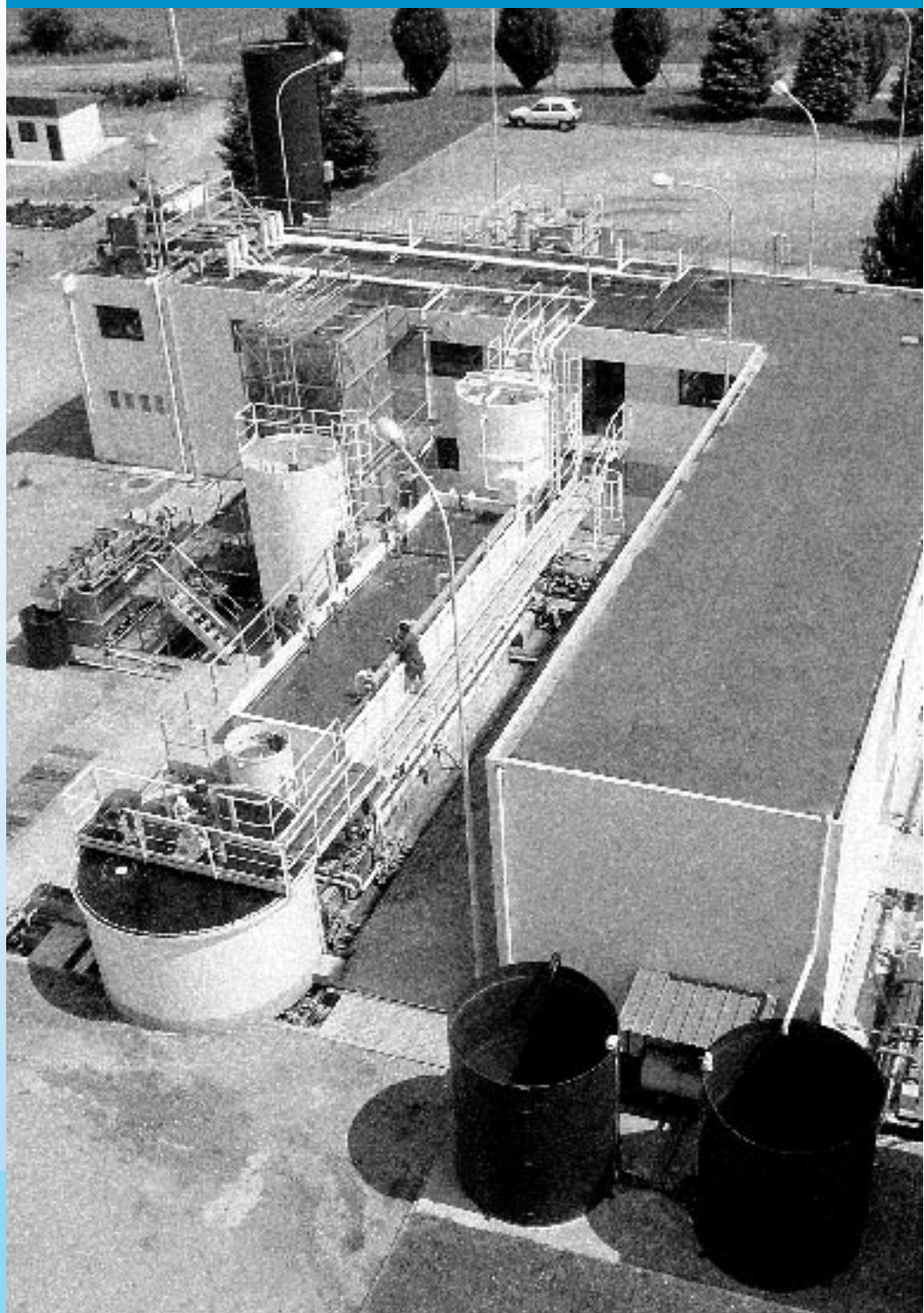




*Office
International
de l'Eau*

*International
Office
for Water*

INTERNATIONAL NEWS



N°4

**A 1995
RETROSPECTIVE
REVIEW**

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THE INTERNATIONAL OFFICE FOR WATER,

IT'S:

- A network which gathers 149 public and private water-related organizations
- 4 collective services in France :
 - The National Training Centre for Water Professions.
 - The National Information and Documentation Centre on Water.
 - The National Water Database.
 - Permanent survey of studies and research on water.

- An operator of institutional cooperation over the world :
 - Audits, advice, training on administrative organization (river basin management, urban water supply, industrial pollution control, irrigation).
 - Setting up and development of local professional training centres in the water sector.
 - Design of data banks and water monitoring networks.

IOW is in charge of the Permanent Technical Secretariat of the International Network of Basin Organizations (INBO)

IOW'S SCIENTIFIC AND TECHNICAL COUNCIL (STC)

At the invitation of NAN.C.I.E., the STC Plenary Assembly was convened in Nancy on April 4, 1995 and gathered more than 70 French participants and a dozen foreign representatives. It was chaired by Mr. Yves LE BARS, General Manager of CEMAGREF, in the presence of Mr. Pierre ROUSSEL, French Deputy Director for Water.

The primary topic for 1995 was that of international scientific and technical cooperation networks. Several European (TECHWARE, DG XI, European Environment Agency, EUR-AQUA) and international networks (International Network of Basin Organizations, IPTRD in the field of irrigation and drainage, decentralized cooperation, Mediterranean Water Network) were presented, in addition to a rich exchange of information, points of view and experiences.

ELECTION OF IOW'S NEW BOARD OF DIRECTORS

IOW's Ordinary General Assembly meeting took place in Paris on March 8, 1995 to elect or re-elect for a 3-year mandate, new or former members of the Board of Directors and the Bureau :

CHAIRMAN:

Mr. RENARD (Water & Forestry General Council and Artois-Picardy Water Agency)

HONORARY CHAIRMEN:

Messrs. TORRE (Former Minister, Senator, Chairman of Ardeche General Council and of the Rhone-Mediterranean-Corsica Basin Committee), CHERET and DELAY, respectively Former Chairmen of CEFIGRE and of the Water Foundation.

VICE-CHAIRMEN:

Messrs. HADLER (Water Research Centre/Great Britain), MARTINEZ MARTINEZ (CEDEX, Spain), GUERRERO VILLALOBOS (Comisión Nacional del Agua/Mexico), COLLIOT (SAUR), DEJOIE, Senator (Assembly of General Councils' Chairmen), GRANGE (General Council of Civil Engineering/Loire-Brittany Water Agency) and SAUNIER (SAFEGE/Lyonnaise des Eaux).

TREASURERS:

Messrs. FUNKEN (Pont-A-Mousson/CISE) and HERRISSON (Senator/Association of Mayors of France).

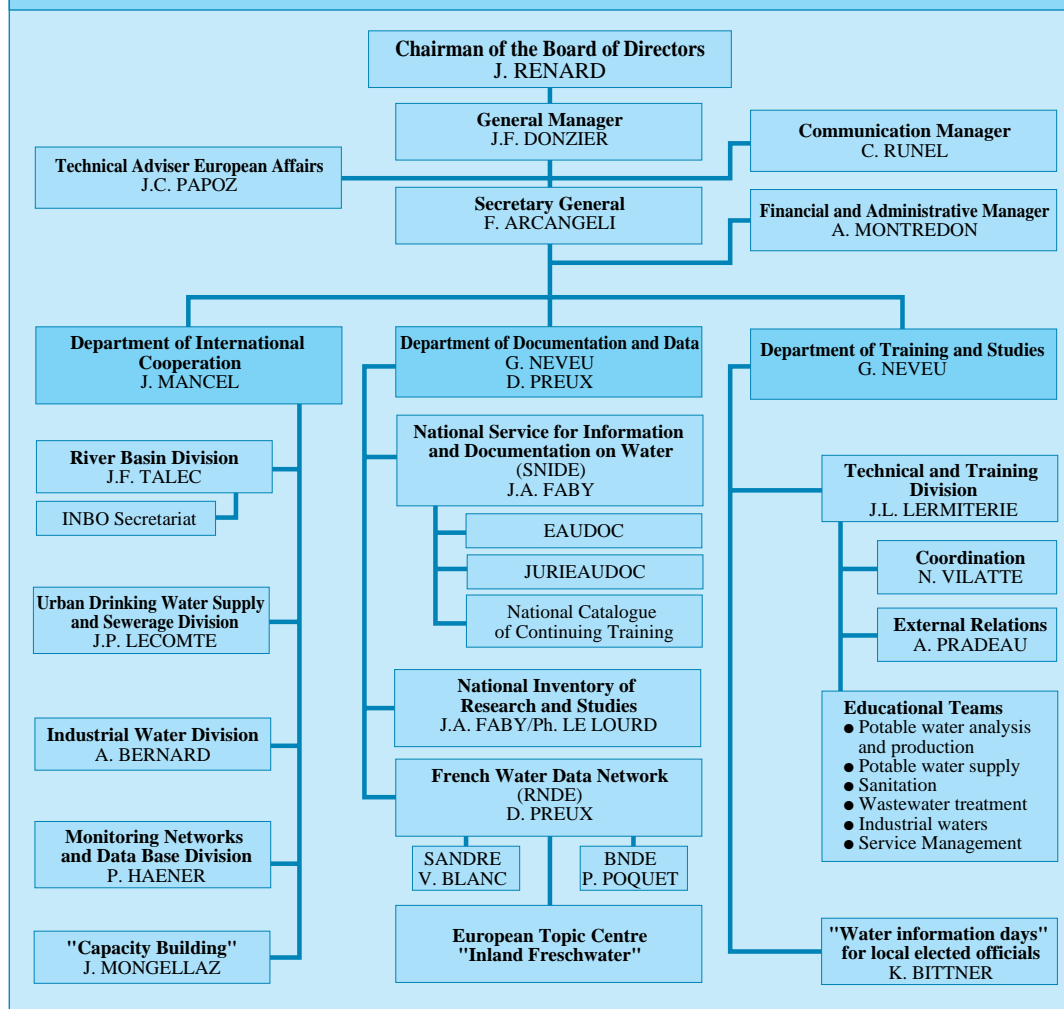
SECRETARIES:

Messrs. EL-HABR (United Nations Environment Programme) and ROSSI (CGE-General Water Supply Co.).

OTHER MEMBERS OF THE BUREAU:

Messrs. GAUDRIOT (National Chamber of Consulting Engineers), GUILHAUDIN (National Rhone Co.), MECLLOT (EDF) and MOINET (Federation of Subcontracting Collectivities and Public Corporations) together with representatives of UAWS (Africa), ACQUA (Brazil), APELE ROMANE (Romania), ONEP (Morocco), OVF (Hungary) among the International Associate Members.

IOW'S ORGANIZATIONAL CHART



IOW EXPANDS ITS INTERNATIONAL NETWORK

Bi and multi-lateral cooperation agencies are members of the Office in their own right and sit in meetings of the International Orientation Committee. The Office's statutes also offer the possibility for public and semi-public organisms from various countries of the European Union, of Central and Eastern Europe and of other continents, to join as "International Associate Members".

26 organizations have already joined the Office in this quality and participate in joint activities as well as in the work of the Board of Directors, and of the Scientific and Technical Council.

INTERNATIONAL ASSOCIATE MEMBERS:

- APELE ROMANE (Romania)
- Asociación Latino Americana y del Caribe de Empresas de Agua Potable y Alcantarillado (A.L.C.E.A.P.A.)
- Centro de Estudios y Experimentación de Obras Públicas (CEDEX) (Spain)
- Comición Nacional del Agua (Mexico)
- Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ-Germany)
- Fresh Water Centre (Denmark)
- Hungarian Office for Water (OVF) (Hungary)
- Hydrocontrol (Italy)
- HIDROVEN (Venezuela)
- Instituto ACQUA (Brazil)
- Instituto Mexicano de Tecnología del Agua (Mexico)
- Inter-African Centre for Hydraulic Studies
- Inter-States Institute for the Environment in Eastern Europe (Hungary)
- Mediterranean Institute for Water (France)
- Ministry of Energy, Water Resources and Postal Services (Mauritius)
- National Committee of Water Suppliers (Romania)
- National Institute for Hydraulic Studies Masarik (Czech Republic)

- National Office for Information and Documentation on Public Works (ONIDE) (Algeria)
- National Office for Sewerage (ONAS) (Tunisia)
- National Water Resources Institute (NWRI) (Nigeria)
- National Office for Potable Water (ONEP) (Morocco)
- The Blue Plan for the Mediterranean (R.A.C. France)
- The International Secretariat for Water (ISW) (Canada)
- Union of African Water Suppliers (UAWS)
- Water Foundation of Gdansk (Poland)
- Water Research Centre (United Kingdom).



TRAINING

THE NATIONAL TRAINING CENTRE FOR WATER PROFESSIONS: 4,122 TRAINEES IN 1995

IT HAS NOW OUTSTANDING EDUCATIONAL EQUIPMENTS FOR MUNICIPAL POTABLE WATER SUPPLY AND SEWERAGE, AND INDUSTRIAL WASTEWATER TREATMENT

In 1995, the International Office for Water received 4,122 trainees in both establishments of the National Training Centre for Water Professions, located in Limoges and La Souterraine (France).

This number has more than doubled in the last four years, due to the present concern of French municipalities, water suppliers, consultancy firms and specialized suppliers to improve and develop the skills of their personnel, to meet, in particular, the new requirements in regulations of the potable water and sanitation field.

In addition to the technical knowledge required by present standards, it should be remembered that manpower (38 %) exceeds the part of the technical and financial amortization of investments (30 %) in the overall cost of the treated and supplied water and that agents' efficiency is thus an essential component of the economic performance of the services.

To meet this demand, IOW proposes, in its new 1996 catalogue, 121 «inter-organizations» training courses, of one to five days' duration, for specialized training. They can be combined to form real «degree courses» for professional qualification that address all employment levels, from engineers and executives, technicians, foremen and supervisors to operators.

These training courses focus on nine main technical topics: water analysis, drinking water production, drinking water supply, sewerage networks, wastewater and sludge treatment, pumping stations, remote management, sensors and measurements, electronics, automatic operation and maintenance, as well as on three specific topics: services management, «quality» approach and «water policy».

In addition, IOW proposes «tailor-made» training courses specifically adapted to the particular needs of interested organizations and enterprises.

To carry out its mission, IOW has now at its disposal a permanent team of 25 expert-trainers, helped when necessary by specialized lecturers for advanced technologies.

It also offers exceptional educational equipment, especially designed for technical training in

the water field, which is now unique in Europe on such a scale (see the middle double page).

In 1995, this equipment was strengthened with two new «training networks» for:

- **leak detection in drinking water supply networks:** it comprises 300 m of underground pressure pipes (in cast iron, PVC ...) for drinking water supply where some types of artificial leaks are reproduced to carry out leak detection and location in a «real urban field situation».

- **maintenance of wastewater mains and booster stations,** where all urban sewerage techniques can be implemented.

All these training courses can be implemented, on request, either in French, English, Spanish or German language.

E.N.A.: SEMINAR ON COMPARATIVE ADMINISTRATION

In 1995, the seminar on comparative administration, organized by E.N.A., the French National School of Administration, was based on the environmental policies in countries of the European Union.

Within this context, Mr. DONZIER, General Manager of the International Office for Water, directed in Strasbourg for twelve weeks, between April and July, a group of students having chosen to work on the topic of water resources management.

Several lectures were delivered. They enabled extremely interesting exchanges with Messrs. LAURENT, Director for Water, VERLON, Director of the Rhine-Meuse Water Agency, LOUDIERE, Director of ENGEES, BARAQUE of LATTs together with Messrs. NOAIN, President of the Hydrographic Confederation of the River Tagus (Spain), and MUNZINGER, Doctor of Science, Directorate for the Environment of the Nordrhein Westfalen region of Germany.

The students also visited several countries such as Great Britain, Germany, Holland, Italy, Scandinavia and Spain where they met executives of water administrations.

The report on this seminar gives an original overview of the French water policy as compared with those of other European Union countries.

MANAGEMENT OF MUNICIPAL SERVICES: TRAINING OF 6,500 LOCAL ELECTED OFFICIALS

For four years the International Office for Water has been carrying out programmes of training and assistance in decision-making adapted for local elected officials.

● **In France**, the passing of the Water Law on January 3, 1992 entrusted the communities with a real competence in water resources development and management.

On the other hand, the new European directives have heavy financial consequences for local communities.

In order to help local elected officials to face their new responsibilities, a decentralized information programme at departmental level was launched in 1992.

The International Office for Water, was entrusted with the general organization and the training preparation of these activities, in close collaboration with administrations and associations involved.

The objective of this programme is to provide elected officials with the items necessary for making choices based on well-argued legal, technical

and economic information in all fields related to their responsibilities: management of public potable water supply and sewerage services, reliable drinking water supply, choice of a sanitation policy.

During four years, more than 6,500 french elected officials have participated in the training courses.

The International Office for Water also proposes 8 training courses on such topics as the management and delegation of public services, estimate of water cost and price, impacts of the European directives or even domestic wastes management.

● **In Central Europe, IOW has been approached by the Polish and Hungarian Authorities to develop an awareness programme for their local elected officials.** In these two countries, the on-going decentralization process has entrusted local elected officials with the management of potable water and sanitation. Therefore, the pilot sessions obviously dealt with the management of public services. Among the main

questions raised during these sessions by the French and national experts, such topics as **investment financing, services management and operation, water price, relations between the community and connected industries** were mentioned.

In Hungary as in Poland, this programme was preceded by the training of national agents in charge of organizing and implementing these sessions, and by preparing educational documents with them in their own language.

“WATER” A SOFTWARE FOR THE FINANCIAL SIMULATION OF A RIVER BASIN ORGANIZATION

France has a high performing institutional system for water resources management. The integrated river basin management, called “**Water Agency System**” has stood the test of time for 30 years.

It relies on a financial solidarity between the water users of a river basin, based on the «user-polluter-pays» principle.

The preparation of training-wise software, to **simulate the financial operation of a Water Agency** in a river basin, would help provide answers to the following questions;

1. How to really set a financial solidarity into motion ?
2. Within which limits ? What charges will be supported by the various users ?
3. For what results ? What impact on the environment ?

Contents:

IOW has developed a “**Watershed Agency Tabulation of Economic Resources**” (WATER), in relation with the French Institute for Environment (IFEN), with a double objective: realism in simulation and educational clarity.

Using a logical approach, which consists in describing the river basin concerned (users, discharges, withdrawals) and defining an action programme (Agency objectives, amount of the water charges, mode of financial assistance), the user can observe, in real time, the impact of the decisions (made by a fictitious River Basin Committee) from an environmental, economic and financial point of view, and this over a 15-year period.

«WATER» is now used for the practical training of agents from countries that are setting up their own river basin organizations.

RESEARCH AND STUDIES

IVTH INTER-AGENCY STUDY PROGRAMME (1992-1996)

The Director for Water and the six French Water Agencies' Directors have decided to up-date the priorities of the IVth Inter-Agency Study Programme (**FF 100 million for 5 years**) in accordance with four main orientations: to control urban water supply, manage river basins and preserve aquatic media, spend appropriately, and to take international aspect into account.

Ten main topics have been retained while taking into account priorities, and pilot Agencies have been designated for each topic: sewerage networks and depollution of stormwater (*Rhine-Meuse and Seine-Normandy*), urban wastewater treatment (*Loire-Brittany*), characteristics and knowledge of the functioning of aquatic media (*Rhone-Mediterranean-Corsica*), overall management of aquatic media, (*Adour-Garonne*), ecotoxicology (*Rhine-Meuse*), accidental pollution (*Rhine-Meuse*), water and agriculture (*Artois-Picardy*), water economy and

sociology (*Seine-Normandy*), wastes and pollution transfer (*Rhine-Meuse*), public health and drinking water distribution (*Adour-Garonne*).

The contracting authority of the IVth Programme is a «**Management Committee**» composed of the Director for Water and the Directors of the six Water Agencies.

The Directors have requested the International Office for Water to assist in the programme implementation, owing to its expertise and evaluation capabilities.

The prime contractor of the programme is an «Executive Committee» comprising a representative of the Inter-Agency mission and 6 project managers delegated by the Agencies.

In 1995, the **Executive Committee** approved 24 new studies to be launched within this up-dated IVth Programme.

“ENVIRONMENT-DETERGENTS” PROGRAMME

Following some controversies about the impact of detergent components on the environment, the French Ministries for Environment and Research in relation with professional circles (Association of soap and detergent manufacturers, Union of chemical Industries, General Water Supply Company, Company of Services and Environment, Lyonnaise des Eaux, Urban and Rural Development Company), have decided to launch an important tri-annual programme entitled “Environment-Detergents”.

This research programme has a triple objective:

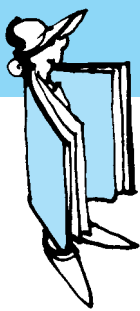
- to assess the impact of all household washing products on the natural environment owing to a better knowledge of eutrophication processes,

- to examine, prior to the marketing of new formulations, the environmental impact assessments made by washing product manufacturers,

- to establish an acceptable and reliable methodology for standardizing tests to measure the impact of these washing products on the environment.

For the first year of implementation of this convention, in 1995, the contribution of the different financial partners amounted up to 6.7 million of French Francs.

IOW is in charge of ensuring the scientific, technical and financial consistency of the programme and of subcontracting with laboratories from, for instance, Paris VI, Limoges, Metz and Rouen I Universities, INERIS, CEMAGREF, the Higher School of Physics and Industrial Chemistry of the City of Paris, BETURE, SAUR, or CIRSEE.



THE NATIONAL INFORMATION AND DOCUMENTATION CENTRE ON WATER

This department of the International Office for Water offers the following services to the users:

THE DOCUMENTARY BASE "EAUDOC"

It contains more than 160,000 publication references, 105,000 of which are computerized and accompanied by totally digitized documents.

In 1995, IOW, in collaboration with AUPELF-UREF, prepared a CD-ROM which contains 30,000 among the most recent references extracted from the EAUDOC documentation base over the past six years.

The European Space Agency which also harbours EAUDOC has distributed an interrogation software under Windows to all users.

THE FONTAINE BASE

Whose data are supplied by the documentation centres of the six Water Agencies and the Water Department of the Ministry for the Environment, contains 10,000 references, standardized in a single format with very precise acquisition rules, on the studies and publications made for the six French river basins.

THE INTERNATIONAL INDEX-FILE OF HYDROLOGICAL PRODUCTS

Operational Multipurpose Hydrological System, was launched in 1981 by the World Meteorological Organization (WMO). Its updating was entrusted to IOW by the French Ministry for the Environment in order to have an inventory of the hydrometric devices, technical manuals or software used in hydrology.

"JURIEAUDOC"

A water-related commented legal base is the centre's important innovation in 1995. The legal and regulatory texts concerning all water sectors are analyzed, from early 20th century, together with articles found in legal periodicals, reference publications and jurisprudence.

THE NEW NATIONAL THESAURUS ON WATER

Jointly designed by the Ministry for the Environment, the six Water Agencies and IOW, now contains approximately 2,500 technical, administrative and legal terms in the French language related to all water fields for indexing and retrieving documents.

NATIONAL INVENTORY OF ON-GOING RESEARCH AND STUDIES

Due to the number of principals or providers of services, it has been difficult up to now to have a synthetic view of public and private efforts with regard to water-related studies and research in France.

IOW, following a survey covering all French organizations concerned and the European Union, made an inventory, at the end of 1995, of 1,573 studies or research titles, 1040 of which are fully detailed.

A GLOSSARY OF TERMS

Commonly used in drinking water and wastewater treatment has just been compiled under the aegis of the French Language Office (OLF) of Quebec and with our collaboration.

DATA MANAGEMENT

A FRENCH WATER DATA NETWORK THAT COMBINES THE NATIONAL DATA BANKS

In France as in other countries; many operators are involved in water resources management, they are either national administrations, local authorities, study and research organizations, public or private enterprises...

All of them produce water data to fulfill their own missions, they concern quantity (pluviometry, hydrometry, piezometry, withdrawals and discharges) as well as quality (natural water, distributed water, polluting effluents).

However, water management must be accomplished through an integrated approach, as for instance, in integrated river basin management. Then additional data coming from the numerous operators should be gathered, ensuring that they are homogeneous and comparable in order to establish the summary indicators that are requested by the decision-makers and the public.

The main French operators involved in the water field have decided to set up the **French Water Data Network -RNDE-** which now regroups the Ministry for the Environment, the six Water Agencies, the Higher Council of Fisheries, the French Institute for Environment and is operated by the International Office for Water.

● A DATA BANK NETWORK

RNDE is an information system which combines data banks:

- **the producers' data banks** contain elementary data,
- **the river basin data banks** meet local needs by collecting data from the producers' banks with whom they have signed agreements for data supply and utilization,
- **the thematic banks** deal with data on rainfall intensity, hydrometry, groundwater and coastal water quality, fish and the hydrobiological medium,
- **the national bank** relies on all the other banks for the provision of the data required at national or european level.

● A STANDARDIZED COMMON LANGUAGE

Automation of data exchanges requires the establishment of a common language, that is a water data dictionary which is called SANDRE (French Data Reference Centre for Water), and designed and up-dated by IOW.

SANDRE's task consists in:

- deciding with precision data characteristics, by establishing a normative dictionary,
- managing national codifications such as the lists of physico-chemical

parameters and taxons, or analytical methods,

- specifying computerized exchange formats for data bases.

● AVAILABLE PRODUCTS

The creation of RNDE has enabled the publication, at national level, of summary documents:

- four quality maps of watercourses,
- records of the 10-year evolution in surface water quality for 100 monitoring stations,
- hydrometric summaries for 150 stations over a 10-year period,
- assessment of sanitation in large cities.

● AN ORGANIZATION GATHERING COMPETENCES

RNDE development requires an important know-how such as the design of data dictionaries and the management of these data, information system technologies, the design of products presenting data and summary indicators.

IOW has acquired and developed this know-how with its partners, and can now plan to widen RNDE to meet the needs involving more producers and users and collaborate with its foreign partners who would have the same requirements.

MULTIMEDIA PROJECT

PRESENTATION OF THE FRENCH KNOW-HOW

The French Ministry for the Environment entrusted IOW with the preparation of a multimedia module presenting the **French know-how on "Organization of monitoring and warning networks and data banks related to water resources"**.

This multimedia will be based on the research of the Commission "Data Management" of IOW's Scientific and Technical Council (STC), chaired by Mr. Pierre ROUSSEL, Deputy Director for Water.

The main components are as follows: data on French water policy, data acquisition (main types of networks and methods used for their implementation), data management (presentation of the French particularity: combining data banks within the framework of an integrated river basin management: RNDE experience), data utilization (presentation of the various utilization levels and operational applications), some examples of data systems (complementarity and coherence between links, as various organizations with different objectives have to work together).

The annexes will include a file comprising the French enterprises that manufacture or supply specific equipment (or software) for sampling, laboratory analyses, on-site measurements and data management.

WORLD BANK WATER SEMINAR

Mr. J. MANCEL (IOW), participated in the annual World Bank Water Seminar that was held in Chantilly (Virginia) on December 11-13, 1995.

Gathering experts in irrigation, drinking water supply and environment, this seminar was organized around three topics:

- implementation of the World Bank's water resources policy (defined in 1993),
- institutional aspects of water resources management, including the participation of the private sector, which was the topic of a conference presented by Mr. J. MONOD, President of the Lyonnaise des Eaux,
- water conservation, reuse and economic aspects.

GLOBAL WATER PARTNERSHIP MEETING

The idea of the GWP arose, over a year ago, in discussions between UNDP and the World Bank to develop a collaboration in the water field between the various donors.

The Swedish International Development Cooperation Agency (SIDA) gathered a group of 75 people, representing 56 institutions (governments, multilateral banks, UN agencies, bilateral agencies, professional associations, the private sector and NGOs) in Stockholm from December 4 to 6, 1995 to consider whether there is a need for GWP and define its missions.

IOW, being charged with INBO's Secretariat, was invited to this meeting. It was represented by Mr. J. MANCEL, Director of International Cooperation.

ACTIM SEMINAR ON THE TREATMENT AND IMPROVEMENT OF URBAN WASTEWATER

From September 25 to 30, 1995, ACTIM organized an information seminar addressed to a **delegation of Mediterranean countries (Algeria, Cyprus, Egypt, Lebanon, Morocco, Palestine, Tunisia and Turkey)**.

IOW was entrusted with preparing the programme of the first working day which was held on its premises at Sophia Antipolis. This seminar focused on the institutional framework of wastewater management and improvement in France, and on the role of Water Agencies. The lectures were followed by technical visits of wastewater treatment plants of the Provence-Alps-the Riviera region.

ICLEI: MEDITERRANEAN LOCAL AGENDA 21

A conference gathering 250 representatives of 150 organizations took place in Rome City Hall from November 22 to 24 at the invitation of ICLEI (**International Commission for Local Environmental Institutions**), to deal with local strategies for sustainable development.

J.C. PAPOZ, representing IOW, was rapporteur of the session on water management.

The establishment of an action plan for Mediterranean cities was a recommendation to be included in the work for the Barcelona Conference.

PROJECT EVALUATION

IOW, due to its independence and its deontology of the public service, is requested more and more to **evaluate public programmes and projects in the water sector, to carry out necessary audits, and to advise contracting authorities, administrations or local communities** that require it.

These activities are implemented by IOW's specialists (including civil servants in secondment from the French Ministries of Agriculture, Public Works, Industry and from Water Agencies) with the support, when necessary, of experts from public administrations (lawyers from the Ministry for the Environment, General Engineers from GREF -Water and Forestry General Council- in particular).

In 1994, IOW had already evaluated **potable water treatment projects in several towns of Vietnam and Gaza water supply** upon the request of the French Ministry of Economy and Finance (DREE).

In 1995, this activity strengthened with:

- Guyana,
- Reunion Island,
- South Manche,
- in Creuse (see below).

At the beginning of 1996, the International Office for Water will continue the audit of the **National Masterplan for Effluent Purification of Morocco**, through an agreement with the French Development Fund (CFD).

POTABLE WATER IN GUYANA

By request of the Department of Agriculture and Forestry of Guyana and the City Halls of Saint George of Oyapock and Mana, two engineers from IOW carried out an expert appraisal of the potable water treatment facilities from April 2 to 9, 1995.

The objective of this mission was to find relevant technical solutions, within the framework of 2 projects for rehabilitating potable water treatment plants in small districts, taking into account the local water quality and the technical constraints linked to these sites. At present, the supplied water does not yet completely meet standards (aluminium, THM, ...).

LA SOUTERRAINE TOWN

PROJECT FOR MODERNIZING THE WASTEWATER TREATMENT PLANT

IOW has assisted, in close collaboration with the Departmental Directorate of Agriculture and the contracting authority - GAUDRIOT Consulting Firm, La Souterraine town to prepare the terms of reference of the invitation to tender for the building of a new wastewater treatment plant (6,000 inh. eq.) and to sort out and choose among the bids.

REUNION ISLAND

AUDIT OF THE PROJECT OF WATER TRANSFER FROM MAFATE AND SALAZIE

Following an invitation to tender, the Reunion General Council has entrusted IOW with the audit of the project for transferring water from Mafate and Salazie corries, from the east of the island to the west coast.

This project aims at transferring 141 million m³ of water per mean year from east to west for the irrigation of 8,650 hectares and the drinking water supply of the towns of La Possession, Le Port, Saint-Paul, Trois-Bassins and Saint-Leu.

The 1991 estimated cost of the project was FF. 1.959 billion programmed within the Regional Development Plan.

The mission of IOW's international experts, composed of Messrs DONZIER, General Manager, DESPAS, GREF General Council, and LAZENBY - Sir GIBB and Partners, went to Reunion Island from June 19 to 30, 1995, to study the problem and meet the organizations involved in this project.

The audit report was submitted and presented on September 13, 1995 to the "ad-hoc" commission of the General Council which will thus have "outside and independent" advice at its disposal for making decisions for the continuation of the project.

NORMANDY - SOUTH MANCHE

EVALUATION OF THE IMPROVEMENT PROGRAM FOR DRINKING WATER SUPPLY

The Intercommunities Syndicate for potable water supply of South Avranches region entrusted IOW with a survey to be provided with an unbiased opinion on the functioning of the Syndicate and the on-going investment design.

The main issue of this audit was the project of building a plant for treating the water withdrawn from the only available watercourse, the Selune. The conclusions of this survey indicated that new considerations are to be taken into account to improve and guarantee water supply: the alluvial water table should be better used, low flow should be sufficiently maintained to allow withdrawals under any circumstances and rehabilitate the Selune quality on the medium-term.

The implementation of a SAGE (Water Development and Management Scheme) is one of the priority measures to preserve the quality of this water resource, indispensable for this part of the Manche Department.



IOW's actions in the field of integrated river basin management cover the three following fields:

- **institutional, organizational, legal, financial and technical expertise** for governments or river basin organizations of interested countries.

- **organization of training courses** addressed to executives from concerned countries, either of short duration in the interested country, or of short or long duration in France.

- **technical assistance** for precise issues (setting up basin observatories, solving conflicting uses, application of the «polluter-pays» principle, urban services organization, industrial pollution, irrigation development ...).

IOW relies on a network of French experts from the French Ministry for the Environment, the six Water Agencies and Waters and Forestry General Council.

A MULTIMEDIA TRAINING MODULE

The training module implemented by IOW upon the request of UNEP, the French Ministries for the Environment and Cooperation and the French Water Agencies, aimed at giving relevant answers to practical issues by presenting an integrated and coherent approach to river basin management.

The CD-ROM technique has been used because of its adaptability to the different uses required by the trainer. The participant's and trainer's handbooks have been completed with case studies on international watercourses and national cases based on river basin management as adopted in some countries.

This module has been implemented in three languages : French, English and Spanish. It was used in 1994 for three training courses held respectively in Dakar (**Senegal**), Jakarta (**Indonesia**) and Caracas (**Venezuela**).

Another training course took place in Rio de Janeiro (**Brazil**) from 30 January to 10 February, 1995. It was jointly organized with ACQUA Institute, with the support of the Brazilian Ministry for the Environment, Water Resources and Legal Amazonia.

It gathered 23 participants from the Central Administration and most Brazilian States concerned : Bahia, Ceara, Espiritu Santo, Goias, Minas Gerais, Parana, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Santa Catarina and Sao Paulo.

MAURITIUS

A cooperation programme for water resources management and quality control has been launched by the French Assistance and Cooperation Fund on request of the Mauritius Government.

IOW intervention comprises two components:

● TRAINING PROGRAMME

The first part of this programme started in 1995 with:

- Mr. POONYTH's practical training on the operation and management of wastewater discharge installations and treatment plants which took place from May 15 to June 30, 1995 in our Centre in Limoges.

- Mr. IP SION THOO's practical training on operation and maintenance of wastewater treatment plants and systems, which took place from June 19 to 30, 1995 in Limoges and continued at the Lyonnaise des Eaux in Bordeaux.

● INSTITUTIONAL ASSISTANCE

On June 14, 1995, Mr. DONZIER, IOW General Manager, met the First Secretary and the principal executives in charge of the water sector in the Ministry of Energy, Water Resources and Postal Services of Mauritius. This visit was the opportunity for a conference on the experiences of various countries in the institutional reorganization of water management, in the presence of Mr. MONCHALIN (Technical Adviser for French Cooperation to the "Water Resources Committee").

IVORY COAST

A business meeting took place at IOW headquarters on February 6, 1995 with Mr. Anzeni DJOUKA, Director of the Water Department in the Ministry of Public Works of Ivory Coast. Its objective was to **define the conditions of a project**, supported by the French Ministry of Cooperation, **for setting up a more decentralized administrative organization in the country while taking into account the river basin aspect.**

Ivory Coast is already participating in the Liaison Bureau of the **International Network of Basin Organizations (INBO)** as a founding member.

KENYA HUMAN RESOURCES DEVELOPMENT PROGRAMME

This programme covers the professions related to water resources management and to potable water supply and sanitation.

A Kenyan Task Force was established to analyze training resources (institutions and programmes) and needs (personnel) to prepare an action plan in 1995.

Thanks to the French Ministries for Foreign Affairs and Environment, a **6-month permanent assistance was given** by Mr HARAMBAT (IOW). Based in Nairobi during the second semester of 1995, he was supported by Mr CASIMIR's specific missions.

The results thus obtained demonstrate the necessity to **develop a sustainable continuing training system in the water sector in Kenya.**

The main objective for 1996 and the following years will be to **develop the capacity-building of Kenyan organizations** regarding human resources management and planning of staff training.

ACTIM SEMINAR

A seminar organized by ACTIM in Nairobi from October 17 to 19, 1995 dealt with water management and was attended by many French companies. IOW presented the above human resources development programme.

GUINEA

The Director of Water Resources of Guinea, Mr. DIALLO, accompanied by Mr. FOFANA, Head of the Regulations Department, came to France on November 20-24, 1995.

Richly endowed with water resources, **Guinea is preparing the legal and regulatory tools necessary for a sound and sustainable management.** In addition to the French legal and regulatory framework, this visit, funded by FAO and organized by IOW, gave these two experts the opportunity of better understanding the Water Agency system and of comprehending the methods of industrial pollution control (presented by the Directorate of Research and Industry of Provence-the Riviera region).

Meetings with the companies CISE, SAUR, BRL and Great Lakes of Seine, allowed exchanges on such issues as delegated management, regional development and dam operation.

OMVS (ORGANIZATION FOR THE DEVELOPMENT OF SENEGAL RIVER)

Mr. MANCEL (IOW) was in Dakar, from May 9 to 13, 1995, to check, with OMVS executives, Messrs DEMBELE, LAKH, GALLOIS, and COURTANT, Adviser at the French Cooperation Mission, the progress made in **the project «Assistance and support to the setting up of an Agency for managing shared works»**. It involved the redefinition of the various actions, experts' schedule, logistics, ...

A new mission of Messrs MANCEL, BERNARD and ARCANGELI (IOW), took place on September 17-28 to deal with such issues as the statutes of the future agency, specifications and users' committee.

Finally, Mr. BERNARD carried out a mission on November 2-10, to take stock of the situation and see **what kind of problems are encountered**: lack of financial resources for dam maintenance, insufficient preventive measures, identification of training needs for the personnel of DIAMA and ROSSO sites on three topics: technical (electromechanics, civil engineering), computerized systems (water management, dam management, accountancy, secretariat), and organization/management (personnel management, optimization of structural organization).

BENIN

The Minister for Mines, Energy and Water Resources, Mr. HOUËSSOU, visited us from November 13 to 16, 1995, accompanied by the Director of Water Resources and his Deputy.

This visit, organized by the International Office for Water, with the support of the French Ministry of Cooperation, included meetings with many organizations, institutions, operators and decision-makers in the French water sector. Thanks to visits of the Rhone-Mediterranean-Corsica Water Agency, DDAF (Departmental Directorate of Social Affairs) of Bouches du Rhone, EDF (Electricity of France) control room in Ste. Tulle and the Canal of Provence Company, our visitors could better understand the French organization, concurrent with **Benin's launching of an ambitious study to define a national strategy for water resources management.**



INDONESIA FRENCH-CANADIAN TRAINING SEMINAR ON RIVER BASIN MANAGEMENT

This seminar, jointly organized by the Water Sector Technical Cooperation Fund (WSTCF) for the «Canadian International Cooperation Agency» (CIDA) and by the International Office for Water, on behalf of the French Embassy in Indonesia, with the participation of the Indonesian Ministry of Public Works, took place in Sanur from November 20 to December 1, 1995.

It gathered 25 participants from the Ministry, most of them from the General Directorate of Water Resources Development (DGWRD - Jakarta) the others from some provinces (Malacca, Bali, Nusa Tenggara, Celebes, Irian Jaya, Central Java).

The programme of this training dealt with the detailed description of the French system of river basin management (River Basin Committees,

Water Agencies) and with some examples of cooperation between Canada and Indonesia in the field of decentralized water resources management.

A total of 10 lecturers intervened, 4 Canadians, 1 Indonesian and 5 Frenchmen from the Ministry for the Environment, the Rhine-Meuse Water Agency, the Canal of Provence Company, and from the International Office for Water.

The training course emphasized the benefit of applying the «polluter-user-pays» principle.

Lectures and discussions brought out possible lines of action to adapt this system to Indonesia, a country where two «pilot projects» are already launched in Citarum (Perum Otorita Jatiluhur) and Brantas (Perum Jasa Tirta) river basins.



CENTRAL ASIA

SEMINAR ON WATER MANAGEMENT AND TECHNOLOGIES

A seminar was organized by ACTIM in Almaty on June 19-21, 1995, which gathered executives from Kazakhstan and four other republics of Central Asia together with many French companies.

Mr ARCANGELI, representing IOW, intervened on training for water professionals.

KAZAKHSTAN: THE IRTYSCH PILOT RIVER BASIN

Following ACTIM seminar, a French delegation, led by the Water Club (MEED), went to Kazakhstan from December 4 to 14, 1995. It was com-

posed of SAFEGE, ANTEA, VER-SEAU; IOW's representative was Mr Alain DUTEMPS from the Adour Garonne Water Agency.

The purpose of this mission was to identify possible cooperation projects and mainly focused on river basin management, based on the French model. **The conditions for launching a pilot project on the Irtysch basin** (river having its source in China, crossing Eastern Kazakhstan and flowing into the Ob in Russia) **mainly dealt with institutional aspects and coordinated pilot investment projects** (monitoring stations, modernization of treatment plants...). Please be reminded that IOW, together with other interested enterprises, participates in the Water Club, managed by Mr. DANGEARD (MEEB).

INDIA PILOT PROJECT FOR SABARMATI RIVER

Following a French-Indian seminar on «Global River Basin Management» held in New Delhi from December 12 to 15, 1994, a programme was prepared with the Central Water Commission and Gujarat State to apply integrated river basin management in India and proposed by the Indian Authorities to be included into the 1995 French bilateral cooperation agreement.

Four main topics were retained:

1. the institutional organization at pilot river basin level,
2. monitoring networks and data banks,
3. training of water professionals,
4. industrial pollution.

1995 was a transitory period with the double objective of preparing a financial agreement and launching the first actions on priority topics.

A preliminary mission of Messrs. TALEC and HAENER from IOW took place from May 29 to June 9, 1995 to investigate the following issues:

● **Institutional aspects:** a first analysis of the situation and the **setting up of a French-Indian steering Commission**. The priority objective of the Commission was to select the pilot river basin and to establish a programme of assistance and follow up for the setting up of an institutional structure in the country.

● **Data banks:** analysis of the current situation at central level and identification of the objectives to be reached with the **creation of a river basin observatory** (water-related information systems) for the pilot basin.

● **Training:** identification of priority needs for **professional training** in the water sector.

A second mission of Messrs. TALEC and LECOMTE was carried out from October 3 to 13, 1995 to **select the Sabarmati River basin in Gujarat State to carry out this experiment and to define the terms of reference for a 3-year cooperation project**. On December 7, 1995, an official request for funding this project was made by the Indian Department of Economic Affairs to the French Embassy in India.

ANTEA (BRGM Group), OTV and SPACE-International (General Water Supply Company's group), Bas-Rhone-Languedoc-Engineering (BRL Group), SAFEGE (Lyonnaise des Eaux group), Pont-a-Mousson and Water and International Development Ltd, together with the Rhone-Mediterranean-Corsica Water Agency, are interested in participating in the implementation of this programme. IOW, designated as leader, has to prepare, in the name of the Group, the detailed project with the Indian Authorities and the French Embassy in New Delhi (PEE), and coordinate the various activities.

The World Bank is prepared to coordinate its planned activities in Gujarat State with the French project, as the latter seems to be innovative and within its new water policy that was defined two years ago. **It also requested France's participation in the water supply programme initiated in Punjab State** where several joint identification missions have already been carried out.

The United Nations Development Programme (UNDP) also intends to participate in this programme.

CHINA VISITS IN FRANCE

● Seven Chinese experts from the Ministry of Water Resources visited France on an international funding for research on river basin management. The visit was organized by CNR (National Rhone Company). These experts were welcomed at IOW headquarters on March 22 by F. ARCANGELI and J.F. TALEC who presented the Office's activities and the French river basin organization.

● ACTIM hosted, from March 23 to April 1, 1995, a delegation of 6 executives of Ningxia province in the People's Republic of China, within the «**Ningxia China Northern Irrigation Project**» funded by the World Bank. The executives were particularly interested in the institutional aspect and water management in France, and in the French processes and technologies in the irrigation field.

IRAN: LAUNCHING A PROGRAMME OF COORDINATED ACTIONS

Following the French-Iranian seminar of October 1993, two projects have been launched on experimental river basins, one on **erosion control with CIRAD**, the other on the **assessment of water resources on the snow mantle** (EDF).

Mr. P. LE LOURD (IOW) went to Tehran from June 29 to July 9, 1995, at the invitation of the Iranian Ministry of Energy, to coordinate the beginning of these projects, with the support of the French Embassy. He also met Mr. AFSHAR, Director of TAMAB and Mr. MANOUTCHERI, Vice-Minister in charge of potable water and sanitation, who talked about his concern with **water quality and the need to strengthen the national structures and the training of manpower** in this sector.



BULGARIA

YANTRA RIVER BASIN PILOT PROJECT

Within the framework of the preparation of the new Bulgarian water law, Mr. BERNARD (IOW) met, from May 19 to 24, 1995, the Bulgarian Authorities in charge of the water sector in order to appreciate their cooperation needs and requirements. Three actions were clearly identified:

- the organization of a seminar on river basin management addressed to executives and decision-makers from the concerned ministries,
- the appraisal of the main laws and regulations being prepared,
- the visit to France of a Bulgarian delegation to better understand the various institutional aspects.

RUSSIAN FEDERATION

TOM RIVER EXPERIMENTAL BASIN

Within the framework of the pilot project for setting up the Water Agency and Basin Committee of Tom River (a tributary of Ob River), that has been launched with the Russian Federal Water Committee, a delegation of eight project managers attended a training course in France from December 10 to 20, 1995.

The programme was organized by IOW and comprised exchanges of views on water regulations, a meeting with the Seine-Normandy Basin Committee and training at IOW's Centre of Limoges on the diagnosis of drinking water supply networks, metering, wastage control, collecting domestic, industrial wastewater and storm water.

ARMENIA

Upon the request of the French Embassy in Armenia, Messrs DJAVADIAN, Vice-Minister for Agriculture, KODJOYAN, Director of the Hydrometeorological Department and SARKISSIAN, Head Hydrologist, came to France in June 1995 to study the water sector.

They were able to discover the French know-how, related to water resources management and utilization for agriculture and domestic uses during a series of meetings and field visits organized by IOW.

ROMANIA

PLAN FOR SETTING UP A FORECASTING AND WARNING SYSTEM FOR FLOOD AND ACCIDENTAL POLLUTION

An initial funding, by the French Ministry for Foreign Affairs out of its 1995 budget, enabled the project with APELE ROMANE to get under way and a preparatory mission to take place in Romania from November 19 to 23, 1995.

On this occasion, Mrs. MONGELAZ of IOW and Mr. ROY, of the Department of Water, defined the problems encountered by APELE ROMANE's subsidiary branch in BACAU, chosen as a pilot area, and the Romanian partners' expectations, regarding the forecasting of sudden floods in mountainous areas in particular. This requires:

- a critical analysis of the monitoring system in order to position stations according to their situation and transmission reliability,
- the setting up of hydrological stations with automatic transmission of data to a central unit enabling a real time visualization of the phenomena,
- the preparation of a flood forecasting model for a small mountainous river basin,

- a study to determine the benefit of using radar for meteorological forecasts and radar-flowrate test models,

- the map up-dating and computerization of flood-prone areas,

- seminars intended for elected officials to make them aware of the flood phenomenon and to inform them of their important role with regard to prevention, warning and safety measures.

The various measures proposed will be tested on TROTUS River.

LONG-TERM NATIONAL TRAINING PROGRAMME

In 1995, the International Office for Water helped launch in Romania an important programme of human resources development in the water field.

With the support of the Danube Programme Coordination Unit, in Vienna, of UNDP and the Global Environment Fund, a Romanian delegation, led by Mr. LASCU, General Manager of APELE ROMANE, took part in a study tour in France and the Netherlands, in June. The aim was to study and compare the different systems of continuous training liable to meet the requirements of the water sector and especially the management of important hydraulic schemes.

A Romanian task force was then formed by national representatives of the sector, in order to determine the training needs at various levels and define the conditions for improving the existing training capacities. The results of this research should be known at the beginning of 1996.

FRENCH-ROMANIAN COOPERATION AGREEMENT

Mr. LAURENT, Director for Water, French Ministry for the Environment and Mr. DONZIER, General Manager of IOW, were in Romania on August 23-24, at the invitation of Mr. STADIU, Secretary of State, Ministry for the Environment, Romania. On this occasion, a project was signed, which emphasizes the main lines of cooperation in the water field: institutional and financial components of river basin management, management of monitoring networks and data bases, prevention of accidents and rare phenomena, training and human resources development.

IOW is entrusted with the technical and financial design of projects that will meet those objectives. It will closely associate the involved public and industrial partners such as the Ministry for the Environment and the Water Agencies, Seine-Normandy in particular, EDF, METEO France, CENTRALP Automatisme.



MOROCCO DRAFTING A WATER LAW

Three high officials from the Moroccan Ministry of Public Works, Messrs Mustapha MOUDDEN, Noureddine BOUTAYEB and Mokhtar BZIOUI, came to France from June 19 to 23, 1995 to broaden their knowledge of French Water Agencies.

The French Embassy in Rabat entrusted IOW with the organization of this study tour. The experts visited the Adour-Garonne, Seine-Normandy and Rhone-Mediterranean-Corsica Water Agencies, the Ministries for Environment and Foreign Affairs and the Great Lakes of Seine.

TURKEY

CHOICE OF AN EXPERIMENTAL RIVER BASIN ORGANIZATION

The first French-Turkish seminar on river basin management took place in Ankara on September 4-6, 1995, on the initiative of both French and Turkish Ministries for the environment.

This seminar was successful, it gathered about a hundred participants representing 28 Turkish organizations concerned.

It was the opportunity for an exchange of experiences on the policies established in both countries regarding water resources management and dealing with institutional, administrative, technical and financial aspects, in relation to the organization at river basin level, municipal services and coastal protection in particular.

The main lines of action for a multiannual French-Turkish cooperation pro-

gramme for inland water resources management were brought out.

These actions would be implemented:

● at central level, provided that support is granted, for preparing a law draft to be presented by the Turkish Ministry for the Environment, and for setting up a Turkish bank on water resources.

● at an experimental river basin level, where a pilot project for the adapted organization of an integrated water resources management would be launched. The Seyhan River Basin has been chosen by the Turkish authorities. It is located in the Mediterranean area to be an example and driving force for other interested Mediterranean countries.

A top-level Turkish delegation should come to France during the first semester of 1996 to meet executives of Water Agencies, municipalities, industries and associations of irrigation users.

ALGERIA

PROJECT FOR THE «MITIDJA WATER PROTECTION AGAINST POLLUTION»

This project, funded by the French Ministry for Foreign Affairs, aims at **implementing a programme for monitoring and protecting the waters of the Mitidja plain which supply Algiers.**

The first agreement plans the following actions : organization of monitoring networks, monitoring the wadis water quality, definition of a protocol for monitoring water quality in the dam-reservoir supplying Algiers from an eutrophication point of view, optimization of the quality networks of aquifers, and preparation of guidelines for the Mitidja management quality objectives.

The International Office for Water has the responsibility of coordinating this action programme jointly implemented by SAGEP, the Universities of Toulouse and Limoges, the Rhone-Mediterranean-Corsica Water Agency and by GEOLAB, all of which combine their complementary expertises to meet the requirements of the Algerian Authorities in the most appropriate manner.



BRAZIL

ENVIROTECH' 95

Mr. TALEC, Manager of the River Basin Division in IOW, was invited to participate in the Forum and Round Table on the reduction of pollution in bays and rivers which took place during Envirotech' 95 exhibition held from June 19 to 23, 1995 in which thirty countries were represented.

TOWARDS A COOPERATION WITH CEARA STATE

Following the talks between Mr. MACEDO, Secretary of State for Water Resources and Mr. DONZIER at IOW headquarters in October 1994, Mr Francisco Ariosto HOLANDA, Secretary of State for Science and Technology in the Government of Ceara State in Fortaleza, requested IOW to organize a visit in France, from August 14 to 23, 1995, for Mrs BARREIRA-UCHOA, Adviser for professional training, to define the terms of reference for a cooperation programme with France concerning the training of water professionals.

VENEZUELA

ICLAM FOR AN INTEGRATED MANAGEMENT OF MARACAIBO LAKE BASIN

At the invitation of Dr. HERRERA, President of ICLAM (Institute for the Conservation of Maracaibo Lake), Mr. DONZIER went to Venezuela from March 29 to April 3, 1995, to participate in a conference on the establishment of means and structures for **improving environmental protection and water quality in Maracaibo Lake basin.**

This conference regrouped Venezuelan experts in environmental law and river basin management, and expert consultants from South America around ICLAM's management team. The legal possibilities, given in the decree creating ICLAM and setting its competence and missions, were analyzed and the main lines of a coordinated plan of multiannual actions were defined, with a possible liaison with the Colombian authorities for the Western upper basin.

During his stay in Venezuela, Mr. DONZIER also met His Excellency the Ambassador of France in Caracas and his main collaborators to take stock of the French-Venezuelan cooperation in the water field.

The training possibilities for the staff of municipal potable water supply services were outlined during an appointment with the President-General Manager of HIDROVEN.

MEXICO

TRAINING OF EXECUTIVES FROM THE COMISION NACIONAL DEL AGUA (CNA)

As part of the cooperation that has been developed over the past few years with Mexico, **13 young Mexican executives from CNA, and future executives of the new Mexican «Water Agencies» (in the process of being set up), were trained in France on water management.**

They went to the National School for Public Works (ENTPE) for 13 months.

They received a specific training on river basin management at IOW. This course was managed by Mr. BERNARD, with the participation of several specialists from Rhone-Mediterranean-Corsica Water Agency (Messrs LASCOMBE, GAUTHIER and BOUFFARD) and from the French Ministry for the Environment (Mr SIRONNEAU).

Ten of these executives participated in a 3-month on-the-job training in the 6 French Water Agencies.



Agences de l'Eau

JORDAN

ASSISTANCE IN CREATING A DEPARTMENT FOR INTERNATIONAL AFFAIRS AT THE MINISTRY OF WATER AND IRRIGATION

At the invitation of Messrs. Saleb IRSHEIDAT, Jordanian Minister for Water and Irrigation and BANI HANI, Secretary General, Mr. P. LE LOURD, Technical Adviser at IOW headquarters, carried out a mission in Amman, from December 11 to 16, 1995, to define the conditions for creating a Department for International Affairs within this Ministry.

Thanks to Ph. OSPITAL, Regional Expert at the French Embassy in Jordan, who prepared this mission, Mr. LE LOURD could also participate in a meeting of the «National Committee in charge of establishing a long-term water policy in Jordan».

TECHNICAL BOOKLETS

IOW's collection of technical booklets is regularly increased with issues dealing with precise technical topics related to the operation of hydraulic and sewerage systems, to the operation and maintenance of equipment in particular.

Translations into a foreign language are made upon particular requests, that is the case of the made-to-order booklet "What is purification ?" which is available in English and Spanish.

- N° 1 - CENTRIFUGAL PUMPS - MAINTENANCE (FRENCH)
- N° 2 - LEAK DETECTION (FRENCH)
- N° 3 - REAGENTS FOR POTABLE WATER TREATMENT (FRENCH)

- N° 4 - MEASUREMENT DEVICES (FRENCH)
- N° 5 - METERING (FRENCH)
- N° 6 - PLUMBING (FRENCH)
- N° 7 - SEWERAGE NETWORKS (FRENCH)
- N° 8 - NITRIFICATION - DENITRIFICATION AND PHOSPHATE REMOVAL (FRENCH)
- N° 9 - WATER OZONIZATION (FRENCH)
- N° 10 - WATER CHLORINATION (FRENCH)
- N° 11 - REMOTE CONTROL OF NETWORKS (FRENCH)
- N° 12 - LAYING OUT OF PIPES (FRENCH)
- N° 13 - HANDPUMPS (FRENCH)
- N° 14 - WATER SUPPLY FOR STEAM BOILERS (FRENCH)

- N° 15 - PUMPS : START, STOP, SPEED VARIATION (FRENCH)
- N° 16 - CHLORINE DIOXIDE (FRENCH)
- N° 17 - BOOSTER PRESSURE : PRINCIPLE, APPLICATION, SIZING (FRENCH)

ON REQUEST :

WHAT IS PURIFICATION ? (FRENCH, ENGLISH, SPANISH)

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Is this a mainstream topic ?

In any case, it is obvious that the requests for cooperation to IOW are increasing. This is due to several reasons:

- the management and organization of potable water supply and sewerage services are the keys for improving the sanitary quality of large cities in developing or emerging countries.

- France has a particular and original experience, thanks to decades of delegated management involving private operators and public services.

- Donor agencies are associating precise conditions with their financial support, requiring the use of reliable and durable management tools.

IOW can then be requested to intervene at various levels of water services: strategic expertise to **assess the present situation and draw up the orientations to be followed** by municipalities in investment, operation, tariffing, and in the industrial and commercial management of services, **the training** of executives, supervisors and operators of services as well as **assistance to decision-making and information of municipal elected officials**.

ZAMBIA A NEW WATER POLICY

Upon the request of the French Embassy in Lusaka, Mr. CASIMIR from IOW studied with the Zambian authorities, from May 3 to 7, 1995, the content of a training action related to water policy and intended for executives of the Ministry of Water.

A Zambian delegation came to France from November 9 to 17, 1995 at the invitation of the French Ministry for Foreign Affairs. The visit organized by IOW, gave the Zambian officials from the Ministry of Water the opportunity of better understanding the French organization of the water sector and to plan a cooperation programme for 1996.

UNION OF AFRICAN WATER SUPPLIERS (UAWS)

GENERAL ASSEMBLY

UAWS's General Assembly, held in Rabat (Morocco) on March 13-14, 1995 at ONEP (National Office for Potable Water Supply) training centre, was the opportunity for strengthening our relations with UAWS who will, from now on, participate in the meetings of IOW's Board of Directors as an International Associate Member.

BOTSWANA

ASSISTANCE FOR TRAINING WITHIN THE NORTH-SOUTH CARRIER PROJECT

The visit of a Botswanese delegation to France in 1995 enabled to validate **the identification of training requirements in Botswana's water sector, and to confirm the need to strengthen the local training capacities**.

Two experts, Mr. CASIMIR for IOW and Mr. HARVEY from LYSA, went to Botswana from May 2 to 12, 1995 to define the main lines of a bilateral cooperation agreement. A request for funding was made at the beginning of July to the French Ministry of Economy (DREE) by the Botswanese Authorities.

STUDY TOUR IN FRANCE

Mrs. RAMALOHLANYE, Director of the Water Utilities Corporation's Training Centre (WUC) made a study tour in France from May 16 to 20, 1995, to visit IOW's National Training Centre for Water Professions at La Souterraine and the International Centre for Development and Training of the Lyonnaise des Eaux in Nanterre.

TRAINING OF TRAINERS

Six Botswanese trainers, 4 from the Department of Water Affairs and 2 from the Water Utilities Corporation, attended a training course at IOW's National Training Centre for Water Professions, from June 26 to July 7, 1995. It dealt with technical knowledge in the fields of water treatment, operation and maintenance of potable water supply and sewerage systems, leak detection, remote control of pumping stations and maintenance of installations.

This training should, in principle, continue in Botswana within the cooperation agreement planned between both countries.

NAMIBIA

WATER SUPPLY OF OHANGWERA REGION

Namibia is the driest country of Sub-Saharan Africa. Meeting the water needs of the population, particularly in rural areas, is a priority of the new water policy of the Namibian Government. This objective requires the setting-up of appropriate infrastructures, beneficiaries' commitment, cost recovery, and finally human resources development.

Upon the request of the French Mission of Cooperation, an exploratory mission to examine **the possibility of creating the training centre** planned by the Namibian Department of Water Affairs was carried out by Mr P. LE LOURD of IOW in Windhoek from November 22 to December 1.



CAMEROON

SEMINAR ON PRIVATE WATER MANAGEMENT METHODS

This seminar was organized in Yaounde from February 28 to March 1, 1995, by the French Development Fund (CFD) and the Ministry of Mines, Water and Energy of Cameroon. It presented various experiences in the field of potable water management to assist the Government of Cameroon in choosing the most appropriate delegated management to be applied to three public services (electricity, water, telephone), as it plans to entrust their operation to private enterprises.

Both lectures of Mr. CASIMIR, IOW expert, insisted on the possible systems of potable water supply and sewerage, heritage property, management objectives, formalization of relations between the contracting authority and delegated services, and investments and operation of services.

NATIONAL WATER COMPANY OF CAMEROON (SNEC) - FEBRUARY 20 - MARCH 3, 1995

The devaluation of the CFA franc has put most African operators in an even more precarious situation. Within this context, SNEC requested an important financial support from the French Development Fund (CFD). The latter proposed a **preliminary institutional study of the type of management best suited to Cameroon's water sector**.

To assist the authorities in their study, CFD requested IOW to organize a seminar for informing the different operators of the sector while setting SNEC's case in a general framework, to contribute to the preparation of the terms of reference and to the launching of the invitations to tender to specialized consulting firms, and to participate in the analysis of tender documents.

SOUTH AFRICA

TOWARDS A COOPERATION PROGRAMME

● Commissioned by the French Ministry for Foreign Affairs, IOW organized from June 26 to 30, 1995, a programme of technical visits for 12 executives of the South African Ministry of Water and Forestry.

Owing to the wide diversity of their objectives, this delegation was split into three groups:

1. Institutions and finance with the participation of Bas-Rhone-Languedoc Company, the Aix-en-Provence regional Directorate for Environment and Rhone-Mediterranean-Corsica Water Agency.

2. Water quality: this group was received at IOW's Department at Sophia Antipolis and focused on watercourse quality and intake protection. They visited the treatment facilities built by DEGREMONT, the General Water Supply Company and SAUR, and attended some lectures at

the Directorate for Environment of the General Council of Maritime Alps region.

3. Human resources : this issue was discussed at IOW's National Training Centre for Water Professions in Limoges and La Souterraine.

This programme also included some discussions at the Department of Water of the Ministry for the Environment, at the Ministry for Foreign Affairs, SAGEP (Paris Water Management Company), CIRSEE (Lyonnais des Eaux) and SAUR.

● A French delegation including experts from IOW and the Ministries for the Environment and Public Works went to Pretoria in December 1995 to elaborate, with executives of the South African Ministry of Water, a cooperation programme on institutional and training aspects, focusing on the revision of the water law, river basin management and the delegated management of municipal water supply and sewerage services.



HUNGARY

INFORMATION PROGRAMME FOR HUNGARIAN LOCAL ELECTED OFFICIALS

This programme was implemented in two phases:

● **The first one concerned the training of Hungarian trainers and comprised a training in France**, from September 24 to 28, 1995 on programmes, educational methods, case studies and supports necessary for informing elected officials, and in particular the participation in the French «Water seminars for elected officials» organized by Ms. BITTNER (IOW), as well as a seminar in Hungary, from October 30 to November 3, dealing in particular with service organization and water price.

● **The second phase comprised 3 information seminars for Hungarian elected officials on the organization**

of urban water supply and sewerage services. They were organized by Hungarian trainers with the participation of French experts : Mrs. J. MONGELLAZ and Mr. M. CASIMIR for IOW, and Mr. Y. BOURON of the General Council of Maritime Alps. They took place in the three following departments : Fecher (November 6-7), Baranya (November 8), and Bekes (December 10-13, 1995).

A meeting took place to conclude this programme, led by the Hungarian Office for Water (OVF) in coordination with the Hungarian Water Suppliers' Association, in which the continuation of this first experience for other Hungarian departments was envisaged.



POLAND

A delegation composed of twenty representatives of local communities and administrations of Silesia-Upper-Vistula region undertook a study tour from June 24 to July 1, 1995, within a cooperation agreement with the Nord-Pas-de-Calais region in France.

In Nord-Pas-de-Calais region, they had contacts with the Artois-Picardy Water Agency where they talked about river basin management and industrial pollution in particular, the Nord-Pas-de-Calais Regional Council that presented its activities regarding environment (Lallaing and Rieulay sites, SICOS treatment plant), and the General Water Supply Company (CGE) where they visited Carvin water treatment plant.

The delegation was then received by the Ministry for the Environment in Paris where the French water management policy and organization were presented. It also visited IOW's National Training Centre for Water Professions in Limoges.

The cooperation agreement between Krakow RZGW and Artois-Picardy Water Agency was then signed.

INFORMATION PROGRAMME FOR ELECTED OFFICIALS

In 1995, seven information seminars on the organization and funding of municipal water supply and sanitation services were organized by the Water Foundation of Gdansk, in association with IOW and with the support of RZGWs (Polish regional Water Agencies). They gathered about **300 elected officials and representatives of local communities** from the following regions: Gdansk (January 23 and 24, 1995), Szczecin (January 26 and 27), Krakow (March 14-15), Katowice (March 17), Wroclaw (March 20) and Warsaw (March 23).

ROMANIA

THE NATIONAL COMMITTEE OF WATER SUPPLIERS BECOMES A MEMBER OF IOW

The 31 autonomous public corporations of water producers and suppliers of Romania decided, during their meeting held on June 15, to create the National Committee of Water Suppliers (CNP DAR) and elected a President, Mr. Costin BEREVOIANU, General Manager of Bucharest Water Supply Company.

Previous to this, Mr. BEREVOIANU

RUSSIAN FEDERATION

WATER MANAGEMENT FOR 35 RUSSIAN EXECUTIVES

This seminar, addressed to the Central Institute of Continuing Training (CINT), was held in Paris from May 14 to 21, 1995. The programme, prepared by IOW, included lectures on the French experience in quality control and standards of supplied water, water management systems, treatment technologies, regulatory framework for water protection and operation of facilities. They were followed by technical visits (Acheres treatment plant, Seine-Normandie Water Agency).

TELECONFERENCE LIVE WITH PETERSBURG

On the initiative of Mr. J.F. MARMEY, Director of International Relations at the Chamber of Commerce and Industry (CCI) of Val-d'Oise-Yvelines, a **2-hour experimental teleconference (duplex) was organized on April 11, 1995 between Versailles and Saint-Petersburg with the assistance of MATRA and FRANCE-Telecom.**

This teleconference dealt with municipal water management and was led live by Mr. DONZIER, IOW's General Manager, on the French side, and Mr. SEMINE, Director of the Scientific Research Institute of the Petersburg Academy of Urban Management, on the Russian side.

A very lively dialogue was established between the French specialists (Seine-Normandie Water Agency, SAGEP, DDAF of Yvelines, OTV) and the Russian experts in charge of the water sector in the Urban Management Committee and VODOKANAL of Petersburg as well as those from the Technical University.

Further to the interest of such type of video conferencing, all participants agreed upon the benefit of such meetings and on the necessity of continuing the dialogue thus started.

was in France on March 27-31, 1995, where he met IOW's General Manager and visited the National Training Centre for Water Professions in Limoges/La Souterraine, in liaison with the French consulting firm Alpha and Omega, Training Adviser. As a result CNP DAR decided to become an International Associate Member of IOW.



GREECE

TRAINING OF GREEK ENGINEERS ON OPERATION OF WASTEWATER TREATMENT PLANTS

Greece has launched a wide programme of wastewater treatment plant construction to comply with the standards fixed by the European Union.

On request of the Hellenic Agency for Local Development and Local Government (EETAA), IOW organized a one-week training programme in English on operation of activated sludge treatment plants, which was the continuation of the 1994 training. It was addressed to 15 experienced operators from Greek municipalities.



KOREA

PRESENTATION OF THE FRENCH WATER MANAGEMENT SYSTEM

A delegation composed of 35 executives in charge of municipal water supply services in Korea was received on July 15, 1995 at the International Relations Department of the Ministry for the Environment in Paris, by Mrs. VERBRUGGE, in charge of the «Asia» sector, Mr. NICOLAZO, from the Water Department presented the French administrative organization of the sector and Mr. DONZIER, from IOW, the management methods used for the municipal water supply and sewerage services.

The Korean visitors were particularly interested in the management delegated to private enterprises, water cost and pricing, leak detection in networks and staff training.

EGYPT

TRAINING ON LEAK DETECTION FOR CAIRO WATER SUPPLY NETWORK

Within a contract signed between the Consulting Firm SEURECA and the Egyptian Government, IOW was entrusted with the training on «leak detection» of 5 engineers in charge of Cairo water distribution system.

The trainees started with a reminder on metering and network diagnosis. Real-size practical work followed, using the underground pilot network for leak detection of the National Training Centre for Water Professions in Limoges. The trainees could thus discover the equipments used in France and acqui-

re the know-how necessary to control these problems in Egypt.

The pilot training network used for leak detection is a tool newly created by the International Office for Water. Thanks to 350 m of various types of underground pipes and to about twenty sluices, the trainers can put the trainees in front of a real situation and work with them to detect pipes, to quantify leakage, to seal off the leaking sections and finally to locate the leaks (real leaks existing in our network to be detected by the trainees).

MOROCCO

AUDIT OF THE NATIONAL MASTERPLAN FOR SANITATION

The French Development Fund (CFD) entrusted the International Office for Water with the audit of the

Moroccan National Masterplan for Sanitation, the study of which was undertaken by SAFEGE.

MIDDLE EAST PEACE PROCESS

TRAINING COURSE ON "REHABILITATION OF URBAN WATER SUPPLY NETWORKS"

A training course, financed by the French Ministry for Foreign Affairs, took place at IOW's National Training Centre for Water Professions in Limoges, from March 13 to 21, and in Paris for field visits (SAGEP, Mont Valerien treatment plant), from March 22 to 24, 1995.

This programme, addressed to 13 participants from Egypt, Israel, Jordan and Palestine, dealt with water quality standards, treatment technologies, distribution networks and pumping stations, their remote control and maintenance, and leak detection.

TRAINING AND DOCUMENTATION CENTRES

CREATION AND DEVELOPMENT OF TRAINING CENTRES FOR WATER PROFESSIONS ABROAD

Information and training of decision-makers and professionals are often the keys for a successful project implementation, for a better water resource management, for service quality and its economic profitability.

A training centre for water professions can provide, as far as training is concerned, the answers to meet the needs:

- of elected officials and executives in municipalities, who often are entrusted with new responsibilities in the water and environmental protection fields,
- of professionals from civil services, local communities, industrial sector at all hierarchical levels, whose functions involve the design of masterplans and equipment, service management, operation and maintenance of facilities.

To acquire this know-how and apply it immediately, trainees must be put in a real professional situation with

realize equipments specially designed for the centre, such as : potable water production unit and distribution network, pilot wastewater treatment plant, sewerage systems, laboratories, decontamination of industrial effluents, ...

Local capacities must be built in each country for the professional training, in their own language, of executives, supervisors, operators and staff of water services and administrations.

Upon the request of a country, IOW's experts can intervene in the creation or development of national training centres with an assistance at various levels :

- definition of the needs, preparation of the project and its financial design, in a context of a real education planning,
- choice of the legal structure and preparation of statutes,
- preparation of technical specifications for buildings and equip-

ment, equipment purchase and follow-up of the work,

- preparation of the centre's activity programme, of educational tools and joint management of the first courses,

- composition of the centre's team and training of trainers.

IOW, which is managing the National Training Centre for Water Professions in France, has developed an international experience with the creation of the «Water Foundation of Gdansk» in Poland. It has been the same in Algeria with INPE, in Spain in Valencia, in Nigeria with NWRI, in the Czech Republic with the Masaryk Institute or in Romania with Apele Romane and ANRD-PA.

Other projects are under study in Mexico, Vietnam, Kenya, Brazil (Ceara State), Russia, Lebanon, India ...

POLAND

“GDANSK FUNDACJA WODY”

Created under the aegis of the Polish Authorities, with the support of French and Danish co-operations and of the European Commission's Life Programme, the Water Foundation of Gdansk aims at becoming the Polish National Training and Documentation Centre for Water.

This new foundation whose President of the Board of Directors is Mr. Maciej PLAZYNSKI, Gdansk Voivodship, was officially registered by Warsaw court on May 19, 1995.

During the Board of Directors' meeting of June 29, 1995, Mr. Zbigniew SOBOCINSKI was elected Director, thus replacing Mr. Jacek KLOS and Mrs. Danuta KOZAK. He is assisted by Mr. Sylvain ROUSEAU, Deputy Director and IOW representative.

The Foundation has now a staff of 6 permanent and full time members.

Located ul. Rycerska 9, in Gdansk city centre, its administrative headquarters has conference rooms, educational and audiovisual materials and a documentation centre with access to IOW data base (80,000 international references).

The rehabilitation of the technical hall is carried out by Saur Neptun Gdansk (SNG) on behalf of the Voivodship within the project of enlarging the city's wastewater treatment plant. The pilot treatment plant and the educational potable water network will be operational in the second semester of 1996.

The Foundation is preparing its 1996 training catalogue and its own base of Polish bibliographical references.

The Foundation's activities successfully started in 1995.



WATER FOUNDATION OF GDANSK 1995-96 ACTIVITIES

In 1995, a series of 7 seminars, organized with the 6 RZGWs (Regional Water Agencies) of Gdansk, Szczecin, Krakow, Katowice, Wroclaw and Warsaw regions on services organization and management, water tariffing and investment financing, gathered 300 municipal elected officials and executives of water supply and sewerage services.

9 training courses of 2 to 3-days' duration, organized in Gdansk, gathered 150 executives from several Polish municipalities in 1995.

First semester of 1996:

LAW AND ECONOMY

- Local communities and environmental protection - legal aspects: April 15-17, 1996
- Water and soil protection - legal aspects: May 6-7, 1996

POTABLE WATER

- Design, implementation and operation of water supply networks: April 15-18, May 13-16, 1996
- Technologies for groundwater treatment: April 24-26, 1996

SANITATION

- Optimization of the operation of wastewater treatment plants by activated sludge: May 20-23, 1996
- Small wastewater treatment plants - exemples of practical solutions: May 27-29, 1996
- Modern technologies for treating nitrogen and phosphorus: June 10-13, 1996

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Department of Documentation and Data

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E-Mail: ddd@oieau.fr

RUSSIAN FEDERATION

“YEKATERINBURG TRAINING CENTRE PROJECT”

Messrs. ZYBINE and TCHERNIAIEV, respectively Director of International Relations in the Russian Water Committee (ROSKOMVOD) and Director of Yekaterinburg Water Institute (ROSNIE) came to France from February 28 to March 3, 1995, within the framework of the project «Setting up a Training Centre for Water Professions for the Russian Federation».

This visit was a part of the initial phase of the project. These Directors had the opportunity to visit various French firms (SAGEP, DEGREMONT, PONT-A-MOUSSON) and IOW's National Training Centre for Water Professions in Limoges and La Souveraine.

On this occasion, a tentative protocol was signed between ROSKOMVOD

and ROSNIE on one side and the French Ministry for the Environment and IOW on the other to study the project.

A mission was carried out by Mr. J.P. LECOMTE (IOW) in Yekaterinburg from October 22 to 29, 1995 on behalf of the French Ministry for the Environment, to define the main lines of action for this project which is locally well-received by the Oural Authorities and that could start during the second semester of 1996.

This project aims at setting up a Federal training centre for regional executives of ROSKOMVOD and would be open to professionals of municipal services (VODOKANALS) and industries (KONBINATS).



MASTERPLAN FOR THE TRAINING OF DGCOH STAFF

Mr. LERMITERIE (IOW) went to Mexico City in October 1995 to launch the preparation of a multiannual plan for training the professional staff of the General Directorate for Large Hydraulic Works in the Federal District.

MEXICO

TOWARDS A «FRENCH-MEXICAN WATER FOUNDATION»

During his visit in Mexico, Mr. DONZIER, IOW General Manager, had a meeting with Mr. GUERRERO-VILLALOBOS, new General Manager of CNA, the Commercial department of the French Embassy in Mexico and the French enterprises working in this country (Lyonnaise des Eaux, DEGREMONT, General Water Supply Company) to discuss about launching again the Mexican Training Centre for Water Professions.



NIGERIA

CONTINUATION OF THE COOPERATION WITH NWRI

and maintenance of pilot plants (October - November 1995).

A two-week training seminar on industrial wastewater treatment was also organized in Lagos (November 1995).

Finally, the documentation staff (October 1995) and two members of the “industrial wastewater treatment” department (September 1995) attended training courses at the National Training Centre for Water Professions in Limoges.

In addition, IOW and its subsidiary EDI provided NWRI with various materials to complete their existing equipment.

Thanks to Mr AUMIS, Cultural Attaché at the French Embassy in Lagos, IOW continued in 1995 the cooperation started a few years ago with the **National Water Resources Institute (NWRI)**. This collaboration consisted of four technical assistance missions in Kaduna, dealing with documentation organization (October 1995), NWRI's strategical development in the coming years (October 1995), the saving of reagents and energy (December 1995),



SLOVAK REPUBLIC

REGIONAL INSTITUTE OF ENVIRONMENTAL TECHNOLOGIES (PIET)

The Slovak Ministry for the Environment and Environmental Agency have launched preliminary studies for the creation in Bratislava of a Regional

Institute of Environmental Technologies for Central Europe (PIET). This study was entrusted to IOW by DG XI - European Commission.

The project was presented by Slovak Authorities to the annual meetings (1994 and 1995) of the Liaison Committee for Environment in charge of preparing regional PHARE programmes.

The principle of creating PIET was accepted during these meetings, with, however, a prerequisite : a study of the potential market for the new services offered.



THE INFORMATION AND DOCUMENTATION CENTRE OF THE MINISTRY FOR THE ENVIRONMENT

Upon the request of the French Ministry for the Environment, IOW is assisting the Lebanese Ministry for the Environment in launching its Information and Documentation Centre.

This action began by purchasing books in French, providing the centre with computerized management tools and training documentation personnel and engineers from the Ministry.

Another mission was carried out in Beirut in May 1995 by Mr Gilles NEVEU and Mrs May ABIRACHED (IOW) to assess the main lines of action to be favoured for developing

the documentation centre in the Lebanese context : beneficiaries and needs, relations with other administrations and universities, creation of national and international information exchange networks, etc.

TRAINING PROGRAMME

The audit undertaken by Lyonnaise des Eaux in March 1994 identified training as one of the prime priorities of the Lebanese Water Departments.

In order to design a priority training programme and to examine the solutions on the medium-term, including the creation of a training centre for water professions in Lebanon, a joint mission of Lyonnaise des Eaux (Ms VIGIER) and IOW (Mr MANCEL) was carried out in Beirut at the end of January 1995. They met representatives from the Ministry of Water Resources and Energy and from Water Departments.

The first phase of this programme, i.e. an information seminar for the

Managers of the Water Departments, was undertaken in Beirut from April 25 to 28, 1995. The objective of this seminar was to present the general technical, administrative and financial fields necessary for a good operation of the Department. This seminar, opened by the Minister of Water Resources and Energy and jointly conducted by Lyonnaise des Eaux and IOW, resulted in recommendations on the relationships between the supervising authority and the Departments and on the internal management of the Lebanese Water Departments (i.e. water quality, customers' management).

ALGERIA INPE

The National Institute for Continuing Training in Public Works (INPE) of Rouiba and IOW have signed a cooperation agreement under the aegis of the French Embassy in Algeria.

This agreement deals with the joint development, in 1995 and 1996, of the Institute's «Water» activities addressed to executives from the Algerian Ministry of Public Works and Land Use Planning.

These training courses will be completed by exchanges between INPE's Documentation Centre and IOW's National Information and Documentation Service for Water (SNIDE), by the supply of educational kits for INPE trainers, and finally by an assistance to the purchase of educational tools and supports (didactic benches, pilot water treatment plants, industrial equipment).

Already two training courses were organized in Limoges, on September 18-29 on sewerage and from November 20 to 30, 1995 on potable water supply of towns.

DATA BANKS

CREATION OF MONITORING NETWORKS AND WATER DATA BANKS

Whatever the level, either a country, a river basin, an administrative unit (department, region, state ...) or international (European Union, Middle East, transboundary river basins ...), **sound water resources management requires combining the data often spread out between various organizations with their own needs and their own information management procedure.**

Experience has shown that it is necessary to know how to:

- **define, organize and manage a network of partners**, either data producers, managers or users, in order to combine their contributions,
- **establish a standard common language**: the data dictionary, for coherent exchanges.

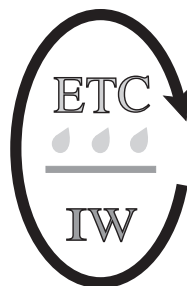
But generally speaking, the setting up of a rational and reliable information system also requires to know how to:

- **define the optimum information** in relation to the attainment of objectives,
- **design, set up and maintain an appropriate information system**

(data base and geographic information system),

- **optimize additional data collection** (definition of additional data to be collected, definition and setting up of additional monitoring networks, organization of data collection and validation ...),
- **define and produce the most significant summary indicators** (on index card, maps ...) depending on the potential users' expectations (political decision-makers, technicians, public, media ...) **to contribute to the setting up of «Water observatories».**

From its activities and responsibilities in France (RNDE/SANDRE), in Europe, as a partner of the Water Topic Centre of the European Agency for Environment, and outside Europe (Middle East Peace Process, India, Niger, Cameroon ...) **IOW has gained a very rich experience and the necessary know-how to provide an efficient technical assistance to organizations and institutions that require dealing with problems of water data management.**



THE «INLAND FRESHWATER» TOPIC CENTRE OF THE EUROPEAN AGENCY FOR ENVIRONMENT

The European Agency for Environment was created in 1994 to collect, process and analyze environmental data at European level, and to supply objective and comparable environmental data to decision-makers and the public.

The Agency relies on focal points in each Member State (IFEN in France), that collect data, and on expertise centres called topic centres.

As regards inland freshwater, the Topic Centre is a consortium regrouping the Water Research Centre (Great Britain), AWW (Austria), NERI (Denmark), INAG (Portugal), VMM (Belgium), CEDEX (Spain), NIVA (Norway) and IOW (France).

In 1995, the Topic Centre implemented 4 projects that contribute to the **progressive setting up of a European monitoring network** that will rely, as much as possible, on the

networks existing in Member States, and to the creation of European data banks:

- an assessment of the needs in relation to European regulations and international agreements,
- an inventory of existing networks that monitor surface and ground waters,
- specifications for a European network, i.e. types of station, geographic density, measurement frequency, ...
- setting up a European data base for large lakes/reservoirs, project in which IOW play a leading role in close collaboration with IFEN.



MIDDLE EAST PEACE PROCESS

MEETING OF THE MULTILATERAL WORKING GROUP ON WATER RESOURCES

Following the previous meeting of Athens in November 1994, this group met again in Amman on June 18-22, 1995, concurrently with the Working Group on «Environment». Mr. LECOMTE from IOW was a member of the French delegation. Discussions dealt with:

- improvement of water data availability
- water management, conservation and supply practices
- concepts for regional cooperation.

The «Training» component in which IOW intervenes is progressing.

CREATION OF A COORDINATION COMMITTEE FOR «DATA BASES»

The Multilateral Working Group on Water Resources has started to reflect on the development of a medium to a long-term regional cooperation for improving the knowledge on the shared water resources of the region, within the framework of the «Middle East Water Data Bank Implementation Plan».

The terms of reference of this coordination committee called «EXACT» («EXecutive ACTION Team») were defined during a meeting held in Jordan on January 22-24, 1995, in which participated representatives from Israel, the Occupied or

Autonomous Territories and Jordan, as well as from the United States, the European Union, France and Canada.

The French Ministry for Foreign Affairs was represented by Mr. OSPITAL, expert at the Cultural Department of the French Embassy in Jordan, Mr. HAENER from IOW and Mr. OLIVER from DAEL.

Upon the request of the Department of External Economic Relations of the French Ministry of Economy, IOW took the opportunity of this mission to start identifying the projects that could be financed out of a French bilateral cooperation agreement within the framework of this «Middle East Water Data Bank Implementation Plan».

EXACT meetings were held in Amman in June 1995 and in Aqaba (Jordan) from November 30 to December 2, 1995. These meetings were the opportunity to check the progress of the ongoing projects financed by the USA (\$ 1.1 million) and the invitation to tender launched by the European Union for implementing 14 out of the 41 recommendations of the «Middle East Water Data Bank Implementation Plan» (Euro 1.8 Million).

EXACT took note of the financial participation of the European Union in some ten studies contributing to the progress of setting up water data banks in the Middle East.

France has also announced its contribution to EXACT activities with a project for setting up a «regional warning system for water resources» to be funded by the French World Environment Fund (FFEM).



NIGER

INVENTORY OF WATER RESOURCES

The French Ministry of Cooperation has financed computerized systems for gathering information on water wells since the beginning of the large rural development programmes, launched in West Africa 15 years ago.

It entrusted the International Office for Water with the assessment of the Inventory of Water Resources (IWR) of Niger.

This expertise was carried out from June 19 to 30, 1995 by Mr. HAE-NER to assess the institutional and organizational context in which the «Inventory of Water Resources» operates, the quality and quantity of available data, and the utilization capacities and methods of the management and processing software financed by French cooperation.

CAMEROON

«PROGRES» DATA BASE

In 1991, the French Ministry of Cooperation approved the funding of a project called «Support to the computerization of rural water supply» (PROGRES) in Cameroon.

It aimed at providing the Department of Rural Water Supply of Cameroon with the computerized means to store the information necessary for a better knowledge of rural water supply and planning future intakes and wells. The PROGRES software was installed by BRGM/BURGEAP group.

Once this project was completed, IOW was requested to carry out an audit of the system.

The mission, undertaken by Mr. HAE-NER from October 17 to 29, 1995, consisted in studying the institutional and organizational context of this information system, assessing data quality and quantity, and evaluating the adequacy of PROGRES software to Cameroon's particularities and needs.

The mission report proposes a series of recommendations (institutional and organizational changes, lines of action to improve the software ...) and defines the main activities that could be implemented on a short-term basis.

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Have you noticed ?

Yes, the International Office for Water has now a logo.
It was time after 4 years of existence !



What does it represent ?
Some people will say a beach with a small island, others will think about a waterfall, or even about a man who rushes forward.

As far as we are concerned, we wished to represent "MAN AND WATER" as our mission in France and abroad is first of all to assist in developing skills and human resources to better manage water resources.

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We hope that all our partners will recognize us through it.