

PART V
Regional Information Resources

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Oceanological Documentation in France

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ABSTRACT

l'Institut Français de Recherches Scientifiques pour l'Exploitation de la Mer (IFREMER) groups engineers, researchers and administrative staff in the headquarters in Paris as well as five centres throughout France and 20 stations overseas, and in ships covering the world's oceans. A special department, Documentation and Publications Service, was created for the information aspects. Its aims are documentation retrieval, especially on the ASFA database, and IFREMER's publications: books and serials, such as *Equinoxe*, and other journals it is involved in such as *Oceanologica Acta* and *Aquatic Living Resources*.

The merger of two Institutes and the geographical distribution of IFREMER centres gave the new information service a good opportunity to create an original library management system. The conception is to consider all the collections of the centres, especially of the libraries in Brest and Nantes, as one, uniformly treated to constitute a unique bibliographic system with two databases - LIVREMER for books, and REVUMER for serials - accessible by any IFREMER searcher anywhere. To operate this system needs cooperation of the librarians for accessions, documentation, processing, and loans. It offers the searcher a direct, clear, open and quick service response. The choice of software in MINISIS. A user's guide was published in 1986 to explain the functions, the means, and presentations of the Documentation and Publications Service.

INTRODUCTION

In France, oceanographical documentation has existed for a long time: The Service Hydrographique and The Service Historique de la Marine date back to the 17th century, and a library was established at the Museum National d'Histoire Naturelle in the 18th century. All of them possess valuable collections of old manuscripts and rare editions and maps, and some of French oceanographic institutes are among the oldest marine laboratories in the world. A century ago, thanks to the initiative of the naturalist Lacaze-Duthiers, marine biology stations were set up at Roscoff and Banyuls and are now part of the University of Paris. At the beginning of 20th century, Prince Albert I, a pioneer in oceanography, inaugurated the private foundations of Musée Oceanographique in Monaco and the Institut Oceanographique in Paris.

A Large Variety of Marine Related Institutes

Along the French coastline from Wimereux on the Channel to Monaco on the Mediterranean, some forty marine laboratories are to be found, each with its own field of interest, its special status and its specialized library. In France there are also

- Universities with marine laboratories: Brest, Rennes, Caen, Bordeaux, Marseille, Nice and Paris.

- Specialized institutes with sections on marine affairs: Institut français du pétrole (IFP), Bureau de recherches géologiques et minières (BRGM), Météorologie nationale, Institut national de recherches agronomiques (INRA), more devoted to the study of brackish and fresh waters, Centre national du machinisme agricole, du génie rural, des eaux et forêts (CEMAGREF) Division ALA, Institut du droit international des transports (IDIT).

- National organizations of a general scientific and technical interest with important sections on marine sciences: Centre national de la recherche scientifique (CNRS), Muséum national d'histoire naturelle (MNHN), Centre de documentation de l'armement (CEDOCAR), Institut français de recherches scientifiques pour le développement en coopération (ORSTOM).

- Public administrations dealing exclusively with the sea: the Ministry of the Sea with its information center and l'Institut français de recherche pour l'exploitation de la mer (IFREMER).

Among the international organizations established in France, we have a section devoted to the study of some aspects of the sea: Intergovernmental Oceanographic Commission (IOC at UNESCO) and Organization for Economic Cooperation and Development (OECD).

NEED FOR COORDINATION

Owing to their wide distribution throughout the French coast and the variety of their objectives, cooperation is essential among all these libraries. A group of librarians and information specialists with a common interest in oceanology has been formed to work together and exchange ideas and experience. Meetings are held annually at various centres and have given rise to various publications. Efforts are being made to strengthen links with colleagues overseas and to encourage an international cooperation. A directory of these libraries is available from IFREMER: *Directory of French Libraries and Documentation Centres for Sea and Fresh Waters*.

Coordination with the Preparation of the "DICTIONARY OCEAN"

For several years, groups of French specialists have been preparing an encyclopedic dictionary on the ocean which will be published in 1989. It will include full definitions of some 5000 terms, with diagrams, tables and translations of each term in English, German, Spanish and Russian.

Coordination and traditional cooperation are organized with the exchange of printed information (commercial literature or non-conventional literature as theses, reports, memoirs), as well as the use of updated tools to answer the need for information of the scientific community; there are bibliographic and textual databases, and international, national or regional databases.

ASFA NETWORK

A monitoring network is another aspect of the coordination between libraries. In France, many institutes take part in the international monitoring Aquatic Sciences and Fisheries Abstracts (ASFA) system and are responsible for analyzing French literature on oceanology. These organizations are INRA, CERS, a laboratory of MNHN, ORSTOM, Institut Océanographique and CEMAGREF. This work is coordinated by the Service de la Documentation et des Publications of IFREMER in Brest. The participation represents 5% of the world oceanological literature.

Since October 1987, ASFA was available at IFREMER on the new exploitation system GCOS 7 with the software MISTRAL. However, ASFA was only accessible for the IFREMER's scientists and the ASFA partners. At the moment, the ASFA database is available on systems such as DIALOG, DIMDI, and ESA.

ON-LINE SEARCH (or Computer-Assisted Retrieval CAR)

There are two trends:

Creation of multidisciplinary or specialized databases accessible on information retrieval services.

In this field, various possibilities of on-line searching are available to French scientists. Apart from the international networks like the information retrieval services DIALOG, DIMDI, ESA, Maritime Information Center in Rotterdam, Institute BATELLE and others, the oceanologists in France have access to the bibliographic PASCAL database set up by the CNRS via TELESYSTEMES (information retrieval center). The main literature sources of PASCAL are serials, doctoral and master theses, reports, and conference proceedings.

Other French information retrieval services are CEDOCAR with the multidisciplinary FIESTA (CEDOCAR) database (sections on oceanographic technology, materials, navigation, and mathematical sciences), and others such as SUNIST and GCAM.

In 1989, IFREMER hopes to extend the access of the ASFA database to the French partners in oceanology.

Creation of specialized databases accessible via the institutes' libraries which are providers.

The "Chaine Documentaire des Ports" with 20,000 records. The fields covered are harbour activities; harbours; maritime transport; traffic; navigation; harbour management; and related legislation.

TRANSIDIT database, a textual database on the jurisdictional aspects of transports with a maritime section and another on fluvial policy.

The laboratories of MNHN, as well as the laboratories of Nice, Montpellier, and Paris universities maintain textual biological databases. Some of these databases, with the agreement of the providers, are accessible on-line; other ones are only accessible by the laboratories which maintain the database.

Besides these databases, other systems have been set up by numerous water and sea documentation centres and libraries. For information on these databases see Appendix.

In 1987, a survey was undertaken by IFREMER, which showed the heterogeneous capacity of the documentation structures as well as the diversity of the software used. There were commercial software, micro software, mini software, mini-micro software, or softwares created by computer engineers of the various institutes.

Institutes very often created their own directorate database for the available documents at their library (books, theses, and conference proceedings). Sometimes, laboratories or scientific departments created, in their own specialization, bibliographic databases retrieving data acquired from other databases available through the information retrieval centers. Therefore, even in the same institute, various systems were established with different software.

The main difficulty is the compatibility of these files; they must be adapted to perform partial or total transfers from one computer to another. This operation must be possible between micro-computers and also from micro to mini-computers or mainframe and vice versa, according to different types of information (centralized or decentralized). To be successful, it would be necessary to define a standard input file formatting.

In a wider context, would it not be possible to envisage a system capable of exchange between institutes (information exchange and loan, as well as copying of diskettes) and with defined administrative, financial and legal conditions? For this to happen coordination becomes necessary.

CREATION OF IFREMER

To achieve this goal of a national marine program and exchange system, IFREMER was created in 1984 as the result of the merger of

L'Institut Scientifique et Technique des Peches Maritimes (ISTPM)

and the

Centre National pour l'Exploitation des Oceans (CNEXO)

The staff includes 1200 employees: engineers, researchers and administrative staff in the headquarters in Paris and five main centers in France and twenty stations overseas. The main activities and presentations of the Institute are ocean sciences, fisheries and aquaculture, technological research, data processing, testing facilities, underwater operations, deep-sea technology, and ocean thermal energy conversion.

A special department of IFREMER, the Documentation and Publication Service is mainly devoted to

1. French monitoring of input to the ASFA System.
2. Documentation retrieval, on-line search on the ASFA database and on various information retrieval centers such as DIALOG, ESA, CEDOCAR.
3. IFREMER's own books and serials for which our center is editor, such as *Equinoxe*, or publications in which we are involved, in such as *Oceanologica Acta* and *Aquatic Living Resources*.

The merger of the two institutes, and the geographical repartition of IFREMER's centers offered to the new service a good opportunity to create an original library management system. The concept is to consider all the collections of the centers as a whole, especially of the libraries in Brest and Nantes, uniformly treated to constitute an unique bibliographic system with two databases, LIVREMER for books, and REVUMER for serials, accessible to all IFREMER's searchers from everywhere.

To operate, it needs efficient coordination of the librarians' work for accessions, documentation processing, and loans in order to offer to the scientists, a direct, clear, open, and rapid service. The selected software is MINISIS, in France; this database management system is commercialized by DATAWARE. A user's guide was published in 1986 to explain the functions, and the presentations of the Documentation and Publications Service.

APPENDIX

French Database Providers

Centre National de la Recherche Scientifique (CNRS)
26 rue Boyer
75791 - PARIS CEDEX 20

This center maintains the pluridisciplinary bibliographic PASCAL database. PASCAL covers the fundamental topics of physics and chemistry, life sciences (biology, medicine, psychology) applied sciences and technologies, earth sciences and information sciences. The main literature sources are serials, doctoral and master theses, reports and conference proceedings. This database was created in 1973 and has more than 6.5 million records. PASCAL database is available on TELESYSTEMES, ESA and DIALOG.

Bureau de Recherches Geologiques et Minieres (BRGM)
BP 6000
45060 ORLEANS CEDEX

This institute realizes the following bibliographic databases: the ECOMINE database, the GEODE database which became in 1987 a field of PASCAL and is now called PASCAL-GEODE. These databases are accessible on TELESYSTEMES and cover the fields of earth science, economy, and technology.

Institut Francais du Petrole (IFP)
1-4 avenue du Bois-Preau
BP 311
92506 RUEIL MALMAISON CEDEX

IFP maintains three databases:

1. Sea oil extraction accidents.
2. Tanker accidents with oil pollution spills.

IFP must be contacted directly in order to access to those files.

3. IFP thermodynamique: Bibliographic records of serial publications and specific books on chemistry available on TELESYSTEMES.

Centre de Documentation de l'Armement (CEDOCAR)
21 bd Victor
75996 PARIS ARMEES

CEDOCAR is a file supplier as well as an information retrieval center. It is the file provider of the multi-disciplinary FIESTA (CEDOCAR) database, which includes a section on oceanographic fields (technology, materials, navigation, and mathematical sciences). This database has existed since 1972, with an annual increase of 30,000 bibliographic records. It covers worldwide literature: serials, books, memoirs, conference proceedings, patents, standards, reports, and theses. FIESTA database is accessible on CEDOCAR Information Retrieval Center with its host computer system and on TELESYSTEMES via the TRANSPAC network.

Direction des ports
Service central des ports maritimes et des voies navigables
2 bd Gambetta
60321 COMPIEGNE

The bibliographic database "Chaine documentaire des ports" was created in 1978 and contains 20,000 records. It covers all harbour activities: maritime harbours, harbour settlements, maritime transports, traf-

fic, navigation, fishing, legislation, and economical aspects of harbour transport. It is an internal software, and the data entry is maintained in each harbour. The information center of the Ministry of the Sea participates to this database realization. This database is accessible via the TRANSPAC network by the Direction de ports de Compiègne (France) and in a short time by VIDEOTEX terminal.

L'Institut du Droit International des Transports de Rouen (IDIT)
Palais des Consuls
quai de la Bourse
76000 ROUEN

IDIT, created in 1969, studies all the legal, economical or technical aspects related to any transport question at a national and international level. IDIT supplies the TRANSIDIT database which is a textual database on all the legal decisions taken by French and foreign jurisdictions. It is available in France, via TRANSPAC network with a VIDEOTEX terminal, and outside of France with a VIDEOTEX terminal that is compatible with French PTT standards.