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# A directory of information resources on radioactive waste management, decontamination and decommissioning, and environmental restoration

Data as of June 1995



INTERNATIONAL ATOMIC ENERGY AGENCY

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#### FOREWORD

In view of the many challenges of managing the increasing amounts of radioactive wastes from radioisotope applications, nuclear fuel cycle activities, nuclear facility decontamination and decommissioning and environmental restoration, many countries have significantly increased their expenditures on research and development (R&D) in these areas. This increase in financial expenditure and efforts has also been augmented by the need to obtain data and information on R&D including information on socio-economic and legal aspects of radioactive waste management.

Over the past decade there has been a corresponding growth in the number of scientific and technical publications, databases, networks, and computer codes. This expansion in the quantity of information creates difficulties for those seeking it — in terms of knowing what is available and how to access it.

The rapidly increasing quantity of research results can only be sensibly exploited with the aid of new information technologies. At the same time, these technologies also provide the opportunity for making the various fields of knowledge more comprehensible and for promoting synergy between them. The optimum provision and exploitation of existing knowledge for further utilization in science, industry and government has a key role to play now and in future.

This also applies to the strengthening of national and international scientific cooperation and to information exchange which is becoming particularly important in the fields of knowledge where developments are essentially dynamic. Such expansion is crucially dependent on scientists, engineers and technicians knowing what is happening elsewhere in the world, where knowledge already exists, and which scientists and engineers are working in particular fields.

This directory is intended to aid scientists, engineers, policy makers and managers in finding other information sources in addition to the information they derive from their personal contacts.

This report was prepared at Consultants Meetings held in Vienna on 6-10 December 1993, 31 October-4 November 1994, and 8-12 May 1995. The IAEA officer responsible for the report was Ms. C.Y. Chan-Sands of the Division of Nuclear Fuel Cycle and Waste Management.

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## EDITORIAL NOTE

In preparing this publication for press, staff of the IAEA have made up the pages from the original manuscript(s). The views expressed do not necessarily reflect those of the governments of the nominating Member States or of the nominating organizations.

Throughout the text names of Member States are retained as they were when the text was compiled.

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## **1. INTRODUCTION**

It is no understatement to say that the amount of information produced as a result of scientific and technical research is overwhelming. Also, over the last few years, the possibilities to access this information have been increasing. It gets more and more difficult for scientists, engineers, policy makers, managers and information specialists to find their way in the information maze and to select exactly the information they want. This is true in the fields of radioactive waste management, decontamination, decommissioning and environmental restoration.

## 1.1. PURPOSE

The purpose of this TECDOC is to provide an overview of the most common sources of information available in the above-mentioned areas.

The main objectives of this publication are:

- to provide important information sources covering the scientific, technical, socioeconomic and legal aspects of radioactive waste management, decontamination and decommissioning, and environmental restoration, and
- to provide information on tools to access the sources.

This directory includes the following major topics:

- the most commonly cited information sources of scientific, technical, socio-economic and legal data are listed, distinguishing between:
  - (a) primary sources, including journals, newsletters, patents, standards and regulatory information, and full-text and numerical databases;
  - (b) secondary sources, including abstracting and indexing journals, bibliographic databases; and
  - (c) other sources, such as directories, electronic information sources, electronic discussion groups and glossaries.
- the most important information suppliers by and through which the information can be made available or accessed.
- a description of how the directory will be maintained and a discussion of future needs.

## 1.2. SCOPE

It must be stressed that within the context of this directory only general information can be given about the information sources and their contents. Detailed information on how to search databases and how to locate the information sources can be acquired through the information experts or librarians at your institute or organization, or via public or university libraries. In this directory, also, no judgment is given of the importance of one information source over the other. It is up to the users to decide which information source holds the most relevant information. Finally, in most of the information sources mentioned here, the subjects of radioactive waste management, decontamination and decommissioning, and environmental restoration, are parts or subsets of the information source. In most cases documentation, in which more details on the contents of the information sources are given, can be requested from the information providers.

## 1.3. THE ROLE OF THE IAEA

Under Article VIII of its Statute, the IAEA has a mandate to facilitate the exchange and distribution of information on subjects related to the peaceful uses of atomic energy to its Member States. Within this mandate, it "must assemble and make available in an accessible form the information provided by Member States" and take positive steps to encourage the exchange of information among its members. Furthermore, the IAEA is to serve as an intermediary among its members for this purpose.

The IAEA has fulfilled this mandate since its inception in 1957. However, for the present and future, the IAEA faces some new challenges in facilitating the exchange and distribution of information as information technology (IT) continues to evolve. First, the IAEA will need to develop the infrastructure to manage the ever increasing quantities of scientific and technical information. Second, the IAEA needs to develop a variety of mechanisms for the distribution of internal and external information to Member States. Thirdly, the IAEA needs to facilitate further the electronic exchange of information between Member States and provide gateway access to other information sources and providers. Considering these challenges, the IAEA is aware that it must maintain a current information technology capability and fulfill its responsibilities in facilitating the exchange and distribution of information with these new technologies — such as electronic access to information, less expansive document and database storage (CD ROM) and information access tools such as this directory of information sources.

## 2. MAJOR INFORMATION SOURCES

Information in this section is divided into scientific, technical and R&D sources versus socio-economic, legal and news type information. Section 2.1 is designed to meet the information needs of scientists and engineers whereas Section 2.2 is addressed towards policy makers, managers and others.

We distinguish between *primary*, *secondary* and *other* information sources. Primary information sources are document types that contain the original literature. Such documents can appear in many forms: journal articles, books, newsletters, patents, standards, and computer programs. Secondary information sources are document types which refer to primary sources. Such document types mostly appear in the form of bibliographic data, in many cases with abstracts and keywords in, for example, abstracting and indexing journals, bibliographic databases and directories. Bibliographic data usually provides information about the title, author and characteristics of the document (e.g. type, number of pages, publisher, availability). Abstracts and keywords reflect the contents of the document. Other information sources is the third category of sources which do not (directly) meet the above mentioned criteria. Information sources under this category can be as diverse as directories, glossaries, handbooks, encyclopedia, electronic discussion groups, electronic information sources, and information on conferences and exhibitions.

Many of the information sources are available on different media: in printed form, in electronic form, as online databases via online hosts, as local databases on CD-ROM (compact disc — read only memory) or diskettes. This directory includes descriptions of the sources, as well as their availability on the various media.

#### 2.1. SCIENTIFIC, TECHNICAL AND R&D SOURCES

Section 2.1.1 focuses on the most important primary sources, as determined by a statistical analysis. Included are conference papers, reports, books and book articles, journals and journal articles, and patents. For each document type the most important characteristics will be given.

In Section 2.1.2, two secondary sources are discussed: abstracting and indexing journals, and bibliographic databases. These sources are characterized and examples are given. In Section 2.1.3, other sources are mentioned, like glossaries, directories, handbooks, research in progress databases, electronic discussion groups, conferences and exhibitions, and computer codes.

## 2.1.1. Primary sources

As mentioned earlier, *primary information sources* can be categorized into a number of different types of publications with specific characteristics. Most of the bibliographic databases provide information about the document type. In order to appreciate the quantitative importance of the various categories of information sources, a statistical analysis of document types was carried out in the bibliographic database INIS (International Nuclear Information System) of the IAEA on a selection of 11077 documents with radioactive waste management as main topic. This analysis covered the years 1990 to 1993 via the STN host (see Table I). The most important document types will be discussed in this order.

Primary sources can be located by consulting subject oriented databases or printed indexes such as the INIS database and the INIS Atomindex, respectively. For certain document types, i.e., patents, databases which are document type oriented tend to be more comprehensive and may provide more detailed information. The most up-to-date sources of printed material are still the catalogues of scientific editors. The big journal and book sellers provide also thematic selections of current and new editions. Scientific associations, national and international agencies like the IAEA and NEA (Nuclear Energy IAEA) are important producers of information and furnish catalogues of their editions. All these sources (bibliographic databases, indexes, catalogues) are secondary sources that will be discussed in Section 2.1.2.

#### Conference papers

Conference papers are presented and published during and as a result of conferences, symposia, workshops, etc. They mostly contain the intermediate or final results of research, development and demonstration (RD&D) projects. The papers can be considered as up to date information of such projects. The quality of the information varies, depending on the importance of the conference or the extent to which the papers are reviewed by experts (peer review). They can be published through the authorities that organized or financed the conference or by commercial publishers. The availability depends on the method of publication, i.e. through commercial channels or as so-called 'grey literature'.

#### Reports

Reports reflect the results of RD&D projects in a more detailed form than, for example, conference papers or journal articles — although they are less up to date. The reports are published by the institutes where the RD&D projects were carried out or published under the authority of institutes that financed such projects. The availability of reports depends strongly

on the possibility to order such documents at the issuing organization or through their suppliers and/or distributors. It also depends on the occurrence of availability notes in, for example, bibliographic databases.

Number of publications	Primary sources
5392	CONFERENCE PAPER
5027	REPORT
2560	BOOK ARTICLE
1710	JOURNAL ARTICLE
689	REPORT ARTICLE
444	MISCELLANEOUS
421	PATENTS
326	PROGRESS REPORT
224	BOOK
179	SHORT COMMUNICATION
82	DISSERTATION
38	COMPUTER PROGRAM DOCUMENTATION
25	LAW
5	FILM
5	STANDARD

#### TABLE I. STATISTICAL ANALYSIS OF RADIOACTIVE WASTE MANAGEMENT DOCUMENT TYPES IN INIS FOR THE PERIOD 1990–1993

## Books and book articles

Books can consist of the collection of papers from a conference or reflect the state of the art in a specific scientific or technical discipline. Most of the books are published on a commercial basis and therefore easily available through the normal publishing channels. Book articles are chapters, which can cover different subjects and, therefore, are described separately and occur as such in bibliographic databases.

#### Journals and journal articles

Journals are published periodically (f.e. weekly, monthly, quarterly, etc.) and contain articles about a specific subject within the scope of the journal. Most of the journals are issued by commercial publishers, sometimes under the authorization of institutes, associations, etc., and therefore easily available or to subscribe to. Many times, journal articles are based on previously published reports or conference papers. To make a selection of the most important journals that cover aspects of radioactive waste management, again a statistical analysis of journal titles has been carried out in the INIS database selected by means of a very global search profile, comprising radioactive waste management, decontamination, decommissioning and environmental restoration. This resulted in about 10 000 documents for a coverage of three years with 402 different journal titles cited (see Table II).

Number of publications	Journal title	Annex Reference No.
292	TRANSACTIONS OF THE AMERICAN NUCLEAR SOCIETY	A1.1
68	NUCLEAR ENGINEERING INTERNATIONAL	A1.13
46	RADIOACTIVE WASTE MANAGEMENT AND NUCLEAR FUEL CYCLE	A1.16
35	ATW. ATOMWIRTSCHAFT, ATOMTECHNIK	A1.6
30	NUCLEAR EUROPE WORLDSCAN	A1.14
27	JOURNAL OF NUCLEAR SCIENCE AND TECHNOLOGY(TOKYO)	A1.11
26	NUCLEAR TECHNOLOGY	A1.15
23	APPLIED GEOCHEMISTRY	A1.2
23	ATOMNAYA ENERGIA	A1.4
20	JOURNAL OF NUCLEAR MATERIALS	A1.10
20	RADIOCHIMICA ACTA	A1.17
19	ATOMNAYA TEKHNIKA ZA RUBEZHOM	A1.5
19	FUSION TECHNOLOGY	A1.7
19	HEALTH PHYSICS	A1.8
18	ATOM (LONDON)	A1.3
18	NUCLEAR ENGINEERING AND DESIGN	A1.12
16	JADERNA ENERGIE	A1.9

## TABLE II. STATISTICAL ANALYSIS OF RADIOACTIVE WASTEMANAGEMENT JOURNAL TITLES IN INIS FOR THE PERIOD 1990–1993

Journal title	Annex Reference No.
American Ceramic Society	A2.1
International Journal of Radioactive Materials Transport	A2.2
Journal of Environmental Radioactivity	A2.3
Journal of Nuclear Materials Management	A2.4
Journal of Radioanalytical and Nuclear Chemistry, Articles	A2.5
Journal of Radioanalytical and Nuclear Chemistry, Letters	A2.6
Nuclear News	A2.7
Radioactivity & Radiochemistry	A2.8
Radwaste News	A2.9
Separation Science and Technology	A2.10
Soviet Radiochemistry	A2.11
Waste Management: Industrial, Hazardous Radioactive	A2.12

#### TABLE III. SPECIALIZED JOURNAL TITLES

Because the statistical analyses are taking into account quantitatively the most productive journals, more specialized journals, which do not produce many articles but do have high quality articles, would not appear in this list. Some of these specialized journals are cited in Table III. More detailed information about the general journals in Table II is given in Annex A1 and for the specialized journals of Table III in Annex A2.

#### Patents

Patents are very specialized publications which contain technical information with legal impact. Much of the information that can be found in patents will not be published elsewhere. This type of document should be located in field specific databases or in one of the numerous patent databases. The database World Patents Index (Annex E.6) of the British producer Derwent should be mentioned because of its large country and field coverage (see also E.4 and E.5). Patent documents can be ordered from a large number of document providers (see Section 3.3) or from the national Patent Offices.

The European Patent Office (EPO), in collaboration with the US and Japanese patent offices, have developed electronic access to patent information furnished with the ESPACE CD-ROM retrieval software (see Annex B). Also, MicroPatent is one of the leading producers of patent databases on CD-Rom.

## Standards

An abundance of standards and regulatory information exists in the areas of radioactive waste management, decontamination, decommissioning and environmental restoration. Included are safety standards, regulations, policy statements, ordinances, acts, laws, regulatory codes and technical standards for materials, products, systems and services. As such, these document types include scientific and technical as well as legal information. Useful sources include: 1994 Annual Book of ASTM Standards [1], Nuclear Standards Catalogue and Classification [2], United States NRC Rules and Regulations, Code of Federal Regulations [3], and Nuclear Law, Bulletin 54/December 1994 [4].

#### Full-text databases

Full-text databases are defined as databases that contain all the text of the article, book, newspaper, or other printed source. In more and more cases figures and tables are included. Numerous full-text databases can be found for business and industry. The most important will be addressed in Section 2.2.1. In the scientific and technical field, full-text databases of particular journals on chemistry exist. They are listed in Table IV next to a few other full-text databases that contain information on radioactive waste. These sources are described in Annex B in more detail. In addition, more and more national patent offices offer the full text of patents on CD-Rom or diskettes (see Annex B).

Database	Annex Reference Number
CJACS	B.1
CJRCS	B.2
Kirk-Othmer Encyclopedia	B.3

#### TABLE IV. FULL-TEXT DATABASES (SCIENTIFIC AND TECHNICAL)

#### 2.1.2. Secondary sources

#### Abstracting and indexing journals

Abstracting journals and indexing journals contain bibliographic information for different publications (see Table V). Most of these journals are printed versions of the whole or part of corresponding databases. They are published by or through the database producers and therefore easily available.

INIS Atomindex and Energy Research Abstracts (ERA) are certainly the most important abstracting and indexing journals in this field. It must be mentioned, that the nuclear part of ERA is actually coming from the INIS database or the corresponding national input centers. INIS Atomindex is the printed version of the online database INIS and is also available on CD-ROM. ERA corresponds to the online database ENERGY, except for the journal articles. Details are given in Annex C. Information about some specialized collections, excerpts prepared from ENERGY (Radioactive Waste Management, Nuclear Fuel Cycle) and Chemical Abstracts (Solid and Radioactive Waste Treatment) are included as well.

Abstracting and Indexing Journal Title	Annex Reference Number
Chemical Abstracts Selects: Solid & Radioactive Waste Treatment	C.1
Current Abstracts: Nuclear Fuel Cycle	C.2
Current Abstracts: Radioactive Waste Management	C.3
Energy Research Abstracts (ERA)	C.4
INIS Atomindex	C.5

## Bibliographic databases

Online bibliographic databases contain citations to the printed literature such as books, conference proceedings, technical reports, journal articles, dissertations, newspaper stories, and the patent literature. Most of the bibliographic databases include abstracts or summaries of the contents of the items cited including descriptors drawn from a list of controlled terms or a thesaurus and category codes. Thesauri in particular are very efficient aids to increase pertinence and narrow subject searches since they work by conceptual topics. However, some databases contain only very brief information to locate the publication such as author, title, source, date published, and page numbers in the source. Almost all online databases charge fees for access, usually based on time connected to the database, number of searches performed, number of citations read by displaying, printing, or downloading the citations electronically.

Knight Ridder International (formerly DIALOG Information Services) and STN International are two of the largest hosts of online databases, making available over 400 and 150 databases, respectively. A search of scientific databases on these two online services makes it possible to rank online bibliographic databases in the order of frequency of citations based on the topic 'radioactive waste management' (see Table VI). Other scientific and technical bibliographic databases are listed in Table VII. Each of these databases is described in Annexes D and E.

More and more of these databases are available on CD-ROM. The most important differences between online databases and CD-ROMs concern:

- the currency (CD-ROMs are updated less frequently),
- the costs (CD-ROMs have to be purchased and subscribed to whereas online databases cost when they are searched), and
- the method of access (CD-ROMs can be accessed locally whereas online databases have to be accessed through hosts).

Bibliographic Database	Annex Reference Number
Energy Science & Technology Database (ENERGY)	D.4
INIS	D.9
NTIS	D.10
Enviroline	D.6
Chemical Abstracts	D.1
INSPEC	D.8
Energie	D.3
Energyline	D.5
Computerized Engineering Index (Compendex)	D.2
Georef	D.7
Nuclear Science Abstracts	D.11
Toxline	D.13
Pollution Abstracts	D.12

## TABLE VI. BIBLIOGRAPHIC DATABASES (SCIENTIFIC AND TECHNICAL)

## TABLE VII. OTHER BIBLIOGRAPHIC DATABASES (SCIENTIFIC AND TECHNICAL)

Bibliographic Database	Annex Reference Number
BIOSIS Previews (Biological Abstracts)	E.1
Conference Papers Index	E.2
Current Contents	E.3
The PCT Application Database	E.4
US Patents	E.5
World Patents Index	E.6
Zeitschriftendatenbank (ZDB)	E.7

### 2.1.3. Other sources

#### Handbooks, encyclopedia, and directories

Other information sources of scientific and technical information include reference materials such as handbooks, encyclopedias, and directories. These sources contain useful facts or information. In the area of radioactive waste management and decontamination and decommissioning, useful sources include: *Nuclear Energy Policy, a Reference Handbook [5], Environmental Hazards, Radioactive Materials and Wastes, A Reference Handbook and [6], Kirk-Othmer Encyclopedia of Chemical Technology Online* (Annex B.3), and *Ulrich's International Periodicals Directory* [7], which is an excellent directory for journals, newsletters, online databases and CD-ROMs. The latter two sources are available in print, online, and on CD-ROM. Another important directory for journals is the International Serials Data System (ISDS) database by Chadwyck-Healey, available on CD-ROM (ISSN COMPACT).

#### Glossaries

Glossaries are sources of terms which are commonly used or have special meanings in a specific scientific or technical field. The terms are mostly arranged in alphabetical order and contain brief definitions, which should be revised and updated on a regular basis. The most extensive glossary on the topic of this directory is the IAEA Radioactive Waste Management Glossary [8]. It should be noted that many publications contain glossaries.

#### Research in progress

Several countries maintain research in progress databases which contain information about current R&D activities and projects. Coverage may be national or regional and is usually supplied by governmental or other public institutions financing this research. Some are limited to specific topics, like SESAME, which holds information on European energy related research, including radioactive waste management projects. In Table VIII some research in progress databases are listed. Each of these databases is described in Annex F in more detail.

Research in Progress Database	Annex Reference Number
Cordis RTD-Projects	F.1
Electric Power Database	F.2
Federal Research in Progress	F.3
FORKAT	F.4
JGRIP	F.5
Sesame	F.6
UFORDAT	F.7

#### TABLE VIII. RESEARCH IN PROGRESS DATABASES

#### Electronic discussion groups

One outgrowth of the ability to have individual electronic mail addresses through the Internet and other computerized telecommunication gateways is the possibility to establish a set of mail addresses of persons with similar interests. These sets are called bulletin boards, electronic discussion groups, or list servers. There are thousands of bulletin boards available, of every size of numbers of subscribers, and concerning every subject. New discussion groups are created every day. It must be stressed, however, that also many lists disappear or are inactive. Many books on the Internet are available which, among other things, include information on how electronic discussion groups are organized and how they can be approached. One is mentioned in Ref. [9]. Here, also the existence of thousands of so-called news groups must be mentioned. These news groups are available through USENET, also a part of the electronic superhighway, and comparable with the above-mentioned discussion groups. One news group in which the topics of this directory are discussed is mentioned in Annex O.

#### Electronic information sources

One of the most exciting possibilities to search for information is through Internet, part of the electronic superhighway. Internet is a network comprising numerous computer networks of organizations, institutes, businesses and industries that all make use of the same protocol and address structure to communicate with each other. An increasing amount of these networks ('sites') are presenting information of all different types and thus performing as so-called servers. Dependent on the method of providing the information these servers are called World Wide Web (WWW) servers, Gopher servers, File Transfer Protocol (FTP) servers, etc.. Several interfaces have been developed to 'navigate' through the Internet (f.e. Gopher, WWW, Mosaic, Netscape, etc.). The main characteristic of WWW is that the words in the presented text can be marked to form links to other pages with information or to other servers. By means of Gopher, information is structured in the form of menus and sub-menus with options to choose for specific information or other servers. FTP is a tool by which large files can be send to or downloaded from FTP servers. Search software is available for navigating through the WWW and enables users to search for specific, relevant information (f.e. Veronica for Gopher and WebCrawler for World Wide Web). Every server or site has its own Internet address, the so-called Uniform Resource Locator (URL). The URL consists of a code identifying the transfer protocol to be used (f.e. http, gopher or ftp), the name of the server on which the file resides, and a full path name locating the file on that server. Many, many books are available which can explain all the ins and outs of Internet [9].

Because of the novelty of the electronic superhighway, information available via the Internet changes daily and the amount of information accessible is growing exponentially. While many electronic information sources come and go, are under construction or developing, all the Internet sources, relevant to our subject, are not listed in this directory. As this directory is periodically updated, additional electronic sources will be added. It is likely that many of the information sources cited in this directory are or will probably be made available as an electronic information source through Internet.

Some of the Internet sources that regularly contain information on radioactive waste management, decontamination, decommissioning and environmental restoration are listed in Annex O. However, one important WWW server should be mentioned here, while it appears to be a main entrance to many information sources regarding different aspects of nuclear energy. It can be approached by the typical Internet address http://nuke.Westlab.com/. It contains regular updates of new nuclear energy information sources, information about US and World Nuclear Power Plant Information, Nuclear Commerce, Nuclear-Related Organizations, Documents, American Nuclear Society (ANS), Nuclear Energy Institute (NEI), Nuclear Information and Records Management Association (NIRMA), US Educational Institutions, Address Lists, and links to other servers, like the Nuclear Regulatory Commission (NRC) Servers, US Educational Institutions with Nuclear Programs, US Department of Energy and National Laboratory World-Wide Web Servers, Other Interesting WWW Servers, and so-called nuke Information.

#### Conferences and exhibitions

Sources of information on conferences and exhibitions on waste management, decontamination and decommissioning and environmental restoration may be found in printed directories, in online databases and in special sections of journals. In Annex G such sources are described. In addition, Annex H contains detailed data about the most important conferences and exhibitions that take place on a regular basis.

#### Sources on data and facts

The Waste Management Data Base (WMDB) [10] of the IAEA provides access to sources of information on radioactive waste management data for each IAEA Member State. The major objectives of the system are to:

- (1) improve access to relevant waste management data;
- (2) provide a system for maintaining corporate memory of such information;
- (3) provide information to assist the IAEA in identifying future focus and activities;
- (4) provide readily accessible reference material for Technical Assistance and Waste Management Advisory Program (WAMAP) mission; and
- (5) provide a report that summarizes waste management policies and activities to Member States.

Most of the information in the database is collected and compiled by member countries on request of IAEA.

Complete listings of short profiles on national nuclear fuel cycle activities are published in printed form by the Office of Civilian Radioactive Management, US Department of Energy (OCWRM) [11], and by the American Nuclear Society (ANS) [12].

Both reference documents contain the following factual data: governmental and private organizations/laboratories; names and titles; programme descriptions and R&D activities/organizations; and suppliers of radioactive waste services and products.

#### Computer codes

Computer codes related to nuclear energy including radioactive waste management and final disposal are distributed internationally by OECD-NEA Data Bank. In this task, NEA works in close collaboration with the IAEA, with which it has concluded a cooperation agreement and serves non-OECD countries, also on behalf of IAEA. The NEA stores a compilation of computer codes and data which are supplied by national research laboratories. This has become a reference source for scientists, but it also acts as a constantly updated memory. Countries providing copies of nuclear energy software prefer to retain control of its distribution: the NEA provide users with the assurance of a well-defined version of each program and the originators with the assurance that there wishes will be respected.

The abstracts describing these programs are published in the News from the NEA Data Bank. When requests are received for these programs, the authors are contacted and asked to submit their programs together with documentation and a test problem with its solution. The programs are then tested according to user demand, and 'master filed' in the permanent collection of some 1500 programs as a complete 'program package' containing the tested and corrected program, information about problems found in testing, sample job control information, test problem, etc.

Programs tested by the NEA Data Bank may be considered as 'verified', and running as their author intended. However, 'validation' of software is a much more demanding process, since it must be shown that the program performs adequately in the practical applications for which it is designed. For existing programs, this is done in 'benchmark' exercises in which the results obtained with the programs are compared with the values measured in corresponding experiments. Addresses to order these computer codes can be found in Annex I.

Low price computer codes related to radioactive waste management, decontamination and decommissioning and environmental restoration especially on personal computer platforms are frequently distributed commercially. Offers can be found in, for example, journals like *Radioactivity & Radiochemistry* (Annex A2, No. 8).

Outside of the scope of this directory the IAEA Nuclear Data Section and the US National Nuclear Data Center offer online computer access to their nuclear-physics and photo-atomic numeric databases, related bibliographic systems and other related information. They provide information to basic and applied research and technology as well as the addresses of the scientists who develop and use the databases. The access to these databases is described in 'Online Nuclear Data Service' [13]. The address for further information can be found in Annex I.

## 2.2. SOCIO-ECONOMIC, LEGAL AND NEWS-TYPE SOURCES

Descriptions of document types as can be found in Section 2.1 will not be repeated here. It is obvious that socio-economic and legal aspects of radioactive waste management, decontamination, decommissioning and environmental restoration can also be found in the different document types mentioned there. In Section 2.2.1, however, attention will be paid to two other important primary information sources, namely newsletters and full-text databases. For each document type the most important characteristics as well as examples will be given. In Section 2.2.2 databases or clusters of databases that can contain bibliographic, numerical, and factual data as well as full-text are mentioned and briefly discussed. In Section 2.2.3 different other sources are mentioned: directories on legislation, regulations and standards; member states profiles and reports; and information on conferences and exhibitions.

## 2.2.1. Primary sources

## Newsletters

Newsletters are document types which can contain all kinds of information, varying from the latest developments in a specific scientific or technical subject to summaries of relevant publications or overviews of future conferences and exhibitions. The actuality of the news depends on the frequency that the newsletter is issued. Most of the newsletters are published by institutes or organizations. Some of the most important newsletters are mentioned in Annex J.

## Full-text databases

Full-text databases are defined as databases that contain all the text of the article, book, newspaper, or other printed source. The text is usually fully searchable and often requires a more complicated set of search commands to limit the search, establish proximity, and exploit controlled thesaurus terminology to avoid false drops or hits that are only marginally of interest.

Increasingly, the full-text of newsletters and newspapers are available online. In addition, they are incorporated in host systems that have groups or clusters of bibliographic and full-text sources, which can be searched simultaneously. Examples of such systems are NEXIS and MAID (see Section 2.2.2 and Annex N).

Most full-text databases dealing with law and legal issues are databases which are country-specific, and should be consulted by the information specialists in those specific countries. Country-specific legal databases are too numerous and out of scope for this directory. Table IX lists some full-text databases that contain socio-economic and legal information. These databases are further described in Annex K.

Database Title	Annex Reference Number
LEXIS Federal Energy Library	K.1
LEXIS Federal Environmental Law Library	K.2
Nuclear Inter Jura '91	K.3
WESTLAW International Law Library	K.4

TABLE IX. FULL-TEXT DATABASES (SOCIO-ECONOMIC/BUSINESS AND LEGAL)

## 2.2.2. Secondary sources

Some databases described earlier in the scientific and technical section also contain a high proportion of references to the socio-economic, business, and legal aspects of radioactive waste management, decontamination and decommissioning, and environmental recovery. These databases and their reference numbers are listed in Table X and are described in Annex L in more detail.

## TABLE X. BIBLIOGRAPHIC DATABASES (SOCIO-ECONOMIC/BUSINESS AND LEGAL)

Database Title	Annex Reference Number
ENERGY	L.1
Energyline	L.2
Enviroline	L.3
INIS	L.4
Sociological Abstracts	L.5

In addition, the following databases (Table XI) include references specifically to the socio-economic, business, legal and news-type aspects of the topic including references to subjects such as the peaceful uses of nuclear energy and radioactive waste as a social issue. Some of these databases can contain full-text documents as well as bibliographic references. Descriptions of these databases can be found in Annex M.

TABLE XI. OTHER DATABASES (SOCIO-ECONOMIC/BUSINESS AND LEGAL)

Database Title	Annex Reference Number
M.A.I.D. (Market Analysis and Information Database)	M.1
PAIS International	M.2
PTS Prompt	M.3
Reuter TEXTLINE	M.4
Social SciSearch	M.5

## 2.2.3. Other sources

## Directories on legislation, regulations and standards

Most of the sources that have information on legislation, regulations and standards are country-specific. References on the related laws of any Member States are also given in the Radioactive Waste Management Data Base [10], described in Section 2.1.3 under the heading Sources on Data and Facts.

Since 1990 only the journal 'Nuclear Engineering International' provided articles on legislation concerning radioactive waste management. An overview on various legal aspects was presented at the biennial congress 'Nuclear Inter Jura '91' (see Annex K.3). At the 1991 congress of the International Nuclear Law Association the subject of Nuclear Law and Nuclear Energy for the future was discussed. Next to the presentation of individual reports, there were four sessions, each covering the report of one or more working groups. The first session investigated licensing and decommissioning, while the second focussed on insurance

and liability. The third session was devoted to nuclear supply and commerce at an international level. Finally, radiological protection and nuclear waste management was discussed in the fourth session.

Governmental institutions and organizations which are responsible for national legislation, regulations and standards are listed in the International Fuel Cycle Fact Book [11] and World Directory of Radwaste Manager.

## 3. KEY INFORMATION SUPPLIERS

In Section 3.1 library catalogs are discussed of international organizations, and scientific and technical institutes through which information on radioactive waste management, decontamination, decommissioning and environmental restoration can be made available or accessed. In Section 3.2 it will be briefly explained what database producers and database host organizations are. Finally, in Section 3.3 document suppliers will be described.

## 3.1. INTERNATIONAL ORGANIZATIONS, SCIENTIFIC AND TECHNICAL INSTITUTES

Most of the international organizations and institutes have catalogs of their library collections. More and more of these library catalogs are available via Internet. These catalogs are often called 'opacs', or 'online public access catalogs'. Searching library catalogs is different than searching on-line databases, mainly due to the fact that the bibliographic description of documents contained in library catalogs is less extensive. Therefore, it is recommended to use library catalogs only for general subject searches or to locate known publications.

#### 3.2. DATABASE PRODUCERS AND DATABASE HOST ORGANIZATIONS

Database producers are the organizations which prepare the databases, select the scope of the database, enter the bibliographic citations and often provide in-house created abstracts to the references. They establish the update frequency, and fields of information to be included in the database. These database producers are mentioned in each database description in the corresponding annexes. Their full addresses, telephone and fax numbers, and contact persons can be found by consulting the Gale Directory of Databases [14].

Database host organizations are the vendors through which the databases can be accessed. Usually the host is different from the database producer and offers many databases from different database producers. The host provides the means for electronic storage and maintenance of the databases and for their commercialization — such as the software required to retrieve and manipulate the information from the databases. The software usually determines the way the text and index files are organised, various retrieval capabilities and may offer various system functions — such as crossfile searching, duplicate removal and statistical analysis. These tools allow the user to not only locate information but also to gain secondary data such as trend indicators.

Some hosts, like Dialog Information Services, offer more than 400 databases from one access point. It is with the online services that a user signs up to access desired databases and pays whatever fees are assessed, such as annual fees and search charges. It is usually the online service which establishes the software used for searching the database. The names

and addresses of the online services which make available the databases are listed in Annex N.

## **3.3. DOCUMENT SUPPLIERS**

#### Document delivery

Most libraries have agreements to provide materials to other cooperating libraries when the local library does not contain the needed item. Utilizing the online public access catalogs throughout the world will help to identify these resources.

Some database producers offer online ordering of the documents that have been found in their database. In addition, some database producers like INIS provide document availability information. Every IAEA publication describes how to order IAEA publications.

#### 4. WHAT IS NEEDED FOR THE FUTURE

As we move further and further into the information age, the amount of information accessible is growing exponentially. This directory is intended to be a tool to help scientists, engineers, managers, policy makers and information specialists find the information that they need. This directory will be updated periodically.

Although the initial availability of this directory is in printed form, it is intended to make it available in electronic form with many links to the information sources, allowing the user to easily move from the directory to the sources and back. Also it is expected that an electronic mail address will be established to answer questions about the directory and to collect feedback and suggestions. This would allow users to easily submit suggestions for additions and/or deletions to the directory, making it increasingly more useful to the scientific community.

#### REFERENCES

- [1] ASTM, **1994 Annual Book of ASTM Standards**, Philadelphia, Pennsylvania, PCN: 01-120194-35 (1994).
- [2] Fichtner, N., et al., Nuclear Standards Catalogue and Classification, Druck: Oskar Zach GmbH & Co., Berlin, Germany (1984).
- [3] United States Nuclear Regulatory Commission, United States NRC Rules and Regulations, Code of Federal Regulations, USNRC, Washington, D.C. (1992).
- [4] Nuclear Energy Agency, Nuclear Law, Bulletin 54/December 1994 (1994).
- [5] Kruschke, Earl R. and Byron M. Jackson. Nuclear Energy Policy, a Reference Handbook, Santa Barbara, California, ABC-CLIO (1990) (Contemporary World Issues Series).
- [6] Miller, E. Willard and Ruby M. Miller, Environmental Hazards, Radioactive Materials and Wastes, A Reference Handbook, Santa Barbara, California, ABC-CLIO (1990) (Contemporary World Issues Series).
- [7] Salk, J., et al. (Eds), Ulrich's International Periodicals Directory, R.R. Bowker, New Providence, New Jersey (1993).
- [8] International Atomic Energy Agency, Radioactive Waste Management Glossary (1993).
- [9] Hahn, Harley and Stout, Rick, The Internet Complete Reference (1994) (ISBN 0-07-881980-6).
- [10] International Atomic Energy Agency, Radioactive Waste Management Data Base, IAEA-TECDOC-629, IAEA, Vienna (1991).
- [11] United States Department of Energy, International Nuclear Fuel Cycle Fact Book (1992).
- [12] Payne, J., et al. (Eds), Nuclear News Staff, World Directory of Radwaste Managers Second Edition, American Nuclear Society, Inc., ISBN 0-89448-518-0 (1993).
- [13] Dunford C.L. and Burrows, T.W., Online Nuclear Data Service, IAEA-NDS-150 (1993).
- [14] Marcaccio, Kathleen Young, Ed. Gale Directory of Databases, Gale Research, Inc., Detroit, Michigan (1994).

## Annex A1 JOURNAL TITLES (SCIENTIFIC AND TECHNICAL)

A1.1: American Nuclear Society Transactions
Sponsoring Org.: American Nuclear Society
Publisher address: 555 N. Kensington Ave. La Grange Park, IL 60525, USA
Frequency: Two volumes per year, often with supplement issues
ISSN: 0003-018X
Content: Nuclear energy and technology, mainly proceedings of national and international conferences.
Language: English
A1.2: Applied Geochemistry

Sponsoring org.: International Association of Geochemistry and Cosmochemistry Publisher: Pergamon Press, Inc., Journals Division Publisher address: 660 White Plains Rd., Tarrytown, NY 10591-5153, USA Frequency: 7 per year ISSN: 0883-2927 Content: International journal devoted to original research papers in geochemistry and cosmochemistry. Topics covered include the search for energy sources, the use of

cosmochemistry. Topics covered include the search for energy sources, the use of geochemical knowledge for protection of the environment from pollution and others. Language: English

A1.3: Atom Sponsoring org.: United Kingdom Atomic Energy Authority Publisher address: 11 Charles II St., London SW1Y 4QP, England (UK) Frequency: Monthly ISSN: 0004-7015 Content: World news on nuclear technology. Language: English

A1.4: Atomnaya Energiya
Sponsoring org.: Ministry of Atomic Energy and Industry
Cosponsor: Co-sponsors: Nuclear Society of the USSR
Publisher address: Ul. Kirova 18, Moscow, Russia
Frequency: Monthly
ISSN: 0004-7163
Content: Scientific and technical papers on all aspects of atomic energy Comment: Plenum
Publishing Corp. publishes an English translation: Soviet Atomic Energy.
Language: Russian, contents page in English

A1.5: Atomnaya Tekhnika Za Rubezhom Sponsoring org.: Minister of the Russian Federation for Atomic Energy Publisher: Ehnergoatomizdat Publisher address: 113114 Moskwa M-114, Shlyuzovoya Naberezhnaya 10, Russia Frequency: monthly ISSN: 0320-9326

A1.6: Atomwirtschaft - Atomtechnik Sponsoring org.: Kerntechnische Gesellschaft Publisher: Verlagsgruppe Handelsblatt GmbH Publisher address: Kasernenstr. 67 Postfach 10 11 02, D-40002 Duesseldorf 1, Germany Frequency: Monthly ISSN: 0365-8414 Content: Bulletin of the nuclear energy scene, mainly in Germany but also with reports on other countries. Language: German, English, summaries in English, French

A1.7: Fusion Technology
Sponsoring org.: American Nuclear Society
Cosponsor: European Nuclear Society
Publisher address: 555 N. Kensington Ave., La Grange Park, IL 60525, USA
Frequency: 8 per year (plus supplements)
ISSN: 0748-1896
Content: Scientific and technical papers of applications of fundamental research to fusion technology.
Language: English

A1.8: Health Physics Subtitle: The Radiation Protection Journal Sponsoring org.: Health Physics Society Publisher: Williams & Wilkins Publisher address: 428 E. Preston St., Baltimore, MD 21202, USA Frequency: Monthly (2 vols./yr.) ISSN: 0017-9078 Content: Scientific and technical papers on radioprotection, radiation dosimetry, environmental hazards and health effects. Language: English

A1.9: Jaderna Energie Parallel Lang. title: Nuclear Energy Sponsoring org.: Ceskoslovenska Atomova Komise Publisher: Nakladatelstvi Technicke Literatury Publisher address: Spalena 5, 113 02 Prague 1, the Czech Republic Coverage: 1955-date Frequency: Monthly ISSN: 0448-116X Language: Text in Czech or Slovak; summaries in English, French, German, Russian

A1.10: Journal of Nuclear Materials Publisher: Elsevier Science Publishers B.V. Publisher address: P.O. Box 211, 1000 AE Amsterdam, the Netherlands Frequency: 10 vols.per year, 3 nos.per vol. ISSN: 0022-3115 Content: Publishes papers covering the field of materials research related to nuclear science and technology, original research and critical review papers concerned with the basic science and application of materials in fission and fusion reactor systems, fuel fabrication and fuel reprocessing plants and in the treatment and storage of nuclear waste. Language: Text in English, French, German A1.11: Journal of Nuclear Science and Technology
Sponsoring org.: Atomic Energy Society of Japan
Publisher address: Japan Publications Trading Co.
P.O.Box 5030 Tokyo International, Tokyo 100, Japan
Frequency: Monthly
ISSN: 0022-3131
Content: Scientific papers on all aspects of nuclear science and technology, including radioactive waste management.
Language: English

A1.12: Nuclear Engineering and Design
Publisher: Elsevier Science Publishers B.V.
Publisher address: P.O. Box 211, 1000 AE Amsterdam, the Netherlands
Frequency: 7 vols.per year, 3 issues per vol.)
ISSN: 0029-5493
Content: Scientific and technical papers on topics related to the analysis, design and safety of nuclear reactors and plants, materials engineering, mechanics and structures, thermal-hydraulics and safety, waste repository technology and instrumentation and control. Language: English

A1.13: Nuclear Engineering International
Publisher: Reed Business Publishing
Publisher address: Quadrant House, The Quadrant
Sutton, Surrey SM2 5AS, UK
Frequency: Monthly
ISSN: 0029-5507
Content: News, comment and feature articles on technical and commercial developments in the exploitation of nuclear energy.
Language: Text in English; summaries in French, German.

A1.14: Nuclear Europe Worldscan
Sponsoring org.: European Nuclear Society
Publisher address: ENS Secretariat Postfach 5032, CH-3001 Bern, Switzerland
Frequency: Bimonthly
ISSN: 1016-5975
Content: Bulletin of the European nuclear energy scene.
Language: Text in English.

A1.15: Nuclear Technology
Former Title: Nuclear Applications and Technology
Sponsoring org.: American Nuclear Society
Cosponsor: European Nuclear Society
Publisher address: 555 N. Kensington Ave., La Grange Park, IL 60525, USA
Frequency: Monthly
ISSN: 0029-5450
Content: Technical papers, technical notes, critical reviews, complete papers appearing in proceedings and unreported work on all phases of application of fundamental research to nuclear technology.
Language: English

A1.16: Radioactive Waste Management and Environmental Restoration
Former title: Radioactive Waste Management and the Nuclear Fuel Cycle
Subtitle: A Multinational Journal
Publisher: Harwood Academic Publishers
Publisher address: 270 Eighth Ave. New York, NY 10011, USA
Frequency: 2 vol. per year with 4 issues per vol.
ISSN: 1065-609X
Content: Mainly research and development in the area of radioactive waste management, waste arising, inventories and categorization, waste treatment and conditioning, transportation and interim storage, ultimate disposal, alternative management strategies, cost benefit analysis and normative problems.
Language: English
A1.17: Radiochimica Acta
Subtitle: International journal for chemical aspects of nuclear science and technology

Subtitle: International journal for chemical aspects of nuclear science and technology Publisher: R. Oldenbourg Verlag GmbH Publisher address: Postfach 81 613, D-81671 Muenchen, Germany Frequency: 3 vols.per year, 4 nos. per vol. ISSN: 0033-8230 Content: Scientific and technical papers on chemical aspects of nuclear applications. Language: English

## Annex A2

## SPECIALIZED JOURNAL TITLES (SCIENTIFIC AND TECHNICAL)

A2.1: American Ceramic Society
Sponsoring org.: American Ceramic Society
Publisher address: 735 Ceramic Pl., Westerville, OH 43081, USA
Coverage: 1968-date.
Frequency: Monthly
ISSN: 0002-7820
Content: World's most authoritative technical publication on ceramics, reporting original fundamental research on the latest advances. More than 160 peer-reviewed technical papers per year.
Language: English
Availability: Print journal. Microfilm.
A2.2: International Journal of Radioactive Materials Transport

Publisher: Nuclear Technology Publishing Publisher address: P.O. Box 7, Ashford, Kent TN25 4NW, UK Frequency: 1 vol. of 4 issues per year ISSN: 0957-476X Content: Covers all aspects of the transport of radioactive materials including regulations, package design, safety assessments, testing, accidents and operating experiences. Language: English

A2.3: Journal of Environmental Radioactivity
Publisher: Elsevier Science Publishers Ltd
Publisher address: Crown House, Linton Rd., Barking, Essex IG11 8JU, UK
Frequency: 9 per year (in 3 vols.)
ISSN: 0265-931X
Constant: International for publication of original research or review papers

Content: International forum for publication of original research or review papers on any aspect of radioactivity in natural systems, including assessments of health effects, criteria for discharge control and options for ultimate disposal of nuclear waste. Language: English

A2.4: Journal of Nuclear Materials Management
Former Title: Nuclear Materials Management
Sponsoring org.: Institute of Nuclear Materials Management, Inc.
Publisher address: 60 Revere Dr., Suite 500, Northbrook, IL 60062-1563, USA
Frequency: Quarterly
ISSN: 0893-6188
Content: Covers nuclear materials safeguards including physical protection, waste management, materials control and excavating.
Language: Summaries in English and Japanese.
A2.5: Journal of Radioanalytical and Nuclear Chemistry Articles

A2.5: Journal of Radioanalytical and Nuclear Chemistry Articles Subtitle: An International Journal Dealing with All Aspects and Applications of Nuclear Chemistry Publisher: Elsevier Sequoia S.A. Publisher address: P.O. Box 564, CH-1001 Lausanne, Switzerland Frequency: 16 per year (in 8 vols.) ISSN: 0236-5731 Content: Original papers, review papers and short communications on all aspects of nuclear and radiochemistry. Language: English

A2.6: Journal of Radioanalytical and Nuclear Chemistry. Letters
Subtitle: An International Journal for Rapid Communication on All Aspects and Applications of Nuclear Chemistry
Publisher: Elsevier Sequoia S.A.
Publisher address: P.O. Box 564, CH-1001 Lausanne, Switzerland
Frequency: 18 per year (in 3 vols.)
ISSN: 0236-5731
Content: All aspects and applications of nuclear chemistry and radiochemistry.
Language: English

A2.7: Nuclear News Publisher: American Nuclear Society (ANS) On-line Vendor: NEXIS, LEXIS Coverage: United States, with some international coverage. 1982 to date. Frequency: Monthly ISSN: 0029-5574 Content: Journal containing articles on industry trends and technical developments, reports on industry meetings and research developments. Includes the World List of Nuclear Power Plants. Language: English

A2.8: Radioactivity & Radiochemistry, a journal of applied measurements
Country code: US
Editor: Thetis S. McFarland
Publisher: Caretaker Communications, a division of Caretaker Technology Inc.
Publisher address: 1380 Seabord Industrial Blvd., Atlanta, 30318 GA
Frequency: Quarterly
ISSN: 1045-845X
Content: Focusing on the practical aspects of radioactivity measurements, publishes papers and articles relevant to real-world applications and solutions for those professionals engaged in the use of radioactive materials
Language: English

A2.9: Radwaste News Publisher: Radwaste News Publisher Address: P.O. Box 7166, Alexandria, VA, 22307, USA Coverage: 1979 to date. Content: Journal covering technical, regulatory, legislative, economic and socio-political aspects of radioactive waste. Included are mixed waste, and generation, treatment, transportation and disposal. Language: English

A2.10: Separation Science and Technology Publisher: Marcel Dekker Journals Publisher address: 270 Madison Ave., New York, NY 10016, USA Frequency: Monthly ISSN: 0149-6395 Content: International journal dealing with basic methods and underlying principles of separation, evolving and new concepts and techniques. Language: English

A2.11: Soviet Radiochemistry
Sponsoring org.: Russian Academy of Sciences
Publisher: Plenum Publishing Corp., Consultants Bureau
Country: RU
Publisher address: 233 Spring St., New York, NY 10013-1578, USA
Frequency: Bi-monthly
ISSN: 0038-576X
Content: Publishes English translations of Soviet research in radiochemistry by the Academy of Science of the Soviet Union.
Language: English translation of: Radiokhimiya

A2.12: Waste Management: Industrial, Hazardous, Radioactive
Publisher: Pergamon Press, Inc., Journals Division
Publisher address: 660 White Plains Rd., Tarrytown, NY 10591-5153, USA
Frequency: 8 per year
ISSN: 0956-053X
Content: Generation, prevention, control, treatment or detoxification, handling and ultimate
residual disposition of hazardous, radioactive and industrial wastes. International journal

residual disposition of hazardous, radioactive and industrial wastes. International journal designed for scientists, engineers and technically oriented managers covering scientific, engineering legal, social and regulatory problems. Language: English

#### Annex B FULL-TEXT DATABASES (SCIENTIFIC AND TECHNICAL)

B.1: Chemical Journals of the American Chemical Society (CJACS)

Publisher: American Chemical Society

On-line Vendor: STN International

Coverage: International, 1982 to date.

Update frequency: Biweekly

Content: Contains the complete and searchable text of approximately 90,000 articles from 22 American Chemical Society primary journals, comprising Analytical Chemistry, Chemical Reviews, Energy & Fuels, Environmental Science & Technology, Inorganic Chemistry et al. Subject coverage includes chemistry, biochemistry, chemical engineering, and related topics. Language: English

Availability: Full-text database.

**B.2:** Chemical Journals of the Royal Society of Chemistry (CJRSC)

Publisher: Royal Society of Chemistry

On-line Vendor: STN International

Coverage: International, 1987 to date.

Update frequency: Biweekly

Content: Contains the complete text of approximately 13,000 articles, communications, and notes appearing in 10 journals of the Royal Society of Chemistry, comprising The Analyst, Journal of Materials Chemistry et al. Subject coverage includes chemistry, experimental chemical data and procedures, preparation techniques, new chemical names, and synthesis information.

Language: English

Availability: Full-text database.

B.3: Kirk-Othmer Encyclopedia of Chemical Technology Online

Publisher: John Wiley & Sons, Inc., Wiley Electronic Publishing, 605 Third Avenue, New York, NY, 10158, USA

On-line Vendor: Data-Star, Dialog, Knowledge Index, Life Science Network Coverage: International, 1978 to date.

Update frequency: Periodically, as new data becomes available

Content: Contains the complete text of the 25-volume 3rd edition of the Kirk-Othmer Encyclopedia of Chemical Technology. Covers chemical technology including agricultural chemicals; chemical engineering; coatings and inks; drugs, cosmetics, and biomaterials; ecology and industrial hygiene; food and animal nutrition; industrial organic and inorganic chemicals; and plastics and elastomers. The manufacture and distribution of chemicals is also covered in the following areas: computers, instrumentation, and control; information retrieval; patents and trademarks; purchasing, materials allocations, and supply; and research and operations management.

Language: English

Availability: Print equivalent. CD-ROM: Kirk-Othmer Encyclopedia of Chemical Technology.

Note: Full text patent databases are available for the following countries and regional organisations: the African Intellectual Property Organisation, Austria, Belgium, Bulgaria, the Czech Republic, Denmark, the Europe Union, Germany, Hungary, Italy, Luxembourg, Poland, Romania, Slovakia, Spain, Switzerland, the Netherlands, the United Kingdom, the United States, and the World Intellectual Property Organisation. More information may be European Patent Office (tel. (43) obtained from the 1521262411, e-mail: CDHELP@epo.e-mail.com), MicroPatent UK or US (tel. (44) 1223215512 or (1) 203 4665055) or Chadwyck-Healy (France tel. (33) 1 44838181).

## Annex C ABSTRACTING AND INDEXING JOURNAL TITLES

C.1: Chemical Abstracts Selects. Solid & Radioactive Waste Treatment
Publisher: American Chemical Society Chemical Abstracts Service
Publisher address: 2540 Olentangy River Rd., Box 3012, Columbus, OH 43210, USA
Frequency: Semi-monthly
ISSN: 0160-9165
Content: Chemical and chemical engineering aspects of waste treatment and disposal. This publication contains abstracts extracted from Chemical Abstracts File (see Annex B.1).
Language: English

C.2: Current Abstracts: Nuclear Fuel Cycle

Sponsoring org.: US Department of Energy Office of Scientific and Technical Information Publisher address: P.O. Box 62, Oak Ridge, TN 37831, USA Frequency: Monthly

ISSN: 0735-2506

Content: Current worldwide information on all aspects of the fuel cycle, reserves, exploration and mining, feed processing, uranium enrichment, fuels production and properties, spent fuels processing, transport handling and storage, waste management, economic, environmental and health aspects, safeguards and regulations. This publication contains abstracts extracted from ENERGY (see reference).

Language: English

C.3: Current Abstracts: Radioactive Waste Management

Sponsoring org.: US Department of Energy Office of Scientific and Technical Information Publisher address: P.O. Box 62, Oak Ridge, TN 37831, USA Frequency: Monthly ISSN: 0275-3707

Content: Current worldwide information on the critical topics of spent-fuel transport and storage, radioactive effluents from nuclear facilities, and techniques of wastes processing, storage, and disposal, information on remedial actions and other environmental aspects. This publication contains abstracts extracted from ENERGY (see reference).

Language: English

C.4: Energy Research Abstracts (ERA)
Sponsoring org.: US Department of Energy
Publisher address: Box 62, Oak Ridge, TN 3783, USA
Frequency: Semi-monthly
On-line Vendor: Dialog (Energy Science and Technology Database), STN International (ENERGY)
ISSN: 0160-3604
Content: Abstracting journal covering all energy sources, supplies, safety, environmental impacts and regulation. ERA covers all published literature originated by the US Department of Energy and energy information prepared in report form by domestic or foreign government organizations, universities and research organizations. Foreign information is obtained through International Energy Agency's 14-nation Energy Technology Data Exchange, the IAEA's International Nuclear Information System or nation to nation agreements. Journal literature is not included but is available on-line via ENERGY (see

reference). Language: English C.5: INIS Atomindex
Sponsoring org.: International Atomic Energy Agency — United Nations
Publisher Address: Division of Publications, Wagramerstrasse 5, P.O.Box 100 A-1400
Vienna, Austria
Frequency: Semimonthly
ISSN: 0004-7139
Content: Abstracting Journal covering every aspect of the peaceful uses of nuclear science and technology.
Availability: Bibliographic database. CD-ROM (see reference).

## Annex D BIBLIOGRAPHIC DATABASES (SCIENTIFIC AND TECHNICAL)

D.1: Chemical Abstracts File/Chemical Abstracts Search

Producer: Chemical Abstracts Service, Columbus, Ohio, USA

On-line Vendors: Filename CA File (with Abstracts): STN International. Filename CA Search (no Abstracts): BRS, CAN/OLE, Data-Star, Dialog, ESA/IRS, Orbit, Questel, national Science Council, Science & Technology Information Center (STIC), BIOSIS Life Science Network.

Coverage: International. The literature of chemistry and its applications. 1967-present. Update frequency: Biweekly

Content: A comprehensive database of over 10 million references covering the

literature of all areas of chemistry and its applications.

Language: English

Availability: Print Index: Chemical Abstracts

**D.2:** Compendex (Computerized Engineering Index)

Producer: Engineering Information, Inc., Hoboken, New Jersey, USA

On-line Vendor: Dialog, Cedocar, ESA/IRS, NIFTY-Service, Orbit, FIZ Technik, STN International, CAN/OLE, University of Tsukuba.

Coverage: International, 1970-present.

Update frequency: Monthly

Content: Over 2.8 million records, with abstracts, covering the worlds' significant engineering and technical literature.

Language: English

Availability: Print Indexes: Engineering Index Monthly and Engineering Index Annual.

**D.3:** Energie

Producer: FIZ Karlsruhe D-7514 Eggenstein-Leopoldshafen 2, Germany

On-line Vendor: STN International

Coverage: Austria, Germany, and Switzerland, 1976-date.

Update frequency: Twice a month.

Content: Over 200,000 citations, with abstracts, to energy-related literature published in German-speaking countries.

Language: English, German

Availability: Bibliographic database.

**D.4:** Energy Science & Technology (Formerly DOE Energy Data Base)

Producer: Office of Scientific & Technical Information, US Department of Energy, Oak Ridge, Tennessee, USA

On-line Vendor: Dialog, STN International

Coverage: International, multi-disciplinary file with emphasis on basic and applied science and technology research. 1976-present.

Update frequency: Every 2 weeks

Content: Over 2.7 million records including journal literature, conference, patents, books, theses, and engineering software as well as basic and applied science and technology research.

Language: English

Availability: Bibliographic database. Print indexes: INIS Atomindex for the INIS portion of the file and Energy Research Abstracts. CD-ROM: DIALOG OnDisc.

**D.5:** Energyline

Producer: Congressional Information Service, Bethesda, Maryland, USA

On-line Vendor: Dialog, ESA/IRS, ORBIT, Data-Star, FIZ Technik

Coverage: International, 1971-date.

Update frequency: Monthly

Content: All aspects of energy. Approximately 85,000 citations, with abstracts, relating to energy issues and problems, including economics, government policy and planning, international political and economic issues, research and development, and nuclear power. Emphasis on non-serial documents.

Language: English

Availability: CD-ROM. Magnetic Tape. Print Indexes: Environment Abstracts, Energy Information Abstracts, Energy Index.

**D.6:** Enviroline

Producer: Environment Abstracts, Congressional Information Service, Inc., Bethesda, Maryland, USA

On-line Vendor: Dialog, BRS, CEDOCAR, CAN/OLE, Data-Star, ESA/IRS, Orbit, STN International, BIOSIS Life Science Network.

Coverage: International. 1971-present.

Update frequency: Monthly

Content: 165,000 records covering more than 1,000 international publications on the environment.

Language: English

Availability: Print Index: Environment Abstracts.

D.7: GeoRef

Producer: American Geological Institute (AGI)

On-line Vendor: Dialog, CAN/OLE, Orbit, STN International, OCLC EPIC

Coverage: International technical literature on geology and geophysics. 1785-date for North American material; 1933-date for worldwide material.

Update frequency: Monthly

Content: 1.7 million records covering 4,500 serials and other publications in the field.

Language: English, some titles in other languages

Availability: Print Indexes: Bibliography and Index of North American Geology, Bibliography of Theses in Geology, Geophysical Abstracts, Bibliography and Index of Geology exclusive of North America, Bibliography and Index of Geology.

## D.8: INSPEC

Producer: Institution of Electrical Engineering (IEE), UK

On-line Vendor: BRS, CAN/OLE, CEDOCAR, Data-Star, Dialog, ESA/IRS, FIZ Technik, ORBIT, STN International

Coverage: International.

Update frequency: Weekly

Content: Over 4.5 million citations, with abstracts to the worldwide literature in

physics, electronics and electrical engineering, computers and control, and information technology. Primary coverage of journal articles, conference papers, books, technical reports, and dissertations.

Language: English

Availability: CD-ROM. Magnetic Tape. Print Indexes: Physics Abstracts, Electrical & Electronic Abstracts, Computer & Control Abstracts.

#### D.9: International Nuclear Information System (INIS)

Producer: International Atomic Energy Agency (IAEA), INIS Section, Vienna, Austria On-line Vendor: BELINDIS; CAN/OLE; ESA-IRS; STN International; and the International Atomic Energy Agency, INIS Section, (available to clients with the permission of the national liaison officer).

*NOTE:* Since INIS is a subfile of the Energy Database, it is not available to United States commercial users of STN International as a separate file. The Energy database is available in 18 countries; INIS is available in 108 countries.

Coverage: Worldwide coverage of the peaceful applications of nuclear science, including legal, economic, medical, and social aspects. 1976 to date.

Update frequency: Bimonthly

Content: Peaceful applications of nuclear science and technology. Over 1.3 million citations, with abstracts.

Language: English

Availability: Bibliographic database. Print indexes: INIS Atomindex. CD-ROM: INIS. Magnetic tape. Also online as part of Energy Science and Technology.

*NOTE:* The Energy and INIS databases are perhaps the first sources consulted in a technical search of the literature. Technical manuals are available for both of these databases. The manuals include database description, subject thesaurus, subject categories, and scope descriptions. INIS is fully contained as a subset of the Energy database, and it also stands alone as a separate database.

**D.10:** National Technical Information Service (NTIS)

Producer: National Technical Information Service, US Department of Commerce, Springfield, Virginia, USA

On-line Vendor: BRS, CEDOCAR, CAN/OLE, Data-Star, Dialog, ESA/IRS, ORBIT, STN International, BIOSIS Life Science Network

Coverage: USA, with some international coverage, 1964-date.

Update frequency: Monthly or biweekly depending on service

Content: 1.5 million technical reports, predominately of US government sponsored research in all subject areas, but about one third of the database originates outside the USA, emphasizing technology and research being conducted in Western Europe and Japan. The database also contains references to software.

Language: English

Availability: Paper Indexes: GRA&I Reports and Announcements. CD-ROM: DIALOG on DISC NTIS.

**D.11:** Nuclear Science Abstracts

Producer: US Department of Energy Office of Scientific and Technical Information (OSTI), Tennessee, USA

On-line Vendor: Dialog

Coverage: International, 1948–1976.

Update frequency: This file is not updated, but covers a time period not available in most databases. See Energy Science & Technology.

Content: Approximately 947,000 citations, some with abstracts. All aspects of nuclear science and technology worldwide.

Language: English

Availability: Print Index: Nuclear Science Abstracts. CD-ROM.

**D.12:** Pollution Abstracts

Producer: Cambridge Scientific Abstracts, Bethesda, Maryland, USA

On-line Vendor: Dialog, Data-Star, ESA/IRS, University of Tsukuba, BIOSIS Life Science Network.

Coverage: International, 1970 to date.

Update frequency: Bimonthly

Content: Coverage of 2,500 international sources. Over 175,000 references, with abstracts, to books, conference papers, periodical articles. Leading resource for references to environmentally related technical literature on pollution, sources and control.

Language: English

Availability: Print Index: Pollution Abstracts.

**D.13:** Toxline (Toxicology Information Online)

Producer: US National Library of Medicine, Bethesda, Maryland, USA.

On-line Vendor: Dialog, BRS, Data-Star, JICST Online Information System, Medlars, BIOSIS Life Science Network.

Coverage: International. Some subfiles date to 1940s.

Update frequency: Monthly

Content: 1.6 million records, with abstracts, on the toxicological, pharmacological, biochemical, and physiological effects of drugs and other chemicals. Radiation,

environmental pollution, and waste disposal are special subject divisions of this database, comprised of 14 discrete files.

Language: Primarily English

Availability: This is partially a derivative database: 45% of its contents are taken from Medline, the database of the National Library of Medicine. CD-ROM. Magnetic tape.

#### Annex E OTHER BIBLIOGRAPHIC DATABASES (SCIENTIFIC AND TECHNICAL)

E.1: BIOSIS Previews (Biological Abstracts)

Producer: BIOSIS, Philadelphia, Pennsylvania, USA

On-line Vendor: BRS, CAN/OLE, Data-Star, Dialog, DIMDI, ESA/IRS, JICST, STN International Bulgaria Central Institute, OCLC.

Coverage: International, 1969 - date (host coverage varies).

Update frequency: Weekly

Content: Over 8.5 million citations, with abstracts, to worldwide literature on research in the life sciences. Sources include 7000 periodicals, books, conference proceedings, research communications, software reviews, and symposia. Includes subject areas such as ecology, social biology, soil microbiology, soil science, and toxicology.

Language: English

Availability: Print Indexes (Biological Abstracts and Biological Abstracts/Reports, Reviews, Meetings). Diskette. Magnetic Tape.

E.2: Conference Papers Index

Producer: Cambridge Scientific Abstracts (CSA), Bethesda, Maryland, USA

On-line Vendor: Dialog, ESA-IRS, STN International

Coverage: International, 1973-date.

Update frequency: Bimonthly

Content: Over 1.5 million citations to scientific and technical papers presented at regional, national, and international meetings. Also includes research and development activities, emphasizing nuclear and power engineering as one key area.

Language: English

Availability: Magnetic Tape. Print Index: Conference Papers Index.

E.3: Current Contents

Producer: Institute for Scientific Information (ISI), Philadelphia, Pennsylvania, USA On-line Vendor: BRS, Dialog, Data-Star

Coverage: International, Current two years. Bibliographic citations, with abstracts, to journal articles.

Update frequency: 18,000 records added weekly.

Content: Citations, with abstracts, of the tables of contents of approximately 7,000 journals in the sciences, social sciences, and arts and humanities. Engineering, technology and applied sciences is a subfile (ENGI).

Language: English

Availability: Print Index: Current Contents. Magnetic Tape.

**E.4:** The PCT Application Database On-line Vendor: Questel (PCTPAT)

Coverage: Europe, 1978 to date.

Update frequency: Biweekly

Content: Contains more than 110,000 citations to Patent Cooperation Treaty (PCT) and European PCT applications published in the *PCT Gazette* since 1978.

Language: English, French

Availability: Bibliographic database.

E.5: US Patents Producer: Derwent, Inc. On-line Vendor: Dialog Coverage: USA, 1971 to date. Update frequency: Weekly Content: Contains approximately 1.4 million citations, with abstracts, to US patents, continuations, divisionals, and defense documents issued since 1971, and design, reissued, reexamined, and plant patents since 1977. Language: English

E.6: World Patents Index
Producer: Derwent Publications, London, England (UK)
On-line Vendor: Dialog, Orbit, Questel
Coverage: International, 1963-date.
Update frequency: Monthly
Content: Over 6 million citations, with abstracts, to chemical, electrical, mechanical, and general patents.
Language: English
Availability: Bibliographic database. Batch access product.

E.7: Zeitschriftendatenbank (ZDB)

Producer: Deutsches Bibliotheksinstitut, Berlin, Germany

On-line Vendor: Deutsches Bibliotheksinstitut (DBI)

Coverage: International. Bibliographic. 17th century to date. Update frequency: 40,000 records per year added as new information becomes available.

Content: Provides citations to the periodical holdings of more than 210 libraries in Germany. Worldwide popular and academic serials, journals, newspapers held by German libraries. Language: German

Availability: Print equivalents of indexed periodicals.

#### Annex F RESEARCH IN PROGRESS DATABASES

**F.1:** Cordis (Community Research and Development Information Service)RTD-Projects Producer: Commission of the European Union (CEU), Directorate-General Telecommunications, Information Market and Exploitation of Research (DGXIII) On-line Vendor: ECHO, TTY et VIDEOTEX; also available on CD-ROM.

Coverage: European Union Countries, since 1973

Update frequency: Monthly

Content: About 17000 references on research projects entirely or partially financed by the European Union.

#### **F.2:** Electric Power Database

Producer: Electric Power Research Institute (EPRI), Palo Alto, California, USA On-line Vendor: Dialog, CAN/OLE

Coverage: International, 1972-present.

Update frequency: Monthly

Content: Summaries of ongoing and completed research and development projects related to all aspects of electric power generation conducted by EPRI, Canadian Electrical Association, Instituto de Investigaciones Electricos (IIE) in Mexico, the Central Research Institute for Electric Power Industry (CRIEPI) in Japan and other agencies involved in electric power. Language: English

Availability: Print: Digest of Research in the Electric Utility Industry. CD-ROM.

F.3: Federal Research in Progress (FEDRIP)

Producer: National Technical Information Service (NTIS)

On-line Vendor: Dialog

Coverage: Current.

Update frequency: Monthly

Content: Information about ongoing federally funded research projects in the fields of physical sciences, engineering and life sciences. The abridged version is available worldwide, the unabridged version, including US Department of Energy (DOE) and National Aeronautics and Space Administration (NASA) records are available only in the US. Nevertheless there are 95 records on radioactive waste in the abridged database (January 1995).

#### F.4: FORKAT

Producer: Bundesministerium fuer Forschung und Technologie (BMFT), Germany On-line Vendor: STN International

Coverage: 1986 to date, about 25000 records.

Update frequency: Quarterly

Content: Multidisciplinary, current research in science and technology supported by the German Federal Ministry for Research and Technology, about 80 records on radioactive waste (January 1995).

F.5: Japanese Government and Public Research in Progress (JGRIP)

Producer: The Japan Information Center of Science and Technology (JICST)

On-line Vendor: STN International

Coverage: Current, about 45,000 records.

Update frequency: Annually

Content: Multidisciplinary, current and recently completed research by universities, private and public research organizations in Japan; includes the name of the research institution, principal investigators, topic, start and completion dates, budget and brief outline. Availability: Bibliographic database. Batch access product.

F.6: SESAME

Producer: Commission of the European Union, DGXII, DGXVII

On-line Vendor: Dansk Diane Center, Deutsche Mailbox, Edicmail, Eurobases, Euromail, Infopartners Espana, Komunity Komserve, Marconi, Mundi-Prensa, OSEC, Outlaw, Spritel, Statens Datasentral, STN International, Textel, Trendline.; also available on CD-ROM (LONGMAN GROUP UK LTD).

Coverage: European Union Countries, partially since 1975.

Update frequency: At least once a year

Content: Research projects, achieved or in progress, having obtained the financial support of the CEU, Directorate-General Science, Research and Developpement (DGXII) or the Directorate-General of Energy(DGXVII) as well as hydrocarbon projects financed by the British or Norwegian Governments. The following subjects are covered: research and development of energy technologies, energy supply and energy conservation, reactor dismantling and decommissioning, radioactive waste management and radioprotection. The information contained in this database are also included in the Cordis RTD-Projects database. Availability: Bibliographic database. CD-ROM.

F.7: UFORDAT

Producer: Umweltbundesamt, Germany

On-line Vendor: STN International

Coverage: 1974 to date, About 33500 records.

Update frequency: Two to four times annually

Content: Ongoing, developing and completed research in Germany, Switzerland and Austria on environmental subjects.

#### Annex G CONFERENCES AND MEETINGS SOURCES

G.1: CONF

Producer: FIZ Karlsruhe, Germany, FIZ CHEMIE, Germany

On-line Vendor: STN International

Coverage: 1976 to date.

Update frequency: Weekly

Content: CONF contains information on conferences in science and technology, including energy, physics, mathematics, chemistry, computer science, and engineering. Sources for CONF include: journals, press releases, calls for papers, invitations, and programs. Meeting dates, locations, organizers, titles, and classification codes are all searchable. Language: English

#### G.2: MEETING

Producer: MIST/SBDS/SPRI GROUPE MEETING, Centre d'Etudes de Saclay, F-91191 Gif-Sur-Yvette Cedex, France

Coverage: Meetings announced March 1991 to date.

Update frequency: Semi-monthly (approximately 500 records per update).

Content: MEETING contains announcements for congresses, conferences, colloquia, seminars, expositions and shows held worldwide. It covers scientific and technical sectors, medicine, humanities and social sciences.

G.3: Meetings on Atomic Energy

Publisher: Division of Public Information, International Atomic Energy Agency, P.O. Box 100, Wagramerstrasse 5, A-1400 Vienna, Austria

Frequency: Quarterly

Content: The quarterly journal *IAEA Bulletin* contains a list of the IAEA's conferences and seminars.

Language: English

G.4: World Meetings USA and Canada

World Meetings: Outside USA and Canada

ISSN: 0043-8693

Publisher: Macmillan Publishing Company, 866 Third Avenue, New York, NY 10022, USA Content: It contains a two year registry of future scientific and technical meetings. It contains information on: conferences, exhibitions and training courses; and a Key Word in Context (KWIC) index on titles, places and dates. Features include: international meetings, arranged chronologically; national meetings, arranged in alphabetical order by country; and detailed information on IAEA meetings, training courses and proceedings. Included in this directory is the published meeting schedule from IAEA: Meetings on Atomic Energy, which is a quarterly world-wide list of conferences, exhibitions and training courses in atomic energy (see reference).

#### Annex H CONFERENCES AND MEETINGS

H.1: Annual Meeting of the AMERICAN NUCLEAR SOCIETY
Sponsor: American Nuclear Society
Frequency: Annual
Date: June
Place: Varies, usually USA
Subject scope: Nuclear fuel cycle, waste management, decontamination and decommissioning and environmental restoration, includes often topical meetings.

H.2: Annual Symposium of THE URANIUM INSTITUTESponsor: Uranium: Institute, London, England (UK)Frequency: AnnualDate: SeptemberPlace: London, England (UK)Subject scope: Nuclear fuel cycle.

H.3: Autumn Meeting of the MATERIALS RESEARCH Society
Sponsor: Materials Research Society
Frequency: Annual
Date: November/December
Place: Boston, Ma, USA
Subject scope: Nuclear fuel cycle, waste management, emphasis on technical issues and R&D.

H.4: International Conference on NUCLEAR FUEL REPROCESSING AND WASTE MANAGEMENT (RECOD)
Sponsor: British Nuclear Forum, et al.
Frequency: Biennial (even years)
Date: April
Place: Varies
Subject scope: Nuclear fuel cycle, waste management.

H.5: International Conference on RADIOACTIVE WASTE MANAGEMENT AND ENVIRONMENTAL REMEDIATION
Sponsor: American Society of Mechanical Engineers, et al.
Frequency: Biennial (odd years)
Date: September
Place: Varies
Subject scope: Nuclear fuel cycle, waste management, decontamination and decommissioning and environmental restoration.

H.6: International Conference on SPENT NUCLEAR FUEL - CHALLENGES AND INITIATIVES
Sponsor: American Nuclear Society
Date: December
Place: USA
Subject scope: Nuclear fuel cycle, waste management.

H.7: International HIGH-LEVEL RADIOACTIVE WASTE MANAGEMENT Conference Sponsor: American Nuclear Society, et al.
Frequency: Annual Date: April/May
Place: Las Vegas, NV, USA
Subject scope: Radioactive waste management, emphasis on high level waste.

**H.8:** International Symposium on IN-SITU REMEDIATION: SCIENTIFIC BASIS FOR CURRENT AND FUTURE TECHNOLOGIES Sponsor: US Department of Energy et al. Frequency: Annual Date: November Place: Richland, WA, USA Subject scope: Waste management, environmental restoration.

H.9: International Symposium on the PACKAGING AND TRANSPORTATION OF RADIOACTIVE MATERIALS (PATRAM)
Sponsor: Administrative contact: US Department of Energy
Frequency: Biennial (odd years)
Date: December
Place: Varies
Subject scope: Nuclear fuel cycle, waste management, decontamination and decommissioning and environmental restoration, emphasis on packaging and transport.

H.10: International Topical Conference on the EVALUATION OF FUEL CYCLE FOR FUTURE NUCLEAR SYSTEMS (GLOBAL)
Sponsor: American Nuclear Society, et al.
Frequency: Biennial (odd years)
Date: September
Place: Varies
Subject scope: Nuclear fuel cycle, waste management, emphasis on non-disposal options for the back-end of the fuel cycle, recycling options and waste transmutation.

H.11: International WASTE MANAGEMENT Conference (WM)
Sponsor: WM Symposia Inc. in cooperation with the IAEA
Frequency: Annual
Date: February/March
Place: Tucson, AZ, USA
Subject scope: Nuclear fuel cycle, waste management, decontamination and decommissioning and environmental restoration.

# H.12: PACIFIC BASIN NUCLEAR CONFERENCE (PBNC) Sponsor: Australian Nuclear Association, Institution of Engineers, Australia Frequency: Biennial (even years) Date: April/May Place: Varies, usually Pacific region Subject scope: Nuclear fuel cycle, waste management, decontamination and decommissioning and environmental restoration, emphasis on Pacific region.

H.13: SPECTRUM: NUCLEAR AND HAZARDOUS WASTE MANAGEMENT
Sponsor: American Nuclear Society, et al.
Frequency: Biennial (even years)
Date: Summer
Place: Varies
Subject scope: Nuclear fuel cycle, waste management, decontamination and decommissioning and environmental restoration.

H.14: Spring Meeting of the MATERIALS RESEARCH Society
Sponsor: Materials Research Society
Frequency: Annual
Date: April
Place: San Francisco, CA, USA
Subject scope: Nuclear fuel cycle, waste management, emphasis on technical issues and R&D.

H.15: Winter Meeting of the AMERICAN NUCLEAR SOCIETY
Sponsor: American Nuclear Society
Frequency: Annual
Date: October/November
Place: Varies, usually USA
Subject scope: Nuclear fuel cycle, waste management, decontamination and decommissioning and environmental restoration, includes often topical meeting.

#### Annex I COMPUTER CODES

I.1: NEA Data Bank
Le Seine Saint Germain
12, boulevard des Iles
F-92130 Issy-les-Moulineaux, France
Telex: OCDE 620 160F
Fax: +33 (1) 45241110
Phone: +33 (1) 45241071
Internet: staff-name@db.nea.fr
Bitnet: staff-name@frneab51

- I.2: Mail: Online Data Service Nuclear Data Section International Atomic Energy Agency P.O. Box 100, Wagramerstrasse 5 A-1400 Vienna, Austria Phone: (43) (1) 2360-1715 Fax: (43) (1) 234564 Computer networks: Bitnet: rnds@iaea1 Internet: online@iaeand.iaea.or.at
- International Atomic Energy Agency Nuclear Data Section
  P.O. Box 100, Wagramerstrasse 5
  A-1400, Vienna, Austria
  Internet: staff-lastname@iaea1.iaea.org.at

#### Annex J NEWSLETTERS/NEWSPAPERS

J.1: EC Focus, Radioactive Waste and Nuclear Fuel Cycle Newsletter
Sponsoring org.: Commission of the European Communities
Publisher: Commission of the European Communities, DG XII/F/5
Publisher address: Rue de la Loi, 200, B-1049 Bruxelles, Belgium
Content: Mainly European developments in the area of radioactive waste management and disposal and decommissioning of nuclear installations.
Language: English
Availability: Print newsletter.

J.2: Energy Daily

Publisher: King Communications Group, Inc., Washington, DC 20005, USA On-line vendor: NewsNet, Newsletter Database, NEXIS

Coverage: USA only, 1989 to date.

Frequency: Daily

ISSN: 0364-5274

Content: Daily newsletter on the US energy industry and its regulators. Covers fossil fuels and nuclear power, energy technology, environmental issues, economics, finance, policies, and industry regulation.

Language: English

Availability: Print newsletter. Full-text database.

J.3: The Energy Report
Publisher: Pasha Publications, Inc., Arlington, Virginia 22209, USA
On-line vendor: NewsNet, NEXIS, LEXIS, Newsletter Database
Coverage: USA only, 1988 to date.
Frequency: Weekly
ISSN: 0888-0131
Content: Weekly newsletter on US energy policy. Includes nuclear and alternative fuels, government decisions, technological innovations, cogeneration, and fuel conservation.
Language: English
Availability: Print newsletter. Full-text database.

J.4: Europe Energy
Producer: Europe Information Service, B-1140 Brussels, Belgium
On-line Vendor: LEXIS, NEXIS
Coverage: Full-text. European Economic Community. 1990-date.
Update frequency: Fortnightly
Content: News concerning energy policy and legislation, and European energy research projects. Energy issues and research as they relate to the European Economic Community.
Language: English, French
Availability: Also available as part of EUROSCOPE, PTS Newsletter Database, and PTS PROMT.

J.5: European Energy Report Publisher: FT Business Enterprises, Ltd., London SE1 9HL, England (UK) On-line Vendor: NEXIS, FT PROFILE Coverage: Western Europe. 1989 to date. Frequency: Biweekly.

Content: Newsletter on energy-related developments in Western Europe. Covers production of nuclear power, legislation and trade agreements, and contracts for major projects. Language: English Availability: Print newsletter. Full-text database.

J.6: Forum for Applied Research and Public Policy
Sponsoring org.: University of Tennessee
Cosponsor: Oak Ridge National Laboratory
Publisher Address: Knoxville, TN 37996-0710, USA
Frequency: Quarterly
ISSN: 0887-8218
Content: Discussion of policy options by academic, government and corporate experts in energy, environment and economic development.
Language: English

J.7: Hazardous Waste News (HWN)
Publisher: Business Publishers, Inc., Silver Spring, Maryland 20910-4464, USA
On-line Vendor: NewsNet, Newsletter Database
Coverage: International. 1982 to date.
Frequency: Weekly.
ISSN: 0275-375X
Content: Newsletter focusing on compliance and enforcement related to the regulation of hazardous wastes. It covers waste generation, source reduction, disposal, and recycling.
Data are derived from federal, state, and local government agencies, special interest groups, private industry, and others.
Language: English
Availability: Print newsletter. Full-text database.

J.8: Information Bank Abstracts

Producer: New York Times Company, New York, New York, USA

On-line Vendor: NEXIS

Coverage: International. Citations with abstracts to over 40 newspapers in the US, Canada, and Europe. 1969-date.

Update frequency: Daily

Content: Current national and international affairs, including business, economics, politics, sciences, and general news.

Language: English

Availability: Print equivalents of the indexed newspapers.

J.9: International News Brief

Sponsoring org.: CRWMS International Technology Information Center Publisher address: CRWMS MS and O/ITIC International News Briefs, Vienna, VA 22180, USA

Frequency: Monthly

Content: Recent events and activities in foreign countries that are related to spent fuel and high-level radioactive waste management.

Language: English

Availability: Print newsletter.

J.10: Nuclear Fuel Publisher: McGraw-Hill, Inc., New York, New York 10020-1095, USA On-line Vendor: NEXIS, NewsNet, LEXIS, Dialog (McGraw Hill Publications Online), Dow Jones/News Retrieval (NUF), Mead Data Central (NUFUEL) Coverage: USA, with some international coverage. 1981 to date. Frequency: Biweekly. ISSN: 0149-3574 Content: Newsletter covering the production and marketing of nuclear fuel for power generation, also trends in uranium supply, transportation, storage, enrichment and reprocessing, and waste disposal. Language: English Availability: Print newsletter. Full-text database. J.11: Nuclear Power and the Nuclear Fuel Cycle Publisher: Australian Nuclear Science & Technology Organisation, Lucas Heights Research Laboratories Publisher address: New Illawarra Road, Lucas Heights, NSW, Australia Frequency: Quarterly Content: Nuclear power and nuclear fuel cycle issues . Language: English Availability: Print newsletter. J.12: Nuclear Safety and Cleanup Report Publisher: Business Publishers Inc. Publisher address: 951 Pershing Drive, Silver Spring, MD 20910, USA Frequency: Monthly ISSN: 1066-016X Content: Nuclear safety and environmental issues. Language: English Availability: Print. J.13: Nuclear Waste Bulletin Parallel Lang. title: Bulletin sur les Dechets Nucleaires Sponsoring org.: Organization for Economic Cooperation and Development (OECD), Nuclear Energy Agency Publisher address: Le Seine-St Germain Building 12, boulevard des Iles, F-95130 Issy-les-Moulineaux, France Frequency: 2 issues per year Content: Update on Waste Management Policies and Programmes, topical reports and international activities. Language: J.14: Nuclear Waste News (NWN) Publisher: Business Publishers, Silver Spring, Maryland 20910-4464, USA On-line Vendor: NewsNet, Newsletter Database Coverage: International. 1983 to date. Frequency: Weekly. ISSN: 0276-2897 Content: Newsletter covering waste management policy, waste transportation and disposal and public health, safety, and security issues in the nuclear industry. Language: English Availability: Print newsletter. Full-text database.

J.15: Nucleonics Week Publisher: McGraw-Hill, New York, New York 10020-1095, USA On-line Vendor: NEXIS, NewsNet, LEXIS, Dialog (McGraw Hill Publications Online) Coverage: International. 1981 to date. Frequency: Weekly ISSN: 0048-105X Content: Newsletter covering worldwide technical, corporate, and regulatory developments for the nuclear power industry. One edition each month includes statistics for the previous month's electric power generation. Subject coverage includes commercial nuclear power, worldwide plant construction, decommissioning, and the economics of nuclear power. Language: English Availability: Print newsletter. Full-text database. J.16: OCRWM Bulletin Publisher: US Dept. of Energy, Office of Civilian Radioactive Waste Management Publisher address: P.O. Box 44375, Washington, D.C. 20585, USA Frequency: Ouarterly Content: Quarterly report from the United States Department of Energy on the activities of the Office of Civilian Radioactive Waste Management. In addition, information about the Yucca Mountain Project is included. Language: English Availability: Print newsletter. J.17: Rachel's Hazardous Waste News Publisher: Environmental Research Foundation Publisher address: P.O Box 73700, Washington, D.C. 20056, USA Frequency: Weekly ISSN: 1065-4623 Content: National and international hazardous waste issues including air pollution, landfills, incineration, radiation and nuclear wastes. Language: English Availability: Print newsletter. J.18: The Radioactive Exchange Publisher: Exchange Publications, Edward L. Helminski Publisher address: P.O.Box 5757, Washington, D.C. 20036, USA Frequency: 23 per year

ISSN: 0891-3013

Content: To promote the exchange of views and information on radioactive waste management. Sister publication: The Weapons Complex Monitor: Waste Management and Clean Up.

Language: English Availability: Print newsletter.

#### Annex K FULL-TEXT DATABASES (SOCIO-ECONOMIC/BUSINESS AND LEGAL)

K.1: LEXIS Federal Energy Library

Producer: Mead Data Central, Inc., Dayton, Ohio, USA

On-line Vendor: LEXIS

Coverage: Full-text. USA. 1925 to date (Depending on subfile).

Update frequency: Varies by subfile.

Content: United States energy law. Complete text of US federal court decisions, US federal commissions, relevant sections from the US code and selected energy periodicals such as the *Environmental Reporter* and *Nuclear News*.

Language: English

Availability: Print equivalents of periodicals covered, government publications.

K.2: LEXIS Federal Environmental Law Library

Producer: Mead Data Central, Inc., Dayton, Ohio, USA

On-line Vendor: LEXIS

Coverage: Full-text. USA. 1790-date, depending on subfile.

Update frequency: Varies by subfile.

Content: US environmental law. Complete text of US court decisions related to environmental law. Also contains relevant sections of several published periodicals and business journals, newspapers, and newswire services.

Language: English

Availability: Print equivalents of periodicals covered, government publications published by the US government.

K.3: Nuclear Inter Jura '91: Nuclear law and nuclear energy for the future.

Author: International Nuclear Law Association, Harwell, UK.

Publisher: H.M. Stationary Office Harwell (United Kingdom). International Nuclear Law Association. 1992). 794p.

ISBN: 0-7058-1654-0.

Content: Regulations and standards concerning transportation of radioactive wastes and safety standards are available from IAEA. Many journals and conferences cover these topics, too, especially the International Journal of Radioactive Materials Transport (UK).

K.4: WESTLAW International Law Library

Producer: West Publishing Company, Eagan, Minnesota 55123, USA

On-line Vendor: WESTLAW

Coverage: Full-text. International. 1789 to present depending on subfile source.

Update frequency: Varies from daily to quarterly depending on source.

Content: International law. Complete text of US federal court decisions, and other work dealing with international law. This is the legal database of the European Communities, and relevant sections of international law journals.

Language: English

Availability: Printed equivalents of subfiles.

#### Annex L BIBLIOGRAPHIC DATABASES (SOCIO-ECONOMIC/BUSINESS AND LEGAL)

L.1: Energy Science & Technology (Formerly DOE Energy Data Base).

Producer: Office of Scientific & Technical Information, US Department of Energy, Oak Ridge, Tennessee, USA

On-line Vendor: Dialog, STN International

Coverage: International, multi-disciplinary file with emphasis on basic and applied science and technology research. 1976-present.

Update frequency: Every 2 weeks

Content: Over 2.7 million records including journal literature, conference, patents, books, theses, and engineering software as well as basic and applied science and technology research.

Language: English

Availability: Bibliographic database. Print indexes: INIS Atomindex for the INIS portion of the file and Energy Research Abstracts. CD-ROM: DIALOG OnDisc.

L.2: Energyline

Producer: Congressional Information Service, Bethesda, Maryland, USA

On-line Vendor: Dialog, ESA/IRS, ORBIT, Data-Star, FIZ Technik

Coverage: International, 1971-date.

Update frequency: Monthly

Content: All aspects of energy. Approximately 85,000 citations, with abstracts, relating to energy issues and problems, including economics, government policy and planning, international political and economic issues, research and development, and nuclear power. Emphasis on non-serial documents.

Language: English

Availability: CD-ROM. Magnetic Tape. Print Indexes: Environment Abstracts, Energy Information Abstracts, Energy Index.

L.3: Enviroline

Producer: Environment Abstracts, Congressional Information Service, Inc., Bethesda, Maryland, USA

On-line Vendor: Dialog, BRS, CEDOCAR, CAN/OLE, Data-Star, ESA/IRS, Orbit, STN International, BIOSIS Life Science Network.

Coverage: International. 1971-present.

Update frequency: Monthly

Content: 165,000 records covering more than 1,000 international publications on the environment.

Language: English

Availability: Print Index: Environment Abstracts.

L.4: International Nuclear Information System (INIS)

Producer: International Atomic Energy Agency (IAEA), INIS Section, Vienna, Austria

On-line Vendor: BELINDIS; CAN/OLE; ESA-IRS; STN International; and the International Atomic Energy Agency, INIS Section, (available to clients with the permission of the national liaison officer).

*NOTE*: Since INIS is a subfile of the Energy Database, it is not available to United States commercial users of STN International as a separate file. The Energy database is available in 18 countries; INIS is available in 108 countries.

Coverage: Worldwide coverage of the peaceful applications of nuclear science, including legal, economic, medical, and social aspects. 1976 to date.

Update frequency: Bimonthly

Content: Peaceful applications of nuclear science and technology. Over 1.3 million citations, with abstracts.

Language: English

Availability: Bibliographic database. Print indexes: INIS Atomindex. CD-ROM: INIS. Magnetic tape. Also online as part of Energy Science and Technology.

*NOTE*: The Energy and INIS databases are perhaps the first sources consulted in a technical search of the literature. Technical manuals are available for both of these databases. The manuals include database description, subject thesaurus, subject categories, and scope descriptions. INIS is fully contained as a subset of the Energy database, and it also stands alone as a separate database.

L.5: Sociological Abstracts

Producer: Sociological Abstracts, San Diego, California, USA

On-line Vendor: BRS, Dialog, Data-Star, DIMDI, OCLC, BIOSIS Life Sciences Network. Coverage: International, 1963-date.

Update frequency: Bimonthly

Content: Over 300,000 records. All aspects of sociology, including social change and economic development, sociology of science, community development, policy, planning, and forecasting. Citations, with abstracts contained in two major files: social planning, policy and development abstracts (SOPODA) and Sociological Abstracts. Dissertations since 1986 are included.

Language: English

Availability: Print Indexes: Social Planning Policy & Development Abstracts (SOPODA) and Sociological Abstracts. Magnetic Tape.

#### Annex M OTHER DATABASES (SOCIO-ECONOMIC/BUSINESS AND LEGAL)

M.1: Market Analysis and Information Database (M.A.I.D.)

Producer: MAID Systems Ltd.

On-line vendor: MAID Systems Ltd.

Coverage: Full-text, bibliographic, and numeric information. International. 1983 to date. Update frequency: Weekly

Content: News and information on every consumer and industrial business sector worldwide. Composed of three files: (1) Researchline, containing the complete text of more than 50,000 market research reports; (2) Newsline, containing complete text and abstracts of periodicals, journal, and newspapers dealing with business and industry as covered by Reuter Textline, four Predicasts databases (PTS PROMT, PTS Aerospace/Defense Marketing & Technology, PTS New Product Announcements/Plus, and PTS Marketing and Advertising Reference Service) and Infomat International Business; and (3) Companyline, containing the complete text of company financial reports from the world's major publishers who specialize in providing financial information. Covers more than 4.5 million companies in 40 countries. Language: English

Availability: MAID Systems Ltd.

M.2: PAIS International

Producer: Public Affairs Information Service, New York, New York, USA

On-line Vendor: Data-Star, Dialog, OCLC.

Coverage: International, 1972 to date.

Update frequency: Monthly

Content: More than 385,000 citations, with abstracts, to the literature of business and the social sciences with emphasis on contemporary social, economic, and political issues and the making and evaluating of public policy.

Language: English

Availability: Print Indexes: PAIS Bulletin, PAIS Foreign Language Index, PAIS International in Print.

M.3: PTS Prompt

Producer: Predicasts, Cleveland, Ohio, USA On-line Vendor: BRS, Data-Star, Dialog, Nexis, Questel Coverage: International, 1972-date. Update frequency: Daily Content: Over 2.8 million citations, with abstracts and selected full-texts, to worldwide business literature, covering all major industries. Language: English Availability: Bibliographic, full-text database.

M.4: Reuter TEXTLINE Producer: Reuters Ltd, London, England (UK) On-line Vendor: Data-Star, Dialog Coverage: International. 1980 to date. Update frequency: Up to 7 times a day.

Content: More than 5 million citations and abstracts (and often complete text) of articles appearing in approximately 2000 of the world's major daily newspapers and journals. Includes a company name thesaurus as an aid for locating affiliated and related companies.

Language: English Availability: Print equivalents of indexed newspapers.

M.5: Social SciSearch

Producer: Institute for Scientific Information (ISI), Philadelphia, Pennsylvania, USA On-line Vendor: Data-Star, Dialog, DIMDI

Coverage: International, 1972-present.

Update frequency: Weekly

Content: Over 2 million records. Complete bibliographic data plus citations and abstracts covering 1400 key social science journals and selected articles from more than 3200 others. Subject areas include economics, international relations, sociology, urban planning and development.

Language: English

Availability: Print Index: Social Science Citation Index, CD-ROM. Magnetic Tape.

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#### Annex N DATABASE PRODUCERS AND HOST ORGANIZATIONS

N.1: BELINDIS

Belgium Ministère des Affaires Economiques — Centre de Traitement de l'Information Brussels, Belgium Phone: 02 2336111

N.2: BIOSIS Life Science Network Philadelphia, Pennsylvania, USA Phone: 800-523-4806; 215-587-4800

N.3: BRS InfoPro Technologies (BRS/After Dark) (BRS/COLLEAGUE) (BRS Online) McLean, Virginia 22102, USA Phone: 800-456-7248; 703-442-0900

N.4: CINTI Bulgaria Central Institute for Scientific and Technical Information AIC/BMS 1040 Sofia, Bulgaria Telex 22404

N.5: CAN/OLE
Canada Institute for Scientific and Technical Information (CISTI) — Electronic Products and Services
Ottawa, Ontario, Canada
Phone: 613-993-1210

N.6: CEDOCAR France Ministry of Defense — Délégation Générale pour l'Armement. Centre de Documentation de l'Armement Paris-Armées, France Phone: 01 45524504

N.7: Data-Star, Knight Ridder Information, Inc. London, England (UK) Phone: 071-930-5503

N.8: Deutsches Bibliotheksinstitut (DBI) D-1000 Berlin 31, Germany Phone: 030 85050

**N.9:** Dialog, Knight Ridder Information, Inc. Mountain View, California, USA Phone: 415-254-7000 N.10: DIMDI

Deutsches Institut fur Medizinische Dokumentation und Information D5000 Cologne 41, Germany Phone: 0221 47241

N.11: ESA/IRS European Space Agency (ESA) - Information Retrieval Service (IRS) Frascati (Rome), Italy Phone: 06 941801

N.12: FIZ Technik (Fachinformationszentrum Technik) Frankfurt am main 60, Germany Phone: 069 43080225

N.13: FT PROFILE Dunbury-on-Thames, Middlesex TW16 7UD, UK Phone: 0932 761444

N.14: IAEA International Atomic Energy Agency - INIS Section Vienna, Austria Phone: 01 2060-22883

N.15: JICST Japan Information Center of Science and Technology JICST Online Information System Tokyo 100, Japan Phone: 03 35816411

N.16: LEXIS (Mead Data Central, Inc. (MDC) - LEXIS Dayton, Ohio 45401-9964, USA Phone: 513-865-6800

N.17: MAID Systems Ltd. MAID House London EC1Y 8PD, UK Phone: 071-253-6900

N.18: Medlars US National Library of Medicine (NLM) Bethesda Maryland 20894, USA Phone: 800-638-8480; 301-496-6193

N.19: NewsNet, Inc. Bryn Mawr, Pennsylvania 19010, USA Phone: 215-527-0338

N.20: NEXIS (Mead Data Central, Inc. (MDC) - NEXIS Dayton, Ohio 45401-9964, USA Phone: 513-865-6800

N.21: NIFTY-Serve NIFTY Corporation Tokyo 140, Japan Phone: 03 54715800

N.22: OCLC EPIC OCLC Online Computer Library Center, Inc. Dublin, Ohio 43017, USA Phone: 800-848-5878; 614-764-6000

N.23: Questel Orbit GroupeFrance Telecom F-92029 Nanterre Cedex, France Phone: 01-46145555

N.24: Questel Orbit France Telecom Group Richmond, Surrey, TW9 2RG, UK Phone: 0181-3327888

N.25: STIC National Science Council Science and Technology Information Center Taipei, Taiwan 02 7377631

N.26: STN International D-76012 Karlsruhe 1, Germany Phone 07247 808555

N.27: STN International c/o Japan Information Centre of Science and Technology C.P.O. Box 1478 Tokyo, Japan

N.28: STN International c/o Chemical Abstracts Service P.O. Box 3012 Columbus, Ohio 43210, USA

N.29: University of Tsukuba Science Information Processing Center Ibaraki-ken 305, Japan Phone: 0298 532450 (Access limited to affiliates of the University of Japan)

N.30: WESTLAW West Publishing Company Eagan, Minnesota 55123 Phone: 612-687-7000

#### Annex O ELECTRONIC INFORMATION SOURCES

#### World Wide Web Servers

#### Center for Nuclear and Toxic Waste Management (CNTWM) Internet address: http://neutrino.nuc.berkeley.edu

Contents: Corporate information of CNTWM, which is a forum within the Department of Nuclear Engineering at the University of California at Berkeley, News, Communications, Analysis, Data, Catalogs, Tools for searching for information in the CNTWM Database, and links to other WWW-sites.

Environmental Sciences Division (ESD)

#### Internet address: http://www.esd.ornl.gov/

Contents: Corporate information of this US-DOE Oak Ridge National Laboratory division, next to Hot News from DOE and ESD, Communications and Current Events, Services and Resources, and links to the ESD Gopher Server, the ESD Anonymous FTP Server, Usenet News, US-DOE Energy Information Index, US-DOE Energy Gopher Servers, and US Government Information Index.

FORUM for Applied Research and Public Policy

#### Internet address: http://scholar.lib.utk.edu/sws/forum/

Contents: FORUM is a quarterly policy journal that focuses on issues of energy, environment, economic development, and science and technology, co-published by The University of Tennessee's Energy, Environment, and Resources Center and ORNL.

#### International Atomic Energy Agency

Internet Address: http://www.iaea.or.at/

Contents: Corporate information of this international institute, IAEA Activities and Programmes, IAEA Databases and Information Resources, and IAEA and the Internet.

#### International Institute for Applied Systems Analysis (IIASA)

Internet address: http://www.iiasa.ac.at/

Contents: Next to corporate information and information on IIASA a description can be found of one of their projects: Radiation Safety of the Biosphere.

#### Lawrence Berkeley Laboratory (LBL)

Internet address: http://www.lbl.gov/

Contents: An important option is to be able to search all the Public Archives on that are available on this WWW-server of LBL of the University of California.

#### Los Alamos National Laboratory

Internet address: http://www.lanl.gov/

Contents: Next to corporate information and information on the activities of this DOE Laboratory one can consult the Waste Management and Technologies Analytical Database System (WMTADS) and find information about the National Decommissioning Program.

#### National Technology Transfer Center (NTTC)

#### Internet address: http://www.nttc.edu/

Contents: A national network linking US companies with federal technologies that can be converted into practical, commercially-relevant applications. One of the Gateways offered is the Environmental Technology Gateway. Also search tools are offered by which the NTTC Resources can be searched.

#### NATT Research Group

Internet address: http://candu.neep.wisc.edu/NATT/home.html Contents: A research group of the US University of Wisconsin is engaged in the theoretical and computational study of the macroscopic interactions of neutrons with matter.

#### Nuclear Energy Agency

Internet address: http://www.nea.fr/

Contents: Information on publications, radiation protection, nuclear law, nuclear sciences, and possibilities to consult the NEA Data Bank and the NEA Library.

#### nuke: Nuclear Information World Wide Web Server

#### Internet address: http://nuke.Westlab.com/

Contents: Many links to all kinds of interesting sites on nuclear energy: f.e. IAEA, NEI, NRC, ANS, NIRMA, DOE, Nuclear Power Plant Information, Nuclear Commerce, Worldwide Nuclear-Related Organizations, Documents, US Educational Institutions with Nuclear Programs, and Address Lists. Considered to be a main entrance for the nuclear energy community.

#### Oak Ridge National Laboratory (ORNL)

#### Internet address: http://www.ornl.gov/

Contents: Corporate information of this US-DOE multiprogram laboratory, Research, Publications, Other ORNL WWW Servers, Other WWW Info Sources and Search Tools, What's New. One of the divisions within ORNL is the Waste Management and Remedial Action Division of which a Fact Sheet is presented

#### Office of Civilian Radioactive Waste Management (OCRWM)

Internet address: http://www.rw.doe.gov/

Contents: Corporate information of this US-DOE Office, Current Activities, Resource Information, Services, Yucca Mountain Site Characterization Office, Comments Mailbox.

#### Office of Environmental Management (EM)

#### Internet address: http://www.em.doe.gov/

Contents: Corporate information of this US-DOE Office, EM Public Information Sources, Regulatory Information, Environmental Technology Information, Environmental Information, and links to Other WWW Servers. Choosing Environmental Information from the menu brings you to the options Waste Management, National Decommissioning Program, and the National Recycle Program. Choosing the option Waste Management leads you f.e. to the contents and the complete text of the Integrated Database Report for 1993. Choosing the National Decommissioning Report gives the possibility to consult f.e. Briefings, Site Reports and Other Documents.

#### Sierra Club

Internet address: http://www.sierraclub.org/ Contents: a long list of Sierra Club Conservation Policies, among which the policies on High-Level and Low-Level Radioactive Waste.

#### SNL's Geoscience and Geotechnology Center

Internet address: http://www.sandia.gov/

Contents: Corporate information of this center of the Sandia National Laboratories. One of the Departments within SNL is the Underground Storage Department with information of Focus, Technical Activities, Staff, and Projects.

#### US Nuclear Regulatory Commission

Internet address: http://www.nrc.gov/ Contents: Corporate information, NRC News, Contacts, Nuclear Reactors, Nuclear Material, Radioactive Waste.

#### US Patent Classifications

Internet address: http://patents.cnidr.org/

Contents: A list of Patent Classifications with direct links into the individual US Classification Schedule pages and the US Class definitions. F.e. Class 588: Hazardous or Toxic Waste Destruction or Containment.

#### **Gopher Servers**

EcoNet

Internet address: gopher://gopher.econet.apc.org/

Contents: Brochure about EcoNet, Publications and News Services, General Environmental Resources, Toxics, Hazards and Wastes, Guide to Internet Resources on the Environment, and other. EcoNet is a member of the Association for Progressive Communications (APC).

#### Government Publications Network (GPN)

Internet address: gopher://kraus.com/

Contents: GPNetwork Information and News, New Book Announcements, European Communities Official Publications, The British Government Publisher HMSO, Intergovernmental Publications, US Government Printing Office Publications, US Depository Library Information, and how to order publications from Bernan/UNIPUB.

Greenpeace

Internet address: gopher://gopher.greenpeace.org/ (also available as a WWW-server: http://www.greenpeace.org/) Contents: Corporate information, and one of the options to choose in the Gopher menu is Nuclear Power Campaign.

Massachusetts Institute of Technology (MIT)

Internet address: http://web.mit.edu:1962/

Contents: The archives of this independent, educational university in Cambridge, US, can be searched by means of keywords: f.e. radioactive waste.

Rachels's Environment and Health Weekly

Internet address:gopher://ftp.std.com:70/00/periodicals/rachel Contents: News and resources for environmental justice.

United Nations Development Programme (UNDP)

Internet address: gopher://gopher.undp.org/

Contents: Corporate information, Speeches and Statements, Press Releases, Publications and Videos, Sustainable Development Network, Capacity 21, and other. Choosing UNDP Publications and Videos from the UNDP Gopher menu gives the options Annual Reports, Updates, and Videos. Also available as WWW server by the Internet address http://www.undp.org

#### FTP Servers

Case Western Reserve University (CWRU)

Internet address: ftp://ftc.cwru.edu/ Contents: US Supreme Court opinion files, compiled by the CWRU.

Legal Information Institute

Internet address: ftp://fwux.fedworld.gov/ Contents: Contains the full-text of titles from the United States Code of Federal Regulations.

USENET Newsgroup

clari.tw.nuclear

Internet address: news:clari.tw.nuclear Contents: messages and news on nuclear power and waste.

#### CONTRIBUTORS TO DRAFTING AND REVIEW

#### **Consultants Meetings**

6-10 December 1993 (1) 31 October-4 November 1994 (2) 8-12 May 1996 (3)

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- Chan-Sands, C. IAEA, Scientific Officer
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### **QUESTIONNAIRE ON IAEA-TECDOCs**

It would greatly assist the International Atomic Energy Agency in its analysis of the effectiveness of its Technical Document programme if you could kindly answer the following questions and return the form to the address shown below. Your co-operation is greatly appreciated.

## Title:A directory of information resources on radioactive waste management,<br/>decontamination and decommissioning, and environmental restorationNumber:IAEA-TECDOC-841

#### 1. How did you obtain this TECDOC?

- [] From the IAEA:
  - [] At own request
  - [] Without request
  - [] As participant at an IAEA meeting
- [] From a professional colleague
- [] From library

#### 2. How do you rate the content of the TECDOC?

- [] Useful, includes information not found elsewhere
- [] Useful as a survey of the subject area
- [] Useful for reference
- [] Useful because of its international character
- [] Useful for training or study purposes
- [] Not very useful. If not, why not?

#### 3. How do you become aware of the TECDOCs available from the IAEA?

- [] From references in:
  - [] IAEA publications
  - [] Other publications
- [] From IAEA meetings
- [] From IAEA newsletters
- [] By other means (please specify)
- [] If you find it difficult to obtain information on TECDOCs please tick this box

#### 4. Do you make use of IAEA-TECDOCs?

- [] Frequently
- [] Occasionally
- [] Rarely

#### 5. Please state the institute (or country) in which you are working:

Please return to: R.F. Kelleher Head, Publishing Section International Atomic Energy Agency P.O. Box 100 Wagramerstrasse 5 A-1400 Vienna, Austria