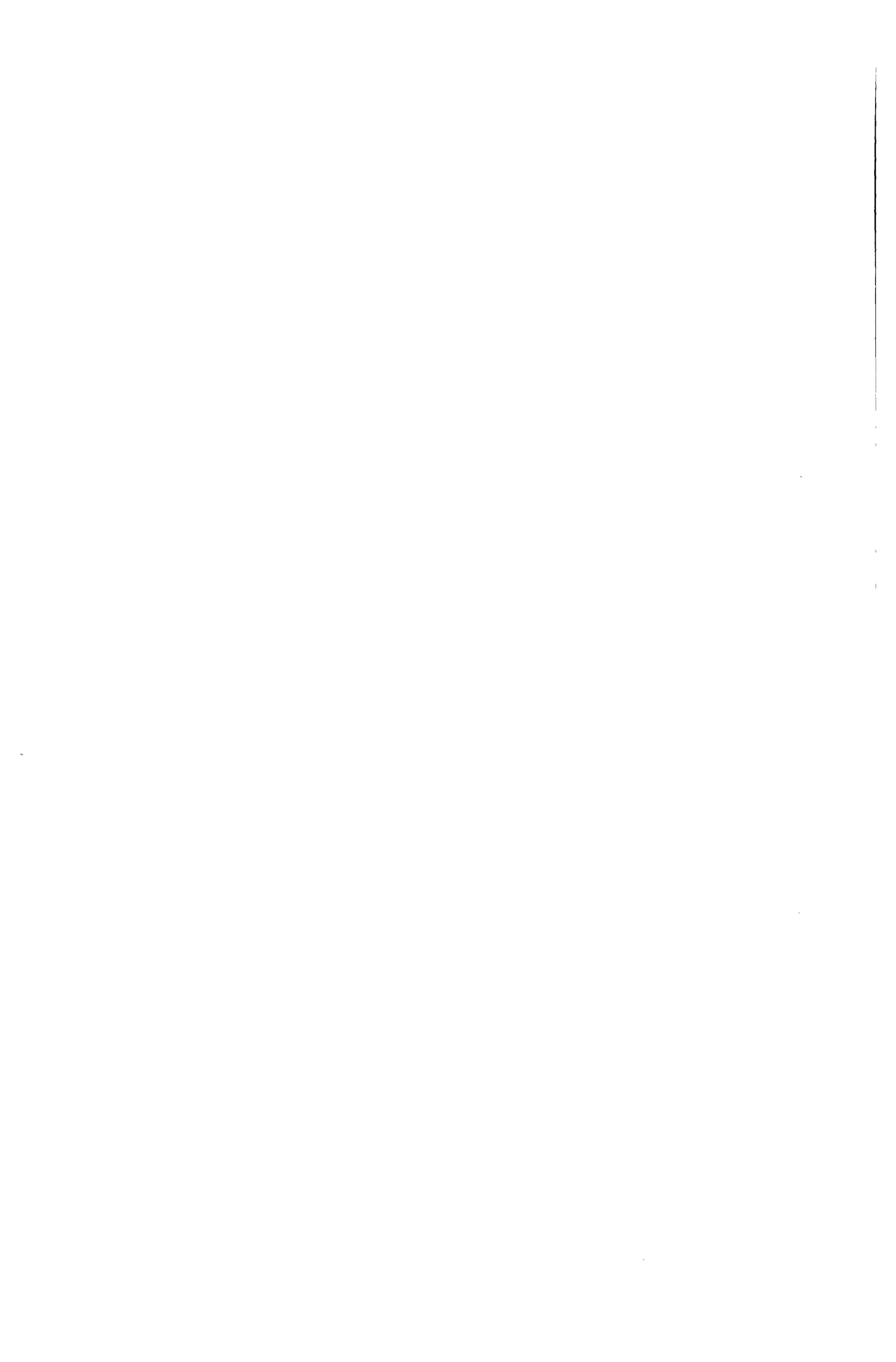
Please indicate if the library has any firm plans to introduce any of the following information technology based library applications over the next 3 years (Tick 'Yes' as appropriate) ?

		YES								
11.1	Cataloguing computerised ?	___	1							
11.2	Retrospective catalogue conversion ?	___	2							
	If Yes, over the next 3 years, what proportion of catalogue is likely to be converted ?									
	100%	75%	50%	25%	Other% (specify)					
	___	___	___	___	_____		3	4	5	6
11.3	Book ordering computerised ?	___	8							
11.4	Online link to book supplier ?	___	9							
11.5	Periodical ordering computerised ?	___	10							
11.6	Online link to periodical supplier ?	___	11							
11.7	Communication facilities ?	___	12							
	Telex	Fax	Email							
	___	___	___		131415					
	Installation of local area network (LAN) ?							___	16	
	Use of wide area network(s) (WAN(s)) ?							___	17	
	Specify WAN(s) _____							18 19		
	_____							20 21		
11.8	Join cooperative computerised system ?	___	22							
11.9	Acquire integrated library system from commercial supplier ?	___	23							
11.10	Introduce online searching facilities ? (exclude videotex)	___	24							
11.11	Introduce videotex searching facilities?	___	25							

11.12	Introduce computerised access to library catalogue e.g. OPAC ?	—	26
	If Yes,		
	Will access be internal only ? (e.g. via a LAN)	—	27
	Will access be external ? (e.g. via a WAN)	—	28
11.13	Introduce other information technology developments ?	—	29
	If Yes, please specify (e.g. user access to microcomputers enhancement of existing IT systems)		
	_____		30 31
	_____		32 33
	_____		34 35

Thank you for completing the questionnaire.

APPENDIX II: INTERVIEWS



INTERVIEWS (VISITS)

Chomhairle Leabharlanna	A. Bevan, A. Kelly
CTT (Irish Export Board)	M. Hogan
Dept. of the Marine	M. Moore
Dublin City University	C. O Sullivan
Dublin Public Libraries	N. Hardiman
Dun Laoghaire Public Library	M. Ryle
Higher Education Authority	T. Dooney
Law Library	J. Aston
LGCSB	C. Smith
Mc Donnell Douglas (URICA)	L. Corcoran, D. Hoolahan
National Library of Ireland	B. Mc Kenna
Pick Resource Centre (DYNIX)	C. Cullen
Royal Dublin Society	M. Kelleher
St. Patrick's College, Maynooth	A. Sliney
Trinity College Dublin	T. Peare
University College Dublin	S. Phillips

INTERVIEWS (TELEPHONE)

AIB Group	N. Hudson
CERT	M. Penney
Dept of Health	A. Beatty
Dept. of Agriculture and Food	M. Doyle
Dept. of Education	O. Marshall
ENFO	N. Hughes
EOLAS	J. Mc Cluskey
ERU	N. Hughes
ESB	J. O Reilly
FAS	M. O Donnell
Fisheries Research Centre	A. Mc Dermot
GPA Bolton Library	D. Woodworth
Guinness Ireland	E. Mooney
Limerick City Library	E. Mc Mahon
Mayo County Library	R. Hickey
NCAD	G. Bradley
NCIR	M. Buckley
Roscommon County Library	B. Gilligan
Royal College of Surgeons	E. Phillips
RTC Athlone	C. O Brien
RTC Carlow	B. Commisky
RTC Cork	D. Delaney
RTC Dundalk	A. Cleary
RTE	J. Mc Mahon
St. Patrick's College Drumcondra	F. Salholm
St. Vincent's Hospital	H. Beckett
State Laboratory	A. Judge
Teagasc	B. Keane
University College Cork	N. de Brun
University College Galway	A. Dalton
University of Limerick	M. Reddan
Waterford County Library	E. Byrne
Wood & Associates	A. Purtell

ACKNOWLEDGEMENTS

The Department of Library and Information Studies gratefully acknowledges the following:

Funding of the project by the European Commission.

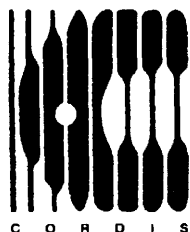
Support throughout the project by the EC Libraries Project Team in Luxembourg.

Secondment of Mr. John Steele by U.C.D. Library.

Cooperation of all those who provided information, or who helped in any way during the project.

For up-to-date information on European Community research

consult



CORDIS **The Community Research and Development Information Service**

CORDIS is an on-line service set up under the VALUE programme to give quick and easy access to information on European Community research programmes.

The CORDIS service is at present offered free-of-charge by the European Commission Host Organisation (ECHO). A menu-based interface makes CORDIS simple to use even if you are not familiar with on-line information services. For experienced users, the standard Common Command Language (CCL) method of extracting data is also available.

CORDIS comprises eight databases:

- RTD-News: short announcements of Calls for Proposals, publications and events in the R&D field
- RTD-Programmes: details of all EC programmes in R&D and related areas
- RTD-Projects: containing 14,000 entries on individual activities within the programmes
- RTD-Publications: bibliographic details and summaries of more than 50,000 scientific and technical publications arising from EC activities
- RTD-Results: provides valuable leads and hot tips on prototypes ready for industrial exploitation and areas of research ripe for collaboration
- RTD-Comdocuments: details of Commission communications to the Council of Ministers and the European Parliament on research topics
- RTD-Acronyms: explains the thousands of acronyms and abbreviations current in the Community research area
- RTD-Partners: helps bring organisations and research centres together for collaboration on project proposals, exploitation of results, or marketing agreements.

For more information and CORDIS registration forms, contact
ECHO Customer Service
CORDIS Operations
BP 2373
L-1023 Luxembourg
Tel.: (+352) 34 98 11 Fax: (+352) 34 98 12 34

If you are already an ECHO user, please indicate your customer number.