

AGREEMENTS

BILATERAL AGREEMENTS

Argentina – EURATOM

Co-operation Agreement relating to the Peaceful Uses of Nuclear Energy (1996)

This Agreement was signed at Brussels on 11 June 1996. The preamble refers to the Agreement for Commercial and Economic Co-operation between the EEC and Argentina, signed in Luxembourg on 2 April 1990. That earlier agreement provided that the Parties would encourage mutual co-operation, in particular in the energy sector. The 1996 Agreement confirmed that the production of nuclear energy and related activities are firmly established in the Community and Argentina as a competitive industrial sector. Further, its preamble refers to the adherence by Argentina to the Treaty on the Non-Proliferation of Nuclear Weapons, and to the Tlatelolco Treaty, as well as to its adherence to the “Nuclear Suppliers Guidelines” in the Agreement between Argentina, Brazil, the ABACC and the IAEA, signed in Vienna, along with a Protocol of Application, on 13 December 1991 (ratified by Law No. 24113 of 7 September 1992).

The Agreement of June 1996 was ratified by Argentina by Law No. 24869 and published in the Official Journal on 18 September 1997. It entered into force on 29 October 1997 for a period of 10 years, renewable automatically for periods of 5 years each.

The Agreement, in particular, aims to develop at joint research in the areas of reactor safety, management and disposal of radioactive waste, radiation protection, controlled fusion, nuclear applications in agriculture, medicine and industry, the control of nuclear materials, as well as the interaction between nuclear energy and the environment.

Argentina – Greece

Agreement on Co-operation in the Peaceful Uses of Nuclear Energy (1997)

On 17 July 1997, a bilateral Agreement between the Government of the Hellenic Republic and the Government of the Argentine Republic was concluded on co-operation in the peaceful uses of nuclear energy.

The main objective of this Agreement is the promotion of co-operation in the development of peaceful uses of nuclear energy, in accordance with the needs and priorities of the national programmes of the two countries.

The Agreement encourages, in particular, co-operation in the following fields:

- research, development and technology covering research and energy reactors, including nuclear power plants;
- building and operation of nuclear power plants and nuclear fuel cycle installations;
- the nuclear fuel cycle, including research into and use of nuclear resources, production of fuel elements and disposal of radioactive wastes;
- industrial production of materials and equipment;
- production and use of radio-isotopes;
- radiological protection and nuclear safety;
- physical protection of nuclear materials; and
- fundamental and applied research with respect to the peaceful uses of nuclear energy.

The forms of co-operation will include mutual assistance in education and training, exchange of experts, exchange of lecturers for courses and seminars, scholarships, joint working groups, and the exchange of equipment, services and information.

Argentina – United States

Implementing Arrangement for Technical Exchange and Co-operation in the Area of Peaceful Uses of Nuclear Energy (1997)

The Implementing Arrangement entered into force upon signature by both Parties on 16 October 1997. It will remain in force for a period of five years, and will be automatically renewed for further five year periods unless either Party notifies the other in writing three months prior to the expiration of the first Implementing Arrangement and may, in any event, be terminated at the discretion of either Party, upon six months advance notification.

The Implementing Arrangement is made pursuant and subject to the Agreement for Scientific and Technical Co-operation, as extended, entered into between the Parties on 7 April 1972. It is also made to further co-operation in the peaceful uses of nuclear energy, as called for in Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons.

Co-operative activities undertaken pursuant to the Implementing Arrangement may include, *inter alia*, the following:

- exchange of information on scientific and technical activities;
- exchange of scientists, engineers and other specialists for agreed periods of time;

- short term visits by staff or assignment of staff;
- organisation of, and participation in, seminars, workshops and other meetings;
- exchange or loan and provision of samples, materials, instruments, equipment and components for experiments, testing and evaluation; and
- execution of joint studies, projects or experiments, including design, construction and operational activities.

For each joint project the Parties will execute a Project Annex, which will form an integral part of the Implementing Arrangement. Each Project Annex will contain details of its technical scope, management, costs and schedule.

Finally, there are provisions for the general management of the Implementing Arrangement, as well as provisions which address specific issues, such as assignment of staff, intellectual property rights and exchange of equipment and information.

Australia – Indonesia

Agreement Concerning Co-operation in Nuclear Science and Technology (1997)

On 11 November 1997 Australia and Indonesia signed an Agreement Concerning Co-operation in Nuclear Science and Technology. In the preamble to the Agreement the Parties were mindful of their respective commitments to non-proliferation of nuclear weapons and of their safeguards agreements with the IAEA. They also recalled their respective international obligations and national measures in respect of the physical protection of nuclear materials. In that context they agreed to promote, encourage and facilitate co-operation between the two countries in the peaceful use of nuclear energy for social and economic development.

The co-operation envisaged is to include the following areas of nuclear science and technology:

- a) nuclear related safety information, assessment and technology;
- b) radiation protection;
- c) management of radioactive waste;
- d) application of radio-isotopes and radiation;
- e) nuclear medicine;
- f) research and application of neutron beams;
- g) nuclear instrumentation design and development;
- h) nuclear material accountancy and control;

- i) uranium exploration, mining and processing techniques; and
- j) other areas as may be mutually decided by the Parties from time to time.

The various forms of collaboration will include exchanges of information and personnel, education and training programmes and joint research and development work. The Agreement will be valid for ten years and will be automatically extended from year to year, unless either Party gives written notice of its intention to terminate six months prior to the expiration date.

People's Republic of China – United States

Implementation of the 1985 Agreement for Co-operation Concerning the Peaceful Uses of Nuclear Energy (1998)

On 19 March 1998 the US Congress approved the implementation of the Agreement for Co-operation Between the Government of the United States of America and the Government of the People's Republic of China concerning Peaceful Uses of Nuclear Energy.

This Agreement, which was signed on 23 July 1985, aims to promote the co-operation between the parties. It enables the transfer of nuclear material, facilities and components, and information or technology concerning nuclear energy to each other (See *Nuclear Law Bulletin* No. 36).

For the implementation of the Agreement, the US President is required under Public Law No. 99-183 to make a certification to the Congress on three matters. The President must certify that (a) the reciprocal arrangements made pursuant to Article 8 of the Agreement have been designed to be effective in ensuring that any nuclear materials, facilities, or components provided under the Agreement shall be utilised solely for intended peaceful purposes; (b) the Government of China has provided additional information on its nuclear non-proliferation policies and that, based on this and all other information available to the United States Government, the People's Republic of China is not in violation of paragraph 2 of section 129 of the 1954 US Atomic Energy Act, as amended; and (c) the obligation to consider favourably a request to carry out activities described in Article 5(2) of the Agreement shall not prejudice the decision of the United States to approve or disapprove such a request.

An additional condition was imposed by the 1990 US Foreign Relations Act, which includes a Presidential certification that China has provided clear and unequivocal assurances to the United States that it is not assisting and will not assist any non-nuclear weapon State in acquiring nuclear explosive devices.

In 1998 President Clinton, after the visit of President of Jiang Zemin, has formally certified that China has met the necessary non-proliferation standards. The US Congress decision was the final step in the procedure for the implementation of the 1985 Agreement.

Agreement of Intent Concerning Peaceful Uses of Nuclear Technology (1997)

The U.S. Department of Energy and China's State Planning Commission signed the Agreement of Intent Concerning Peaceful Uses of Nuclear Technology on 29 October 1997. Its

objective is to exchange technical information and to promote co-operative activities relating to nuclear technologies. The Agreement is the first step toward joint initiatives in reactor technology and safety, advanced in-service inspection of nuclear power plant components, fuel handling and storage, the production of isotopes for medical, industrial and agricultural uses and decontamination and decommissioning. The Agreement also calls for co-operation in establishing systems for export control of nuclear materials, equipment and technologies, nuclear materials control and accounting, physical protection and enhancement of international nuclear safeguards.

This Agreement is expected to pave the way for the negotiation of a broader agreement that will govern future co-operative activities related to nuclear energy and non-proliferation.

France – Lithuania

Protocol of Co-operation (1997)

The Protocol was signed on 21 May 1997 by the *Commissariat à l'Énergie Atomique* (France) and the Lithuanian Minister for the Economy. It entered into force on the same date. Under the Protocol the Parties agree to co-operate in the peaceful uses of nuclear energy.

The areas of co-operation concern support for the safety authority of Lithuania (VATESI), radioprotection, research and development and applied research for non-destructive applications, management of spent fuel and nuclear waste, public information and support for the operator of the Ignalina NPP.

The scientific and technical co-operation which is the object of the Protocol, is intended to lead to industrial and commercial co-operation between the two countries.

Germany – United States

Agreement on Co-operation in Energy Research, Science and Technology, and Development (1998)

The Agreement, between the United States Department of Energy and the German Ministry of Education, Science, Research and Technology, came into force upon signature by both parties on 20 February 1998, and will remain in force for 5 years. It will be renewed automatically for five year periods, unless either Party notifies the other that it intends to permit the Agreement to expire.

The areas of co-operation under the Agreement include:

- energy efficiency and renewable energy;
- fossil fuel energy, including clean coal and natural gas technologies; and
- nuclear energy, including fission and fusion technologies and radioactive waste management.

The forms of co-operation may include:

- exchange of scientists, engineers and other specialists for participation in agreed research activities;
- seminars and workshops;
- promoting energy technologies that are economically competitive and environmentally acceptable;
- development of systems-analysis instruments, computer tools and data bases in support of efforts to reduce greenhouse gases and to minimise environmental impacts;
- participating in joint government-industry activities; and
- joint projects.

The Agreement allows additional public or private organisations in either country to participate as “co-operative entities”. Each co-operative entity will participate at its own expense.

When the Parties agree to undertake a form of co-operation under the Agreement, they may conclude an “Implementing Annex”, which will be subject to the terms of the Agreement. The Implementing Annex will cover the project’s technical scope, cost, schedule, exchange of equipment and any special provisions relating to matters such as intellectual property.

The Agreement also contains detailed provisions on such matters as rules on management, exchange of personnel, equipment and information and intellectual property rights.

Greece – Romania

Agreement on Early Notification of a Nuclear Accident and Exchange of Information on Nuclear Facilities (1997)

On 22 December 1997, a bilateral agreement on Early Notification of a Nuclear Accident and Exchange of Information on Nuclear Facilities was concluded between the Greek Atomic Energy Commission of the Republic of Greece and the National Commission for Control of Nuclear Activities of Romania.

Hungary – Ukraine

Agreement on Early Notification of Nuclear Accidents and Co-operation in the Field of Nuclear Safety (1997)

An Agreement on early notification of nuclear accidents, exchange of information and co-operation in the field of nuclear safety and radiation protection was signed on 13 October 1997. It will enter into force, after official notification by each side, for an indefinite term.

The Agreement covers matters related to the notification of nuclear accidents, exchange of information on nuclear installations and illicit actions concerning nuclear materials and scientific co-operation in the field of nuclear and radiation safety.

Switzerland – United States

Agreement in the Field of Radioactive Waste Management (1997)

This Agreement came into force on the date of its signature by both Parties on 23 December 1997. The Agreement is intended to continue and intensify co-operation in activities related to the field of radioactive waste management and the back-end of the nuclear fuel cycle. The Agreement will continue in force for five years and will be automatically extended for successive five year periods, unless terminated by either Party.

Co-operation under the Agreement may include:

- characterisation of geological formations;
- field and laboratory testing;
- preparation and packaging of radioactive wastes;
- disposal in geologic formations;
- surface and subsurface storage of radioactive wastes;
- environmental and safety issues;
- design and operational issues;
- performance assessment issues;
- transportation requirements;
- public acceptance issues; and
- other areas of co-operation as the Parties may agree.

The forms of co-operation can include the following:

- exchange of scientists, engineers and other specialists for participation in agreed research;
- exchange of scientific and technical information;
- exchanges of samples, materials and equipment for testing;
- organisation of and participation in seminars and other meetings;
- short visits by specialists to the facilities of the Parties;
- observation of and participation in studies dealing with the areas of co-operation; and
- joint projects.

The Agreement also contains general provisions dealing with management under the Agreement, exchange of personnel and intellectual property and information.

MULTILATERAL AGREEMENTS

Intergovernmental Agreements on Co-operation in Transportation of Nuclear Materials (1997-1998)

An intergovernmental agreement on co-operation in the transportation of nuclear materials was signed on 27 November 1997 between Bulgaria, Moldova, Russian Federation and Ukraine. Similarly, an intergovernmental agreement on co-operation in the transportation of nuclear materials was signed on 14 March 1998 between the Czech Republic, Slovak Republic, Russian Federation and Ukraine.

In each case the Agreements regulate the transportation of “special cargo”, defined as meaning any nuclear materials except nuclear waste. Also in each Agreement it is the operator from whose country the special cargo is being transported who is liable in accordance with the Vienna Convention on Civil Liability for Nuclear Damage caused by nuclear incident, up to the moment of transfer of liability to another operator, pursuant to a contract in writing. The Agreements differ somewhat in the manner in which the respective Governments guarantee the fulfilment of the financial obligations of the operators. Under the Bulgaria, Moldova, Russian Federation and Ukraine Agreement this State guarantee covers an amount which does not exceed the minimum amount of liability of the operator under the Vienna Convention. Under the Czech Republic, Slovak Republic, Russian Federation and Ukraine Agreement, however, the State guarantees the fulfilment of the operators financial obligations in accordance with the Vienna Convention, and the guarantee is not expressly limited to the minimum amount of the operators liability under the Convention.

Entry Into Force of the Energy Charter Treaty (1998)

The Energy Charter Treaty, together with the Protocol on Energy Efficiency and Related Environmental Aspects, was opened for signature on 17 December 1994. The 30th ratification of the Treaty took place on 16 January 1998, and, in accordance with its terms, the Treaty came into force 90 days later on 16 April 1998. The Protocol came into force on the same day as the Treaty.

The Energy Charter Treaty covers nuclear materials and fuels through its definition of “Energy Materials and Products” under Article 1(4), by way of a cross reference to Annex EM. That Annex includes the following list of nuclear materials and fuels as falling within the definition:

- a) Uranium or thorium ores and concentrates.
- b) Radioactive chemical elements and radioactive isotopes (including the fissile or fertile chemical elements and isotopes) and their compounds; mixtures and residues containing these products.
 - I. Natural uranium and its compounds.
 - II. Uranium enriched in ^{235}U and its compounds; plutonium and its compounds.
 - III. Uranium depleted in ^{235}U and its compounds; thorium and its compounds.

- IV. Radioactive elements and isotopes and radioactive compounds other than (i), (ii) or (iii).
- V. Spent (irradiated) fuel elements (cartridges) of nuclear reactors.
- VI. Heavy water (deuterium oxide).

The provisions of the Energy Charter Treaty, therefore, have general application to these nuclear materials and fuels. Under Article 7 (Transit) of the Treaty, for example, each Contracting Party is obliged to facilitate the Transit of Energy Materials and Products consistent with the principle of freedom of transit and without distinction as to the origin, destination or ownership of such Energy Materials and Products or discrimination as to pricing on the basis of such distinctions, and without imposing any unreasonable delays, restrictions or charges. Similarly, the provisions of Article 8 (Transfer of Technology) expressly apply to Energy Materials and Products, and, therefore, to the nuclear materials and fuels listed in Annex EM. Through the definitions of “Investment” [Article 1(6)] and “Economic Activity in the Energy Sector” [Article 1(5)] other broad-ranging provisions of the Treaty, such as Article 9 (Access to Capital) and Part III (Investment Promotion and Protection), apply to the trade in nuclear materials and fuel.

A Protocol dealing specifically with nuclear energy was under negotiation until May 1995, but was never concluded and negotiations have not been re-opened since that date.

On 24 April 1998, the Charter Conference agreed on the adoption of the Amendment to the Trade Related Provisions of the Energy Charter Treaty, bringing the trade-related provisions of the Energy Charter Treaty up to date with World Trade Organisation rules. Amongst other changes, the Amendment will open the way for future legally binding tariff commitments for Energy Materials and Products, as well as for Energy-Related Equipment.

French and British Declarations concerning the 1992 OSPAR Convention on the Protection of the Marine Environment of the North-east Atlantic (1997)

Until 1992, two Conventions governed the protection of the marine environment of the North-east Atlantic: the Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft, signed in 1972, and the Paris Convention for the Prevention of Marine Pollution from Land-based Sources, signed in 1974. The “OSPAR” Convention, which combines these two instruments, strengthens the protection of the geographic zone while taking into account types of pollution which were not covered up until this time. The Oslo and Paris Conventions contained a specific list of substances and products whose polluting effects should be limited or eliminated. The OSPAR Convention takes a more global approach, by defining the general duties of States in reference to various principles including the precautionary principle, the polluter-pays principle, and the principle of optimisation. Four Annexes contain specific provisions governing the protection of the marine environment (See *Nuclear Law Bulletin* No. 50).

In particular, Annex II deals with the prevention and the elimination of pollution caused by dumping activities and incineration and prohibits the dumping of all waste and material other than those listed in Article 3 of Annex II. The dumping of low and medium-level radioactive waste is prohibited. However, a dispensation from this rule was granted to the United Kingdom and France, given that these countries were not prepared, in 1992, to definitively abandon their activities involving the dumping

of low and medium-level radioactive waste. This dispensation, which appears in Article 3.3(b) of Annex II, allowed the United Kingdom and France to carry out dumping of this type of waste, but only after expiry of a fifteen-year period commencing on 1 January 1993. Until this time, these two countries had committed themselves to study alternative land-based options for dumping and to present their findings in this respect at the meeting of the OSPAR Commission in 1997.

In September 1997 both of these countries had made a declaration according to which they abandoned their right to the dispensation which had been granted to them according to the terms of Annex II. This dispensation therefore no longer exists and a regime prohibiting all dumping of radioactive substances in the North-east Atlantic is now in place. This regime will start to apply when the OSPAR Convention comes into force, during 1998.

Status of the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage (1998)

This Protocol was adopted on 12 September 1997 at the conclusion of a Diplomatic Conference convened for this purpose at the headquarters of the IAEA. It was opened for signature on 29 September 1997 during the 40th regular session of the Agency's General Conference in Vienna. As of 12 March 1998, 11 States had signed the Protocol: Argentina, Hungary, Indonesia, Italy, Lebanon, Lithuania, Morocco, Philippines, Poland, Romania and Ukraine.

The Protocol, pursuant to Article 21.1, shall enter into force three months after the date of deposit of the fifth instrument of ratification, acceptance or approval.

An analysis of this Protocol can be found in the chapter "Articles" in this Bulletin.

Status of the Convention on Supplementary Compensation for Nuclear Damage (1998)

This Convention was also adopted on 12 September 1997 and opened for signature on 29 September 1997. As of 12 March 1998, 11 States had signed the Convention: Argentina, Australia, Indonesia, Italy, Lebanon, Lithuania, Morocco, Philippines, Romania, Ukraine and the United States of America.

The Convention, pursuant to Article XX.1, shall come into force on the ninetieth day following the date on which at least 5 States with a minimum of 400,000 units of installed nuclear capacity have deposited an instrument referred in Article XVII.

An analysis of this Protocol can be found in the chapter "Articles" in this Bulletin.

Status of the Convention on Nuclear Safety (1998)

Since the last status report on this Convention in *Nuclear Law Bulletin* No. 59, eight new States, namely Argentina, Austria, Greece, Italy, Luxembourg, Pakistan, Peru and Ukraine, have ratified and one, Singapore, has acceded to the 1994 Convention on Nuclear Safety (as at 15 April 1998).

The Convention entered into force on 24 October 1996.