Digital Information Resources in European Documentation Centers: A case study from Spain

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ABSTRACT

The purpose of this paper is to provide a guide map for persons interested of information sources offered by the European Documentation Centers and specialized electronic resources in the European Union. The study examined thirty-seven centers in Spanish institutions of higher learning. The web pages of these institutions were thoroughly inventoried and categorized, allowing the researcher to conclude that European documentation centers, by virtue of the diversity of information sources they gather in one place, constitute an important tool for users wishing to search and retrieve information on the European Union. The research also revealed a bias in information centers for institutional sources and a conspicuous scarcity of information resources produced in the centers themselves.

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Keywords: European Documentation Centres; European Union; Information sources; Electronic resources

RESUMEN

Recursos de información electrónicos en los Centros de Documentación Europea: el caso de España

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El propósito de este trabajo es esbozar el mapa de recursos electrónicos que ofrecen los Centros de Documentación Europea con el fin de proporcionar una guía de fuentes de información especializadas en la Unión Europea, que sirva de herramienta a aquellas personas interesadas en esta temática.

Para la realización del estudio se eligieron como muestra los 37 centros establecidos en instituciones españolas de enseñanza superior. A través del análisis de sus portales web, se perfiló el amplio conjunto de recursos informativos que aquellos ofrecen y se procedió posteriormente a organizarlos.

Tras la elaboración del trabajo y, a tenor de los resultados alcanzados, podemos concluir que los centros de documentación europea conforman una importante herramienta en la búsqueda y recuperación de información de la Unión Europea dado el amplio y variado número de recursos que permiten consultar. Sin embargo, se constata una fuerte tendencia a ofrecer fuentes oficiales de origen institucional y una notable escasez de recursos informativos elaborados por el propio centro.

Palabras clave: Centros de Documentación Europea; Unión Europea; Fuentes de información; Recursos electrónicos

Introduction

In any democratic institution or agency, access to information constitutes one of the pillars for the proper exercise of its functions. In the case of the European Union, this exigency is framed in its information and communication policy formally developed in the 1990s. With the ratification of the

European Union Treaty in 1992 and the treaty of Amsterdam in 1997, the principles of informational transparency and the right to access institutional documentation became the twin pillars of the European Union's actions (Olarán and Pérez-Trompeta, 2000; Sánchez Domínguez, 2001).

Nonetheless, concern regarding the creation of mechanisms to promote awareness of the policies and activities carried out by community agencies goes back as far as the 1960s, when the European Commission founded the European Documentation Centers for the purpose of multiplying information. These centers would eventually join others, and together comprise the European information system through which the EU attempted to solve the problem of information deficit, which for many observers lies at the root of the democratic deficit threating the Union itself (Marcella *et al.*, 1997).

Its diverse typology shall be directly associated with the public or with those sectors of society to which they are targeted (Moreira, 2002): The European Documentation Centres shall be in charge of meeting the information needs of universities; the Euro Info Centres shall do the same for the business sector; the Carrefours shall operate in the rural milieu and the Info Points shall be strategically located in urban areas.

The restructuring of the Euro-communitarian information system was launched in 2004; and the model for second generation information link up was defined (Llorente Pinto, 2007). The *Europe Direct* service, bringing together all of the contemporary information centers exclusively under the Directorate General of Communication of the European Commission, was also implemented.

As already mentioned, the European Documentation Centers (EDC) are one of the first information networks instituted by the European Commission. These centers have a dual thrust, acting as specialized information units and promoters of research and academic study in the European Community. Moreover, the EDC are installed in the libraries holding official EU documents and publications.

Because the EDC are located on university campuses, their main users are teachers, researchers, students and administrative or services personnel; although these centers are also open to the general public. Terra (2010) has written an interesting paper describing the profile and information needs of each of these groups with regard to their use of European documentation.

Among their diverse functions, the documentation centers are charged with facilitating user access to community information sources and directing citizens to those sources best suited to meeting their information requirements. Moreover, these centers carry out significant educational activities through courses, didactic and topical sessions, and other activities.

Currently there are 697 EDC worldwide, of which 403 are located on university campuses and research centers of EU member countries. Thirty-seven of these are located in Spain.

The deployment of the EDC in our country begin largely in the 1980s, after Spain joined the European Economic Community. The Universities of Deusto and Valladolid are among the first to be appointed European Documentation Centers, in 1980 and 1982, respectively.

The EU systematically sends the EDC without cost official EU institutional documentation and publications issued by the Office of Official Publications of the European Communities. With the launch of the official EU website *Europa* in 1995 entailing the availability of digitized documents, the role of the EDC has had to be reconsidered.

Moreover, the European Commission does not issue these centers any kind of common directives for the creation of web portals. As such, each information unit is responsible for determining the resources and electronic services it will provide to users. In this sense, as Terra (2009) observes, the specification of each country are reflected in the organization of the information provided through digital means in each center. Moreover, this often influences the type or resources and/or information offered by these centers, or the university faculty or department in charge of its management.

Even though EDC are visible in countries around the world, surprisingly very few studies have examined them. The scientific literature available focuses largely on document production of the European Union as a whole: such is the case of the monograph by I. Thomson (1989), which offers the first scientific approach to the topic, or that written by the Spaniard Maciá (1996), which constitutes the most comprehensive study to date of our country with regard to the Euro-community documentation repertoire. Other papers published focus on concrete aspects of European documentation and information, notably a paper published by Grau Gaudix (1998a), who provides a detailed analysis of the documents produced by the EU and a proposal for classifying the same. In a similar vein, Abiega (2000) contributes useful information for identifying the diverse documents produced by European institutions and the data appearing therein. In a manual illustrated with practical applications, Martín González (2007) describes the distinct tools that facilitate electronic retrieval of European documentation and information.

Other studies center on document groups or information tools such as official European publications (Masa and Salas, 1996), communitarian data bases (Fuentes García, 1993, 1994; Moreira, 2002), document production of a given community agency, such as that published by Martín González (2002)

on the European Parliament; and online access to documents (Aleixandre Baeza, 1996; Grau Gaudix, 1998b; Viesca, 1998; Martín González, 2005).

Taken as a whole these published scientific studies on the EDC do not address information resources. In this context, McCarthy (1996) published a brief paper on the role they play and the duties assigned them. In the same year, Thomson (1996) argues in favor of these centers on university campuses. In 1997, Algarbani published a paper on European information and documentation networks in Andalucia, describing the diverse nature of these information units which include EDC. Also in that year, Marcella, Baxter, Parker and Davies explored how users employ EDC in France and the United Kingdom. Finally, Olarán and Pérez-Trompeta (2000) published a paper on the resources offered in these centers and the access to this information through electronic means.

The choice of research focus is justified by the scarcity of scientific studies exploring specialized information resources offered by EDC, especially with regard to their typology and organization.

Thus, the main purpose of this study is to create a map of information resources, understood as fundamental resources of any agency or business (Moscoso, 1998), provided by the European Union through the web pages of the EDC.

More specifically, this paper also aims to:

- Offer a repertoire of digital information resources that helps solve the problem associated with locating EU documentation resources for interested parties and/or researchers or Spanish-speaking users.
- Provide order for the diverse specialized resources gathered and a classification model for the same.
- Inform those interested parties interested in European matter and/or those belonging to the Spanish-speaking community about online information resources produced by the EDC in Spain.

METHODOLOGY

Bibliographic review

The information search process was executed using diverse information sources.

Initially, researchers resorted to sources belonging to documentation sci-

ence itself in order to locate scientific studies on information and documentation repertoire in the European Union. Because of the transnational nature of the object of this research, researcher consulted largely monographs and widely recognized scientific journals enjoying international distribution. Researchers also explored data bases and collections in the fields of Library and Documentation Science. In light of the dearth of work studies on this topic, researchers proceeded to seek out EU institutional information sources in order to provide a more comprehensive perspective. As such, we consulted the official portal of the EU known as *Europa*; the Europe Direct network website, the official webpage of the Representation Office of the European Commission in Spain and the ECLAS catalogue.

The following search terms were used in all of the above cases: "European Documentation Center"; "European Union"; "information recourses", "recourses maps"; "electronic recourses" and "European information." The terms were combined in equations using Boolean and proximity operators.

Though we originally planned to limit the scientific literature review to more recent publications, the lack of studies and published materials on this topic obliged us to broaden the timeline under review.

Sample selection

A sampling methodology was chosen for this study. The total number of EDC in Spain constitutes the sample for this study.

Locating the EDC was achieved using two information sources in order to ensure the information offered coincided.

The first source used was the official portal of the European Union, *Europa* (http://europa.eu). Through this site we linked to the *Europe Direct* network (http://europa.eu/europedirect), which is comprised in part by the documentation centers. The second source consulted was the website of the Representation Office of the European Commission in Spain (http://ec.europa.eu/spain). In this case, using the *Resources link and European information points for citizens and businesses*, we located the EDC network for Spanish Autonomous Communities in which they exist listed in alphabetical order.

Having consulted both sources, we corroborated the existence of 37 European Documentation Centers in Spain. Thereafter, we proceeded to find out if each center had set up a webpage, and therefore, if one could gain access to information resources in digital format.

The localization of the URL addresses of the EDC was easy, because this information is provided by the European Commission Office in Spain by means of a link cited in previously. Other data are also provided, such as the

mailing address, telephone and fax numbers, the name of the director of the center and the documentation professional in charge, including the latter's email address, and office hours. With regard to the *Europe Direct* website, only the mailing address, telephone number and email address are provided.

The next step entailed ascertaining whether access to digitized information is allowed, which it was in most cases.

The EDC of the University of Las Palmas de Gran Canarias, the University of National Distance Education and the University of Navarra do not have web portals. The server hosting the University of Coruña webpage did not respond to repeated access attempts. In contrast, access to EDC digital information resources of the Complutense University of Madrid is achieved through a single web portal.

These circumstances resulted in the number of EDC under consideration to be abridged to 32.

Table 1. European Documentation Centers in Spain offering online access

University - CDE	Web link
Universidad de Córdoba	http://www.uco.es/webuco/cde/index2.htm
Universidad de Granada	http://cde.ugr.es/
Universidad de Sevilla	http://centro.us.es/cde/
Universidad de Zaragoza	http://www.unizar.es/derecho/cde/cde.html
Universidad de Oviedo	http://www.uniovi.net/cde
Centre Balears Europa (Palma de Mallorca)	http://www.documentaciocbe.eu/
Universidad de La Laguna	http://www.cdeuropea.ull.es/
Universidad de Cantabria (Santander)	http://www.buc.unican.es/CDE/
Universidad Autónoma de Barcelona	http://www.uab.cat/biblioteques/cde/
Escuela Superior de Administración y Dirección de Empresas (ESADE)	http://www.esade.edu/cde/
Universidad de Gerona	http://biblioteca.udg.es/info_general/unitats/cde/
Universidad de Lleida	http://www.sbd.udl.cat/sbd/cde.html
Universitat Rovira i Virgili (Tarragona)	http://www.urv.cat/biblioteca/cde/index.html
Universidad de Castilla La Mancha (Toledo)	http://www.uclm.es/centro/ceuropeos/
Universidad de Salamanca	http://cde.usal.es/
Universidad de Valladolid	http://www.cdoce.uva.es/
CDE Extremadura (Badajoz)	http://www.cdiex.org/
Universidad de Santiago de Compostela	http://www.usc.es/es/servizos/cede/index.html
Universidad Complutense de Madrid	http://www.ucm.es/BUCM/be/

•	Universidad Politécnica de Madrid	http://www.upm.es/institucional/UPM/Biblioteca/NuestraBiblioteca/ BibliotecasCentros/CEYDE
	Universidad San Pablo CEU	http://www.uspceu.es/pages/servicios/cde/centro-documentacion-euro pea-home.html
	Universidad Francisco de Vitoria	http://www.ufv.es/investigacion.aspx?sec=291
	Universidad de Alcalá de Henares	http://www.uah.es/biblioteca/biblioteca/cde04.html
	Universidad Autónoma de Madrid	http://biblioteca.uam.es/cdeuropea/default.html
	Universidad Carlos III	http://www.uc3m.es/portal/page/portal/biblioteca/sobre_la_biblioteca/colecciones/nuestras_colecciones/centro_documentacion_europea
	Universidad de Murcia	http://www.um.es/biblio/cde/
	Universidad del País Vasco (Bilbao)	http://www.ehu.es/p200-content/es/contenidos/informacion/cde_centro_documetacin_europea/es_cde/principal.html
	Universidad de Deusto (Bilbao)	http://www.iee.deusto.es/servlet/Satellite/Page/1116406939495/_cast /%231116406939495/UniversidadDeusto/Page/facultadesTPL
	Universidad de La Rioja (Logroño)	http://biblioteca.unirioja.es/cde/index.shtml
	Universidad de Alicante	http://www.cde.ua.es/
	Universidad Jaume I (Castellón)	http://sic.uji.es/cd/cde/
	Universidad de Valencia	http://cde.uv.es/

Data collection and analysis

The data examined in this study were gathered by means of consulting each one of the EDC web portals. During this process, we found that some of the URL addresses provided by the Commission Representation Office were not correct. Such was the case for the EDC of the Autonomous University of Madrid, the University of Murcia and the University of Deusto. On other occasions, the Commission did not list the center's website, which we took to mean none existed. In these cases, we decided to carry out our own search, discovering that this assumption was not correct. Such was the case for the University of Cantabria, which in fact does offer online access to its information resources.

Once all of the websites were located and verified, we proceeded to extract a list of information resources provided by the centers in order to discern any repeating patterns or models. Our initial intention was to consider almost exclusively the resources grouped under links titled "Internet Information Sources," or some such similar designation; however, a detailed search of the diverse sections comprising the structure of the websites led us to broaden the scope of the study when we discovered that there were many more information resources lying beyond such designations and which needed to be taken into account.

Finally, we proceeded to design a grouping model allowing us to order information resources on the basis of a systematic structure using large categories.

Even though diverse criteria were employed to design the model, we finally opted to classify resources on the basis of the type of information provided; since this option is considerably easier than trying to retrieve the information consulted by users. In this way the following categories were established:

- Juridical information recourses
- Institutional information recourses
- Contemporary issues information recourses
- Education information Recourses
- Bibliographic information Recourses
- Financial information recourses
- Statistics information recourses
- Information recourses 2.0

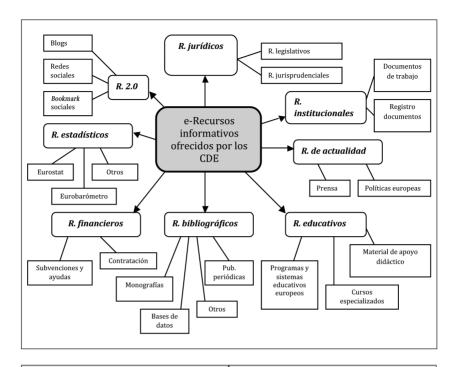
RESULTS AND DISCUSSION

The number and type of information resources provided by the EDC were quite significant. Some centers have even put together their own resource guides. The Autonomous University of Barcelona has issued a guide of information resources that is quite complete, containing not only official EU information sources, but also other kinds of sources associated with Europe in general. The University of Seville has made a listing European information sources into a sort of guide. Nonetheless, the creation of these tools is not the general habit among EDC.

There are other situations, such as the Autonomous University of Madrid, whose website offers only information on the center itself and does not allow access to other information or online services.

It is important to note that almost 90% of the information resources provided by EDC are supplied by the official site of the European Union *Europa*, which is the main source of information on Europe. In this way, the mediating role of EDC, whose work consists of redirecting the user to the primary source of information, is confirmed. In contrast, the lack of resources allocated to these websites is evident, as many are reduced simply to issuing informative bulletins.

The following lines provide a map (Figure 1) of the information resources of the Spain's EDC grouped by categories established on the basis of the type of information offered. Resources appearing frequently across all of the centers and those which stand out significantly, perhaps holding special interest for the user, are gathered for each case.



Spanish	English
Blogs	Blogs
Redes sociales	Social networks
R. estadísticos	Statistical R.
Otros	Others
Euro-barómetro	Euro-barometer
R. financiero	Financial R.
R. bibliográfico	Bibliographic resources
R. educativo	Educational resources
Subvenciones y ayudas	Subsidies and aid
Contratación	Hiring and job openings
R. Jurídicos	Juridical resources
e-Recursos informativos ofrecidos por CDE	e-Resources offered by EDC
Monografías	Monographs
Pub. Periódicas	Periodicals
R. legislativos	Legislative resources
R. jurisprudenciales	Jurisprudence resources
R. institucionales	Institutional resources

>	R. de actualidad	Current events resources
	Prensa	Press
	Políticas europeos	European policy
	Programas y sistemas educativos europeos	European educational systems and programs
	Documentos de trabajo	Work documents
	Registro documentos	Record documents
	Material de apoyo didáctico	Didactic support materials
	Cursos especializados	Specialized course offerings

Juridical information resources

The European Union produces a large quantity of juridical information, on one hand, the fruit of its legislative capacity and, on the other, of its jurisprudential faculties.

The resources regarding legislative matters can be accessed from practically all of EDC:

- The Official Journal of the European Union is the official bulletin of the European Union. It is published in both online and in print editions in the official languages of the member states. It is organized in series. The L Series covers the laws passed by institutions with power of decision. These acts include regulations, directives, rulings, recommendations and official reports. The C Series brings together the diverse communication and information issued by European institutions and agencies. The S Series contains notification of pubic tenders which are also available in the TED data base.
- EUR-Lex: This is the main legal web portal of the European Union, which collects the bills at different stages of the legislative and budget process, as well as legal documentation issuing from diverse institutions. That is to say, the legislative proposals of the Commissions (COM and SEC documents), consulting committee reports, joint council positions, regulations, ruling, parliamentary initiatives, etc. Likewise, the site allows users to consult the diverse document collections of treaties, international accords, current and consolidated legislations, jurisprudence and parliamentary questions, etc.
- PreLex: This data base brings together the documentation issued as a
 result of inter-institutional procedures. Updated on a daily basis, this
 tool provides all of the official texts generated during the legislative
 processes, such as proposals, recommendations and correspondence;

- and issued by the Commissions to institutions holding power of decision (Council and Parliament), and advisory agencies.
- Repertory of current community legislation: This index of community legislation sources and references contains community acts, largely current derived law. This repertory exists for the purpose of keeping a record of modifications made to legislative acts, while providing references to source drafts and associated modifications when these exists.
- Synopses of EU legislation: This data base exists for the purpose providing synopses of community legislation across all areas of community matters. It is managed by the European Commission and is targeted at specialists or person interested in the operation and policies of the European Union. This link is not habitually available on EDC sites surveyed, though a link does exist on the webpage of the EDC of the University of Lleida.
- Legislative Observatory of the European Parliament: This resource is provided only in English and French and provides all of the information concerning legislative and budgetary procedures, and non-legislative matters, including internal resolutions, initiatives and organizational procedures of the European Parliament.

With the regard to the jurisprudence issued by European Community Tribunals, the most frequently linked resources in Spanish EDC web portals are the following::

- CURIA: This site is the main resource for consulting European Community jurisprudence, allowing online access to the universe of sentences, legal acts, conclusions, reports and communiqués issued by the European Court of Justice, the General Tribunal and the Public Function Tribunals.
- *European e-Justice Portal* is a full-service window to European jurisprudence that is offered by very few EDC, one of which is the Rioja site that provides a links to it as part of its jurisprudence resources.

Some centers have prepared their own community law resource guides, such as the Universitat Rovira i Virgili. There are others; however, such as the University of Cordoba--more oriented to the field of economy-- which oddly do not offer any kind of legal resources to users. Others still go a step further, such as the University of Alicante, offering information organized by topic with regard to European Community legislation enforcement and transposition to Spanish law.

Institutional information resources

Documents drafted by EU institutions and agencies constitute a resource frequently listed on EDC portals because of the interest of researchers in European topics. Included among these documents are those produced by institutions in compliance with their respective mandates under diverse community treaties. Some centers have even prepared organized lists of institutional documents for the purpose of facilitating user access; such is the case of the EDC of the University of Laguna. Other institutional resources commonly included are:

- *EU General Activities Report:* This report is issued every February by the European Parliament to inform both parliament and general public about the past actions and future plans of community institutions and agencies, especially with regard to community policies.
- *The EU Bulletin:* Once published on a monthly basis, this bulletin provides a summary of activities carried out by the former European Community. The last issue was released in August 2009, and some centers allow users to access past numbers. After this date, the EU Newsroom service essentially replaced it.
- *Green Books:* These books published by the Commission are documents providing reflections on the political issues to be subjected to public hearings across Europe.
- White Books: These documents contain community action proposal in specific areas.

Established in 2001 within the framework of EU public access legislation, the document registries are an indispensable resource for access to institutional documentation. These registries provide reference information on documents produced by each institution so that they can be easily located by citizens.

Contemporary issues information recourses

In this category we have included two groups of distinct resources: in the first place, the resources drafted by communications media and, in the second place, the information associated with the distinct policies and activities executed by the EU. Both of these instances deal with news and current events in the EU.

With regard to the first group, news reports, press releases and the European agenda are the central pillars of EU current information content, and

these documents are provided in updated, comprehensive form by the EDC of the University of Valladolid through its webpage.

The resources most commonly provided in EDC webpages are as follow:

- RAPID: Belonging to the Spokesman Service, it is one of the Community's historical data bases, providing media outlets access to press releases regarding diverse EU policies and activities issued from Brussels.
- Newsroom: This unit constitutes the official press office of the EU, offering duly accredited media outlets current information and general materials to facilitate their journalistic tasks. Certain EDC, such as the one based in the University of Lleida, also allow access to press conference rooms of the European Commission and the European Parliament.
- Euronews: This is a press information service providing European news.
- Aquí Europa: This online daily originally issued from Spain and is now published in Brussels. It offers news on the European scene.

The University of Salamanca offers a wide, up-to-date list of information resources to mass media outlets, allowing journalists to consult *Euronews*, *Aquí Europa* and *Euroalert*, among others. The data base put together by the Complutense University of Madrid includes news and editorials published in leading Spanish newspapers from 1998 and in international dailies since 2003.

In addition to journalistic resources, EDC provide access to dossiers containing "current events." These dossiers include information on the current EU presidency, the Lisbon Treaty and the celebration of the European Year.

The other group comprising this category is called "Topics" by most EDC, and we have included it in order to fully describe the EU's diverse activities and policies. The broad repertory of online resources offered by EDC is organized into twenty categories as per the classification of the Directorate General of Communication of the European Commission. To see an example, consult the EDC of the Universities of Lleida or Salamanca.

Educational information resources

Among the educational resources available through EDC, we find three distinct groups.

The first group provides access to information resources on European education systems and programs, facilitating access to the following services:

• *PLOTEUS*, the EU official website in education and study opportunities in Europe.

- Information on European exchange programs: Erasmus, Tempus and Jean Monnet Action.
- Internships in community agencies and institutions: The EDC of the University of Deusto provides access to diverse institutional webpages containing information on paid and unpaid internships.

The second group offers an array of courses, master's degree studies and other formative activities organized by the center itself or by another party. The EDC of the University of Cantabria is noteworthy for offering a comprehensive catalogue of the formative courses it offers on a wide variety of EU topics.

The third group consists of centers that provide teaching and research resources. Almost all of those comprising this small group allow access to the *Teachers' Corner* website set up by the European Union. Others, such as the University of Laguna, facilitate information on the European Space of Higher Education. This access is also provided by the Universities of Cantabria and Valladolid. Still others provide access to the European Space of Research. The Complutense University of Madrid facilitates access to the digital collection of the central library of the European Commission and information on standards committees and agencies, patent offices and European calls for research projects.

The EDC of Tarragona stands out as a provider or didactic resources and a teacher support center, offering access to courses on European integration available at the university. For each course offered, the center provides a learning guide, basic bibliography and a list of EDC resources for professors and students enrolled.

Also outstanding is the virtual classroom offered by the University of Granada providing online support to students enrolled in its standard lecture courses.

Finally, the EDC of Seville, Cordoba and Granada have implemented a tool known as *Euroexperts*, which serves as a clearinghouse for locating expert teachers and researchers in European affairs working in Andalusian universities.

Bibliographic information resources

Within the large number of bibliographic and documentary resources supplied by EDC we must differentiate between the following types: monographs, periodicals, data bases and other resources.

Practically all of the European Documentation Centers consulted allow users to access monographs published by the European Union Office of Offi-

cial Publications (EUR-OP) and those supplied by the website *EUBookshop*. The centers also facilitate consultation of monographs published outside of the European institutional milieu. The EDC of the Autonomous University of Barcelona, for example, makes donated materials and other acquisitions from independent publishers, such as Cambridge University Press, Springer and Oxford University Press, available to users.

Our research distinguishes two subgroups of periodicals: specialized scientific journals and informative bulletins.

The access service provided Universitat Rovira i Virgili to abstracts prepared by New York University of papers published on European Community Law and Economy journals is especially worthy of note. The University of Castilla y la Mancha and the Polytechnic University of Madrid also facilitate consultation of specialized online journals addressing European affairs, though the listing provided by the former is not particularly comprehensive.

Moreover, the centers issue electronic bulletins vary significantly. There are news bulletins, such as that issued by the University of Seville, and informative bulletins, of which the bulletin issued by the EDC University of Valencia on European affairs is particularly outstanding and to which any user may subscribe in order to be kept up to date with regard to news and topics of events on weekly basis. The EDC of the University of Alicante publishes a bulletin for younger users, consisting of capsules on European affairs. The EDC of the University of Oviedo issues a repertory of abstracts of the journals it receives in the EDC center.

Finally, the EDC of the Universitat Rovira i Virgili makes a notable catalogue of books and duplicate journals available for users to consult.

Data bases constitute a common information resource on the EDC resource map. Generally, they facilitate consultation of data bases made available by the European Union and are organized either alphabetically or by topic. The EDC of the University of Lleida only allows direct access to the IATE terminology data base, while the EDC of the University of Valladolid has its own data bases, one providing titles and journals abstracts, and the other monographs (recent acquisitions); all of which are specialized in EU affairs.

Other resources to which the EDC frequently allows access:

- Who's Who, the EU directory can be accessed from the EDC of La Rioja.
- *ECLAS*, the bibliographic catalogue of the European Commission can be consulted from the University of La Laguna.
- *EUTube*, the multimedia documentation site on European affairs. The University of Rioja provides specialized audiovisual documen-

tation on European affairs in conjunction with the European Film Archive.

- Documentary depositories with resources specialized in Community topics. The EDC of the University of Alcala offers access to E-Scidr, ESO (European Sources Online) or Archidok. The center of the University of Santiago de Compostela allows users to consult the European Research Papers Archive and other non-European repositories, such as AEIplus of the University of Pittsburg.
- Pamphlets, maps, posters and all manner of dissemination information are supplied by EUR-OP through EDC in both online and print versions.

Financial information resources

In this category, we include the set of informative resources on subsidies, support programs and European funding programs. The most frequently occurring are as follows:

- EPSO: European Personnel Selection Office posts information on job openings in Community institutions, agencies and Community organizations.
- EURES: This site lists job opportunities in the EU and is available to both businesses and citizens. The University of Deusto, among other EDC, provides access to this site.
- TED: This is a data base containing public hiring information.

Several centers also offer the following resources:

- SIMAP: This is the European portal on public hiring to which the Complutense University of Madrid allows access.
- CORDIS: The Research and Development Community Information Service
- INFOREGIO: This is the information service on regional investment polices (FEDER Funds, FSE and Cohesion Fund).
- Community funding guide: This catalogue is highly recommended accessing information on community supports, financing instruments and partner search for the purpose of executing research projects. It is offered by the University of Valencia and the University of Cantabria.
- EU help guide: This guide is issued by the Barcelona Deputation for local corporations and is offered by the EDC of the University of Valencia.

The Extremadura Information and Documentation Center offers interesting information on European funding opportunities through a search engine and a messenger service on programs to keep users apprised of European programs with short application deadlines. Curiously, this site also provides updated Euro exchange rate information.

Statistical information resources

Though this information is offered by all most of the EDC reviewed, the statistical resources are in fact somewhat scant and are derived largely from the following two sources:

- Eurostat: This agency is charged with developing official statistics, both general and specialized. The EDC of the University of Extremadura shows the diverse collections of statistics issued by Eurostat, which are displayed in series grouped around diverse topic areas.
- *Eurobarometer:* This publication brings together the diverse opinion surveys on European affairs.
- Key European statistics: This site consists of a series of EU statistics.

Several centers add statistical information prepared by the European Central Bank, perhaps because they believe it is relevant to the current economic crisis.

Other statistical resources come from the National Institute of Statistics, the Statistical Institute of the Madrid Community (available in the EDC of the Polytechnic University of Madrid), the barometer of the Royal Elcano Institute and the Sociological Research Center (use of the latter two as well as access to glossaries of nomenclature and statistical terms is provide by the University of Carlos III).

The EDC of the University of Valladolid redirects users to the search engine and the statistical data directories prepared by the Universitat Pompeu Fabra.

Information recourses 2.0

The broad listing of resources offered in the European Documentation Centers comprises the so-called "Information 2.0"; which the user can consult in real time and is bolstered by its own contributions. Moreover, these information units employ 2.0 technologies to achieve the greatest possible dissemination of their resources, services and activities. In this area we find:

- Blogs: The Autonomous University of Madrid operates a blog listing calls for papers issued by the documentation center. The information consists of announcements on scholarships, grants, seminars, congresses, etc. Access to blogs on European topics is currently offered by the University of La Laguna, which distinguishes between institutional and specialized blogs, and the University of Valencia.
- Social bookmarks: The Autonomous University of Barcelona employs the *Delicious* tool to group favorite websites with resources on European topics.
- Social networks are already available in the EDC of Extremadura, which maintains a Facebook page. The Francisco Vitoria University and the University of Valencia maintain twitter accounts.
- EDC of the University Extremadura, the University of Santiago de Compostela and the University of Valencia allow syndication of contents (RSS), and the latter also offers access to its information by means of tags.

Conclusions

In recent years the EU has shown consistent concern for providing information access. This task is facilitated by diverse information units, not the least of which it the European Documentation Centers that operate on university campuses acting as intermediaries between specialized information sources and citizens.

In order to improve their information access mission, the EDC have created their own websites where they offer access to sources and document services. Almost all of these user-friendly, well-structured websites allow users to consult a broad range of resources. Nonetheless, there are differences between the websites maintained by the diverse centers. At first glance, for example, the EDC of Gerona is obviously outdated, while the EDC of Zaragoza is deficient. In contrast, the EDC of Salamanca is quite rich, while that maintained by the EDC of Zaragoza uses information 2.0 technologies.

Moreover, since no European Commission policy requires centers to offer certain sources of information on their respective webpages, each center selects the information resources it wishes to offer. Nonetheless, this selection tends to favor the scientific areas of the director of the university, the EDC or the faculty.

With regard to the origin of the resources, most are prepared by the European Union itself. As such, the EDC act merely as mediators between the original source and the user. This circumstance, apparent in all the EDC worldwide, is most evident in the field of law, institutional documentation, and statistical and funding information, for which EDC link to official websites of the European institutions and agencies. The rest of the information is comprised of those resources prepared by the center itself or information from other, non-community sources, something observed frequently in bibliographical and educational resources, and those we have denominated 2.0.The second group features informative bulletins and news in formats similar to blogs specialized in European affairs.

In terms of size, the juridical information group is the largest, followed by institutional information resources. This circumstance is to be expected in light of the large legislative and jurisprudential reach of granted under European Union Treaties and their influence in the legal frameworks of the member states. In other matters, the set of work documents produced by European institutions and access to the same by means of document registries are often demanded by EDC users. Statistical information produced by the European Statistics Office (Eurostat), opinion surveys issued by Eurobarometer and information on the community funding and other current information (early on, the European Union has been concerned with informing the media about its policies and activities) are also in high demand. The presence of bibliographic and document resources is best understood in the context of the universities with EDC offices, and can be justified in their condition as drivers of academic studies on Europe. In contrast and noteworthy, despite their association with universities offering specialized courses and diplomas on the EU, there are scant resources offered to support teaching and research.

Special mention is deserved by the presence of EDC in social media networks, such as Facebook and Twitter. Of the total EDC examined, a very low percentage has a web 2.0 presence. Only the EDC of the Francisco Vitoria University, the University of Valencia and University of Extremadura offer any such visibility, which is surprising since social media has become a key means of dissemination of information, especially among young people who are a majority on college campuses. No doubt, the presence of the these information units on social media shall contribute to raising awareness about EDC and, by direct communication with their cybernauts, learning about the information needs of their users.

We can definitely conclude that given the large number and diverse nature of resources offered, the EDC comprise an important point of access to

EU information. Nonetheless, their role as mere transmitters of information, perhaps, should be recast, especially in light of the strong tendency to offer official sources with scant attention paid to the added value of providing specialized information produced by the EDC themselves.

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