INFORMATION AND DOCUMENTATION FOR THE SOCIAL SCIENCES IN SPAIN

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I. OUTLINE OF THE NATIONAL DOCUMENTATION AND INFORMATION ACTIVITIES

In this report we are taking the term information and documentation for the social sciences in its most general sense, in the same way, for instance, as was taken by the OCDE report L'information dans une société en evolution (París, 1971). That is to say we will talk not only about information necessary to the work of social scientists as investigators, but also that which is necessary to practicians; we will discuss information used by managers at all levels of decision-making, and that which is needed by citizens, either as individuals or in groups (professional, political etc.).

First of all we should note the underdeveloped state of information and documentation activities, in social sciences in Spain. This is in fact a characteristic trait of information and documentation in general in Spain, as only in recent years has it begun to be an object of particular interest, and that only in a fragmentary and spasmodic form. The first cautious attempts on the part of the CSIC (1973) to outline a general policy of information and documentation were limited to scientific and technical information, in a restricted sense, which excluded social sciences. Something which is all the more surprising when you think that such a policy was drawn up in 1973 with technical advice from the same people who were responsible for the aforementioned OCDE report (1971).

Before this policy came to be applied it was replaced by another which did formally take into account the social sciences. In 1975 within the CSIC (belonging to the Ministry of Education and Science) the Centro Nacional de Información y Documentación Científica (CENIDOC) was formed, composed of the information and documentation institutes in Science and Technology (ICYT) in Madrid, and in Biomedicine (IBYM) in Valencia, —which were already in existence—, and the Institute in Humanities and Social Sciences (ISOC) which was newly formed in Madrid.

Unfortunately this reorganization has not had any effect on the lack of coordination which exists between the various organs of different departments carrying out work on any aspect of information and documentation. There is a great lack of political awareness of the importance of the problem. Proof of this is the extreme scarcity of means with which the CENIDOC is trying to develop, something which is even more serious in the case of the ISOC, which is just beginning its task.

In the different ministries there are a certain number of information and documentation services directed basically towards satisfying the internal needs of the organs they belong to; very rarely do they consider extending their services to the public, except in a subsidiary form, which consists solely of publishing journals, etc. with bibliographical sections of varying degrees of usefulness.

On the other hand we should note the restrictive practices prevailing as regards publication of reports and studies, and the distribution of those that come to be published.

With respect to numerical information the Public Administration is very reticent about supplying it if it is not in an aggregate form, whether it comes from census or enquiries carried out with the aim of obtaining statistics, or from the administrative management activities; also, access to the existing data machinereadable files is not at all easy.

Even the Instituto Nacional de Estadística (INE) is not envisaging any active policy from the dissemination of statistics to the public apart from the traditional statistical publications.

However we should quote the Servicio de Estudios del Banco de España and the Servicio de Documentación del Instituto de Estudios de la Administración Local (IELL), in the Presidency of the Government, which have developed notable bibliographical and documentary activities with high standards of work and specialization, although using only traditional methods.

The first moreover, is forming a data bank with series of macroeconomic statistics on Spain, which will soon be serving the public. Faced with this lack of government initiative, then, it has been the initiative of various parapublic or private (non-profit) institutions which have created and sustained some centres organized specially to serve the public. We can quote, among them the Consorcio de Información y Documentación de Cataluña (CIDC) and the Centro de Información y Documentación Económica (CIDE).

The CIDC was formed jointly in 1969 by four Barcelona organisms, the Diputación Provincial, the Ayuntamiento (town hall) the Comisión de Urbanismo de la Comarca and the Cámara de Comercio. Its first name (Comioión Mixta de Coordinación Estadística) is indicative of the main problem it was faced with, but from the very first it accepted its task in the widest form, considering itself responsible for drawing up a policy aimed to satisfy the information needs of all types of users in the Catalan region. It created its own systems of territorial information on the region (statistics, economy, cartography) and provided access to the national and international documentary systems, not only in social sciences, but also in hard sciences and technology. It has been serving the public since 1970, fundamentally—on a regional basis but covering also other parts of Spain (specially on statistics).

The CIDE was formed in 1970 by the Cámara de Comercio in Madrid and the Fundación Fierro and gives documentary services in economic information of all kinds, mainly obtained from Spanish and international journals and aimed towards the documentary needs of business firms.

In both these cases, as in other similar ones, the scarcity of resources and the lack of official support has made the full development of the systems and services very difficult.

We must also refer to the activities of certain foundations for the promotion of information and documentation projects. For example, the Fundación March, in collaboration with the Universidad Autónoma de Madrid has a plan to form a data archive, with information coming from surveys.

The FUNDESCO (Fundación para el Desarrollo de la Función Social de las Comunicaciones) financed by the Compañia Telefónica Nacional de España (CTNE) is the foundation that dedicates the most effort to the promotion of new data banks (both numerical and literary) and bibliographical information centres. It does this by means of support for the collaboration agreements between the institutions involved in each project (whether they are from the Administration, universities or associations). Thus, in the field of social sciences a juridical data bank is functioning on an experimental level, covering Spanish legislation and jurisprudence. There are also plans for a wide agreement about the development of regional data banks in the different parts of Spain, using the Catalonia data bank as a model. This as Phase I of the agreement has to be prepared by the CIDC, in collaboration with the INE and the Instituto Geográfico y Catastral (IGC). The possibility is also being studied of starting linguistic data banks.

Moreover FUNDESCO has also supported the installation of two RECON interactive systems terminals of the European Space Agency (ESA) Network on a leased-line rule, one in Madrid (INTA) and another in Barcelona (CIDC). The emphasis of ESA files at the moment is predominantly towards hard sciences and technology, but on the initiative of FUNDESCO negotiations have opened with ESA to greatly increase the capacity of the computer infrastructure and the number of files at the ESA data base, so that social sciences in general may have adequate representation. This undertaking, originating in Spain, could have important consequences in the European countries to which the ESA network extends.

For some years the Confederación Española de Cajas de Ahorros has been sponsoring numerous studies and investigations which it finances through grants and subsidies through the Fondo para la Investigación Económica y Social (FIES). At the same time it operates the Servicio de Documentación del FIES which compiles bibliographies on economic and sociological subjects and publishes them in its *Boletín de Documentación* and maintains a specialised library of the use of the grant-holders of the Fondo.

Concerning archives, as well as a number of traditional historical archives there also exist specialised information services, such as the Oficina de Información Urbanística (OIU) in the Colegio de Arquitectos de Cataluña, which specialises in gathering urbanisation plans and press information about the municipalities of Catalonia. Concerning libraries, a part from general

libraries, as Biblioteca Nacional, there exist numerous specialised public and private libraries, of differing levels of importance and value, usually linked to departments of universities or other higher education institutions.

Finally we must not forget the numerous bibliographies and indexes published periodically by certain institutions, such as the yearbook *La Economía Española* (1968 onwards) the quarterly *Indice Histórico Español* (1953 onwards) both of university origin, among others.

To resume, the dominant characteristics of the structure of information and documentation in social sciences in Spain would be the great scattering of centres, their smallness and diversity, the infrequent use of modern documentary techniques, and above all the lack of coordination.

There is a great imbalance regarding the subject matter covered in documentation of Spanish origin. Certain types of economic or statistical information are covered, but it is not so with sociology, politics etc. This imbalance also exists between data systems, literature systems, priority (in terms of resources allocated) usually being given to the first. Respecting on going research we can only indicate isolated, scarce and discontinuous examples of actions undertaken (fundamentally in the subject of town and regional planning).

Lastly we should note that though many technically modern and ambitious information and documentation projects are being initiated at present, these are in answer to so many different types of problems and are so isolated that they are developing in ignorance of each other, and without realising how useful inter-relations could be to them.

II. DESCRIPTION OF THE MAIN INSTITUTIONS IN INFORMATION AND DOCUMENTATION IN SOCIAL SCIENCES

In this section we will concentrate solely on those contres of information and documentation whose work and organisational structure are directed mainly towards serving the public. We will discuss then the ISOC, the icyt (both CENIDOC organisations) and CIDE and the CIDC. We will speak at some length about this last one, because, it represents the fullest attempt, even if partly successful on different lines of work, to develop a coherent global policy on the level of Catalonia, introducing simultaneously a nationwide policy which could incorporate regional activities. In this section we will discuss here only the nature and individual systems of these centres, reserving the description of the services they offer for Section III.

As an institute of CENIDOC, the ISOC has among its objectives that of developing a general policy in humanities and social sciences, within the CSIC. But it has not got the rights or the resources needed to promote the necessary coordination with either the rest of the services of the Ministerio de Educación y Ciencia or with the other ministries.

Since its formation in 1975 the ISOC has had as one of its principal assets, a small but well-trained team of 13 people (as having been working already in developing SDI and reprography services, based on the ISI tapes, in the Instituto Bibliográfico Hispánico). These in turn have at their disposal the ministry administrative and computer services. As ISOC, until now they have concentrated on offering services of retrospective search and SDI on the basis of international systems and reprography centres but at present they are preparing the *Indice Humanístico Español de Ciencias Sociales*. These are KWOC-type indexes obtained by computer from analysis of articles appeared in Spanish journals of a general and inter-disciplinary nature within their respective subject area.

On its part the ICYT, although an institute of CENIDOC specialising in the field of science and technology compiles and publishes some social science bibliographies such as the bulletin *Resúmenes Economía de Empresa*, which corresponds to a selection of the input of the European network Pool Betriebwirtschaft, in which it participates, covering Spanish journals. It has now stopped publishing the *Indice Jurídico Español* after a few numbers.

The CIDE, organised as an autonomous body, has a staff of some 10 people. Its basic aim is to provide the Spanish firms with services of current awareness and retrospective searches based on analysis of 132 economic journals from Spain and other countries, with a pre-dominantly industrial branches approach. Its main tool is a monthly bulletin, *IN-CIDE*, which includes a computer-produced index. The criteria for selecting input articles gives more importance to exhaustivity than to selectivity.

The CIDC, organised as an autonomous institution with a public budget, has a staff of 57

people, distributed in 4 departments: Systems and Analysis, Data Collection and Processing, Documentation, and Dissemination departments. Its many and varied activities can be summarised as follows:

(1) Maintain a store of basic data on Cataluña composed of various files with numerical, individualised and aggregate information on the level of municipalities and smaller areas.

(2) Compile inventories, collect and analyse documentation on statistics of Spain and on documents of a varied nature (economic literature, cartography etc.) on the Catalan region, supposed to be necessary to the territorial decision-making, basically socio-economic and urbanistic information.

(3) Promote the maximum and most effective use for Catalonia of the available information and documentation resources, both its own (data bases and documentary systems) and external (IR, reprography, data processing etc.) and designing ad hoc systems for the specific needs of groups of users.

(4) Promote the standardisation and homogenisation of methods together with the application of innovations in systems and techniques in production, transference and use of the information on a regional and national level participating in international coordination.

The data base is at present composed of some 15 files, separated into some 80 subfiles related to demography, and use, socio-economic information, mobility of economic agents and collective resources and equipment. The territorial area concerned is that of Catalonia, and the source of the data can be censures, sample surveys, by products of public administration activities etc., some files in the data base come from CIDC surveys since this maintains a relative important activity, in production of information in the catalan area. The territorial division is generally into small areas, working with geocodification codes with the DIME system (L.S. Bureau of Census) for urban areas and a square grid for the rest of the territory. Various packages (its own and external) of tabulation, calculation, statistics and automatic cartography complete the system.

The main documentary instruments, which date from 1960, are the following. The *Inventario de Estadísticas de España*, (with abstracts and indexes), a development of the ancient Guía de Fuentes Estadísticas de España, compiled for the first time in 1968 by the Servicio de Estudios de Barcelona del Banco Urquijo. This inventory is brought up to date every month by the *Boletín Bibliográfico de Estadísticas de España*. Secondly, the *Bibliografía Económica de Cataluña* (with indexes) whose last accumulative edition (1960–77) is under way and which includes references to published documents (monographs, reports, studies) and articles from journals, chosen with selective criteria. Thirdly, there is the Inventario de Información Cartográfica de Cataluña (1973) with full descriptions of the existing basic cartography.

At present the CIDC is preparing to carry out the first phase of its new policy of documentary networks on Spain and its regions, consisting of a cooperative network in economic documentation on Spain and its different regions, which will use the software SPLEEN, transferred from the centre de Documentation Sciences Humaines, for automatic processing. The first step, this very year, will consist of putting into action the documentary network on catalan economy, in collaboration with other centres in the region (research departments in universities, chambers of commerce, local administration etc.). A second network is planned for town-planning documentation.

Another project under way concerns data. The CIDC is to design and implement an on line data bank for Catalonia with an interactive IR system, provided with user-oriented packages of tabulation, computing, cartography etc. The project is being carried out in collaboration with the Instituto Nacional de Estadística, the Instituto Geográfico y Catastral and FUNDESCO and it is anticipated that the methods used for the data bank could be passed on to other regions of Spain. Other characteristics of this data bank are that it will integrate data files with bibliographic information files that it will run on municipal and smaller areas levels, and that it will include other types of information, such as ephemeral information from the press.

Unpublished documentation is a constant worry for the CIDC. At the moment it is initiating the collection, publication of lists of references, and dissemination by microfiches of unpublished documents (reports, working papers, theses, etc.) compiled in the region. It is also experimenting with the recording of conferences, debates, etc., on audiocassettes, in order to distribute copies on demand. The project as a whole will consist of promoting networks of

unpublished documentation on Spain and its regions, and will be carried out at the same time as those quoted above.

The CIDC is also working towards coordination on three levels—regional, national and inter-regional. Firstly, on the level of Catalonia it works through subcommissions for information coordination (health statistics, cartography etc.), in which participate information generator organisms, and public and private users of information. Also it tends to achieve coordination also through its networking policy, local diffusion centres, informal meetings with other documentation centres etc. At present in preparation for democracy in Spain, Catalonia is hoping to regain the self-government lost in 1939, and the CIDC is preparing to develop medium and long-term information plans for Catalonia, within the autonomical institutions, plans, of course, to be integrated in a new nationwide information and documentation policy, in strict cooperation with national and other region organs.

Secondly, coordination on a national level the CIDC has, since its formation, in fact, urged the Central Administration to adopt a modern, open information and documentation policy,— specially in statistical, economic and urban information—including regionalization, standardisation and active diffusion services. It has, therefore proposed projects (such as that of regional economic observatories) and participated, when it could, in the drawing up of plans on a nation scale (such as the White Paper on Urbanism, which did not come to be published nor applied) and in the feasibility study for the Spain-European Space Agency teledocumentation agreement. At the moment the CENIDOC and the CIDC are preparing an agreement project, by which the CIDC would be responsible for the study of the problems of information and documentation in economics and urbanism in Spain, and for implementing systems and networks on a nationwide scale. Other projects include cooperation in bibliometric and documentary research, development of software etc.

In third place, coordination on an inter-regional level. The CIDC is offering more and more technical help to similar centres which are starting in other regions of Spain, passing on its experience and methods and preparing to collaborate with them in systems and services through networking policy.

In general terms the CIDC owes its creation and development to the initiative of innovator groups within the Local Administration, but its aims have not been fully admitted by its sponsoring institutions. Moreover since its formation it has been an alien organism in a centralised state. All this has meant that its various projects and activities have developed with great difficulties and long delays.

III. SERVICES OFFERED IN INFORMATION IN SOCIAL SCIENCES

While the centres described in Part II are notable for actively dedicating strength and resources to the promotion of services for the public (the CIDC, for example dedicates 12 people to this task) all the centres quoted in part I also offer services to the public, in a more or less subsidiary form.

To perform retrieval, the ISOC and the CIDC have at their disposal, as well as their own indexes, a terminal each, through which they have interactive access to international files. The ISOC uses a dial-up terminal, with which it gains access to the U.S.A. bibliographic data bases SDC (ORBIT system) and Lockheed (DIALOG System) via TYMNET. It carries out searches on demand therefore, on the available socio-economic information files, (ABI, SSCI, PREDI-CASTS etc.) and also offers SDI. A good collection of international bibliographies as well, means that it can carry out manual searches. The CIDC uses a terminal on leased-line rule, connected to the ESA network (RECON system). It uses this to carry out searches for scientific and technical information on demand since these are the only subject matters available. We have already refferred to the project of expansion of the ESA data base, which is being negotiated, with ESA, by a group of Spanish organisms (FUNDESCO, CTNE, INTA, CIDC, etc.) which will permit the incorporation of, among others, numerous social sciences files. The CIDC will now also have at its disposal a dial-up terminal to gain access, in the neartime to SDC and Lockheed.

The reprography services are limited in general to the supply of copies on own documentary stocks. The centres, such as ISOC and CIDC, which accept any demand very frequently have to fall back on international centres, since the library resources in Spain leave much to be

desired, regarding documentation fron from both national and international sources. They lack, in many cases even the minimum of equipment and organisation necessary for making photocopies of articles from the journals they own, and interlibrary lending is not organised on a national level. The difficulties increase with certain types of documents, such as congress proceedings, and unpublished documents. The ministry of Education is only now to start to supply catalogues of doctoral theses presented in the Spanish universities, and still has no plans for anything that would facilitate access to them. ISOC, in Madrid, CIDC in Barcelona and IBYM in Valencia, are preparing a joint project to supply copies of Spanish theses on microfiches.

To concentrate now on data services, only the CIDC, up to now, has built up a service for the public, whether it be retrospective searches on statistics published in Spain, and reprography on its own information stores, or the use on demand of its regional data base on Catalonia. The Instituto Nacional de Estadística (INE) up to now has not developed any active policy of promotion of services in statistics, and does not supply tapes to the public; but it now has a project to develop a national data bank, and is collaborating with the CIDC project for an integrated Catalonia data bank mentioned earlier. Some organisms such as the Instituto Provincial de Urbanismo (IPUR) in Barcelona, maintain data banks for their own use, which can eventually be used by external users. Other centres offer the use on demand of specialised files, such as the CEDIN, of the Ministerio de Comercic (import–export statistics), or the Cámara de Comercio, Industria y Navegación de Barcelona (lists of firms according to type of activity). The Servicio de Estudios del Banco de España, on its part, is implementing a statistical series bank on the Spanish economy, which it will later put at the service of the public. On the whole a new interest in opening services to the public can be noted at the moment.

IV. TECHNICAL TOOLS USED

We have already quoted, in the previous sections, various characteristics of the technical means employed. Respecting computers, expecting the Ministry of Education, which works with UNIVAC, usually one of the IBM-370 models is used. Index production software in internally and ad hoc designed in each centre (ISOC, ICYT, CIDE, CIDC). Concerning software SPLEEN, the CIDC intends to use it in the documentary networks it is starting, as an instrument of homogenisation of methods. Concerning software of numerical data bases processing, diversification is the norm, as each centre has a tendency to run ad hoc problem-orientated systems. Problems of compatibility arise at all levels and are acutely felt as big obstacles to data exchange. Microfilm is still rarely used as a medium for transfer documentation, although its use is developing rapidly, especially the A6 size microfiche, (60 or 98 images) and the COM microfiche for computer generated indexes (ICYT).

There is great disparity in the existing systems since while some are functioning with interactive terminals, the use of computers in documentation is still very rare and is limited in general to the production of catalogues and printed indexes.

We should also point out that many libraries do not have reprography equipment, which limits, to a great extent, the use of their information resources.

V. USERS

Broadly speaking, the few available figures would indicate that the use of information and documentation services on behalf of the public is small compared with the estimated needs (ISOC, some 320 searches; CIDC, 1500 per year are significant examples).

Concerning nature of users, a comparison between the ISOC and the CIDC demands, distribution show similar figures for Administration (18 and 20% respectively). The University (39 and 40%) and inverse ones for business firms (6 and 35%) and Individuals (37 and 5%). Let us note the strength of University demand on both centres, a general feature.

Faced with this situation various courses of action are being planned—for the coordination of services on the one hand, and for the promotion of information and documentation on the other. Coordination is carried out above all in the field of reprography. Promotion operations are rare; but the CIDC is now developing, as well as the usual forms of promotion, a policy of multiplication of points of access to its services creating local information and documentation

centres (3 up to now) in organisms already established locally, such as the Chambers of Commerce, with which it is extering into collaboration agreements.

These are of a territorial-type; but, a systematic operation is also being carried out to promote the use of information services for groups of users with similar needs (financial institutions, urban planners, university lecturers), consisting of signing agreements for providing them specific information services.

It has also designed, in collaboration with FUNDESCO (which is financing it in part) a four-year plan for the promotion of the use of the RECON network in Spain and the progressive installation of dial-up terminals in sectorial and regional centres.

VI. EXISTING INTERNATIONAL COOPERATION IN THE FIELD OF SOCIAL SCIENCE INFORMATION

Up to now, official participation of Spain in international information bodies has been extensive in the traditional ones, at the library level, but rare and uncoordinated at the new information and documentation levels (UNISIST, for example), and and not social sciences-oriented. As concerns bilateral cooperation, ICYT participates in the European network Pool Betriebwirtshaft on enterprise management. Some centres now designing systems are contacting experienced institutions and centres in other countries, in a forseeable future cooperation.

Perhaps the CIDC is the centre which, from the beginning has most systematically maintained contacts and technical cooperation on various levels. Let us mention some of them, grouped by subjects:

—Regional information organisms and systems: INSEE, in Paris and the network Observatories Economiques Régionaux; Greater London Council Information Unit etc.

—Geocodification and Tabulation Systems: US Bureau of Census.

—Data Banks: Data for development (OCDE); European Urban Data Bank Symposium (the CIDC organised the 4th symposium in Madrid).

—Statistics: International Association for Urban and Regional Statistics (IARUS) in the International Statistical Institute.

—Exchange of demands and reprography: Centre de Documentation sur l'Urbanisme; Institut d'Aménagement et d'Urbanisme de la Rágion Ile-de-france, MICRO-URBA, etc.

VII. PLANNED PARTICIPATION IN INTERNATIONAL SYSTEMS

Firstly we should remember the aforementioned project to extend the ESA data base, which was initiated by FUNDESCO, with participation from the CTNE (which will supply the informatic infrastructure and other Spanish organisms (INTA, CIDC, etc.).

We have also already mentioned the transfer agreement of SPLEEN software between the CDSH and the CIDC, which will include exchange of tapes and participation in the future development of such software. The CIDC also intends to promote the participation of specialised Spanish groups in the CDSH sectorial networks, covering the appropriate Spanish documentations.

When the Spanish urban documentation network comes into use the CIDC will promote collaboration with the French network URBADOC, which already has the participation of other countries it hopes to make the tapes accessible in the future, on an interactive and multilingual system, via ESA or some other network.

Another project aimed towards the International field is that of the Instituto de Cultura Hispánica, which is thinking of applying ISIS software, from the ILO to hispanic documentation, in collaboration with some Latin-American countries.

VIII. FEASIBILITY OF MUTUALLY LINKED AUTOMATED INFORMATION SYSTEMS

This depends in the first place, on the existence of adequate computer and telecommunications infrastructures.

The Compañía Telefónica Nacional de España (CTNE already has a packet switching telecommunications network (the Red Especial de Transmisión de Dates) working for data transfer, and as a member of CEPT, is anticipating applying the standards which are developing on a European scale (the X–Z for example) to make Spanish participation technically possible in the European networks (EURONET, EIN etc.).

The CTNE is going to install concentrators connected to the ESA network and the Western Union network (U.S.A.) to facilitate Spanish users' access to interactive bibliographic data bases through dial-up terminals.

The CTNE is also implementing a public service of on line access to data bases, including various application packages-using FACOM computers.

A computer and communications infrastructure—such as this could be used by the afore-mentioned project to extend the ESA data base.

But interconnection of information systems is not viable without the previous homogenisa-tion of the information to be transmitted, and this is the basic problem yet to be solved, as regards both numerical and bibliographical information. This has been recognised at the recent coordination meetings between Catalan production organisms and information services.

We have already mentioned various projects which include computer linking systems, such as the regional Data Banks network, and the future economic and urban networks. Others are the Ministry of Education project for on line cooperative cataloguing, in which some university libraries are participating, and the Entel-Ibermética private network (INFONET) which offers on line computer services with data base management software, on a self-service basis, (used, for example, for the legal information project).

IX. NEEDS AND PRECONDITIONS FOR EUROPEAN COOPERATION

Social sciences information and documentation is different from scientific information and documentation in general, for notably: its multiformity, the dispersion of its sources, the importance of primary information (statistics, legislation etc.) is territoriality and the great diversity of its users (potentially all society), and importance of data.

A European information and documentation policy for social sciences should, therefore take these characteristics into account, and also consider the following points:

—Elimination of political, ideological and technical obstacles to the transmission of in-formation.

—The design of the most adequate information and documentation systems for all the various uses, and their implementation in networks, to try to grauantee both selectivity in function of their use and the widest possible coverage (IR systems, textual and numerical data banks).

—Organisation of systems and networks should be on a national basis, but connected on a regional and local level, and maintaining coordination on an international level.

—The governments should develop a policy of active diffusion of information produced by the administration, so that the public can make the most effective use of it. This should be done increasing the means of publication on the one hand, and on the other by promoting networks of territorial centres of information for all types of users.

—The creation of infrastructures of telecommunications and computers which allow the linking of systems on a national and international level.

—The development of infrastructures which facilitate access to documents, by means of networks of repositories, standardisations of media and networks of facsimile teletransmission.

—The design and implementation of a systematic plan of research and studies, both bibliometric on the available documentation and on the conditions of information transfer and use, covering also the degree to which the needs of the various users are satisfied by the existing systems. This should be carried out taking into account the various fields of study and territorial levels.

—Development of a coordination plan of professional formation in the field of information and documentation in its various aspects.

On the whole, as we commented in Part I we should consider the problem of information in its widest form: for social scientists, practicians, managers and citizens. We also think priority should be given to data systems over literature systems.

X. AREAS FOR EUROPEAN COOPERATION

Firstly, European cooperation, (in coordination with UNISIST) must play an important part in the direct implementation of information systems on documentation of international origin

and interest (basically theoretical methodological documentation), in the different fields of social sciences.

Secondly, in view of the territorial aspect of information for the social sciences the basic systems will have to be planned on a national level. In the long term European cooperation, therefore should concentrate its energies into facilitating intercommunication between these systems, through:

—The preparation of common basic infrastructures: standards, design of systems, prototypes, specialised software, telecommunication and data transmission networks, professional training, repository networks, services of interactive access to data bases, etc.

—The establishment of a coordinated plan of documental coverage by networks, integrating the regional, national and local levels of each country in European super-networks.

In the short term a series of coordinated activities could be carried out, leading to the maximum knowledge and exploitation of the existing resources; and standards could be drawn up on the numerical data and its processing in national/regional systems. For the first of these, varied inventories would have to be compiled: of periodical titles, congress proceedings, theses etc. and of their collections maintained in libraries, to ensure access to primary documentation. Inventories would also have to be compiled of the centres and services and the channels established to facilitate their use.

The Spanish centres are wishing to actively participate, to a greater or lesser extent according to their abilities, in European projects, specially at the moment, when they are starting so many projects on a national and regional level.

P.S. The author wishes to make the following assessment. As it is said in the text, information and documentation for the social sciences are just beginning to appear in Spain. And most centres, up to the present, have been working in a shy and isolated way, so that they have not made themselves known outside their immediate context.

This lack of information transparency may be the reason why this report does not reflect exactly the actual situation in Spain. And so, the centres and facts well known by the author have been emphasized whereas other interesting experiences have been probably underestimated.