# NATIONAL LEGISLATIVE AND REGULATORY ACTIVITIES

## Algeria

***Radiation Protection***

*Decree establishing the Atomic Energy Commission (1996)*

Decree No. 96-436 of 1 December 1996 establishes the Atomic Energy Commission as the body responsible for the definition and implementation of national policy on the promotion and development of nuclear energy and technology.

This Decree was adopted pursuant to Act No. 83-03 of 5 February 1983 on Environmental Protection, and was published in the Official Gazette of the Republic of Algeria No. 75 of 4 December 1996.

The mandate of the Commission is:

- to study and formulate proposals on national policy in the field of atomic energy, in accordance with the directions and priorities identified, and decisions adopted, by the supervisory authority;
- to ensure that requirements concerning the storage of radioactive waste are fulfilled and to ensure the management and control of such waste;
- to contribute, in collaboration with other competent bodies, to the development of technical and safety specifications in its areas of activity, and to guarantee the application of measures designed to protect persons, property and the environment from the harmful effects of ionising radiation;
- to contribute, in collaboration with other competent bodies, to the development of nuclear safety standards, and of general technical regulations concerning nuclear installations, installations for the management of radioactive materials and installations for radioactive waste;
- to participate, with other competent bodies, in the development of legislative and regulatory instruments governing nuclear energy;
- to ensure the collection, preservation and dissemination of technical and scientific information, or any other information related to atomic energy.

The Decree also describes the structure, composition and mode of operation of the Commission. Implementing legislation will be adopted to further specify the practical application of this Decree.

# Belarus

### *Radiation Protection*

*New Law on Radiation Protection of the Public (1998)*

The Law on Radiation Protection of the Public was adopted and subsequently promulgated by the President on 5 January 1998 (for details of this Law when it was in draft form before the Parliament, see *Nuclear Law Bulletin* No. 60).

# Belgium

### *Organisation and Structure*

*Act on the Staffing of the Federal Agency for Nuclear Control (1997)*

Chapter V of the Planning Law of 12 December 1997 introduces an amendment to Article 45 of the Act of 15 April 1994 on protection of the public and the environment against the dangers of ionising radiation, and on the Federal Agency for Nuclear Control (see *Nuclear Law Bulletin* No. 53).

Article 45 regulates the transfer of personnel to the Agency from the Division of Technical Safety of Nuclear Installations, which is part of the Ministry of Employment and Labour, and the Division for Protection against Ionising Radiation, which is part of the Ministry of Social Affairs, Public Health and the Environment. The amendment provides that such transfers will no longer happen automatically, but instead will be subject to a preliminary selection carried out by the Board of Directors of the Agency. Furthermore, personnel from other government departments in the nuclear field may be integrated into the Agency upon the advice of its Board of Directors.

This Act was published in the *Moniteur Belge* of 18 December 1997.

### *Radiation Protection*

*Royal Decree on Radiation Protection (1997)*

The Royal Decree of 2 October 1997 amends the Royal Decree of 28 February 1963 on the protection of workers and the general public from the dangers of ionising radiation (see *Nuclear Law Bulletin* No. 1). It also effects the entry into force of parts of the Act of 15 April 1994 on protection of

the public and the environment against the dangers of ionising radiation and on the Federal Agency for Nuclear Control (see *Nuclear Law Bulletin*s Nos. 53 and 57).

This Decree aims to complete the implementation into Belgian law of a series of European Union Directives, including, in particular, Council Directive 90/641/Euratom of 4 December 1990 on the protection of outside workers exposed to the risk of ionising radiation during their activities in restricted areas. This Directive had already been partially implemented by the adoption of the Royal Order of 25 April 1997 (see *Nuclear Law Bulletin* No 60). In addition, this Decree implements Council Directive 92/3/Euratom of 3 February 1992 on the supervision and control of shipments of radioactive waste between Member States and into and out of the Community. In this respect, the Decree sets out a model uniform document for the surveillance and control of these transfers. Finally, the Decree completes the implementation of Council Directive 89/618/Euratom of 27 November 1989 on informing the general public about health protection measures to be applied and about steps to be taken in the event of a radiological emergency.

The amendments made to the afore-mentioned 1963 Decree include a new Section on the operational protection of outside workers exposed to radiation during activities in restricted areas which defines, *inter alia*, the obligations of the "outside enterprise" and those of the operator (Section VI, Chapter III). Furthermore, Chapter IV of the 1963 Decree is replaced by provisions governing import, export, transit and distribution of radioactive substances. These provisions describe the formalities for obtaining a license for any of the above activities.

Finally, the Decree provides that persons responsible for the operation of establishments where radiological, radiotherapeutic or nuclear medicine installations are in use, must consult experts in radio-physics for the organisation and supervision of measures necessary to guarantee the protection of patients against the harmful effects of ionising radiation and to control the quality of the equipment used. The Decree lays down the criteria and procedure according to which these experts in radio-physics are officially recognised. The latter provisions were adopted pursuant to Directive 84/466/Euratom on radiological protection of patients.

This Decree was published in the *Moniteur belge* of 23 October 1997

# Brazil

### *Organisation and Structure*

*Decree establishing the National Electrical Energy Agency (1997)*

Decree No. 2.335 of 6 October 1997 sets up the National Electrical Energy Agency under the authority of the Ministry for Energy and Mining. This Decree describes the nature and the objectives of the Agency, its structure and powers, and the particular responsibilities of its Board of Directors.

The mandate of the Agency is to regulate the production, distribution, commercialisation and control of electrical energy in general. Its principal activities in the nuclear field relate to the regulation and control of energy produced in nuclear power plants. In addition, the Agency participates in research

and technological development activities in the electrical sector (including nuclear energy), and is responsible for promoting co-operation with national and international bodies in this field.

This Decree was published in the Official Gazette of 7 October 1997

***Regime of Nuclear Installations***

*Resolution on Protection Against Fires (1997)*

This Resolution, adopted by the National Commission on Nuclear Energy on 16 September 1997, governs fire protection measures to be taken in nuclear fuel cycle installations.

The standards set out in this Resolution aim to protect the public and the environment against the harmful effects of fires which may occur during the construction, operation or conversion of nuclear fuel cycle installations.

***Regime of Radioactive Materials***

*Resolution on the Possession of Radioactive Sources by Natural Persons (1997)*

This Resolution, adopted by the National Commission for Nuclear Energy on 16 September 1997, sets out requirements for the registration of all professionals responsible for the preparation, use and handling of radioactive sources, both sealed and unsealed, in the following sectors: industrial, medical-veterinary, education and research, agriculture and the tertiary sector.

# People's Republic of China

***Overview of Nuclear Legislation***

*Introduction*

China currently has three pressurised water reactors (PWR) in operation, one of which, located at the Quinshan station, was the first reactor developed exclusively by China. The other two, whose equipment was mainly supplied by Framatome, are located at the Daya Bay station. The total capacity of the three reactors is about 2 100 MWe, being approximately 0.9 per cent of the capacity of all power sources as of the end of 1996.

In addition, there are four more PWR's under construction, all of which are scheduled to be commissioned at the start of the next century: two of these units are at Quinshan with the remaining two at Guandong Lingao. Two new reactor projects are also underway; the first comprises the construction of two CANDU reactors at Quinshan in co-operation with Canada, while the second involves the construction of two PWR's at Lianyungang in co-operation with Russia.

*Competent Nuclear Authorities*

The National Nuclear Safety Administration (NNSA) was established in 1984 under the authority of the State Science and Technology Commission to exercise control over nuclear installations, including regulating safety and to ensure the safe development of the peaceful uses of nuclear energy. The NNSA established the Beijing Nuclear Safety Centre to provide technical advice and three regional offices in areas where nuclear installations are located. The Nuclear Safety Advisory Committee, which was established in 1986, is another agency providing NNSA with advice on licensing conditions, research and development planning and nuclear safety policy.

The main functions of the NNSA are as follows:

- to prepare regulations dealing with the safety of nuclear installations and to review technical standards for nuclear safety;
- to assess the safety of nuclear installations and the capability of operating organizations to ensure their safe operation
- to issue or revoke licences;
- to investigate and dealing with safety related accidents;
- to guide and supervise the establishment and implementation of emergency plans in co-operation with relevant departments or agencies;
- to assist in the development of scientific research, public information and education, and international co-operation relating to the safety and management of nuclear installations;
- to mediate and settle disputes relating to nuclear safety in co-operation with relevant departments.

The China National Nuclear Corporation established in 1988 under the authority of the State Council, is a national corporation with primary responsibility for the promotion and development of nuclear energy. It is also responsible for international co-operation in the field of nuclear energy and for directing the appropriate response to a nuclear accident.

Other national organisations directly involved with nuclear safety are:

- **National Environmental Protection Agency**, the State agency responsible for reviewing and approving the environmental aspects of feasibility reports for nuclear installations and monitoring the environmental impacts of nuclear installations.
- **Ministry of Public Health**, responsible for approving the registration of radioactive sources for use in medical, industrial and research facilities and the registration of ionising radiation generating devices, for monitoring both occupational and non-occupational radiation doses, and for providing medical facilities for radiation injuries.
- **Office for Nuclear Materials Control**, is responsible for nuclear materials control, including issuing nuclear materials licences, establishing regulations and systems relating

to nuclear materials control and establishing and monitoring the accountancy system for nuclear materials on a national basis.

- **National Office for Nuclear Emergency Preparedness**, a State agency administered by the State Council through the State Planning Agency, whose main responsibilities are to review and approve off-site emergency plans for nuclear power plants and to prepare and co-ordinate the national nuclear emergency plan.

*Legislation in force*

No legislation generally addressing the use of nuclear energy in China yet exists. However, in the fields of nuclear safety and nuclear exports, five regulations have been adopted by the State Council, as follows:

- Regulations on the safety and control of civilian nuclear installations (HAF0500, 29 October 1986) establish a licensing system for nuclear installations, set forth the functions of the NNSA and provide for a "safety first" principle to be applied to the siting, design, construction, operation and decommissioning of nuclear installations;

- Regulations on the control of nuclear materials (HAF0600, 15 June 1987) establish a system of licensing and control over the safe and lawful use of nuclear materials;

- Regulations on radiation protection in respect of radioisotopes and radiation equipment (24 October 1989) establish a system of licensing and apply to everyone engaged in the sale or use of radiation equipment;

- Regulations on the control of nuclear emergencies involving nuclear power plants (HAF0700, 4 August 1993) set forth the functions of government departments and organisations responsible for emergency management.

- Regulations for the control of nuclear exports (No.230, 1 August 1997) provide that nuclear materials, equipment, and related nuclear technology may only be exported for peaceful uses.

*Administrative Instruments*

In 1986, the State Council issued a statement regarding China's position on the matter of nuclear third party liability. It is entitled "Official Written Reply of the State Council Concerning the Handling of Third-Party Liability", and in the absence of Chinese legislation on this subject, it is the only legal instrument which addresses this issue. It was prepared in connection with the construction of the Daya Bay station as a result of a need to clarify the Chinese Government's official position on the matter. The Statement reflects the major principles which are incorporated into the international nuclear liability regime, including the principles of strict and exclusive liability of the operator and limitations upon the operator's liability in terms of both time and money. However, a number of issues are still not clear when compared to the existing international regime.

*Draft Legislation*

A draft law generally addressing the use the nuclear energy in China had been submitted to the Standing Committee of the National People's Congress in May 1989, but its consideration was suspended without full discussion, mostly because government restructuring taking place at that time made it unclear who would be responsible for the legislation. A second draft was submitted to the Government in March 1995 by the State Science and Technology Commission (SSTC) and it is currently subject to study and debate.

In addition, a draft law on a radioactive pollution prevention and control was submitted by the National Environmental Protection Agency which is now being reviewed by various ministries.

*International Conventions*

China is party to the following international conventions:

- 1968 Treaty on the Non-Proliferation of Nuclear Weapons, ratified on 9 March 1992;
- 1979 Convention on the Physical Protection of Nuclear Material, acceded to 10 January 1989;
- 1986 Convention on Early Notification of a Nuclear Accident, ratified on 10 September 1987;
- 1986 Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency, ratified on 10 September 1987;
- 1994 Convention on Nuclear Safety, ratified on 9 April 1996.

# Czech Republic

***General Legislation***

*Act on the Peaceful Uses of Nuclear Energy and Ionising Radiation (1997)*

The text of the Act on the Peaceful Utilisation of Nuclear Energy and Ionising Radiation (the Atomic Act) and on Amendments and Additions to Related Acts, which was adopted on 24 January 1997, is reproduced in the Supplement to this edition of the Bulletin. A brief description of the legislation was given in *Nuclear Law Bulletin* No. 59.

# Denmark

### *Radiation Protection*

*Order on Dose Limits for Ionising Radiation (1997)*

On 31 October 1997, the National Board of Health issued Order No. 823 on dose limits for ionising radiation. This Order repeals and replaces Order No. 838 of 10 December 1986 (see *Nuclear Law Bulletin* No. 39). The Order is in accordance with the Council Directive, 96/29/Euratom of 13 May 1996, laying down basic safety standards for the health of workers and the general public. As well as specifying dose limits for ionising radiation, it also sets out the requirements for dose monitoring and for approved dosimetric services.

# Estonia

### *Radiation Protection*

*Radiation Act (1997)*

The text of the Radiation Act, adopted on 23 April 1997, is reproduced in the Supplement to this edition of the Bulletin. A brief description of the legislation was given in *Nuclear Law Bulletin* No. 60.

# France

### *Regime of Nuclear Installations*

*Decree Modifying the Categories of Installations for the Protection of the Environment (1997)*

Decree No.97-116 of 27 November 1997 modifies the Decree of 20 May 1953, as amended, on the categories of installations for the protection of the environment (see *Nuclear Law Bulletin* No. 1). Section 1 of Act No.76-663 of 19 July 1976 provides a definition of installations for the protection of the environment: "factories, workshops, warehouses, building sites and any other installations managed or possessed by a natural or legal person of public or of private law, which constitute risks or inconveniences to the well-being of the neighbourhood, to public health, safety or hygiene, to agriculture, to the protection of nature and the environment or to the preservation of sites and monuments".

Section 2 of the 1976 Act, which provides that "installations described in Section 1 are defined according to the categories of installations established by decree of the Council of State" therefore refers to Decree No. 53-578 of 20 May 1953, as amended (see *Nuclear Law Bulletin* No. 18).

The latter provides that installations are subject to licensing or to declaration depending on the level of danger or inconvenience which their operation may cause.

Certain installations for the protection of the environment are designed to contain radioactive materials. Classifications 1710, 1711, 1720 and 1721 correspond to installations where certain types of radioactive material may be used, placed or stored.

The new Decree No.97-116 contains three annexes: the first deals with the revision of existing categories, the second governs the creation of new categories and the third describes the removal of four categories. New categories include Classification No. 2799, entitled "Waste from major nuclear installations" (disposal installations except installations mentioned under classification Nos. 322, 1711 and 1720 and major nuclear installations). Installations which dispose of low-level radioactive waste from major nuclear installations, and in particular certain demolition waste, are subject to licensing.

### ***Transport of Radioactive Waste***

*Amendment of two Orders of 1996 on the Transport of Dangerous Goods by Road and Rail (1997)*

The Orders of 5 and 6 December 1996 on the transport of dangerous goods by road and by rail, respectively, have been amended by two new Orders of 16 December 1997.

The first Order of 16 December 1997 modifies the Order of 5 December 1996 on road transport in order to take into account the new powers of the Minister for Economic Affairs, Finance and Industry and the Minister for Territorial Development and the Environment in the field of transport of radioactive and fissionable materials for non-military purposes, which powers were attributed to them by the Decrees Nos 97-710 and 97-715 of 11 June 1997 (See, for the former of these two instruments, *Nuclear Law Bulletin* No. 60).

Section 47 of the new Order provides furthermore that the Institute for Nuclear Safety and Protection will co-operate with the Directorate for the Safety of Nuclear Installations (DSIN) with regard to the granting of authorisations necessary for deliveries of radioactive substances.

The second Order of 16 December 1997 amends the Order of 6 December 1996 on the transport of dangerous goods by rail for the same reasons as outlined above.

*Circular Implementing European Union Council Directive 95/50/EC on Uniform Procedures for the Transport of Dangerous Goods by Road (1997)*

This Circular of 29 October 1997 refers to all texts applicable to the transport of dangerous goods by road, and indicates specifically the type of control and inspection to apply to such goods. In particular, it is provided that inspections can be carried out within companies.

# Germany

### *General Legislation*

*Amendment of the 1959 Atomic Energy Act and of the Act on the Establishment of a Federal Office for Radiation Protection (1998)*

An Act to Amend the Atomic Energy Act and the Act on the Establishment of a Federal Office for Radiation Protection adopted on 6 April 1998 (BGBl 1998 I, p. 694).

The first goal of the Act is to implement the Directive of the European Union, 92/3/Euratom of 3 February 1992, on the supervision and control of transboundary movement of radioactive waste (*EC Official Journal 1992 No. L 35, p. 24*). The implementation of that Directive at national level was required on 1 January 1994. However, there was a need to introduce into the Atomic Energy Act a special authorisation for issuing ordinances and to amend the import and export regulations. Moreover, a special ordinance is under preparation.

The Act also aims at improving nuclear safety with regard to existing nuclear installations and with regard to further development of nuclear safety technology. The additional provisions of the Act deal mainly with the final disposal of radioactive waste.

In addition to the implementation of the European Union Directive, the Act deals with the following subjects:

- By way of clarification a new sentence 2 of Section 7, Paragraph 2, aims at facilitating safety improvements of existing nuclear installations. In the future the safety improvements of existing nuclear installations may also be permitted if they cannot entirely reach the safety standard which is required in the licensing procedure for new nuclear installations. This provision is meant to encourage operators not to refrain from safety-oriented back-fitting measures even if those back-fitting measures do not entirely comply with the latest status of science and technology, as required for new installations.

- A new Section 7c introduces a procedure which aims at promoting the development of new reactor types with an advanced safety technology. The drafters of the Act had in mind, in particular, the German-French project of a new European Pressurised Water Reactor (EPR). Section 7c allows the assessment of single elements of the necessary safety requirements, independently of the site of the installation. The competent authority for the new procedure is not the authority which in general is competent for issuing installation licences, namely the competent Ministry of the respective "Land", but rather the Federal Office for Radiation Protection. The procedure aims at giving the Federal Office the opportunity to influence new safety concepts during the development phase. Consequently, the licensing authority competent for the final procedure is not bound by the results of the preliminary assessment. The results of that assessment will be published in the "Bundesanzeiger", and it may have significance for the final licensing procedure. The Federal Government also intends the new provision to be an important signal that Germany is prepared to actively take part in the international development of enhanced nuclear safety standards.

– The Act introduces substantial changes to the provisions on the final disposal of radioactive waste (See *Nuclear Law Bulletin* No. 59).

  - According to Section 9a Paragraph 3, the final disposal of radioactive waste is a task to be fulfilled by the Federal Government. The Federal Government has to construct and to operate final repositories and may use third parties to assist it in fulfilling this task. The new version of Section 9a now opens the door for a full transfer of functions to third parties in two steps:

  - The Federal Government still remains responsible for final disposal and it may still use dependent third parties. However, the Federal Government is now authorised to transfer its public functions in the field of final disposal to third parties by entrusting them with public power (so-called "*beliehener Unternehmer*"). In this case the private person, which will normally be a company, will exercise public power on behalf of the Federal Government. The third party has to guarantee that it will fulfil its transferred powers in the way described by the law. This transfer of function is meant as a first step to privatising final disposal of radioactive waste (see new Paragraph 4 of Section 9a, Atomic Energy Act).

  - The second step to transferring public functions to private nuclear industry is not yet elaborated in the Act. A new sentence 3, which is added to Section 9a, Paragraph 3, provides for a legislative programme. According to that programme, the responsibility of the Federal Government to construct and operate final repositories for radioactive waste may, on the basis of a new law to be promulgated, be entirely transferred to a newly-established corporate body under public law ("*Körperschaft des öffentlichen Rechts*"). According to the purposes of the Act, all operators of nuclear installations and other entities producing nuclear waste which need facilities for final disposal of radioactive waste shall be mandatory members of the corporate body. This would be the final step towards "privatising" nuclear waste disposal. The waste disposal still remains a domain of public law, but responsibility rests with the waste producers. The Federal Government will no longer be responsible for final disposal. However, the form of a corporate body under public law ensures that waste disposal is still a public task and is supervised under the rules of public law.

  - In order to facilitate the construction and operation of final repositories for nuclear waste and in order to facilitate changes to existing repositories, new sections 9d to 9g provide for the possibility of expropriations if necessary. This compulsory purchase with provision for compensation is also permitted with a view to facilitating the investigation of a site for a nuclear waste repository. The latter measure has special importance for investigating possible disposal sites in deep geological formations.

– Section 11, Paragraph 1 is amended by a new No. 6, which provides for the necessary authorisation to the Government to issue the legal instruments (ordinances) necessary to implement the European Union Directive on the transboundary movement of radioactive waste.

– In accordance with Section 57a, Atomic Energy Act, which contains transitory provisions on the continuation of licences issued under the law of the former German Democratic Republic, the validity of GDR-licences will terminate on 30 June 2000, provided they have not already terminated at an earlier date. The amendment prolongs the date to 30 June 2005. However, this prolongation is only relevant to the former GDR repository Morsleben.

– The Act amends Annex 1 to the Atomic Energy Act, which contains the definitions applying to the liability chapter of the Act, and which is identical to Article 1 (a) of the Paris Convention. Following the NEA Steering Committee's Decision of 11 April 1984 (NE/M(84)1) "installations for the disposal of nuclear substances" are included in the list and are now "nuclear installations" in the sense of the Paris Convention.

– Finally, this Act entrusts responsibility to the Federal Office for Radiation Protection to support with its expert knowledge other authorities, including the police, in cases of loss or discovery of radioactive substances or in cases where radioactive substances are involved in crimes or endanger life, health or property of individuals or the public. For this purpose Section 2 of the Act on the Establishment of a Federal Office for Radiation Protection has been amended accordingly.

The amendment will enter into force on 1 May 1998.

### *Radiation Protection*

*The Third Ordinance Implementing the Preventive Radiation Protection Act (1997)*

A third Ordinance of 16 October 1997 was adopted (BGBl. I, p. 2474) to assign competence for measurements and evaluations in accordance with the Preventive Radiation Protection Act of 1986 as amended (See *Nuclear Law Bulletin* No. 39). According to the Ordinance the Federal Office for Radiation Protection is responsible for extensive investigation of the gamma dose rate.

*Ordinance on Cosmetics (1997)*

The Ordinance on Cosmetics of 19 June 1985 (BGBl. I, p. 1082) was amended by the 26th Ordinance to amend the Ordinance on Cosmetics of 13 June 1997 (BGBl. I, p. 1356). A consolidated new version of the Ordinance was published on 7 October 1997 (BGBl. I, p. 2410). In accordance with Section 1 and No. 293 of Annex 1 to the Ordinance, radioactive substances must not be used for the commercial production of or the treatment of cosmetics. However, naturally-occurring nuclides and radioactive substances produced by artificial contamination of the environment may be used as long as they are not enriched and as long as their radioactivity concentration is in line with the European Union Directive on Health Protection of the Public and of Workers against the Risk of Ionising Radiation.

### *Transport of Radioactive Materials*

*Ordinance on the Transport of Dangerous Goods by Inland Waterways (1997)*

The Dangerous Goods Ordinance – Inland Waterways of 18 January 1996, as amended by the 2nd Ordinance of 20 December 1996 (See *Nuclear Law Bulletin* No. 59), was amended by the 3rd Ordinance of 4 December 1997 (BGBl. 1997 I, p. 2853). The main purpose of the amendments is to list the competent authorities for Annexes B1 and B2 to the ADNR agreement. By an Ordinance also of 4 December 1997 (BGBl. 1997 I, p. 2123) amendments of Annex B2 to the Ordinance on the Transport

of Dangerous Goods on the Rhine River (ADNR) and to the Ordinance Regarding the Transport of Dangerous Goods on the Mosel River in Germany have come into force.

### *Regulations on Nuclear Trade (including non-proliferation)*

*Amendments to the Foreign Trade Ordinance (1997-1998)*

The Foreign Trade Ordinance of 22 November 1993, as last amended by the Ordinance of 27 May 1997 (See *Nuclear Law Bulletin* No. 60) was amended once again, by the 40th Ordinance to Amend the Foreign Trade Ordinance of 11 December 1997 (*Bundesanzeiger* 1997 Attachment No. 242) and by the 41st Ordinance to Amend the Foreign Trade Ordinance of 20 January 1998 (*Bundesanzeiger* 1998 p. 985). The first of these amendments aims at adapting the Foreign Trade Ordinance to changes in the international field and at simplifying procedural provisions. In particular, the amendments follow upon the change of the Iraq embargo and the change of restrictions vis-à-vis the Federal Republic of Yugoslavia (Serbia and Montenegro), the Republic of Croatia, Bosnia and Herzegovina. The amendment also takes into account the termination of the COCOM control system. Moreover, the amendment permits new media in order to facilitate the licensing procedures. The second amendment implements, on the basis of the UN Security Council Resolution No. 1132 (1997), certain restrictions vis-à-vis Sierra Leone.

The 93rd Ordinance to Amend the Export-List – Annex AL to the Foreign Trade Act – of 4 September 1997 was published in Bundesanzeiger 1997, p. 11, 757 (as for the 91st and 92nd amendments, see *Nuclear Law Bulletin* No. 60). This amendment adapts the Export-List, in accordance with the Council Decision of the European Union No. 97/419/GASP of 26 June 1997, to the Joint List of the European Union for Goods with Dual Use.

## Indonesia

### *Third Party Liability*

*New Third Party Liability Regime under the new Act on Nuclear Energy (1997)*

The new Act on Nuclear Energy (No. 10 of 1997), which repealed and replaced the Atomic Energy Act of 1964, was promulgated by the President of Indonesia on 10 April 1997 (See *Nuclear Law Bulletin* No. 59). Under Article 45 of the Act, all regulations currently in force dealing with nuclear energy remain in force to the extent that they are not incompatible with the provisions of the Act.

Under the new Act there are detailed provisions on third party liability for nuclear damage. Thus, the operator of a nuclear installation is liable for damage suffered by a third party resulting from any nuclear incident inside the nuclear installation. The sending operator is liable for damage suffered by a third party during the transportation of nuclear fuel or spent fuel, subject to the right of the sending operator to transfer the liability to the receiving operator or the carrier by written agreement. The Act

provides for joint and several liability where the nuclear damage can be attributed to more than one operator and the damage attributable to each is not reasonably separable (Article 30).

This liability is strict, with the proviso, however, that the operator shall not be liable for damage directly due to an act of international or local armed conflict or a grave natural disaster, nor if it results from the intent of the third party suffering the damage.

The maximum limit of liability of the operator shall be not less than 900 billion rupiahs, which, at present, is subject to considerable fluctuation when converted to a foreign currency equivalent because of the economic situation prevailing in Indonesia. Any limit of liability above that amount is to be established by a Presidential Decree. This amount does not include interest and costs awarded by the Court.

There are provisions requiring insurance cover for the operator, including both the sending operator and the receiving operator in the case of transport, but these do not apply to Government-operated nuclear installations which are not State companies, in respect of which compensation for nuclear damage is to be the subject of a Presidential Decree.

The insurance company liable to pay the compensation shall do so within seven days of the issuance of a statement of the occurrence of the nuclear incident by the regulatory body, which statement shall be issued within three days from the date of the incident. There is a time-limit of 30 years within which to bring a claim for compensation, commencing from the date of the statement of the regulatory body that a nuclear incident has occurred. Where the damage arises from a nuclear incident involving nuclear fuel which has been stolen, lost or abandoned at the time of the incident, then the time-limit within which a claim for compensation must be made will be 40 years from the date of theft, loss or abandonment. There is also a further requirement that claims be brought within three years of the time the person suffering the nuclear damage knew or should have known of the nuclear damage and of the operator liable.

# Latvia

### *Regime of Radioactive Materials (including Physical Protection)*

*Regulations on State System of Accounting and Control of Nuclear Materials (1998)*

In March 1998 the Cabinet of Ministers adopted the Regulations on State System of Accounting and Control. The Regulations were drafted by the Ministry of Environmental Protection and Regional Development on the basis of Euratom Regulations in this field.

By way of a short summary, the Regulations include provisions on their objectives, information and notification requirements regarding NPP design and nuclear materials, a control programme (obligations of the operator regarding inventory), implementation of the Regulations (responsibility of operator, nomination of responsible person, information exchange with Inspectorate), the system of nuclear accounting, accounting reports and export/import of nuclear materials (notification, requirements for export/import, including prohibition of export to non-NPT countries).

***Regulations on Nuclear Trade (including Non-Proliferation)***

*Regulations Regarding Control of Strategic Goods and Import of Radioactive Substances (1997-1998)*

On 16 December 1997, the Cabinet of Ministers adopted new Regulations on Control of Strategic Goods (No. 421, 1997). These Regulations replace the 1995 Regulations concerning Strategic Export, Import and Transit and also the Regulations concerning the Committee for Control of Strategic Export and Import. The Regulations cover all aspects of the *Nuclear Suppliers Group* regime. In practice they represent only minor changes to the previous Regulations and the change of name for the Committee reflects only internal institutional changes within the Latvian Development Agency.

***Radioactive Waste Management***

*Amendment to the Licensing Regulations (1998)*

In March 1998 the Cabinet adopted amendments to the Licensing Regulations, whose main aim is to replace the Guaranty Fund for the State enterprise "Radons", with the Latvian Environmental Protection Fund for the collection of duty on the import of radioactive substances. The main task of the Fund is to manage the financial resources made available to it for environmental purposes. It has its own management, but policy decisions are made by the Board, which is headed by the Minister for the Environment and has representatives from the Ministry and certain nominated institutions.

# Lithuania

***General Legislation***

*Regulations on Licensing of Nuclear Activities (1998)*

Regulations on the Licensing of Nuclear Activities were recently prepared by the Lithuanian State Nuclear Power Safety Inspectorate (VATESI) and approved by Government Decree No. 103 of 27 January 1998 (published in Official Journal No. 12-274, 1998).

The process of licensing nuclear activities is not strictly centralised in Lithuania. Under these Regulations, VATESI is responsible for issuing licences for the design, construction, modification, operation and maintenance of nuclear facilities, the acquisition, possession and transportation of nuclear materials and the storage and disposal of radioactive waste. The Ministry of Environmental Protection is responsible for issuing licences for the acquisition, possession and transportation of radioactive materials. The Ministry of Economy is responsible for the issue of licences for the export, import and transit of nuclear, radioactive and other materials used in nuclear technologies, of nuclear equipment and of dual-use goods. The Ministry of Health Protection issues permits for the use of radioactive materials and other sources of ionising radiation.

### *Organisation and Structure*

*Creation of the Board of State Nuclear Power Safety Inspectorate (1997)*

On 14 November 1997, by Government Decree No. 1257 (published in Official Journal No. 108-2678, 1997), the Board of Management of the State Nuclear Power Safety Inspectorate (VATESI) was established. Until then, VATESI had been directed by the Head of the Inspectorate. The functions of the Board are to define the direction of VATESI's main activities, to approve its strategic development plans, to analyse its annual financial accounts, its annual activity reports and its plans for future activities, to approve the principles governing research and development applications and to stimulate co-operation between VATESI and State authorities. The Board is to meet 4 to 6 times a year. The decisions of the Board cannot restrict the independence or responsibility of the Inspectorate.

The Board consists of a Chairman, two members of Parliament, two representatives of ministries, one representative of the technical support group (Ignalina Safety Analysis Group) and the Head of the Inspectorate.

## Morocco

### *Radiation Protection*

*Decree on Protection Against Ionising Radiation (1997)*

Decree No 2-97-30 was adopted on 28 October 1997 pursuant to Act No 005-71 of 12 October 1971 on protection against ionising radiation. It was published in the Official Gazette of 4 December 1997. This Decree sets out general principles of protection against the harmful effects which can result from the use of ionising radiation and establishes certain requirements to which any activity involving exposure to radiation must conform. Establishments which carry out activities in this field are divided into different categories which determine whether or not they require a licence or a preliminary declaration.

The Decree draws a distinction between provisions applicable to normal and controllable uses of ionising radiation and those which apply to exceptional circumstances and emergency situations. It applies the principles of justification and optimisation to the system of dose limits, and specific provisions govern the exposure of workers, of students and apprentices of the general public, and exposures of an exceptional nature.

The provisions of the Decree which govern licences and declarations refer to Decree No 2-94-666 of 7 December 1994 on the licensing and control of nuclear installations. The latter Decree, also adopted pursuant to the 1971 Act, defines a nuclear installation and provides that the construction, commissioning, operation and final shut-down of such an installation are subject to licensing. This Decree also establishes the National Commission for Nuclear Safety, whose mandate is to provide opinions on licensing requests made under this Decree.

The 1997 Decree provides that the National Radiation Protection Centre, which is part of the Ministry for Public Health, is responsible for the keeping of a register of licences and declarations. Furthermore, a new body, the National Commission for Radiological Protection, which also forms part of the Ministry of Public Health, has the power to issue opinions on any question related to radiological protection.

*Decree on the Use of Ionising Radiation for Medical or Dental Purposes (1997)*

Decree No 2-97-132 was adopted on 28 October 1997 and published in the Official Gazette on 4 December 1997. It provides that the use of ionising radiation for medical or dental purposes may only be carried out by qualified personnel in premises fitted out and equipped according to the Regulations.

Apparatus and sources which are used for these purposes must appear on the list of equipment for which type approval has been granted by the Minister for Public Health. In this manner, the import, manufacture and sale of articles which are not included on this list is prohibited. Medical practitioners are obliged to maintain a register concerning radioactive substances which have been administered to patients for diagnostic or therapeutic purposes. The administration of radioelements for these purposes may only be carried out by doctors specialised in the use of radioisotopes or in nuclear medicine. The Decree includes, in annex, a list of requirements for the fitting-out of premises where ionising radiation sources are used for medical or dental purposes.

# Netherlands

***Third Party Liability***

*Royal Decree to Increase the Liability Amount of the Operator of a Nuclear Installation (1998)*

Pursuant to Sub-section 5 (2) of the Nuclear Third Party Liability Act of 1979, as amended in 1991, a Royal Decree (No. 577) of 14 November 1997 has increased the maximum amount of the operator's liability from 625 to 750 million Dutch guilders (approximately 275 million Special Drawing Rights). The Decree entered into force on 1 January 1998. The amount of cover from public funds set down in the Act has remained unchanged at five billion Dutch guilders (the text of the 1979 Act is reproduced in the Supplement to *Nuclear Law Bulletin* No. 49).

# Poland

***Radiation Protection***

*Regulation Exempting Certain Activities from Licensing (1997)*

A 1995 amendment to the Atomic Energy Act of 1986 gave the President of the National Atomic Energy Agency (NAEA) the power to exempt certain activities utilising radiation sources from the requirement to be licensed (the text of the 1986 Act is reproduced in the Supplement to the *Nuclear Law Bulletin* No. 43). By Regulation of 28 August 1997 (*Monitor Polski* No. 59, item 569), the President has exercised this power, exempting those activities where the radiation source is of very low activity or concentration, or where low level sources are contained in equipment conforming to specified construction requirements, thereby assuring a satisfactory level of radiation protection. Although exempt from licensing, these same activities must nevertheless be registered to permit some level of control by the regulatory agency.

This approach reflects current radiation protection principles of restricting the licensing process to activities with a potential radiation hazard. The exemptions are also compatible with the recommendations and rules of international organisations of which Poland is a member or with which it is associated (1994 Basic Radiation Safety Standards of the IAEA; the Directive 96/29/Euratom of 13 May 1996).

*Regulation on the Registration and Monitoring of Ionising Radiation Sources (1997)*

This Regulation made by the NAEA President on 28 August 1997 (*Monitor Polski* No. 59, item 570) amends an earlier Regulation on the principles of accountancy and control for ionising radiation sources (*Monitor Polski* No. 27, item 214). The amendment provides that the earlier Regulation shall not apply to those sources for which a licence is not required under the Atomic Energy Act of 1986.

*Regulation setting Conditions for the Import, Export and Transit of Nuclear Materials, Radiation Sources and Equipment Containing such Sources (1997)*

This Regulation, also made by the NAEA on 28 August 1997 (*Monitor Polsk*i No. 63, item 614 and No. 78, item 749) maintains the requirement that for the import, export and transit through Poland of nuclear materials, radiation sources or equipment containing such sources, a permit or licence for the specified practice related to the use of those items must be obtained. However, it introduces an exception to this requirement to accord with the provisions of new Regulations of 28 August 1997 above which exempt certain activities from the licensing obligation. Consistent with the basis for those exemptions, the Regulation of 28 August 1997 above allows such imports, exports or transit after registration, on the basis of the total activity or concentration of radioisotopes, including fission isotopes, or, in the case of equipment containing radioactive sources, on the basis of the radiation dose rate.

One of the conditions under which imports, exports or the transit of nuclear materials may proceed is the attachment, to the shipment, of the consignee's declaration of readiness to collect the shipment. The declaration is in the form of a standard document which is consistent with the Annex to the Regulation of the European Union 1493/93/Euratom on shipment of radioactive substances between Member States.

*Regulation Designating Occupational Positions for Ensuring Nuclear Safety and Radiation Protection and Staffing Conditions (1997)*

This Regulation, made by the NAEA on 19 September 1997 (*Monitor Polski* No. 73, item 698) generally defines the types of occupational positions that are essential for ensuring nuclear safety and radiation protection in facilities where nuclear materials or radiation sources are being used, where radioactive waste is being processed or disposed of, and at nuclear power plants. It also sets forth the conditions and procedures for issuing authorisations, to the individuals appointed to these positions, to work with nuclear materials, radiation sources or radioactive waste. Finally, it prescribes the methods for verifying the qualifications and capabilities of employees working with nuclear materials, radiation sources or radioactive waste. Modifications introduced by this Regulation concern:

- the procedure for obtaining authorisations and the areas within which they are valid;
- designation of those agencies authorised to organise training in the field of nuclear safety and radiation protection;
- the rules for appointing plant inspectors for radiation protection and the definition of their duties;
- generally updating the list of occupational positions and appropriate qualifying requirements.

The Regulation is consistent with European Union regulations, namely, Directive 96/29/Euratom of 13 May 1996, concerning the basic safety standards for radiation protection for workers and for the public.

# Romania

### *General Legislation*

*Amendment of the Law on the Safe Conduct of Nuclear Activities (1998)*

On 8 January 1998, Law No. 16 was adopted (*Monitorul Oficial*, Part 1, No. 8/13 January 1998), amending the 1996 Law on the Safe Conduct of Nuclear Activities (reproduced in the Supplement to *Nuclear Law Bulletin* No. 59).

Although most of the 14 amendments introduced to the 1996 Law were technical in nature, four others are of particular importance:

- Under Article 4(1) of the Law, the National Commission for the Control of Nuclear Activities has been made more independent and is now responsible directly to the Government, rather than being the agent of the Ministry of Waters, Forests and Protection of the Environment.

- Under Article 4(5) the authorisation of the Commission to spend revenue from fees has been widened to cover, in addition to material expenses, personnel expenses, endowments and investments specifically relating to the activities of the Commission. The proportion of the fees collected which can be used for these expenses has been set by Government decision at 50%.

- Article 35 considerably strengthens the powers of the Commission and effectively raises it to the rank of a Ministry, allowing it to propose draft laws and other projects in the field, for submission to the Government and then to Parliament.

- Under Article 37 it is now the Commission, rather than the Central Authority for the Protection of the Environment, which is responsible for radiation monitoring in Romania.

# Slovak Republic

***General Legislation***

*Law on the Peaceful Use of Nuclear Energy (1998)*

The Law on the Peaceful Use of Nuclear Energy (Atomic Law), Law No. 130, was adopted by the Parliament of the Slovak Republic on 1 April 1998 and published in the Official Journal on 8 May 1998 (see *Nuclear Law Bulletin* No. 60). It will replace Law No. 28/1984 when it enters into force on 1 July 1998.

The Law covers, in a comprehensive manner, the conditions for the use of nuclear energy in the Slovak Republic. It places an emphasis on the safety of nuclear installations in order to protect the environment and to implement international conventions in this area.

It became necessary to repeal and replace Law No. 28/1984, on State supervision of the safety of nuclear installations in light of social and political changes, new environmental legislation, experience with nuclear energy use and international obligations which had arisen since its adoption. In preparing the new Law, account had to be taken of related legislation, such as the Act on Public Safety and Health and the Act establishing a State fund for decommissioning of nuclear power plants and the management of spent fuel and radioactive waste.

The new Law consists of seven main parts:

1. *Basic provisions* – which include the scope of the Law, main definitions, principles of nuclear energy use, requirements for the licence to use nuclear energy and the procedure for the issue of licences.

2. *Nuclear materials* – which defines nuclear materials, special materials and equipment and cover the obligations of users, the transport of nuclear materials and responsibilities for accounting and record keeping.

3. *Nuclear installations, radioactive waste and handling of spent fuel* – which defines nuclear installations and sets up conditions to permit construction, commissioning, operation and decommissioning of nuclear installations.

4. *Nuclear safety and quality assurance* – which defines nuclear safety, sets out the responsibility of the operator, as well as the conditions which have to be fulfilled by the operator to assure safety during all phases of the project. This part includes requirements for the qualification and training of nuclear installation personnel. It sets out quality assurance requirements and requirements for the security of nuclear installations. There is a categorisation of operational events and the obligations of the licence holder during each stage are set out. The requirements for emergency planning cover both on-site and off-site measures and the bodies responsible for the preparation, implementation and approval of them.

5. *Nuclear damage liability* – which implements the obligations of the Slovak Republic under the Vienna Convention on Civil Liability for Nuclear Damage. The operator's liability is limited up to the amount of 2 billion Slovak Crowns. The operator is obliged to secure financial coverage of this responsibility.

6. *Nuclear Regulatory Authority of the Slovak Republic* – which defines the responsibilities of this body and sets out who is subject to State supervision, the methods of supervision, the obligations of different bodies related to the supervisory activity and the responsibilities and rights of nuclear safety inspectors and the Nuclear Regulatory Authority, including the power to shut down a nuclear installation or to stop its construction. This part of the Law also sets out the penalties in case of breach.

7. *General, transitional and final provisions* – which clarifies the relationship of this Law to others, abrogates Law No. 28/1984 on the State supervision of nuclear safety and lists the existing regulations which remain in force until they are up-dated.

# Sweden

### *General Legislation*

*Act on the Phasing-out of Nuclear Power (1997)*

In 1995, the Swedish Government invited the major parliamentary parties to take part in deliberations on a sustainable long-term energy policy. These deliberations concluded on 4 February 1997, and resulted in an inter-party agreement on guidelines for energy policy. The purpose of the policy is to create conditions for the efficient use of energy and for a cost-effective supply of energy, thereby facilitating the creation of an "ecologically sustainable society".

On 18 December 1997, the Swedish Parliament adopted the Act on the Phasing-out of Nuclear Power (SFS 1997:13320), which entered into force on 1 January 1998. The Act was proposed in the Government Bill 1996/97:84 on "A Sustainable Energy Supply" and formed part of the inter-party agreement on guidelines for the energy policy.

The Act gives the Government the right to revoke a permit to operate a nuclear power reactor on a date to be decided by the Government. The order and timing of the closures will depend on Parliament's decision on the transformation of the energy system. In deciding when a reactor should be taken out of operation, due regard should be taken of its location, its age, design and its importance for the national energy supply system. The licensee is entitled to compensation from the State for losses caused by an enforced closing-down. The amount of compensation should be decided according to the provisions in the Act on Expropriation (SFS 1972:719). When considering the amount, the lifetime of a reactor shall be estimated to be 40 years.

Pursuant to the Act on Phasing-out of Nuclear Power, the Government decided on 5 February 1998 that the nuclear power reactor Barsebäck No. 1 will be closed down by 1 July 1998. According to the present Government's plans, the second reactor at Barsebäck shall be closed down* by 1 July 2001. The decision has been taken on appeal to the Swedish Supreme Administrative Court (*Regeringsrätten*) and to the Court of Justice of the European Communities. According to the license-holder, the decision is contrary to the Swedish Constitution, to Community Law and to the European Convention on Human Rights.

* On 14 May 1998, the Supreme Administrative Court ruled to suspend the application of the Government's decision until pending legal matters are settled.

# Switzerland

***Third Party Liability***

*Ordinance on Third Party Liability in Nuclear Matters: New Method of Calculating Federal Insurance Premiums (1997)*

By Ordinance adopted on 19 November 1997 (ORCN; RS 732.441), the Swiss Federal Council has modified the method of calculating federal nuclear third party liability insurance premiums to be paid by those persons responsible for same. As of 1 January 1998, these amounts are fixed in Swiss francs rather than as percentages of the premiums collected by private insurers for third party liability coverage.

Section 5, paragraphs 1 and 1bis specify that contributions in respect of the following facilities are increased to the corresponding amount in Swiss francs:

| | |
|---|---|
| a) Beznau power plants I and II | 2 500 000 |
| b) Mühleberg power plant | 1 470 000 |
| c) Gösgen power plant | 1 880 000 |
| d) Leibstadt power plant | 1 880 000 |
| e) University of Bâle reactor | 3 500 |
| f) radioactive waste containers from the former Lucens power plant | 2 400 |

They further provide that contributions from those responsible for nuclear substances in transit are increased to 100 percent of the insurance premium due in respect of third party liability coverage, before taking into account any possible reduction in the premium that might be made as a result of any special arrangement entered into between the insured and the insurer.

In the past, the operators of nuclear installations always paid a federal premium that was proportional to the premium paid to private insurers. This proportion varied considerably, decreasing from 300 percent to 108 percent between 1 January 1984 and 31 December 1997. The continual increase in the amount of coverage provided by private insurers, increasing during this same period from 300 to 700 million Swiss francs, coincided with the continual lowering of the premiums due for such coverage, thereby permitting a lowering of the premiums charged by the Government.

The proportionality relationship between private and federal insurance premium amounts resulted in an untenable situation: the Government was collecting fewer premiums, yet still providing not only conventional risk coverage for the difference between 700 million and 1 billion Swiss francs but also unconventional risk coverage for anywhere up to 1 billion Swiss francs. The new Ordinance corrects the situation by simply ensuring that premiums payable to the Government are calculated on a basis that reflects the extent of both conventional and non-conventional risks that it must legally cover. There is one exception to the new system however, and that concerns the premiums payable for nuclear

substances in transit. These premiums will remain at 100 percent of the premium payable to private insurers, again, without any consideration for reductions agreed upon between the insurer and the insured.

# Tunisia

### *Radioactive Waste Management*

*Act on the Management and Disposal of Waste (1996)*

Act No. 96-41 of 10 June 1996 was published in the Official Gazette of the Republic of Tunisia on 18 June 1996. This Act, which is of a general nature and governs all types of waste, applies also to dangerous waste, including radioactive waste (see *Nuclear Law Bulletin* No 58). The first Chapter of the Act contains general provisions and definitions, Chapter II governs packaging waste, Chapter III regulates waste contained in dumps and Chapter IV deals with the management and disposal of waste.

Chapter V deals more specifically with dangerous waste. The list of categories of dangerous waste is established by decree, and their methods of management are submitted to the Minister for the Environment for approval. The development, collection, sorting, transport, storage, treatment and disposal of dangerous waste are subject to a licence, which is granted by the Minister for the Environment. This Law also establishes a periodical control of establishments which exercise these activities. The latter are obliged to maintain a register containing data concerning waste and its movement. Chapter V also contains provisions governing the disposal of waste, packaging and labelling, as well as declarations which must be made to the Ministry of the Environment concerning this waste. Chapter VI governs the export, import and transit of waste. Finally, Chapter VII sets out the legal proceedings and penalties which apply in respect of infringements of the provisions of this Act.

# United Kingdom

### *Organisation and Structure*

*Merger of British Nuclear Fuels plc and Magnox Electric plc (1998)*

On 30 January 1998, British Nuclear Fuels plc ("BNFL") merged with Magnox Electric plc ("Magnox Electric"). Both companies were wholly owned by the United Kingdom Government, and the merger took place by the Government transferring all the shares in Magnox Electric to BNFL. The Government remains the sole shareholder in BNFL.

BNFL's main business is providing nuclear fuel cycle services. It produces nuclear fuel, reprocesses spent fuel and provides clean up services to both United Kingdom and international customers. It also owns and operates the two earliest built Magnox-type nuclear power stations. Magnox Electric owns nine Magnox-type power stations, three of which have closed and are being

decommissioned. A substantial part of Magnox Electric's costs relate to fuel, reprocessing and waste management services provided by BNFL. The principal aim of the merger is to improve the current arrangements for managing public sector nuclear liabilities and to reduce costs for the benefit of the United Kingdom tax payer. The merger will help to reduce the costs of discharging Magnox Electric's nuclear liabilities and will also bring together the technical and commercial expertise of the two companies.

Magnox Electric is now a wholly owned subsidiary of BNFL. Full integration of the combined businesses of the companies is expected to be completed early in 1999, subject to the companies meeting the requirements of the relevant regulators.

# Ukraine

### *Regime of Radioactive materials*

*Law on Uranium Ore Mining and Processing (1997)*

On 19 November 1997, the Ukrainian Rada adopted the Law on Uranium Ore Mining and Processing and it entered into force one month later on 19 December 1997. This new Law, which regulates uranium mining, reprocessing and trading activities, contains specific provisions for the protection of uranium mine workers, the public and the environment against the harmful effects of ionising radiation.

### *Third party liability*

*Law on the Introduction of Amendments to certain Ukrainian Legislative Acts in connection with the Accession of Ukraine to the Vienna Convention on Civil Liability for Nuclear Damage (1997)*

On 29 December 1997, special legislation came into force in Ukraine which effected amendments to both the Law on the Use of Nuclear Energy and Radiation Safety (the 1995 Law) and to the 1996 Law on Insurance (the text of the 1995 Law is reproduced in the Supplement to the *Nuclear Law Bulletin* No. 56). It provides that, for the purposes of Chapter XIII of the 1995 Law relating to compensation for nuclear damage, all of the defined terms contained in the Vienna Convention on Civil Liability for Nuclear Damage such as "operator" and "nuclear damage", shall be identically defined under the amended Law. Further amendments introduced provisions concerning the exception to the operator's exclusive liability, the consequences of lost, stolen or jettisoned nuclear material, the liability of two or more nuclear operators, the State's right of recourse against the operator, nuclear damage that was the result of an intentional act, on-site property damage and liability for damage caused during transport. The amended Law now sets the limit of the operator's liability at 50 million SDRs, prescribes a 10 year limitation period for property damage claims and no limitation period at all for personal injury claims.

Additional amendments to the 1995 Law ensure that workers at both nuclear installations and other facilities where ionising radiation sources are used, as well as nuclear and radiation safety

inspectors employed by the state, are entitled to socio-economic compensation for any negative health effects thereby caused and shall, in addition, be covered by mandatory insurance against such risks.

The effect of the amendment made to the 1996 Law on Insurance is to permit the underwriting of insurance coverage for an operator's third party liability, and to require that insurance companies which do wish to insure against such risks create a nuclear insurance pool as a separate legal entity backed by insurer's funds.

### *Radiation protection*

*Law on Protection Against Ionising Radiation (1998)*

The Law on Protection against Ionising Radiation of 14 January 1998 entered into force on 19 February 1998, with the exception of Article 19 which will come into force on 1 January 2000. Its objective is to protect human health and property against the harmful effects of ionising radiation by establishing maximum permissible dose limits for exposure to radiation of 20 mSv (millisievert) per year for occupationally exposed persons and 1 mSv per year for members of the public. The Law also identifies the authorities, at executive, ministerial and local levels, who are responsible for its implementation, and imposes special duties upon certain individuals and organisations with regard to protecting the public in the event of a radiation accident. It also provides for protective measures against the effects of radionuclides which are contained in building materials, food products and potable water, or which are used for medical treatment or diagnostic purposes. In addition, the Law establishes rules concerning compensation for damage resulting from ionising radiation.

## Vietnam

### *Radiation Protection*

*Ordinance on Radiation Safety and Control (1997)*

This Ordinance lays down all of the basic principles required to ensure radiation safety in connection with the import, export, production, use, storage, disposal, transfer and transport of radioactive sources or other activities involving ionising radiation. It was passed by the National Assembly on 26 June 1996 and it took effect as of 1 January 1997.

In general, the Ordinance requires that any organisation or individual carrying out work involving radioactive sources must fully meet the conditions stipulated therein. Such conditions include limiting exposure to radiation to permissible dose levels, ensuring that workers are properly trained and qualified in matters of radiation safety, ensuring quality assurance in the installation and operation of equipment involving radiation sources, properly managing a radiation accident including ensuring the availability of mitigating measures, ensuring that declarations are made to and proper registrations or licences are obtained from the State Management Agency on Radiation Safety and Control for various activities involving radioactive sources, and finally, ensuring that adequate financial resources are provided to enable compliance with the stipulated conditions.

The Ordinance imposes extensive safety related responsibilities upon the owner of an establishment in which a radioactive source is installed or used, it sets forth the responsibilities of the person appointed by the owner to ensure that radiation safety is respected at that establishment and describes the radiation safety responsibilities of the workers themselves. It also imposes upon the owner of radioactive substances the responsibility of ensuring that transport requirements are complied with as regards the packaging and transport of such substances. The owner is also legally liable for providing compensation for the damage caused by a radiation accident. The Ordinance provides that those who suffer personal injury or property damage as a result of a radiation accident or other violation of legal requirements are to receive compensation therefor, and that those who violate any provision of the law with regard to radiation safety shall be subject to a fine or other penalty depending upon the gravity of the violation.

The role and responsibilities of various Government ministries and agencies with regard to radiation safety and control are also set out in the Ordinance. The State Management Agency on Radiation Safety and Control exercises overall supervision over radiation safety and control including the power to inspect premises for compliance with required conditions and to temporarily suspend activities that are likely to cause a radiation accident with dangerous effects upon human health or the environment. Other ministries, such as the Ministry of Science, Technology and Environment and various local agencies, such as the People's Committees at the district and provincial levels also have specific responsibilities, particularly in the case of a radiation accident.