The IAEA and the UN family: Networks of nuclear co-operation

A range of formal agreements and arrangements support the global foundation for peaceful nuclear development in many fields

by Sheel Kant Sharma

While its Charter makes no specific mention of the nuclear age, the United Nations moved quickly after its formation in 1945 to lay the basis of global co-operation in the nuclear field. At its first session in January 1946, the General Assembly adopted a resolution that, inter alia, established the UN Atomic Energy Commission, which was formed to make specific proposals related to the international control and peaceful development of nuclear energy. Before it was dissolved in January 1952, the Commission issued a number of reports to the Security Council. New impetus came in December 1953, when US President Eisenhower addressed the General Assembly and dramatically proposed the creation of an international atomic energy agency.

In 1954, the General Assembly adopted the resolution [810A (IX)] that set in motion the process to establish the IAEA. During that same session, the Assembly also favourably considered a draft resolution to convene in 1955 what would later become the first of four International Conferences on the Peaceful Uses of Atomic Energy, and it established the UN Secretary-General's Advisory Committee on the Peaceful Uses of Atomic Energy. Three years later, in 1957, this Committee formally negotiated on the UN's behalf the relationship agreement with the IAEA Preparatory Commission, both of which had been envisaged in the Agency's Statute.

Since that time, the UN and the IAEA have built an extensive network of global nuclear cooperation in fields related to international security, economic and social development, and the environment. This article presents an overview of agreements that have been put in place with the UN and its specialized agencies. It also reviews formalized cooperative arrangements that the IAEA has with other national, regional, and global organizations whose work is of interest to Agency activities.

Relationship agreement with the UN

The IAEA's relationship agreement with the UN was, in fact, the result of many years of deliberation. The work was guided by the experience gained over a decade by specialized agencies that had concluded agreements with the UN. The lengthy deliberations on the IAEA agreement reflected the special position that the IAEA has under the UN's aegis, namely to be responsible for "international activities concerned with the peaceful uses of atomic energy". The agreement was fashioned to accommodate the unique nature of the IAEA's planned activities and the terms of its Statute. It thus brought the IAEA into a category different from the specialized agencies within the UN system. The agreement recognized the Agency as an autonomous international organization (under its Statute) in "working relations" with the UN.

Some basic principles underpin the relationship, as stated in the agreement's first Article: "The Agency undertakes to conduct its activities in accordance with the Purposes and Principles of the United Nations Charter to promote peace and international co-operation, and in conformity with policies of the United Nations furthering the establishment of safeguarded world-wide disarmament and in conformity with any international agreements entered into pursuant to such policies".

Other important features are that the IAEA is: • required to submit its annual report to the UN

General Assembly;
called upon to submit reports, when appropriate, to the Security Council and notify the Council whenever, in connection with the activities of the Agency, questions within the

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In Africa and other regions, the IAEA works closely with the FAO to help countries improve food production. (Credit: Emma Robsor/UNDP)

competence of the Council arise. The IAEA is also called upon to cooperate with the Security Council by furnishing to it, at its request such information and assistance as may be required in the exercise of the Council's responsibility for maintenance or restoration of international peace and security. The agreement further provides that the Agency shall report to the Security Council and the General Assembly any case of non-compliance with safeguards undertakings, within the meaning of relevant provisions in the IAEA Statute.

 called upon to undertake consideration of any resolution related to the Agency, adopted by the General Assembly or by a Council of the UN. Effective co-operation and co-ordination are also stipulated between the IAEA and other UN-established bodies concerning the provision of technical assistance in the field of atomic energy. Other provisions address co-operation with the UN's Administrative Committee on Co-ordination (ACC), as well as with UN specialized agencies.

Agreements with inter-governmental organizations and specialized agencies

The IAEA Statute envisaged co-operation with specialized agencies within the UN family. The specific terms for collaboration were subsequently fleshed out in individual formal agreements. These *co-operation agreements* reflect the particular interface between the wide range of nuclear applications and the specialized fields of these agencies. They further provide for interagency consultations and co-operation in various forms. (*See figure.*)

Apart from this formal framework, informal working contacts have been set up over the years based on shared interests and knowledge that can be brought to bear on specific issues. Participation by the Agency in the meetings of the ACC and its subsidiary organs also has broadened bilateral or trilateral consultations.

In some cases, standing arrangements have been put into place. First and foremost among these is the one between the IAEA and Food and Agriculture Organization (FAO), which operate the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture. Located at IAEA headquarters in Vienna, the Joint Division marked 30 years of service in 1994 under an arrangement whereby all of its programmes and activities are approved by the governing bodies of the two autonomous organizations. Notable achievements have been recorded. A prime example is the work related to mutation breeding, through which nearly 2000 new beneficial varieties of crops have been developed using radiation-based technology.

Another valuable form of co-operation is through *standing inter-agency forums*. An example here is the International Consultative Group on Food Irradiation (ICGFI), the coordinating group for global work in this field. It has been in operation since 1984 with participation by the IAEA, FAO, and World Health Organization (WHO).

Other cases of such arrangements are evident from the work of IAEA research laboratories and centres. The IAEA and United Nations Educational, Cultural and Scientific Organization (UNESCO), for instance, jointly operate the International Centre for Theoretical Physics in Trieste, Italy. The IAEA's Marine Environment Laboratory in Monaco (IAEA-MEL) - unique in the UN system — has long-standing arrangements in place with the United Nations Environment Programme (UNEP) and with UNESCO's Intergovernmental Oceanographic Commission (IOC). Links have especially been strengthened since the 1992 UN Conference on Environment and Development (UNCED) on matters related to the measurement and control of global marine pollution, and protection of ocean and coastal waters. In the context of the Earthwatch initiative, UNEP also has designated the IAEA's Seibersdorf Laboratories as an inter-agency collaborating centre, specifically to serve as the laboratory for reference environmental materials and methods.

Less institutional but effective co-operation is maintained with WHO. By mutual agreement, areas of interest have been defined to avoid duplication; this is the case, for instance, in the field of hormone radioimmunoassay. WHO takes part in IAEA radiation protection services and the two organizations operate an international network of Secondary Standard Dosimetry Laboratories and a dose intercomparison programme for cobalt-60, widely used in medical treatment.

The IAEA additionally undertakes joint projects with other members of the UN family, pooling expertise and resources whenever appropriate. In areas of nuclear and radiation safety, a practice has evolved whereby manuals, standards, regulations, and recommendations are issued under the joint sponsorship of IAEA, FAO, WHO, and the International Labour Office (ILO). In the 1990s, the International Chernobyl Project involved co-operation with FAO. ILO. WHO, the World Meteorological Organization (WMO), and the United Nations Scientific Committee on the Effects of Atomic Radiation (UN-SCEAR), as well as the Commission of the European Communities. Similarly, WHO's International Programme on the Health Effects of the Chernobyl Accident (IPHECA) is coordinated with the IAEA, FAO, ILO, the Pan-American Health Organization (PAHO), and the Nuclear Energy Agency of the Organization for Economic co-operation and Development (OECD/NEA).

The IAEA and non-governmental organizations (NGOs)

In keeping with the IAEA's Statute — which authorizes it to establish appropriate relations with "any organization the work of which is related to that of the Agency" — 19 non-governmental organizations (NGOs) have formal consultative status with the Agency. Seven others have been invited by the IAEA Board of Governors as observers to the Agency's General Conference or to undertake specific tasks.

Those with consultative status are the European Atomic Forum; European Confederation of Agriculture; International Air Transport Association; International Cargo Handling Co-ordination Association; International Chamber of Commerce; International Commission on Radiological Protection; International Commission on Radiation Units and Measurements; International Confederation of Free Trade Unions; International Co-operative Alliance; International Council of Scientific Unions; International Federation of Documentation; International Federation of Industrial Producers of Electricity for Own Consumption; International Organization for Standardization; International Union for Inland Navigation; International Union of Producers and Distributors of Electrical Energy; Japan Atomic Industrial Forum, Inc.; World Confederation of United Nations Associations.

In addition, certain NGOs with no formal consultative status but having concern with developing uses of nuclear energy for peaceful purposes are invited to send observers to the regular session of the Agency's General Conference. These include: the American Nuclear Society; Canadian Nuclear Society; European Nuclear Society; European Physical Society; International Institute for Applied Systems Analysis; International Nuclear Societies Council; International Radiation Protection Association; Nuclear Energy Institute; the Uranium Institute, and the World Association of Nuclear Operators (WANO). The Director General may request NGOs having special competence in a particular field to undertake specific studies or investigations, or to prepare papers for the Agency.

NGOs with consultative status are allowed certain privileges and facilities in connection with meetings of the General Conference and the Board. These include the right to receive the provisional agendas of the Conference; the right to send observers to all public meetings of the General Conference and of the Board; the right to submit written statements to any organ of the Agency, subject to censorship by the Director General; the right to submit oral statements to Committees of the General Conference or before public meetings of the Board, subject to various restrictions; the right to be invited by the Director General to other meetings convened by the Agency; the right to consult with members of the Secretariat; the right to have access to any document services established for the press and to the Agency's library.

Arrangements have also been made with NGOs active in the field of electric power and energy economics for the exchange of statistics and documents and for attendance at each other's meetings. Thus, representatives of the International Union of Producers and Distributors of Electrical Energy and of the World Energy Council have participated in the Agency activities and are in close collaboration with the IAEA on matters of mutual interest, In many cases, the joint organization of scientific meetings has become a common practice. A case in point is the upcoming international conference on Chernobyl's radiological consequences in April 1996. It is being co-sponsored by the European Commission, the IAEA, and WHO, in co-operation with the UN Department of Humanitarian Affairs (UNDHA), UNESCO, UNEP, UNSCEAR, FAO, and OECD/NEA.

On energy-related matters, the IAEA has joined forces with a number of organizations within and outside the UN family. One particular focus is on the comparative assessment of energy sources for electricity production. In 1991 at a



symposium organized by the IAEA and nine partners, senior experts examined the environmental and health effects of different energy systems for electricity generation and the prospects of increasing efficiency in energy use. The conclusions were submitted to the Preparatory Committee of the Rio Conference (UNCED). Subsequently, the Agency initiated a joint interagency project on databases and methodologies for comparative assessment of different energy sources for electricity generation, called DEC-ADES. Databases cover technical and economic parameters as well as emission levels and problems at different steps of the electricity generation chain. The work includes a review of the various approaches to comparative assessment that may be used in the planning and decisionmaking processes. Project results will be considered in October 1995, at a major international symposium on electricity, health, and the environment. It is being co-sponsored by the IAEA, WMO, World Bank, OECD/NEA, EC, International Institute of Applied Systems Analysis (II-ASA), United Nations Industrial Development Organization (UNIDO), and the Organization of Petroleum Exporting Countries (OPEC).

Another cooperative venture, involving the IAEA and United Nations Development Programme (UNDP), was launched in 1993 to assist Newly Independent States (NIS) of the former Soviet Union to improve their infrastructures for radiation protection and nuclear safety.

Technical co-operation links

Technical co-operation activities of the IAEA have grown considerably over the last two decades, significantly expanding their scope. In general, the cooperative network can be described broadly under three relationship levels:

Participation in the coordinating machinery of the UN system for operational activities. The IAEA participates in the work of the ACC, which is at the apex of UN system-wide co-ordination. The link extends to various subsidiary bodies within the ACC framework that deal with specific matters; for example, statistical activities; information management; groundwater resources; oceans and coastal areas; and women's concerns.

The Agency also takes part in other interagency mechanisms, including the IACSD (Inter-Agency Committee on Sustainable Development), CCPOQ (Consultative Committee on Programme and Operational Questions), and the CCAQ (Consultative Committee on Administrative Questions). The IACSD co-ordinates follow-up work to the UNCED on activities related to the environment and sustainable development. The CCPOQ holds discussions on technical cooperation in order to arrive at a common understanding of the problems involved and to establish, wherever possible, a common approach in dealing with them. One of the main issues currently under review is the implementation of General Assembly Resolution 47/199 regarding UN operational activities for development. Other issues include African development, field level co-ordination mechanisms, and support costs.

The IAEA additionally supports work of the UN's Joint Inspection Unit (JIU) by regularly contributing to its draft reports and evaluations.

Other mechanisms for coordinating interagency activities have been created in response to specific issues and needs involving the IAEA's support. They include the Intergovernmental Panel on Climate Change (IPCC) and the Joint Group of Experts on the Scientific Aspects of Marine Environment Protection (GESAMP), which is under the co-sponsorship of the International Maritime Organization (IMO), FAO, WMO, WHO, IAEA, UN, UNESCO, and UNEP.

Relations at the headquarters level. The IAEA maintains close links with UNDP headquarters on Agency projects, its activities related to its regional programmes, and other related matters.

For projects related to mineral exploration, there is an understanding on delineation of tasks with the UN Department of Development Support and Management Services. General mining exploration activities are carried out by the UN Department, but exploration for uranium-bearing minerals is the IAEA's responsibility. The IAEA has carried out mineral exploration projects involving uranium resources financed by UNDP. Under a UNDP-initiated energy project, the Agency also has co-operated closely with the World Bank through provision of technical advice on the development of energy policies and strategies.

In other areas of technical co-operation, common interests were identified with UNIDO in a 1987 agreement. UNIDO is currently working with the Agency to ascertain the viability of mass-rearing insects on an industrial scale using radiation technology in support of pest control projects in Africa. UNEP is working with the IAEA on environmental monitoring of non-radioactive pollutants in areas where IAEA activities complement activities under its Global Environmental Monitoring System (GEMS).

Co-operation at the national level with UN agencies, in particular UNDP. Since it has no technical officers permanently in the field, the IAEA draws upon the UN resident co-ordinator system, working closely with UNDP field offices. Delivery of IAEA technical assistance is channeled through the local UNDP office. UNDP-financed projects often serve as focal points around which IAEA technical assistance can be designed and thereby more deeply anchored in the development priorities of recipient countries. Co-ordination with UNDP also ensures better awareness, through resident planning authorities, of nuclear applications and their potential contributions in fields such as plant breeding, hydrology, medicine, industry, and pest control.

Relationships with non-UN organizations

To put the global nuclear network into true perspective, it is useful to look at the IAEA's relationships with organizations outside the UN system. Their activities in many cases are directly related to the IAEA's work in specific areas.

Nineteen non-governmental organizations have *consultative status* with the Agency, which enables close working contacts. (*See box*). Formal *co-operation agreements* have been concluded with seven inter-governmental organizations: the OECD/NEA, the Inter-American Nuclear Energy Commission of the Organization of American States (IANEC); the Organization of African Unity (OAU); the European Atomic Energy Community (EURATOM); the League of Arab States (LAS); the Organization for the Prohibition of Nuclear Weapons in Latin America (OPANAL); and the Arab Atomic Energy Agency (AAEA).

By virtue of these agreements, these organizations are entitled to be represented at the sessions of the General Conference. An additional seven inter-governmental organizations are normally invited to send observers to the General Conference every year by virtue of their concern with developing uses of nuclear energy for peaceful purposes or with research in the nuclear services. These are the: Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC); International Bureau of Weights and Measures (IBWM); International Energy Agency of the Organization for Economic Co-operation and Development (OECD/IEA); Joint Institute for Nuclear Research (JINR); Latin American Energy Organization (OLADE); Middle Eastern Regional Radioisotope Centre for the Arab Countries (MERRCAC); and OPEC.

The IAEA's co-operation with the NEA is particularly close in several key areas. It includes joint preparation of specialized publications, such as *Uranium Resources Production and Demand*, and the joint operation of the Incident Reporting System for nuclear power plants. High-level meetings are held annually to review and discuss co-operation in these and other areas, including training programmes, scientific conferences, and research in fields related to health and safety, waste disposal, transport of radioactive materials, and nuclear law.

Strengthening the foundation

The IAEA's relationships with the UN and other organizations have been established carefully and steadily over the years. The agreements with the UN and some of its specialized agencies have been founded on the provisions of the Agency's Statute as well as the UN Charter. Major changes could not be envisaged without corresponding amendments to these instruments.

Overall, the relationships have served to augment the global foundation for nuclear co-operation in important ways. It has been relatively easy to tailor or expand the cooperative network to meet the demands of important new priorities of the UN and IAEA. Such has been the case regarding the range of Agency activities contributing to Agenda 21 and sustainable development. Even closer and broader co-operation is required as this agenda moves ahead.

In the IAEA's experience, co-operation and co-ordination among many organizations generally has been most effective on administrative and financial matters where the problems are rather clearly spelled out and the solutions, accordingly, easier to find. More difficult, because of the complexities and different technologies involved, is co-ordination on matters relating to technical programmes. Owing to differing mandates and administrative procedures, practical problems and delays can frequently arise.

For greater effectiveness, relationships between organizations, as those between individuals, must be kept alive and active. Rigid adherence to the letter of the law, or to precedent and formal procedure, may not achieve the needed results. Overall experience has shown that it is generally possible to reach flexible, workable arrangements to overcome difficulties, prevent unnecessary duplication, and ensure coordinated international action.

As more emphasis is placed on global co-operation involving organizations within and outside the UN family, more unified approaches will be demanded. The co-operative network established in the nuclear field over the past half century offers a solid basis for more concerted and effective action.