The Utility of the International Construction Database ICONDA for the Developing Countries

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Abstract

ICONDA records world-wide published literature in the fields listed above. This aim will be achieved by an international co-operation of many organizations with various functions.

The input to ICONDA also includes literature on Building and Planning in the developing countries. The United Nations Centre for Human Settlements (UNCHS)-Habitat, Nairobi, Kenya, intends to assume the function of a focal point.

The participation in ICONDA enables the developing countries to transfer their own know-how to other countries and to receive information from other developing or industrialized countries.

For the developing countries the most important services will be the printed services and the microfiche services. Based on ICONDA, abstracting journals and current retrospective bibliographies on Building and Planning in the developing countries will be published. Naturally, ICONDA can be interrogated on-line. The database will be offered for use from different hosts world-wide.

It is also possible to obtain ICONDA or the sections concerning the developing countries in machine-readable form.

ICONDA will go on-line in September 1986 on the occasion of the 10th CIB Congress in Washington D.C., USA.

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1. The History

Since its foundation the CIB has had among its main tasks the collection of available knowledge for building research and practice and its supply to users.

All important findings are published e.g. in journals, books, serials, research reports, theses, publications of firms and universities or norms and standards. For this reason national building documentation centers have for many years collected and analyzed literature on construction. In very few countries these documentation centers are independent institutions; in most cases they are subdivisions of large research institutes. The quantity of this literature which should be analyzed has grown considerably. It was no longer easy for an individual institution to survey it.

For many years information about publications was recorded on cards. The national building documentation centers linked up with the CIB exchanged these cards, so that each of them had knowledge of the literature seen by the others. This saved each center considerable effort. The result was an international cooperative network within the CIB in which the input work was shared.

The developing countries participated in this CIB-information system. They received index cards and could herewith compile information storages of their own in their countries. In case they needed original literature, they could order it at national building documentation centers or libraries in industrialized countries. In the same way the institutions in developing countries could prepare index cards themselves, and give references to specialized literature published in their own countries.

With the introduction of computer-aided methods more and more documentation centers began to record information about current literature in a machine-readable form and to build up databases of their own. These databases may be searched directly by terminals. As a byproduct of the databases printed publications such as abstract journals are produced. The exchange of cards within the CIB-network has meanwhile been stopped.

This was very disadvantageous for the developing countries. In general they had no possibilities or financial resources to interrogate the data bases in industrialized countries. And there was no institution to take care of the storage of references to literature from developing countries in national construction data bases.

In industrialized countries efforts have been made to find a new and up-to-date basis for a cooperative network in building documentation. It has therefore been decided within the framework of the CIB-Working Commission M 57: "Building Documentation and Information Transfer" to establish an international database-system called CIBDOC. CIBDOC is the name of a collection of databases containing literature information on building, construction and planning. The system is managed by the Information Centre for Regional Planning and Building Construction (IRB) of the Fraunhofer-Society in Stuttgart. The CIBDOC-system has been implemented on a host-computer in Karlsruhe and can be searched online from all over the world, either via special data transmission networks or via normal telephone lines. The following databases form the nucleus of the CIBDOC-system: the French database PASCALBAT, the English database PICA and the German database RSB. These databases, produced in several countries, have been created according to different rules and requirements. No special printed information services like bibliographies or abstract journals which would be useful for building and planning in developing countries have been derived from them.

2. ICONDA - The International Construction Database

Today, there exist national databases or those covering smaller special fields or large world-wide offered databases referring among others also information on selected building fields. In addition to those, ICONDA has been established now.

ICONDA is the International Construction Database and has found the ideal support of the CIB. ICONDA contains references in English, with abstracts in many cases to world-wide published journal-articles, books, research reports, theses, conference proceedings, business reports and unpublished literature dealing with building construction, construction engineering, architecture and town planning.

The production of ICONDA is the result of an International cooperation and is co-ordinated by the ICONDA-Office which has been established at the IRB in Stuttgart. The participants of the international cooperation come from France, Belgium, United Kingdom, the Scandinavian countries Sweden, Norway, Finland and Denmark and from the Federal Republic of Germany. We are in negotiations with further countries, e.g. the Netherlands, Hungary and Yugoslavia. This is the situation in February 1986 when ICONDA is not operational online, yet. Institutions in other countries will be interested in supplying input to ICONDA, because the objectives for the participation in ICONDA are identical for every country.

- The national building researchers, construction companies, planners, architects and engineers shall have, via ICONDA, world-wide specialized information available with a long-term guarantee.

- ICONDA shall contain, as far-reaching as possible, references to important results of research and development in a country, because, in case foreign experts ask for publications of the authors of the country, this could lead to a demand of consulting activities of national experts, and in the long run to the export of national know-how abroad. For this reason it is of national and international interest to make ICONDA as public as possible and, it is of interest to developing countries, that the appropriate methods for building and planning in developing countries will be recorded in ICONDA, and that publications from developing countries will be analyzed for ICONDA.
Publication from a developing country

DISPLAY OF A PICA RECORD IN STN

AN 1986(08):1234567 ICONDA
TI New system of brick masonry for hot and dry climate
AU Vodnare, Y B; Karapetjan, S V
LO GBPSA N75/679
DT Journal
CY India
LA English
AB Deals with the evolution of a new system of brick masonry which is structurally strong, economically feasible, aesthetically pleasing and thermically comfortable for mass buildings of a low rise nature.
CT masonry; brick; brickwork; temperature behaviour; developing country; climatic effect
ST hot climate; low rise building
OS PICA p5750679 IP GBPSA

Legend:
AB: Abstract
AN: Accession number
AV: Availability
AU: Author
CS: Corporate source
CT: Controlled terms
CY: Country of publication
DT: Document type
IP: Information provider
LA: Language
NR: Report number
OS: Other sources
SL: Summary language
SO: Source
ST: Supplementary terms
TI: Title

- Those countries which analyze today a great number of world-wide published specialized literature for their national databases, shall restrict their activities to the analysis of specialized literature only in their own language. The national databases shall contain then exclusively references to national specialized literature. The ICONDA-IPESystem shall save considerable expenses already within a measurable space of time.

Today (in February 1986) periodicals from the following countries are already analyzed for ICONDA:

- Australia
- Austria
- Belgium
- Canada
- China, People's Republic of
- Cuba
- Czechoslovakia
- Denmark
- Dominican Republic
- Federal Republic of Germany
- Finland
- France
- German Democratic Republic
- Greece
- Hungary
- India
- Ireland
- Italy
- Japan
- Kenya
- Mexico
- Netherlands
- New Zealand
- Norway
- Poland
- Singapore
- South Africa
- Spain
- Sweden
- Switzerland
- United Kingdom
- United States of America
- Venezuela
- Yugoslavia

3. Considering interests of the developing countries

First of all it is important that specialized literature which has been written or published in developing countries will be analyzed for ICONDA in the same way like specialized literature from industrialized countries.

For this reason, the ICONDA-Agency, the Information Centre for Regional Planning and Building Construction (IRB) in Stuttgart, has in good time contacted the United Nations Centre for Human Settlements (UNCHS) - Habitat in Nairobi, Kenya. UNCHS is ready to assist us in the following way:

- UNCHS, within the framework of its status as a United Nations agency, will provide IRB with the literature relevant to ICONDA's scope that has already been entered in the UNCHS database.

- UNCHS will also make available to IRB the Directory of Ongoing Research in the field of human settlements (Habitations).

- UNCHS will disseminate in due course through its usual channels: Habitat News, the Regional Information Offices etc., information regarding the goals of ICONDA and the role of UNCHS as a focal point for the developing countries. In no instance will UNCHS influence such countries to communicate their reports for inclusion in ICONDA and UNCHS will in all instances respect existing governmental practice and regulations on dissemination of national documents.

- UNCHS will provide only such data as are available to the Centre and undertake no obligation to search for or collect such data or to provide data at any prescribed times.

- UNCHS will provide data in whatever language it has received them.

The participation of UNCHS in ICONDA enables the developing countries to
transfer their own know-how to other countries.

A further objective of ICONDA is that the developing countries shall receive information from other developing or industrialized countries. It is very natural to think about the possibility of online searches in the use of databases like ICONDA.

For the developing countries, however, the most important services will be the printed services and the microfiche services. Based on ICONDA, abstract journals and retrospective bibliographies on Building and Planning in the developing countries will be published. Naturally, ICONDA can be interrogated online. The database will be offered for use from different hosts worldwide. It is also possible to obtain ICONDA or the sections concerning the developing countries, in machine-readable form, e.g., on floppy disks or on magnetic tapes. An important service, just with regard to the developing countries, is that the ICONDA-information does not only contain references to literature, but also the location in the different “ICONDA-libraries”. The ICONDA-Agency, like many other institutions, is prepared to supply the original literature.

4. Final observations

The International Construction Database ICONDA will be online in September 1986 on the occasion of the 10th CIB Congress in Washington D.C., USA, and will be accessible world-wide.

The actual ICONDA General Description for Users, Input-Suppliers and Hosts can be ordered at the ICONDA-Agency, c/o Information Centre for Regional Planning and Building Construction (IRB) of the Fraunhofer-Society, Nobelstraße 12, 7000 Stuttgart 80, Federal Republic of Germany.