

AUSTRIAN
NATIONAL REPORT
UNDER THE CONVENTION ON NUCLEAR SAFETY
(September 1998)

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INTRODUCTION

1. General outline of Austria's national policy on nuclear safety

Austria does not operate any nuclear power plant. Therefore the safety of nuclear facilities, except for the domestic nuclear activities as described in chapter 7.4., is primarily related to environmental questions and concerns about health and safety implications from nuclear power plants in Austria's neighbouring countries.

The basis for this situation is a law of 1978 establishing the prohibition of nuclear power plants on Austrian territory. This was the legal consequence of a referendum in November 1978 resulting in a negative vote against the nuclear power plant project Zwentendorf. This parliamentary decision was reinforced by the events in Chernobyl in 1986 and further strengthened the opposition of the Austrian population against nuclear power. The policy adopted by the Austrian government is aiming towards a „Nuclear Power Free Zone Central Europe“.

In line with this general policy, Austria attaches great importance to international efforts to harmonise and steadily increase nuclear safety levels on a multilateral and global basis.

Austria contributes to various programmes aimed at analysing and evaluating the safety status of nuclear power plants in the context of specific European Union activities and within the framework of the IAEA, e.g. the IAEA's-extrabudgetary programme on VVER- and RBMK-reactors.

Austria has also embarked on bilateral activities with neighbouring countries to exchange information on nuclear safety related matters, which does not only comprise operational information on nuclear installations but also early warning schemes in the case of nuclear incidents or accidents and mutual assistance for the prevention or mitigation of effects from such radiological events.

Austria has contributed and will contribute to all international activities which are aimed at improving safety levels worldwide, which the Convention on Nuclear Safety is a good example of providing the basis for a steady pace of strengthening safety concepts. The Meetings of the Parties for the review of the national situation in the member states is considered to be a very important tool for such objectives.

2. Main themes of the report

This report is focusing mainly on issues of radiation protection, in particular

- the Austrian national system for radiation protection,
- the Austrian legal regime concerning nuclear matters,
- the national system for emergency preparedness including transboundary questions.

3. International agreements

Attached to this report is a list of all relevant bilateral and multilateral agreements Austria is a party of.

ARTICLE BY ARTICLE REVIEW

Article 6 (Existing Nuclear Installations)

not applicable

Article 7 (Legislative and Regulatory Framework)

7.1. Introduction

In Austria, the development and use of nuclear energy for peaceful purposes have been significantly influenced by the passing on 15 December 1978 of the Act prohibiting the use of nuclear fission for energy purposes in Austria [BGBl¹ No. 676/1978: "*Bundesgesetz vom 15. Dezember 1978 über das Verbot der Nutzung der Kernspaltung für die Energieversorgung in Österreich*"].

This Act, adopted as a result of a referendum not to start operation of the first Austrian nuclear power plant at Zwentendorf in 1978, is the basis of the Austrian government's nuclear power policy.

Austrian legislation in the nuclear field comprises all legal provisions relating to *nuclear safety*. The following areas may be distinguished:

- radiation protection: all rules and measures concerned with the protection of the lives or health of human beings and future generations from damage due to ionising radiation;
- facility safety: all constructional and technical norms and standards designed to afford protection against radiation from nuclear facilities;
- safeguards - accountancy and control of nuclear material - designed to prevent diversion from its peaceful utilisation to misuse (non-proliferation);
- protection of nuclear materials and installations against interference or encroachment by unauthorised third parties (physical protection).

¹ [* BGBl: *Bundesgesetzblatt* = Federal Law Gazette]

These matters are dealt with in a variety of laws and regulations and may each involve a number of federal (*Bund*) and regional (*Land*) authorities.

Beyond specific provisions for licensing as referred to in individual laws the General Administrative Procedures Act of 1991 applies.

7.2. Mining Regime

There is no special legislation in this regard. The Mining Act of 1954 [BGBl No. 73/1954] provides no restriction in respect of minerals containing uranium or thorium, i.e. they may be prospected for and mined by any person in compliance with the general provisions of the Mining Act.

7.3. Radioactive Substances, Nuclear Fuels and Equipment

The main provisions of the Radiation Protection Act of 11 June 1969 [*Strahlenschutzgesetz*, BGBl No. 227/1969] relate to the licensing of the construction and operation of installations as far as handling radioactive materials or housing radiation-emitting equipment are concerned.

Handling of radioactive materials means the extraction, production, storage, carriage, delivery, supply, processing, use or disposal of radioactive materials or any other activity resulting in the emission of radiation.

Radiation-emitting equipment means devices used for the production of ionising radiation or the use of which involves the emission of radiation in so far as the ionising radiation does not result from spontaneous nuclear processes.

Under the Radiation Protection Act, any other activities involving radioactive materials or the operation of radiation-emitting devices also require a licence.

Specific requirements in regulations foresee exemptions from licensing for activities involving radioactive materials, if they entail no radiation hazards. Similar exemptions relate to the carriage of radioactive materials, provided it complies with the appropriate transport regulations, and also to installations used for military research and experimental purposes.

The design of devices containing radioactive materials or of radiation-emitting equipment may be approved by the authority in accordance with strict legal requirements. Such an approval may simplify the licensing procedures.

The possession of radioactive materials or of radiation-emitting equipment which is exempt from licensing under the Radiation Protection Act has to be reported. There are exemptions from the requirement to report, e.g. in case that radioactive material is below given limits of activity, or for the transport of radioactive materials when it is in compliance with the relevant transport regulations.

7.4. Nuclear Installations (in general; not as defined in Art. 2 of the Convention)

Apart from the location at Zwentendorf, where a nuclear power plant was constructed but not put into operation - and therefore all nuclear fuel elements were removed in the late 1980ies, - Austria operates the following four "*nuclear facilities*" (three research reactors and a central waste processing and interim storage facility):

7.4.1. Atominstitut (Atomic Institute)

The Austrian Universities' Atomic Institute in Vienna operates a TRIGA Mark II research reactor. It has a maximum thermal power output of 250 kW. However, it can also be operated in the „pulse mode“ up to a maximum output of 250 MW. In operation since 1962, the reactor has been used exclusively for university research and teaching purposes.

Because of its low thermal output of 250 kW, the reactor's original 57 fuel elements are still in the core. Further 22 fuel elements have been loaded in subsequent years. Over the past 33 years, 8 fuel elements were permanently removed, and a total of 8 fresh fuel elements are in storage, guaranteeing the operation of the reactor until the end of the decade.

7.4.2. Österreichisches Forschungszentrum Seibersdorf (Austrian Research Centre)

The ASTRA research reactor at the Austrian Research Centre Seibersdorf, a 10 MW thermal water-cooled and moderated swimming-pool type reactor, has been in operation since 1960. The reactor is mainly used for the production of radioisotopes for industrial and medical purposes, irradiation of materials, and irradiation of samples for the analysis of neutron activation. The future of the reactor is currently under review, with the option of possible shut down.

7.4.3. Reaktorinstitut Graz (Reactor Institute)

The Graz Reactor Institute has been operating a nominal 10 kW Siemens ARGONAUT reactor since 1965. The fuel enrichment levels are 20% and 90%. The reactor is mainly used for training purposes within the framework of Graz Universities' education programme. The available fuel reserves will last for the next 7 years (until 2005).

7.4.4. Interim Storage Facility for Radioactive Waste

This waste storage facility together with related waste treatment facilities is operated by the Austrian Research Centre Seibersdorf in order to meet radioactive waste management needs of the Austrian industry, hospitals, other medical institutions and research institutes.

The storage facility has a design capacity of 15.000 barrels of 200 litres each. Approximately 50 % of this capacity are still available.

7.5. Licensing

As a result of Austria's federal structure, the licensing procedures involve federal (*Bund*) as well as regional (*Länder*) authorities.

7.5.1. Licensing and Inspection

The construction and operation of installations for the handling of radioactive materials and radiation-emitting equipment require a licence [Radiation Protection Act, Sections 5-7]. Under the Radiation Protection Act, licensing is a shared responsibility mainly held by the Federal Minister for Women's Affairs and Consumer Protection (who belongs to the Federal Chancellery). The distribution of responsibilities is specified in Section 41 of that Act. The examination of licences is dealt with primarily in the Radiation Protection Act and the Radiation Protection Ordinance of 12 January 1972 [BGBl No. 47/1972].

The licensing procedure is subject to the provisions of the General Administrative Procedures Act [*Allgemeines Verwaltungsverfahrensgesetz*, BGBl No. 51/1991].

An operating licence is granted if the installation has been constructed in compliance with the specified conditions and obligations, a radiation protection officer has been appointed and the regular operation of the installation entails no hazard from ionising radiation.

The operation of installations for the handling of radioactive materials or for housing radiation-emitting equipment in accordance with the Radiation Protection Act is monitored and inspected at regular intervals by the licensing authority as specified in the pertinent laws.

7.5.2. Emergency Response

The Radiation Protection Act provides that in case of imminent danger from an installation in which radioactive material is handled or radiation-emitting equipment is housed, the authorities shall take all appropriate measures to avert the danger. They may issue provisional instructions and, after consulting the radiation protection officer of the installation, shall proceed in compliance with Section 4 of the 1950 Act on the Enforcement of Administration Decisions (*Verwaltungsvollstreckungsgesetz*).

7.6. Trade in Nuclear Materials and Equipment

Under the Non-proliferation Act of 1991 [*Sicherheitskontrollgesetz 1991*, BGBl No. 415/1992] and in compliance with Austria's international obligations under the Nuclear Non-proliferation Treaty (NPT), the export of nuclear materials and non-nuclear materials as well as nuclear equipment is subject to a licence which is granted in accordance with the provisions of the NPT. Such licenses are granted by the Federal Chancellery (*Bundeskanzler*).

7.7. Radiation Protection

The main focus of Austria's nuclear safety legislation is radiation protection, dealt with primarily in the 1969 Radiation Protection Act and the 1972 Radiation Protection Ordinance.

These instruments define the general measures to protect the lives and health of individuals and their descendants from the hazards of ionising radiation, as well as the licensing conditions for the construction and operation of installations for the handling of radioactive materials (as explained above under item 7.4. "Nuclear Installations").

The radiation protection provisions as such are enshrined in Part III of the Radiation Protection Act and in the Radiation Protection Ordinance. They are designed

- to ensure that exposure of individuals to radiation is kept „as low as possible“;
- to restrict the absorption of radioactive materials by the human body to a minimum;
- to ensure that only the smallest possible quantities of radioactive materials are released into the air, water or soil.

The Radiation Protection Act requires pre-employment medical examinations and periodic health checks of exposed workers as well as their dosimetric surveillance. The Act provides that special radiation protection provisions be defined in a specific Radiation Protection Ordinance.

At present (1998) the Radiation Protection Act as well as the Radiation Protection Ordinance are being adapted to the requirements of the law of the European Union in this field. Article 55 of the (EU) "*Council Directive 96/29/EURATOM of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation*" provides that EU Member States adapt their respective legal instruments before 13 May 2000 in order to comply with this Directive.

Matters of a more general nature concerning health aspects of radiation protection can be brought to the attention of the "Radiation Protection Commission" (*Strahlenschutzkommission* - SSK) which acts as an advisory body to the Minister for Women's Affairs and Consumer Protection.

As up to now, radiation protection in Austria and the Radiation Protection Act 1969 has been based upon the Imperial Sanitation Act [*"Reichssanitätsgesetz"* - RGBI². No. 68 dated April 30, 1870] which dates back to 1870, it is being planned to devise a new legal basis. This new Radiation Protection Act is currently in its preparatory phase and will take account of the latest developments in this field.

² RGBI: Reichsgesetzblatt (Imperial Law Gazette)

7.8. Radioactive Waste Management

Since Austria does not operate nuclear power plants, there is no major production of **high level** radioactive waste (HLW). Consequently, there is no need for considering intermediate or final storage capacities in Austria for HLW. The relatively small quantities of HLW resulting from the Austrian research reactors are covered by a framework contract for „US-origin nuclear fuel“ and shall return to the US during the next decade.

Low and medium level waste (L/MLW) from hospitals, industry and research laboratories (30-40 tons/year) is collected and treated by the Austrian Research Centre Seibersdorf. The research centre is equipped with suitable facilities to process and condition low and medium level waste, e.g. incinerator, supercompactor and waste water evaporator. As a conditioning process, cementing is predominantly used.

On the basis of a joint agreement between the Republic of Austria, the community of Seibersdorf and the Austrian Research Centre Seibersdorf, the intermediate storage facility is scheduled to be operated until 2012 on the site of the research centre for a capacity of 15,000 drums of conditioned waste. After this date, the waste shall be transferred to a final storage facility which is planned to be built on a site to be selected at the beginning of the next decade.

Legal aspects:

The 1972 Radiation Protection Ordinance contains detailed provisions concerning the handling of radioactive waste, which mainly relate to radiation protection measures.

According to the current draft modifying the Radiation Protection Ordinance, the licensing of such installations requires both the applicants for new licences and the operators of existing installations to furnish waste management schemes.

Related Instruments:

The 1989 Ordinance on the Specification of Hazardous Wastes [*Verordnung über die Festlegung von gefährlichen Abfällen* - BGBl No. 607/1989] includes radioactive waste within the defined limits of the Radiation Protection Act. Accordingly, radioactive waste is contained in a list of substances to which the 1989 Act on the Rehabilitation of Hazardous Waste Sites applies [*Altlastensanierungsgesetz* - BGBl No. 299/1989].

A further Ordinance on the Transfer of Radioactive Wastes [*Verbringungsverordnung für radioaktive Abfälle* - BGBl No. 44/1997], relating to the supervision and control of shipments of radioactive waste into, out of and through the national territory, came into force on 1 March 1997. It was issued pursuant to the Radiation Protection Act in order to implement the provisions of 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. The Annexes to the Ordinance define, inter alia, the

form of the applicable standard documentation and the list of quantities and concentration levels for radioactive waste.

7.9. Nuclear Non-Proliferation and Physical Protection

Austria has been a Party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) since 1970 [BGBl No. 258/1970] and, in accordance with the Treaty, concluded an Agreement on 21 September 1971 with the International Atomic Energy Agency (IAEA) on the Application of Safeguards [BGBl No. 239/1972]. The legal basis for Austria's non-proliferation policy was established through the Austrian Nuclear Non-Proliferation Act 1972 amended in 1991.

The authority responsible for safeguards and nuclear export controls is the Federal Chancellor.

Following the Austrian accession to the European Union, the bilateral Safeguards Agreement with the IAEA was suspended and replaced by the trilateral agreement between the IAEA, EURATOM and the non-nuclear weapon states Members to EURATOM.

As regards the *physical protection of nuclear materials*, the Non-proliferation Act 1991 also contains provisions on interference or encroachment by unauthorised third parties. The Federal Ministry of the Interior (*Bundesministerium für Inneres*) may impose any measures it considers necessary to ensure the protection of nuclear material at the domestic level.

The Interior Ministry is responsible for issuing licences and for the adoption of safety measures in connection with the handling of nuclear material, including protective measures against interference or encroachment. Before decisions are taken, the Federal Chancellery (both the divisions for Safeguards and for Radiation Protection) shall be consulted. In addition, the Federal Ministry of the Interior decides on protective measures with regard to the carriage of materials that come within the purview of the Act on the Transport of Dangerous Goods by Road.

Physical protection levels are based on the IAEA Guidelines and Recommendations for the Physical Protection of Nuclear Materials as published in IAEA document INFCIRC/225/Rev.3.

7.10. Transport

In Austria, the transport of radioactive material is strictly controlled so as to ensure maximum safety. Safety measures of a general nature are laid down in the 1969 Radiation Protection Act.

7.10.1 The transport of radioactive material by **rail** is governed by the provisions of the Regulation Concerning the International Carriage of Dangerous Goods by Rail (RID), an Annex to the Convention Concerning the International Carriage by Rail (COTIF). RID has been applicable to the international transport of dangerous goods in Austria since it became a Party to COTIF. Under the Act on the Carriage of Dangerous Goods³ of 1998 (GGBG), it also applies to transport operations within Austria.

7.10.2 The international transport of such material by **road** is primarily subject to the „European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)“ to which Austria is a Party. The provisions of ADR apply directly. In addition to ADR, there are provisions of the GGBG which refer to, implement and complete the ADR. Under the GGBG, ADR is also applicable to the domestic carriage of dangerous goods by road in Austria.

The GGBG also implements several directives of the European Union concerning the carriage of dangerous goods by road, rail and inland navigation, which also refer to, implement and complete the international agreements mentioned above.

7.10.3. As regards **air transport**, the provisions of the ICAO-Technical Instructions for the Safe Transport of Dangerous Goods by Air are implemented by the GGBG. Furthermore, the Dangerous Goods Regulations of the International Air Transport Association (IATA) constitute an integral part of any carriage contract concluded by an IATA-carrier.

7.10.4. Since the relevant international legal instrument for the transport of dangerous goods by **inland navigation** (ADN) has not yet entered into effect, the transport of radioactive material is subject to the provisions of an ordinance⁴ based on the 1997 national law on inland navigation⁵ and to the provisions of the GGBG, as far as they are common to all modes of transport.

Regardless of the applicable law of the state in which a harbour is located, the transport of radioactive materials by **sea** ships registered in Austria has to comply with the International Maritime Organisation (IMO) Dangerous Goods Code. The provisions of this IMDG-Code are also referred to in the GGBG.

As far as the international legal instruments mentioned in this item 7.10. (RID, COTIF, ADR, ADN) relate to the transport of radioactive materials, they are mainly based on provisions published by the IAEA (Safety Series No. 6.)

³ Bundesgesetz über die Beförderung gefährlicher Güter und über eine Änderung des Kraftfahrtgesetzes 1967 und der Straßenverkehrsordnung 1960 (Gefahrgutbeförderungsgesetz -GGBG), BGBl. I No. 145/1998

⁴ Verordnung des Bundesministers für Wissenschaft und Verkehr über die Beförderung gefährlicher Güter auf Wasserstraßen (ADN-Verordnung), BGBl. II No. 295/1997

⁵ Bundesgesetz über die Binnenschifffahrt (Schiffahrtsgesetz), BGBl. I No. 62/1997

7.11. Nuclear Third Party Liability

In Austria, the regime presently governing nuclear third party liability is set forth in the Act on Liability for Nuclear Damage⁶ of 1964. The Act is extensively based on the Paris Convention. Austria has signed, but not yet ratified, the Convention.

The Act covers any damage to persons or property resulting from a nuclear incident caused by nuclear installations, nuclear substances or radioisotopes [Sections 1, 2 and 24]. The Act applies to nuclear incidents occurring and damage caused in Austria.

The operator of a nuclear installation is completely liable for any damage caused by a nuclear incident involving nuclear substances in his installation. The person liable for the damage caused by radioisotopes is the holder of the radioisotopes at the time of the incident.

As regards operators of nuclear installations or carriers of nuclear substances, maximum liability per nuclear incident amounts to ATS 1.5 billion (approximately 90 million Special Drawing Rights of the International Monetary Fund - SDRs), of which ATS 1.125 billion shall be spent on cases of death and personal injury, and up to ATS 375 million to cover property damage.

As regards holders of radioisotopes, the maximum amount of liability depends on the radioactivity and radiotoxicity of the radioisotopes and on whether they were sealed or unsealed. If a person is injured or dies, the maximum amount of liability is ATS 4 million. Where more persons are involved, the Act distinguishes six groups of radioisotopes, providing for maximum amounts between ATS 4 million and ATS 54 million.

The operator of a nuclear installation or the carrier of nuclear substances (with the exception of the Federal Government) shall cover his liability by adequate financial security which has to be maintained for at least ten years after the nuclear incident. The amount of financial security is fixed at ATS 390 million .

An ordinance, issued in October 1991, requires the establishment of a financial reserve for damage and accident insurance, including nuclear liability insurance [BGBl No. 545/1991].

The above mentioned Nuclear Liability Act of 1964 (*Atomhaftpflichtgesetz*) is currently under review and scheduled to be replaced by 1 January 1999 by a new law recently submitted to Parliament [*"Atomhaftungsgesetz 1999" - Bundesgesetz über die zivilrechtliche Haftung für Schäden durch Radioaktivität*].

This bill, designed to strengthen the Austrian nuclear liability regime, covers nuclear third party liability for damage caused by nuclear installations, nuclear material and radioisotopes.

⁶ Bundesgesetz vom 29. April 1964 über die Haftung für nukleare Schäden (Atomhaftpflichtgesetz), BGBl. No. 117/1964 as amended by BGBl. No. 569/1973, BGBl. No. 91/1976, BGBl. No. 628/1991, BGBl. 91/1993 and BGBl. No. 140/1997.

The bill is designed to improve the situation of victims in case of nuclear accidents. Pursuant to this law, victims will have the right to take legal action not only against the operator but also against the supplier and constructor. This will remove the currently applied principle of "channelling".

Furthermore, the bill provides for an unlimited liability on the part of the operator and the carrier.

The future law improves the means to redress damage that has been caused by nuclear incidents. It covers personal loss, damage to goods, expenses for preventive measures and environmental damage.

Article 8. (Regulatory Body)

In Austria, the enforcement of federal legislation is in principle a matter left to the regional governments (*Länder*) except in such cases where the Federal authorities (*Bund*) are explicitly held responsible under the Constitution.

Regulatory and Supervisory Authorities

8.1. Federal Authorities (Bund)

The Federal Ministers are responsible for the application of the pertinent provisions of the Radiation Protection Act of 1969 with regard to:

- nuclear reactors;
- production of nuclear fuels or processing of irradiated nuclear fuels;
- particle accelerators;
- specified types of construction;
- radiation activities by doctors and hospitals.

8.1.1. The Federal Chancellery

In his capacity as the National Nuclear Non-proliferation Authority, the Federal Chancellor (*Bundeskanzler*) is responsible for nuclear material accountancy and control in accordance with the Non-proliferation Act of 1991.

Under the Nuclear Non-proliferation Act, he is also responsible for export controls regarding fissionable material, non-nuclear material (e.g. heavy water, zirconium, etc.) and equipment. In his capacity as nuclear coordination Minister the Federal Chancellor is in charge of all issues involving the negotiation and implementation of all legal instruments concluded with the IAEA.

The **Federal Minister for Women's Affairs and Consumer Protection** (*Bundesministerin für Frauenangelegenheiten und Verbraucherschutz*) is generally responsible for radiation protection as far as health matters are concerned.

The Minister is also responsible for issues relating to the long-term storage of radioactive waste, including the siting, construction and operation of storage facilities. The decision on a specific repository site shall take account of the requirements of the 1993 Environmental Impact Assessment Act [*Umweltverträglichkeitsprüfungsgesetz* - BGBl No. 697/1993] and of the procedure laid down in the land use laws of the *Länder* [1972 Radiation Protection Ordinance].

8.1.2 The Federal Ministry of the Interior

The Federal Ministry of the Interior (*Bundesministerium für Inneres*) is responsible for issuing licences and for the adoption of safety measures in connection with the handling of nuclear material, including protective measures against interference or encroachment by unauthorised third parties [Safeguards Act, Part 3]. In addition, the Federal Ministry of the Interior is in charge of transport safety measures with regard to the carriage of nuclear materials subject to the Act on the Transport of Dangerous Goods by Road.

8.1.3. The Federal Ministry for Economic Affairs

The Federal Ministry for Economic Affairs (*Bundesministerium für wirtschaftliche Angelegenheiten*) is responsible for a limited number of matters concerning the safety of nuclear installations, e.g. pressure vessels and power engines.

Under the 1995 Foreign Trade Act (*Außenhandelsgesetz*, BGBl No. 172/1995), the Federal Ministry for Economic Affairs is responsible for the licensing of exports of nuclear-related „dual use“ goods.

8.1.4. The Federal Ministry of Finance

As far as nuclear third party liability is concerned, the Federal Ministry of Finance (*Bundesministerium für Finanzen*) decides whether the nature and amount of the financial security offered by the operator is sufficient to cover his liability under the Nuclear Liability Act of 1964.

8.1.5. The Federal Ministry of Labour, Health and Social Affairs

The Central Labour Inspectorate of the Federal Ministry of Labour, Health and Social Affairs (*Bundesministerium für Arbeit, Gesundheit und Soziales*) is responsible for the protection of the health of employees carrying out radiation activities.

8.1.6. The Federal Ministry of Science and Transport

The Federal Ministry of Science and Transport (*Bundesministerium für Wissenschaft und Verkehr*) is the authority competent for the carriage of dangerous goods (including radioactive material) by all means of transport and in this regard is also responsible for

the approval of packages and shipments of radioactive material. It is the competent authority for the implementation and interpretation of IAEA's regulations for the safe transport of radioactive materials (IAEA Safety Series Nos. 6, 7 and 37 as amended by IAEA Doc. ST-1 and ST-2) as well as for the legislation enforcing these regulations.

The Ministry also bears responsibility for the co-ordination and strategic orientation of energy research and development in general and nuclear research in particular.

Furthermore, it is the competent authority for the construction and operation of university-based nuclear installations.

8.1.7. The Federal Ministry of Justice

The Federal Ministry of Justice (*Bundesministerium für Justiz*) is responsible for legal matters relating to the Nuclear Liability Act.

8.1.8. The Federal Ministry for Foreign Affairs

The Federal Ministry for Foreign Affairs (*Bundesministerium für auswärtige Angelegenheiten*) is the competent authority representing Austria internationally.

8.2. Regional Authorities (Länder)

The regional Governor (*Landeshauptmann*) is the competent authority for the enforcement of Parts II and III of the 1969 Radiation Protection Act as far as installations requiring licences are concerned, except where the Federal Ministers are explicitly given responsibility by the Law. The Governor is also the competent authority for licensing X-ray equipment.

8.3 District Authorities (Bezirksverwaltungsbehörden)

In general, the district authorities are responsible for the implementation of Parts I - III of the Radiation Protection Act, except where the Law explicitly provides that the Federal Ministry or the regional Governor are in charge.

Under the Constitution, responsibility for granting construction licences for installations to handle radioactive materials would normally lie with the mayor of the town to which the site of the installation belongs. In practice, however, advantage is usually taken of the possibility of transferring this responsibility to the regional authorities' level.

Article 9 - Article 14:

not applicable

Article 15 (Radiation Protection)

Although for Austria this Article 15 is not applicable as far as it relates to nuclear installations as defined by Art. 2 of the Convention, radiation protection is the main topic of nuclear safety legislation in Austria (see also item 7.7. above).

Dose limits are regulated in Sections 12 - 15 of the Radiation Protection Ordinance; at present, they are being adapted to the EURATOM Directive No. 96/29.

Basic limits are e.g. 50 mSv/year for radiation workers and 1,67 mSv/year for members of the public.

The conditions and limits for radioactive materials release are covered by Sections 89 - 92 of the Radiation Protection Ordinance as well as by individual licensing decrees.

Regarding environmental radiological surveillance, Section 93 of the Radiation Protection Ordinance obliges any operator of nuclear facilities or of equipment emitting ionising radiation to provide for an appropriate surveillance system and to measure radiation values in the environment regularly.

In addition, the licensing authority is entitled to measure radiation in the vicinity of nuclear facilities or equipment emitting ionising radiation. In carrying out these control and inspection activities, the authority is supported by experts of the Federal Food Control Institute.

Article 16 (Emergency Preparedness)

16.1. National emergency arrangements

Section 38 of the Radiation Protection Act sets forth the general principles concerning measures to be taken in the case of radioactive contamination.

In general, the competence for taking such measures lies with the regional Governor (*Landeshauptmann*), subject to orders from the federal level (Federal Minister in charge of radiation protection). The responsibility for general radiation aspects lies within the Federal Chancellery.

For radiological emergencies, a national contingency plan - containing, in particular, provisions on the exchange of information, civil protection measures, warning and informing the public and convening the „National Crisis Management Board“ - has been drawn up.

Together with appropriate general recommendations issued by the federal authorities, this principal plan serves as the basis for preparatory measures to be taken at the regional level.

The Federal Alarm Centre (*Bundeswarnzentrale*) of the Federal Ministry of the Interior acts as a "message relay centre" for the Radiation Protection Department of the Federal Chancellery, whose experts are available around the clock. If an incident is reported to the Federal Alarm Centre, the radiation protection experts are immediately called in. If they come to the conclusion that there is imminent danger, all competent authorities are informed.

The Federal Chancellery may decide on any urgent preliminary counter-measures. If necessary, the National Crisis Management Board (*Koordinationsausschuß des Staatlichen Krisenmanagements*) will convene. Its membership comprises all Federal Ministries, the regional governments and socio-professional interest groups as well as the Austrian radio and television network (ORF) and the Austrian Press Agency. This team of experts advises the Federal Government: it co-ordinates all measures necessary for an emergency response at short notice and makes arrangements for a long-term concerted strategy at all levels of the public administration.

16.2. The Austrian Radiation Early Warning and Monitoring System

A special chapter of the Austrian Radiation Protection Act deals with large-scale radiation surveillance, monitoring in emergency situations and the implementation of remedial counter-measures.

As a result of this Act, the Austrian Federal Chancellery (Department for Radiation Protection) operates both an automatic Radiation Early Warning System as well as a laboratory-based monitoring network in order to comply with the requirements of rapid recognition and precise determination of radioactive contaminants.

In addition, several hundred car-borne and several air-borne dose rate measurement units have been installed in the Federal Ministry of the Interior's and the Federal Army's networks.

Furthermore, the Federal Chancellery plays an important role as the authority competent for the planning and implementation of counter-measures.

The **laboratory-based network** (*Laborgestütztes Überwachungsnetz für Radioaktivität*) handles the radionuclide-specific monitoring of the air, precipitation, the surface water bodies and foodstuffs. The various media are collected, and their radionuclide contents is analysed in several laboratories.

The Austrian **Radiation Early Warning System** (*Strahlenfrühwarnsystem*) continuously monitors external gamma dose rates throughout the country. Near the Austrian borders, several aerosol and radioiodine warning devices have been installed.

This automatic on-line system is operated by the Federal Chancellery. Its construction started in the mid-Seventies; and it has been operative since 1979.

All in all, 336 sensor stations, 9 Regional Centres and the National Centre have been set up. The system design meets the requirements of high operational safety and reliability.

From the sensor stations, data are transmitted to the Regional Centres at approx. 3 minute intervals and also on-line to the National Centre. Thus, it is possible to monitor the nuclear radiation situation in all of Austria.

The public has permanent access to the data via the ORF-TELETEXT service (page 784).

The data gathered by the Radiation Early Warning and Monitoring Systems are exchanged on-line with the corresponding systems in the neighbouring country of Slovakia; it is planned to enhance this exchange further.

16.3. Bilateral information agreements with neighbouring states

see Annex 1

Article 17 - 19

not applicable

Annexes

Annex 1: Bilateral agreements in the field of civil protection (including radiation protection)

Annex 2: Multilateral agreements in the field of civil protection (including radiation protection)

**BILATERAL AGREEMENTS
IN THE FIELD OF CIVIL PROTECTION**
(including radiation protection)

Belarus

Agreement on an exchange of information in the field of nuclear safety and radiation protection; signed provisionally in 1996

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Republik Belarus über Informationsaustausch auf dem Gebiete der nuklearen Sicherheit und des Strahlenschutzes).

Czech Republic

Agreement between Austria and former Czechoslovakia concerning questions of mutual interest in connection with nuclear safety and radiation protection; entered into force in 1990 (used with what now is the Czech Republic)

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Tschechoslowakischen Sozialistischen Republik zur Regelung von Fragen gemeinsamen Interesses im Zusammenhang mit der nuklearen Sicherheit und dem Strahlenschutz; BGBl.⁷ Nr. 565/1990 idF BGBl. III Nr. 123/1997).

Agreement between Austria and former Czechoslovakia on co-operation in the field of environmental protection; entered into force in 1989 (used with what now is the Czech Republic)

(Vertrag zwischen der Republik Österreich und der Tschechoslowakischen Sozialistischen Republik über die Zusammenarbeit auf dem Gebiet des Umweltschutzes; BGBl. Nr. 112/1989).

Germany

Agreement on mutual assistance in the event of disasters or serious accidents; entered into force in 1992

(Abkommen zwischen der Republik Österreich und der Bundesrepublik Deutschland über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen; BGBl. Nr.489/1992).

Agreement on an exchange of information and experience in the field of radiation protection; entered into force in 1994

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Bundesrepublik Deutschland über Informations- und Erfahrungsaustausch auf dem Gebiet des Strahlenschutzes; BGBl. Nr. 128/1989 idF BGBl. Nr. 892/1994).

⁷ BGBl. = Federal Law Gazette

Hungary

Agreement on mutual assistance in the event of disasters or serious accidents, entered into force in 1998

(Abkommen zwischen der Republik Österreich und der Republik Ungarn über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen; BGBl. III Nr. 76/1998)

Agreement on the settlement of questions of mutual interest in connection with nuclear installations; entered into force in 1987

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Ungarischen Volksrepublik zur Regelung von Fragen gemeinsamen Interesses im Zusammenhang mit kerntechnischen Anlagen, BGBl. Nr. 454/1987).

Agreement on co-operation in the field of environmental protection; entered into force in 1985

(Vertrag zwischen der Republik Österreich und der Ungarischen Volksrepublik über die Zusammenarbeit auf dem Gebiet des Umweltschutzes, BGBl. 415/1985).

Agreement on facilitating ambulance, search and rescue flights; entered into force in 1995

(Abkommen zwischen der Republik Österreich und der Republik Ungarn über die Erleichterung von Ambulanz-, Such- und Rettungsflügen, BGBl. Nr. 619/1995).

Liechtenstein

Agreement on mutual assistance in the event of disasters or serious accidents; entered into force in 1996

(Abkommen zwischen der Republik Österreich und dem Fürstentum Liechtenstein über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen, BGBl. Nr. 758/1995).

Poland

Agreement on an exchange of information and co-operation in the field of nuclear safety and radiation protection; entered into force in 1990

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Republik Polen über Informationsaustausch und Zusammenarbeit auf dem Gebiet der nuklearen Sicherheit und des Strahlenschutzes, BGBl. Nr. 643/1990).

Agreement on co-operation in the field of environmental protection; entered into force in 1990

(Vertrag zwischen der Republik Österreich und der Volksrepublik Polen über die Zusammenarbeit auf dem Gebiet des Umweltschutzes, BGBl. 39/1990).

Russia

Agreement between Austria and the former USSR concerning early notification and information in the case of nuclear accidents and the exchange of information on nuclear installations; entered into force in 1990

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Sozialistischen Sowjetrepubliken über die frühzeitige Benachrichtigung bei einem nuklearen Unfall und den Informationsaustausch über Kernanlagen, BGBl. Nr. 130/1990 idF BGBl. Nr. 257/1994).

Slovakia

Agreement on co-operation and mutual assistance in the event of disasters; signed in 1997
(Vertrag zwischen der Republik Österreich und der Slowakischen Republik über die Zusammenarbeit und die gegenseitige Hilfeleistung bei Katastrophen).

Agreement on the settlement of questions of mutual interest in connection with nuclear safety and radiation protection; entered into force in 1995

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Tschechoslowakischen Sozialistischen Republik zur Regelung von Fragen gemeinsamen Interesses im Zusammenhang mit der nuklearen Sicherheit und dem Strahlenschutz; BGBl. Nr. 565/1990 idF BGBl. Nr. 1046/1994).

Slovenia

Agreement on co-operation in the field of prevention and mutual assistance in the event of disasters or serious accidents; entered into force in 1998

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Republik Slowenien über die Zusammenarbeit bei der Vorbeugung und gegenseitigen Hilfeleistung bei Katastrophen oder schweren Unglücksfällen; BGBl. III Nr. 87/1998).

Agreement on an early exchange of information in the case of radiological dangers; signed in 1996

(Abkommen zwischen der Republik Österreich und der Republik Slowenien über den frühzeitigen Austausch von Informationen bei radiologischen Gefahren).

Ukraine

Agreement between Austria and the former USSR concerning early notification and information in the case of nuclear accidents and the exchange of information on nuclear installations; entered into force in 1990

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Sozialistischen Sowjetrepubliken über die frühzeitige Benachrichtigung bei einem nuklearen Unfall und den Informationsaustausch über Kernanlagen, BGBl. Nr. 130/1990 idF BGBl. Nr. 291/1996).

Agreement concerning the exchange of information and co-operation in the field of nuclear safety and radiation protection; signed in 1996

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Ukraine über Informationsaustausch und Zusammenarbeit auf dem Gebiet der nuklearen Sicherheit und des Strahlenschutzes).

**MULTILATERAL AGREEMENTS
IN THE FIELD OF CIVIL PROTECTION**
(including radiation protection)

UN / IAEA

Convention on Early Notification of a Nuclear Accident; entered into force in 1988
(*Übereinkommen aber die frühzeitige Benachrichtigung bei nuklearen Unfällen;*
BGBl. Nr. 186/1988).

Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency,
entered into force in 1990
(*Übereinkommen über Hilfeleistung bei nuklearen Unfällen oder*
strahlungsbedingten Notfällen; BGBl. Nr. 87/1990).

Convention on Nuclear Safety; entered into force in 1997
(*Übereinkommen über nukleare Sicherheit, BGBl III No. 39/1998).*

UN / ECE

Convention on Environmental Impact Assessment in a Transboundary Context; signed in
1991
(*Übereinkommen über die Umweltverträglichkeitsprüfung im*
grenzüberschreitenden Rahmen).

Convention on the Transboundary Effects of Industrial Accidents, signed in
1992
(*Übereinkommen über die grenzüberschreitenden Auswirkungen von*
Industrieunfällen).

Convention on the Protection and Use of Transboundary Watercourses
and International Lakes; signed in 1992
(*Übereinkommen zum Schutz und zur Nutzung grenzüberschreitender*
Wasserläufe und internationaler Seen)

C.E.I.

Agreement between Austria, Croatia, Hungary, Italy, Poland and Slovenia in the
Framework of the Central European Initiative on the Forecast, Prevention and Mitigation
of Natural and Technological Disasters; entered into force in 1995
(*Abkommen über die Zusammenarbeit bei der Vorhersage, Verhütung und*
Milderung von Natur- und technologischen Katastrophen im Rahmen der Zentral-
europäischen Initiative zwischen der Regierung der Republik Österreich, der
Regierung der Republik Ungarn, der Regierung der Italienischen Republik, der
Regierung der Republik Slowenien, der Regierung der Republik Kroatien und der
Regierung der Republik Polen)

Council of Europe

European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities; entered into force in 1983

(Europäisches Rahmenübereinkommen über die grenzüberschreitende Zusammenarbeit zwischen Gebietskörperschaften; BGBl. Nr. 52/1983).

Danube River Protection Convention

Convention on Co-operation for the Protection and Sustainable Use of the Danube River; signed in 1994.

(Übereinkommen über die Zusammenarbeit zum Schutz und zur verträglichen Nutzung der Donau)