

AGREEMENTS

BILATERAL AGREEMENTS

Argentina – Australia

Agreement concerning Co-operation in the Peaceful Uses of Nuclear Energy (2001)

On 8 August 2001, Australia and Argentina signed this Agreement which establishes a framework for co-operation in basic and applied research related to the peaceful uses of nuclear energy; research, development, design, construction and operation of nuclear research reactors; technology on the nuclear fuel cycle, including exploration and exploitation of nuclear ores, the production of nuclear fuel, and the management of spent fuel and radioactive waste; industrial production of components, equipment and materials to be employed in nuclear reactors; nuclear medicine, production of radioisotopes and their application; radiological protection, nuclear safety and regulation, the assessment of the radiological impact of nuclear energy and its nuclear fuel cycle; and technology for nuclear safeguards and physical protection.

The co-operation shall be carried out through mutual assistance related to education and training of scientific and technical personnel; exchange of experts and scientists; joint studies and projects on scientific research and technological development; deliveries of nuclear material and equipment; and exchange of information and documentation.

The Agreement includes a requirement that any transfer of nuclear material or equipment between Australia and Argentina must be subject to International Atomic Energy Agency safeguards and should comply with Australia's policy on the control of nuclear materials.

Argentina – Brazil

Joint Declaration regarding the Creation of the Argentinian-Brazilian Agency for Nuclear Energy Applications (2001)

On 14 August 2001, Argentina and Brazil signed this Declaration establishing the Argentinian-Brazilian Agency for Nuclear Energy Applications (*Agencia Argentino-Brasilena de Aplicaciones de la Energia Nuclear* – ABAEN). The purpose of this Agency is to promote and strengthen the co-operation between these countries in the field of the peaceful uses of nuclear energy, to identify fields in which joint projects could be developed and to establish mechanisms to facilitate their implementation.

To this effect, the Agency shall carry out the following activities: promoting progress in the peaceful uses of nuclear energy; encouraging co-operation activities in particular in relation to nuclear power generation and the nuclear fuel cycle; identifying new possibilities of co-operation; promoting joint actions to develop the nuclear power infrastructure in both countries; exchanging information on activities in relation to nuclear energy applications; and establishment of a joint programme for the development of new technologies in the nuclear field; etc.

Co-operation shall essentially focus upon nuclear power generation, the nuclear fuel cycle, radioisotope production, radioactive waste management and development of technology to design and construct advanced power reactors.

Australia – Czech Republic / Australia – Hungary

Agreements on Co-operation in Peaceful Uses of Nuclear Energy and the Transfer of Nuclear Material (2001)

Australia signed bilateral Agreements for Co-operation in the Peaceful Uses of Nuclear Energy and the Transfer of Nuclear Material with the Czech Republic and Hungary on 27 July and 8 August 2001 respectively. These Agreements stipulate strict safeguards, and verification and physical protection measures over uranium which could be supplied from one Party to the other for nuclear power generation.

Australia – Indonesia

Arrangement Concerning Co-operation on Nuclear Safeguards and Related Matters (2001)

The Australian Safeguards and Non-Proliferation Office (ASNO) and the Indonesian Nuclear Energy Control Board (BAPETEN) signed a Memorandum of Understanding (MOU) for an Arrangement Concerning Co-operation on Nuclear Safeguards and Related Matters on 29 June 2001.

The MOU establishes a framework governing co-operation in the safeguards area, including exchanges of scientific and technical staff and joint participation in research and development projects on IAEA safeguards. The MOU does not cover provision of nuclear material or nuclear technology.

Austria – Switzerland

Agreement on the Early Exchange of Information in the Field of Nuclear Safety and Radiation Protection (1999)

This Agreement, concluded on 19 March 1999 between the Government of the Republic of Austria and the Swiss Federal Council, entered into force on 1 January 2001.

The Agreement derives, in part, from the Convention on Early Notification of a Nuclear Accident adopted on 26 September 1986 under the auspices of the IAEA (the text of this Convention is reproduced in *Nuclear Law Bulletin* No. 38), which provides in Article 9 that Contracting Parties

may conclude bilateral agreements for this same purpose. To date, Switzerland has concluded bilateral agreements of this nature with France, Germany and Italy. The Agreement with Austria therefore completes Switzerland's arrangements with its neighbouring states for a system of rapid reciprocal information in the fields of nuclear energy and radiation protection.

The Agreement defines the incidents which give rise to the early notification obligation and the information procedure. It establishes a system of information in stages. The first stage consists of a rapid notification of the date and location of the incident, its nature and possible consequences as well as those measures which should be taken immediately. A second phase provides for more detailed information on the presumed or certified causes of the incidents, and its probable development. Calculations of releases of radioactivity and their development over time must also be communicated. The State where the accident took place is also required to indicate whether the air or water has been contaminated as well as the meteorological and hydrological data concerning those elements. That State transfers information on the radioactivity in the environment and in consumer goods, indicates any measures taken or to be taken on its territory, and informs the other State of measures taken to inform the public. The Agreement furthermore contains a provision on co-operation between the two States and the establishment of a permanent contact body responsible for implementing the Agreement.

This instrument finally provides that once a year, the Parties inform each other on their nuclear programme, their experience in the field of operation of nuclear power plants and their legislative instruments in the field of nuclear safety and radiation protection. The Parties are obliged to inform each other of the current state of nuclear installations whether existing, under construction, or at the planning stage. They also undertake to inform each other of any major modifications to installations or projects to close down or dismantle installations, including any relevant documents. One of the articles in the Agreement deals with information during licensing procedures according to the nuclear legislation of each State. During these procedures, each Party provides access to the relevant documents to the other Party depending on its own criteria (party to an application for an administrative licence/authorisation in the field of nuclear energy). The transfer of such documents aims to allow the other Party to take position on the project. Each Party also organises the measurement of radioactivity on its territory and communicates the results to the other Party once a year.

Finally, the Agreement contains various annexes, including one which defines, for Switzerland, the conditions which a person or an organisation must meet in order to be accepted as Party to an application for an administrative licence/authorisation in the field of nuclear energy.

Brazil – United States

Extension of the Agreement concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications (2001)

On 19 September 1995, the National Nuclear Energy Commission (CNEN) of Brazil and the US Department of Energy (DOE) signed an Agreement concerning Research and Development in Nuclear Material Control, Accountancy, Verification, Physical Protection, and Advanced Containment and Surveillance Technologies for International Safeguards Applications for a five-year period. Pursuant to Article 9 of this Agreement dealing with its extension and modification, on 17 September 2001, the

Parties signed a new Agreement confirming its application for an additional five years, i.e. until 19 September 2005, and its automatic renewal for further five-year periods thereafter.

The Agreement aims to enhance safeguards at all major nuclear facilities located in Brazil where nuclear materials might be diverted for military purposes. Under the Agreement, the DOE and the CNEN shall co-operate to:

- implement physical protection methods at Angara I and II nuclear power reactors;
- develop an unattended monitoring system for the Angara II nuclear power reactor;
- develop a remote monitoring system at Angara II to track spent nuclear fuel from storage to final disposal;
- implement environmental sampling as a tool for verification of activities involving nuclear materials at enrichment facilities in Brazil.

Czech Republic – Republic of Korea

Agreement for Co-operation in the Peaceful Uses of Nuclear Energy (2001)

This Agreement was signed on 16 March 2001 and entered into force on 1 June 2001 for a period of ten years which may be extended for additional periods of five years.

The Agreement provides for co-operation related to the use, development and application of nuclear energy for peaceful purposes. It may include *inter alia*: basic and applied research and development with respect to the peaceful uses of nuclear energy; research, design, construction, operation and maintenance of nuclear power plants and research reactors; manufacture and supply of nuclear fuel elements to be used in nuclear power plants and research reactors; production and application of radioactive isotopes in industry, agriculture and medicine; nuclear safety and regulation, radiation protection, environment protection, radioactive waste management; nuclear material control and physical protection; industrial co-operation; supply of technical training, assistance and services; exploration for and development of uranium resources.

Under the terms of the Agreement, nuclear materials, equipment and technology covered by it may not be used for the production of nuclear weapons and explosive devices. Compliance with this obligation shall be verified in accordance with the procedure of the IAEA Safeguards System. The Agreement does not allow the transfer of nuclear materials, equipment and technology under its scope to a third party unless the Parties agree in writing.

European Union – Russian Federation

Agreements on Nuclear Safety and Controlled Nuclear Fusion (2001)

On 2 October 2001, the European Union and the Russian Federation signed two Co-operation Agreements on Nuclear Safety and Controlled Nuclear Fusion, respectively.

The Agreement on Nuclear Safety contains provisions on reactor safety, radiation protection, radioactive waste management, decommissioning and accountancy and control of nuclear material.

The Agreement on Nuclear Fusion provides for co-operation in the fields of research into generating energy by controlled fusion and of the technology needed for the International Thermonuclear Experimental Reactor (ITER) project.

The co-operation will include exchanges of technical knowledge, experts, materials and equipment, training and joint studies and activities.

These Agreements are concluded for a ten-year and five-year period, respectively, renewable for a further five years.

France – United States

Agreement for Co-operation in Advanced Nuclear Reactor Science and Technology (2001)

In implementation of the Agreement for Co-operation in Advanced Nuclear Reactor Science and Technology, signed on 18 September 2000 (see *Nuclear Law Bulletin* No. 67), the Atomic Energy Commission (France) and the US Department of Energy signed an Agreement on 9 July 2001 aiming to strengthen and broaden their co-operation in advanced nuclear reactor science and technology in order to improve cost, safety and proliferation-resistance of nuclear power systems. The Agreement entered into force for a five-year period upon signature of the Parties.

Co-operation will focus on:

- advanced reactor developments for future-generation reactors;
- advanced reactor fuel and reactor-cycle integration;
- advanced accelerator applications, including accelerator-driven systems for transmutation of waste;
- advanced fuel and material irradiation and use of experimental facilities.

Japan – United Kingdom

Co-operation Agreement on Advanced Nuclear Fuel Cycle, Fast Breeder Reactor and Other Related Technologies (2001)

On 23 April 2001, Japan Nuclear Cycle Development Institute (JNC) and the British Nuclear Fuels plc (BNFL) signed this five-year Co-operation Agreement. Under this Agreement, both Parties plan to promote mutual co-operation in exchanging information and personnel, and conducting joint research in the field of advanced nuclear fuel cycle technology, including fast breeder reactor (FBR) fuel cycle, FBR technology and radioactive waste management.

Republic of Korea – United States

Annex IV Joint Project on Cintichem Technology (2000)

On 29 June 2000, the Department of Energy of the United States (DOE) and the Korea Atomic Energy Research Institute (KAERI) signed an Annex on nuclear energy (Annex IV Joint Project on Cintichem Technology) under the 1996 Memorandum of Understanding (MOU) between the DOE and the Ministry of Science and Technology of the Republic of Korea for a Co-operative Laboratory Relationship.

The MOU provides for co-operation in the following areas:

- nuclear power and research reactors technology;
- nuclear waste management;
- nuclear safety;
- applications of radiation and radioisotopes;
- nuclear safeguards technology;
- basic sciences;
- education;
- health physics; and
- environmental research related to nuclear technology.

The purpose of the Annex, which will remain in force until 29 June 2005, is to provide the KAERI with the Cintichem process technology for production of molybdenum 99 owned by the DOE. The DOE agrees to provide relevant technical information for Cintichem processing and waste treatment using both low-enriched uranium and highly-enriched uranium targets, as well as for the design, fabrication and irradiation of such targets.

Morocco – United States

Protocol amending the Co-operation Agreement on the Peaceful Uses of Nuclear Energy (2001)

This Protocol, signed by the Kingdom of Morocco and the United States of America on 20 September 2001, amends the Framework Agreement concluded by the two parties on 30 May 1980, and extends its validity for 20 years, renewable for further periods of 5 years. The Agreement had originally entered into force on 16 May 1981 for a period of 20 years which expired on 16 May 2001.

The Framework Agreement set out the basis for co-operation between the Parties on the peaceful uses of nuclear energy. The Parties may transfer information and provide nuclear materials, equipment, and nuclear science and technology components. They undertake in particular not to reprocess materials received or to enrich uranium transferred.

This text also establishes the legal bases allowing the construction in Morocco of a reactor for the National Centre of Nuclear Energy, Science and Technology (see Chapter “National Legislative and Regulatory Activities” of this *Bulletin*).

Although the Framework Agreement already provided that each of the parties was responsible for the physical protection of materials and equipment transferred and placed under its jurisdiction, the Protocol further strengthens the requirements concerning the levels of physical protection to be guaranteed, which should correspond to the recommendations published in IAEA INFCIRC/225/Rev. 4. Finally, materials transferred to Morocco are to be subject to IAEA safeguards.