

Nuclear Legislation in **OECD and NEA Countries**

Regulatory and Institutional
Framework for Nuclear Activities



Austria

Austria

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I. General Regulatory Regime

1. General outline

Austria has never operated a nuclear power plant and has no intention to do so in the future. Thus, Austria's high interest in the safety of nuclear facilities relates primarily to environmental, health and safety concerns arising from nuclear power plants in Austria's neighbourhood.

In 1978, legislation prohibiting nuclear power plants on Austrian territory was adopted as a result of a November 1978 referendum rejecting the nuclear power plant project Zwentendorf. The Chernobyl accident in 1986 reinforced this parliamentary decision and further strengthened public opposition to nuclear power. Confirming this policy, in July 1999 the Parliament adopted the Federal Constitutional Act for a Non-nuclear Austria.¹

In view of the high potential consequences of a nuclear incident or accident, Austria attaches utmost importance to international efforts to harmonise and steadily increase nuclear safety on an international level. Austria has contributed and will contribute to all activities that aim to improve nuclear safety, be it on a European or an international level. Consequently, Austria has undertaken a number of bilateral activities with neighbouring countries with regard to the exchange of information on nuclear safety related matters, including not only 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 the effects from such radiological events.

2. Introduction

In Austria, the development and use of nuclear energy for peaceful purposes was significantly influenced by the passing of the Act prohibiting the use of nuclear fission for energy purposes in Austria in December 1978.²

This Act, adopted as a result of the referendum rejecting the start-up of the first Austrian nuclear power plant at Zwentendorf in 1978, is the origin of the Austrian government's nuclear power policy.

The Federal Constitutional Act for a Non-nuclear Austria of 13 August 1999 replaces the 1978 Act and confirms Austria's policy on both civil and military matters in the nuclear field.

Nuclear legislation in Austria addresses the following areas:

- 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;

1. *Bundesverfassungsgesetz für ein atomfreies Österreich*, Bundesgesetzblatt (BGBl) (Federal Law Gazette) I Nr. 149/1999.

2. *Bundesgesetz vom 15 Dezember 1978 über das Verbot der Nutzung der Kernspaltung für die Energieversorgung in Österreich*, BGBl. Nr. 676/1978.

- safety of nuclear installations: all construction and other technical norms and standards designed to afford protection against ionising radiation from nuclear facilities;
- safeguards: accounting and control of nuclear materials designed to prevent their diversion from peaceful utilisation (non-proliferation); and
- security: protection of nuclear materials and installations against interference or encroachment by unauthorised third parties (physical protection).

These matters are covered in various pieces of legislation, involving both federal (*Bund*) and regional (*Länder*) authorities.

3. Mining regime

There is no specific legislation in this field. The Federal Act on Mineral Resources³ does not prohibit the mining of ores containing uranium or thorium. They may be prospected for and mined by any person in compliance with the general provisions of the Federal Act on Mineral Resources.

4. Radioactive substances, nuclear fuel and equipment

The main provisions of the Radiation Protection Act of 11 June 1969 as amended⁴ address the licensing requirements for the construction and operation of installations involved in the handling of radioactive materials or of radiation-emitting equipment.⁵

According to the Radiation Protection Act, “handling of radioactive materials” means the extraction, production, storage, carriage, delivery, supply, processing, use or disposal of radioactive materials or any activity resulting in the emission of ionising radiation.⁶

“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.⁷

Under the Radiation Protection Act, any activities involving radioactive materials or the operation of ionising radiation-emitting equipment require a licence.⁸

Specific regulations exempt certain activities from licensing requirements, such as those activities involving radioactive materials with no radiological hazards and the transport of radioactive materials, provided such transport complies with the appropriate transport regulations.⁹

3. *Bundesgesetz über mineralische Rohstoffe*, BGBl. I Nr. 38/1999.

4. *Strahlenschutzgesetz*, BGBl. Nr. 227/1969.

5. *Ibid.*, sections 5-7.

6. *Ibid.*, section 2.

7. *Ibid.*

8. *Ibid.*, section 10.

9. *Ibid.*, section 13.

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.¹⁰

The possession of radioactive materials or of radiation-emitting equipment that are exempt from licensing under the Radiation Protection Act must be reported to the competent authority,¹¹ unless, for example, the radioactive material is below given limits of activity, or the transport of radioactive materials is in compliance with the relevant transport regulations.

5. Nuclear installations

There are only two nuclear installations in operation in Austria: one research reactor in Vienna and one waste management facility in Seibersdorf.

Institute of Atomic and Subatomic Physics (Atominstitut)

The Institute of Atomic and Subatomic Physics, which is an Institute of the Vienna University of Technology, operates a Training, Research, Isotopes, General Atomics (TRIGA) Mark II research reactor. It has a maximum steady state thermal output of 250 kW and pulsing capabilities up to 250 MW. The research reactor has been in operation since March 1962 and is used exclusively for basic and applied academic research and teaching purposes. Being the closest research reactor to the International Atomic Energy Agency (IAEA) headquarters, it is also frequently used by IAEA staff for the development and calibration of safeguards instruments. In October/November 2012, all 91 irradiated fuel elements from the core and the spent fuel storage were shipped to the Idaho National Lab and replaced by 77 fuel elements containing 19.8% of enriched uranium-235. With this new core, the TRIGA reactor went critical on 27 November 2012. These fuel elements will be returned to the United States after 2025, at the earliest. This time frame may be extended if the parties to the contract come to an appropriate agreement according to the contract's extension clause. Presently, the total number of fuel elements in the core is 76 (plus 9 fuel elements in the pool storage racks and 5 fresh fuel elements in the fuel storage). The Institute of Atomic and Subatomic Physics has a total spent fuel storage capacity of 168 fuel elements. Financially and legally, the Vienna University of Technology is an independent legal entity since 2004.

Nuclear Engineering Seibersdorf GmbH (NES) – Radioactive Waste Management Facility

A waste treatment and interim storage facility is operated by NES, an affiliated company of the Austrian Institute of Technology, to meet the radioactive waste management needs of Austrian industry, hospitals, other medical institutions and research institutes, as well as ongoing decommissioning projects.

Based on the Radiation Protection Act, the joint agreement between the Austrian state, the community of Seibersdorf and NES was renewed in 2013, which extended the interim storage period of the low- and intermediate-level radioactive waste in this facility to 2045.

10. *Ibid.*, sections 19-22.

11. *Ibid.*, section 25.

a) Licensing and inspection, including nuclear safety

As a result of Austria's federal structure, licensing procedures involve federal (*Bund*) as well as regional (*Länder*) authorities. The construction and operation of installations for the handling of radioactive materials and radiation-emitting devices requires a licence according to the Radiation Protection Act. Under that Act, licensing is shared between the Federal Minister of Agriculture, Forestry, Environment and Water Management and other federal and provincial authorities. The distribution of responsibilities is specified in Section 41 of the Act. The examination of licences is dealt with primarily in the Radiation Protection Act and the General Radiation Protection Ordinance.¹² The licensing procedure is also subject to the provisions of the General Administrative Procedure Act.¹³

An operating licence is granted if the installation has been built in compliance with specified conditions, a radiation protection officer has been appointed and the regular operation of the installation entails no hazard from ionising radiation.¹⁴

The operation of all installations licensed under the Radiation Protection Act is monitored and inspected at regular intervals by the licensing authority as specified in the applicable legislation.¹⁵

At the international level, Austria ratified the Convention on Nuclear Safety¹⁶ on 26 August 1997.

b) Emergency response

The Radiation Protection Act provides that in the event of imminent danger arising from an installation in which radioactive materials are handled or ionising radiation-emitting equipment is housed, the authorities must 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 Administrative Decisions as amended.¹⁷

i) National emergency arrangements

Section 38 of the Radiation Protection Act sets forth general principles concerning measures to be taken in the case of radioactive contamination. In general, the Heads of the Provincial Governments (*Landeshauptmann*) are responsible for taking such measures, subject to orders from the federal department in charge of radiation protection. The Federal Minister of Agriculture, Forestry, Environment and Water Management is responsible for general radiation protection measures and the Federal Minister of Health and Women's Affairs is responsible for foodstuffs.

12. *Allgemeine Strahlenschutzverordnung*, BGBl. II Nr. 22/2015.

13. *Allgemeines Verwaltungsverfahrensgesetz*, BGBl. Nr. 51/1991.

14. *Strahlenschutzgesetz*, BGBl. Nr. 227/1969, section 6.

15. *Ibid.*, section 17.

16. Convention on Nuclear Safety (1994), IAEA Doc. INFCIRC/449, 1963 UNTS 293, entered into force 24 October 1996 (CNS).

17. *Verwaltungsvollstreckungsgesetz*, BGBl. Nr. 53/1991.

Provisions concerning emergency preparedness and response are set out in the Ordinance on Interventions.¹⁸

For radiological emergencies, a federal emergency plan – including, but not limited to, provisions on the exchange of information, protection measures and recommendations, warning and informing the public and convening the National Crisis Management Board – has been drawn up. Together with the emergency plans on the provincial level, these plans serve as the basis for preparatory measures to be taken at the regional level. A detailed catalogue of counter-measures has been prepared.

The Federal Alarm Centre (*Einsatz- und Krisenkoordinationscenter*) of the Federal Minister of the Interior acts as a national information exchange centre for the Radiation Protection Department of the Federal Ministry of Agriculture, Forestry, Environment and Water Management, 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 an imminent danger, all competent authorities are informed.

The Federal Ministry of Agriculture, Forestry, Environment and Water Management may decide, in agreement with the Federal Ministry of Health and Women's Affairs, on any urgent preliminary counter-measures. If necessary, the National Crisis and Disaster Protection Management Board (*Koordinationsausschuß des Staatlichen Krisen- und Katastrophenschutzmanagements*) 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 and makes arrangements for a long-term co-ordinated strategy at all levels of public administration.

ii) The Austrian Radiation Early Warning and Monitoring System

The Austrian Radiation Protection Act also deals with large-scale radiation surveillance, monitoring emergency situations and the implementation of remedial counter-measures.

Pursuant to this Act, the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management operates and maintains an automatic Radiation Early Warning System and also, with the Ministry of Health and Women's Affairs, a Laboratory-Based Monitoring Network to comply with the requirements of rapid recognition and precise determination of radioactive contaminants.

The Laboratory-Based Monitoring Network mainly performs the radionuclide-specific monitoring of air, precipitation, surface water bodies, soil, feed- and foodstuffs.

The Radiation Early Warning System (*Strahlenfrühwarnsystem*) continuously monitors ambient gamma dose rates throughout the country. In addition, a number of aerosol and radioiodine monitoring devices have been installed near the Austrian borders. This automatic computerised system is managed by the Federal Environmental Agency on behalf of the Federal Ministry of Agriculture, Forestry, Environment and Water Management and has been in operation since 1979.

18. *Interventionsverordnung*, BGBl. II Nr. 145/2007.

All in all, over 300 dose rate stations, 10 aerosol monitoring stations and 2 centres (one of these centres is a back-up centre) have been set up. The system design meets the requirements of high operational safety and reliability. From the dose rate stations, measuring data are transmitted online to the national centres. The public has permanent access online¹⁹ to the data of about 100 stations of this system and on the Austrian Broadcast (ORF) teletext service. The data gathered by the Radiation Early Warning System are exchanged online with corresponding systems in neighbouring countries: Croatia, Czech Republic, Germany, Hungary, Slovak Republic, Slovenia and Switzerland on the basis of bilateral agreements. Data has also been transmitted since 1995 to the European Commission's radiation database EURDEP (European Radiological Data Exchange Platform).²⁰

At international level, Austria ratified the 1986 Convention on Early Notification of a Nuclear Accident²¹ on 18 February 1988, and it has been a party to the 1986 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency²² since 21 November 1989.

6. Trade in nuclear materials and equipment

Under the Nuclear Non-Proliferation Act of 2013,²³ and in compliance with Austria's international obligations under the Nuclear Non-Proliferation Treaty,²⁴ the export of nuclear materials and related non-nuclear materials as well as nuclear equipment is subject to a licence granted in accordance with the provisions of the NPT, by the Federal Ministry of Science, Research and Economy (Bundesministerium für Wissenschaft, Forschung und Wirtschaft). The goods subject to export licences are listed as category 0 in Annex I of Council Regulation (EC) No 428/2009,²⁵ as last amended by Commission Delegated Regulation (EU) 2015/2420.²⁶

19. www.strahlenschutz.gv.at.

20. For more information on EURDEP, please see: <https://remon.jrc.ec.europa.eu/>.

21. Convention on Early Notification of a Nuclear Accident (1986), IAEA Doc. INFCIRC/335, 1439 UNTS 276, entered into force 27 October 1986 (Early Notification Convention).

22. Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1986), IAEA Doc. INFCIRC/336, 1457 UNTS 134, entered into force 26 February 1987 (Assistance Convention).

23. *Sicherheitskontrollgesetz* 2013, BGBl. I Nr. 42/2013.

24. Treaty on the Non-Proliferation of Nuclear Weapons (1968), IAEA Doc. INFCIRC/140, 729 UNTS 169, entered into force 5 March 1970 (NPT).

25. Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items (Recast), *Official Journal of the European Union* (OJ) L 134 (29 May 2009).

26. Commission Delegated Regulation (EU) 2015/2420 of 12 October 2015 amending Council Regulation (EC) No 428/2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual use items, OJ L 340 (24 December 2015).

7. Radiation protection

The main focus of Austrian nuclear safety legislation is radiation protection, which is dealt with primarily in the 1969 Radiation Protection Act as amended and the 2006 General Radiation Protection Ordinance as amended.

These instruments define general measures to protect the lives and health of individuals and future generations against the hazards of ionising radiation, as well as licensing conditions for the construction and operation of installations designed to handle radioactive materials, as explained under Section 5 "Nuclear installations" above.

The Austrian radiation protection legislation contains provisions designed to:

- ensure that exposure of individuals to radiation is kept "as low as possible" pursuant to the as low as reasonably achievable (ALARA) principle;
- restrict the absorption of radioactive materials by the human body to a minimum;
- ensure that only the smallest possible quantities of radioactive materials are released into the air, water or soil.

8. Radioactive waste management

Since Austria does not operate nuclear power plants, uranium mines or any other nuclear fuel cycle facilities, no high level radioactive waste (HLW) is produced in Austria.

Spent fuel elements from research reactors are sent back to the United States as laid down in the contract No.DE-NA0001641 between the United States Department of Energy, the Vienna University of Technology and the Euratom Supply Agency (ESA). Interim storage at the research reactor at the Institute of Atomic and Subatomic Physics, administered by the Vienna University of Technology, is available but currently empty after the core conversion in October 2012.

The only radioactive waste management facility existing in Austria is located in Seibersdorf.

The main sources of low- and intermediate-level radioactive waste in Austria is the use of radioactive materials in medicine, industry and research (approximately 15 tons per year) as well as the ongoing decommissioning and dismantling activities of nuclear research facilities (30-110 tons per year).

On the basis of a joint agreement between Austria, the municipality of Seibersdorf and NES, the intermediate storage facility of conditioned radioactive waste on the NES site is scheduled to be operational until 31 December 2045.

NES is responsible for the treatment, conditioning and interim storage of all radioactive waste that arises in Austria.

The Federal Minister for Agriculture, Forestry, Environment and Water Management is responsible for laying down provisions for the safe management of radioactive waste. The Minister is also responsible for granting licences for the construction and operation of facilities for the treatment, conditioning, interim storage and disposal of radioactive waste, as well as modifications to those licences.

The Radiation Protection Ordinance contains provisions concerning the handling of radioactive waste, which mainly relate to radiation protection measures. Under the Radiation Protection Ordinance, applicants for new installation licences as well as the operators of existing installations must furnish waste management schemes.

There have been, and will be, further amendments of the Radiation Protection Act in the near future to transpose the Euratom Waste Management Directive²⁷ as well as the amendments to the Euratom Nuclear Safety Directive²⁸ into the national law. The changes will contain general principles of the national policy in waste management and provisions for the national programme and public participation in the decision making process. The amendments will also implement additional safety guidelines that were put in place after the Fukushima accident.

A further Ordinance on the Shipment of Radioactive Waste²⁹ relating to the supervision and control of shipments of radioactive waste and spent fuel into, out of and through the national territory came into force on 19 February 2009. With this ordinance, Council Directive 2006/117/Euratom³⁰ was implemented into the national law. The Annexes to the Ordinance define, *inter alia*, the applicable standard documentation and the list of quantity and concentration levels for radioactive waste.

At the international level, Austria ratified the 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management³¹ on 13 June 2001.

9. Nuclear security

Austria has been a party to the NPT since 27 June 1969³² 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.³³ The legal basis for Austria's non-proliferation policy is the Nuclear Non-Proliferation Act of 2013. The authority responsible for safeguards and nuclear export controls is the Federal Minister for Science, Research and Economy.

27. Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste, OJ L 199 (2 August 2011).

28. Council Directive 2014/87/Euratom of 8 July 2014 amending Directive 2009/71/Euratom establishing a Community framework for the nuclear safety of nuclear installations, OJ L 219 (25 July 2014).

29. *Radioaktive Abfälle-Verbringungsverordnung*, BGBl. II Nr. 47/2009.

30. Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel, OJ L 337 (5 December 2006).

31. Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (1997), IAEA Doc. INFCIRC/546, 2153 UNTS 357, entered into force 18 June 2001 (Joint Convention).

32. BGBl. Nr. 258/1970.

33. BGBl. Nr. 239/1972.

Austria also ratified on 13 March 1998 the 1996 Comprehensive Nuclear Test Ban Treaty.³⁴

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 of Euratom. On 30 April 2004, the Additional Protocol to the Safeguards Agreement entered into force.

As regards physical protection of nuclear materials, the 2013 Nuclear Non-Proliferation Act also contains provisions on interference or encroachment by unauthorised third parties. The Federal Minister of the Interior may impose any measures it considers necessary to ensure the protection of nuclear materials at the national level.

The Federal Minister of the Interior is responsible for issuing licences and for the adoption of security measures in connection with the handling of nuclear material, including protective measures against interference or encroachment. Before decisions are taken, the Federal Ministry for Science, Research and Economy (Division for Nuclear Non-Proliferation) and the Federal Ministry of Agriculture, Forestry, Environment and Water Management (Division for Radiation Protection) shall be consulted. In addition, the Federal Minister 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 guidance and recommendations contained in the document "The Physical Protection of Nuclear Materials".³⁵

Austria has also been a party to the 1979 Convention on the Physical Protection of Nuclear Material³⁶ since 22 December 1988.

10. Transport

The IAEA's Regulations for the Safe Transport of Radioactive Material³⁷ are incorporated into the UN Recommendations on the Transport of Dangerous Goods. They are put into legally binding force by the following modal conventions to which Austria is a party:

- the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR);
- the Regulation Concerning the International Carriage of Dangerous Goods by Rail (RID), Annex C to the Convention Concerning the International Carriage by Rail (COTIF);
- the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN);

34. Comprehensive Nuclear-Test-Ban Treaty (1996) (not yet entered into force), available at: www.ctbto.org/fileadmin/content/treaty/treaty_text.pdf (Nuclear Test Ban Treaty).

35. IAEA (1993), "The Physical Protection of Nuclear Materials", IAEA Doc. INFCIRC/225/Rev.3.

36. Convention on the Physical Protection of Nuclear Material, (1980), IAEA Doc. INFCIRC/274 Rev. 1, 1456 UNTS 125, entered into force 8 February 1987 (CPPNM).

37. IAEA (2012), Regulations for the Safe Transport of Radioactive Material, IAEA Safety Standards, Specific Safety Requirements, No. SSR-6, IAEA, Vienna.

- the International Convention for the Safety of Life at Sea (SOLAS) with the International Maritime Dangerous Goods (IMDG) Code; and
- the Convention on International Civil Aviation with its Annex 18 and the ICAO-Technical Instructions for the Safe Transport of Dangerous Goods by Air.

All these regulations are applicable for national and international transport of dangerous goods in Austria either by themselves or by reference in Commission Regulation (EU) No 965/2012³⁸ or in the Austrian Act on the Transport of Dangerous Goods (GGBG).³⁹ This Act also establishes the institutional framework for the administration and enforcement of the said regulations.

11. Nuclear Third Party Liability

The 1999 Federal Act on Civil Liability for Damage Caused by Radioactivity⁴⁰ governs civil liability for damage to persons or property resulting from ionising radiation from nuclear installations, nuclear material or radionuclides (hereafter referred to as nuclear damage).⁴¹

The Act provides for the unlimited liability of the operator of a nuclear installation and the carrier of nuclear material. The operator of a nuclear installation is liable for all nuclear damage caused by the operation of that installation, including during the dismantling of the plant until the removal of the stock of radioactive material.⁴² The operator is also liable for nuclear damage caused outside the nuclear installation by radioactive material originating from that nuclear installation if the nuclear damage is caused before another operator of a nuclear installation has taken charge of the radioactive material, or where the radioactive material has been sent to the operator, if the nuclear damage is caused after that operator has taken legal charge over the radioactive material.⁴³ The carrier of nuclear substances is liable for all damage caused during the carriage of nuclear material by land, air or sea, unless it proves that it did not know and could not have known that the goods transported were nuclear material.⁴⁴

The operator of a nuclear installation situated within Austrian territory is required to have and maintain nuclear insurance to cover its liability of at least EUR 406 million per incident plus EUR 40.6 million for interest and costs. For experimental and research reactors, the minimum amount is fixed at EUR 40.6 million per incident and EUR 4.06 million for interest and costs.⁴⁵ The carrier of nuclear material is required to take out

38. Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, OJ L 296 (25 October 2012).

39. *Gefahrgutbeförderungsgesetz*, BGBl. I Nr. 145/1998.

40. *Bundesgesetz über die zivilrechtliche Haftung für Schäden durch Radioaktivität*, BGBl. I Nr. 170/1998. An unofficial translation is available on the Nuclear Energy Agency website at: www.oecd-nea.org/law/legislation/austria/AUSTRIA-AtomicLiabilityAct.pdf.

41. *Ibid.*, section 1.

42. *Ibid.*, section 3(1).

43. *Ibid.*, section 3(2).

44. *Ibid.*, section 4.

45. *Ibid.*, section 6(2).

nuclear third party liability insurance only if the risk is not covered by other mandatory insurance. The carrier will then be obliged to have and maintain financial security coverage of at least EUR 40.6 million (EUR 4.06 million for source material) per incident and EUR 4.06 million (EUR 406 000 for source material) for interest and costs.⁴⁶

The liability imposed on the holder of a radionuclide is fault-based.⁴⁷ Liability is also unlimited and must be covered by insurance or other suitable financial security in the manner and to the extent customary in the ordinary course of business.⁴⁸

Damage includes damage to persons or property, the costs of reasonable preventive measures and measures of reinstatement of the environment.⁴⁹

Furthermore, the 1999 Act provides that plaintiffs are entitled to bring an action before the court of first instance (regional court), which has territorial jurisdiction. A regional court will also have territorial jurisdiction when this court is in the district in which the damage was caused or sustained or the preventive measures were taken.⁵⁰ The objective of this provision is to ensure that an Austrian court will have jurisdiction and Austrian law will be applied when nuclear damage is suffered in Austria wherever nuclear incident occurred.

46. *Ibid.*, section 7(2).

47. *Ibid.*, section 9.

48. *Ibid.*, section 10.

49. *Ibid.*, section 11.

50. *Ibid.*, section 22.

II. Institutional Framework

In Austria, the enforcement of federal legislation is in principle a matter for the regional (*Länder*) authorities except in cases where the federal state (*Bund*) is expressly made responsible under the Constitution.⁵¹ Therefore, the federal state does not have exclusive competence for nuclear energy legislation.

1. Regulatory and Supervisory Authorities

a) Federal Authorities (Bund)

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

- nuclear installations;
- production of nuclear fuels or processing of irradiated nuclear fuels;
- particle accelerators;
- design approval for special devices containing radiation sources; this can replace a licence under certain circumstances; and
- approval of medical practitioners and hospitals.

i) *The Federal Ministry of Agriculture, Forestry, Environment and Water Management* (Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft)

The Federal Ministry of Agriculture, Forestry, Environment and Water Management is responsible for the general co-ordination of nuclear affairs and for radiation protection, with the exception of radiation protection matters in the medical field and with regard to foodstuffs. The Ministry is also responsible for issues relating to the long-term storage of radioactive waste, including the siting, construction and operation of storage facilities.

ii) *The Federal Ministry of the Interior* (Bundesministerium für Inneres)

The Federal Ministry of the Interior is responsible for issuing licences on the physical protection of nuclear material and facilities in use, storage and transport, including protective measures against interference or encroachment by unauthorised third parties. In addition, it is responsible for the co-ordination of the national crisis and disaster protection management and international disaster relief.

iii) *The Federal Ministry for Science, Research and Economy* (Bundesministerium für Wissenschaft, Forschung und Wirtschaft)

The Federal Ministry for Science, Research and Economy is the competent authority for the licensing of construction, operation and also for the inspection of nuclear installations and particle accelerators within in the scope of university and research institutions of the Austrian Academy of Sciences. In addition, it is responsible for the co-ordination and strategic orientation of nuclear research in particular.

51. Federal Constitutional Law, Article 15.

The Federal Minister for Science, Research and Economy is the National Nuclear Non-proliferation Authority under the 2013 Nuclear Non-Proliferation Act and therefore responsible for the implementation of Austria's international safeguards undertakings, in particular where they go beyond the system of Euratom safeguards, and for export controls for nuclear material, equipment, technology and non-nuclear material.

Under the 2011 Foreign Trade Act as amended,⁵² the Federal Minister for Science, Research and Economy is responsible for the licensing of exports of nuclear-related "dual use" materials. The Minister is also responsible for a limited number of matters concerning the safety of nuclear installations, e.g. pressure vessels and power engines.

iv) The Federal Ministry of Health and Women's Affairs (Bundesministerium für Gesundheit und Frauen)

The Federal Ministry of Health and Women's Affairs is responsible for radiation protection matters in the medical field and with regard to foodstuffs.

v) The Federal Ministry for Transport, Innovation and Technology (Bundesministerium für Verkehr, Innovation und Technologie)

The Federal Ministry for Transport, Innovation and Technology is the competent authority for the transport of dangerous goods (including radioactive materials) by all means of transport, for the shipments of radioactive materials and the transport security measures with regard to a radiologically significant carriage of nuclear materials (Act on the Transport of Dangerous Goods, in line with respective international agreements such as, for example the ADR). In this regard it is also responsible for the approval of packages and shipments of radioactive materials. This Ministry is the competent authority for the implementation and interpretation of IAEA's Regulations for the Safe Transport of Radioactive Materials,⁵³ as well as for the legislation enforcing these regulations.

vi) The Federal Minister of Justice (Bundesministerium für Justiz)

The Federal Minister of Justice is responsible for legal matters related to the Act on Liability for Damages caused by Radioactivity.

vii) The Federal Ministry for Europe, Integration and Foreign Affairs (Bundesministerium für Europa, Integration und Äußeres)

The Federal Ministry for Europe, Integration and Foreign Affairs is the competent authority representing Austria internationally. It is in charge of all issues related to the negotiation and implementation of legal instruments concluded with the IAEA.

b) Regional and District Authorities (Landes- und Bezirksverwaltungsbehörden)

In general, the provincial authorities are responsible for the application of Parts I to III of the Radiation Protection Act, except where the law expressly provides that the Federal

52. *Außenhandelsgesetz* 2011, BGBl. I Nr. 26/2011.

53. IAEA (2012), Regulations for the Safe Transport of Radioactive Material, Specific Safety Requirements, No. SSR-6, IAEA Doc. STI/PUB/1570.

Minister is in charge. The latter is the case for the TRIGA Mark II research reactor and the Radioactive Waste Management Facility in Seibersdorf. There, the district authorities are responsible for the commercial operation.

Regional and district authorities issue licences for the handling of radioactive material. Each licensee is inspected by the competent authority on a regular basis.

With an amendment in 2012,⁵⁴ Administrative Courts have been introduced as the competent appeal courts regarding administrative decisions.

54. BGBl. I Nr. 51/2012.