Austria

6th NATIONAL REPORT

under the

CONVENTION ON NUCLEAR SAFETY

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6th National Report of Austria under the Convention On Nuclear Safety
in accordance with Article 5

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6th National Report of AUSTRIA

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for the CNS Review Meeting 2014

August 2013

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INTRODUCTION

1. About this report

The form of the Austrian National Report for the CNS Conference 2014 follows the structure given in guideline INFCIRC/572/Rev. 4. On the basis of the last National Report, its content has been updated, in particular taking into account all recent changes of the legislative and regulatory framework and the replacement of fuel of the Austrian TRIGA research reactor.

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

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, except for the domestic nuclear activities as described in chapter 7.6, relates primarily to environmental and health concerns arising from the operation of nuclear power plants in Austria's neighbourhood.

Already in 1978, the Austrian electorate decided in a referendum not to start the operation of the constructed nuclear power plant (BWR) in Zwentendorf. Shortly thereafter, on 15 December 1978, the Austrian parliament promulgated the Law on the Prohibition of the Use of Nuclear Fission for Energy Generation in Austria [BGBl.[1] No. 676/1978: Bundesgesetz über das Verbot der Nutzung der Kernspaltung für die Energieversorgung in Österreich]. This position was strengthened by the Chernobyl accident in 1986 which substantially increased the opposition of the political parties and the public at large against nuclear power. Austria was at the time among those countries in Central Europe which were most affected by the Chernobyl accident.

In 1999, the Austrian parliament passed unanimously the Constitutional Law on a Nuclear-free Austria [BGBl. I No. 149/1999: Bundesverfassungsgesetz für ein atomfreies Österreich]. It stipulates, inter alia, that installations which serve for energy generation by nuclear power must not be constructed or, if they already exist, come on line. Furthermore, the law prohibits the transport of fissile materials for purposes of nuclear power generation or disposal unless this conflicts with international obligations.

In view of the high risks emanating from nuclear installations, especially from nuclear power plants, Austria attaches utmost importance to international efforts to harmonise and steadily increase nuclear safety on 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 matters. It 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 activities which aim to improve nuclear safety, be it on European or international level. In this respect, Austria regards the Convention on Nuclear Safety to be a very important tool in developing a global nuclear safety culture. Its regular Review Meetings provide a highly appreciated opportunity to review progress in the Member States of the Convention and to exchange views on how best to implement its provisions.

[1] Bundesgesetzblatt = Federal Law Gazette

ARTICLE BY ARTICLE REVIEW

Obligations

General provisions

Article 6 (Existing nuclear installations)

Nuclear Installations in the broader sense

Currently, Austria operates no nuclear installations as defined in Article 2 of the Convention. There are only two facilities which can be seen as nuclear installations in the broader sense:

- one central waste processing and interim storage facility and
- one research reactor.

The interim storage facility is covered by the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. The Austrian TRIGA research reactor is currently only covered by the Code of Conduct on the Safety of Research Reactors, which has no reporting obligation. However, this installation is a nuclear installation as defined in the European Nuclear Safety Directive (see chapter 7.2.1). Thus the research reactor will be treated within this report. Reporting on the different articles of this Convention are on a voluntary basis according to section E of INFCIRC/572/Rev.4.

In the 1970s, a nuclear power plant was constructed in Zwentendorf, but in consequence of the negative ballot of the referendum in 1978, it was subsequently not put into operation. All nuclear fuel elements were removed in the late 1980s.

6.1 Institute of Atomic and Subatomic Physics (Atominstitut- ATI)

The Institute of Atomic and Subatomic Physics, which is an Institute of the Vienna University of Technology, operates a TRIGA Mark II research reactor. It has a maximum steady state thermal output of 250 kW and pulsing capabilities up to 250 MW. Being in operation since March 1962, the reactor is exclusively used for basic and applied academic research and teaching purposes. Being the closest research reactor to the IAEA headquarters, it is also frequently used by IAEA staff for development and calibration of safeguards instruments. In October/November 2012 all irradiated fuel elements from the core and the spent fuel storage were shipped to the Idaho National Lab and replaced by 77 19,8% enriched standard TRIGA fuel elements. With this new core the TRIGA reactor Vienna went critical on 27 November 2012. These fuel elements will be returned to the USA after 2025, if the parties of the contract agree upon an extension.

Presently, the total number of fuel elements in the core is 76 (plus 9 fuel elements in the in-pool storage racks plus 5 fresh fuel elements in the fuel storage). The total activity of these fuel elements after one year of cooling time is 7.27×10^{13} Bq and after ten years approx. 1.5×10^{13} Bq. 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 body since the year 2004.

Legislation and regulation

Article 7 (Legislative and regulatory framework)

The legislative and regulatory framework comprises the legal areas of radiation protection, installation safety, safeguards and physical protection of nuclear material and nuclear facilities. As Austria constitutes a Federal State, a number of federal (Bund), provincial (Länder) and district authorities (Bezirksverwaltungsbehörden) are involved in the regulation of these matters.

7.1 Law Prohibiting the Use of Nuclear Fission for Energy Purposes, Constitutional Law on a "Nuclear-free Austria"

As outlined in the Introduction, the use of nuclear energy for peaceful purposes in Austria has significantly been influenced by the passing of the Law Prohibiting the Use of Nuclear Fission for Energy Purposes in 1978 and of the Constitutional Law on a "Nuclear-free Austria" in 1999.

The Constitutional Law on a "Nuclear-free Austria" prohibits the construction and operation of installations for the production of energy by means of nuclear fission as well as – with some exemptions – the transport of fissile materials in Austria. Where an international obligation exists, the international obligation would prevail. The use of installations for research and development activities is compatible with the quoted constitutional law.

7.2 Radiation Protection and Nuclear Safety Legislation

7.2.1 Radiation Protection Act

The Radiation Protection Act [BGBl. No. 227/1969: Strahlenschutzgesetz], with several amendments in 2002, 2004 and 2006 implementing recent EU legislation. The latest amendment in year 2013 entered into force on 1 July and contains

- optimization of the intervals of periodic inspections of the licensees by the authorities,
- transition of the authority from the districts to the provinces and
- sole responsibility of the Federal Ministry of Science and Research for nuclear installations and particle accelerators within universities and research institutions of the Austrian Academy of Sciences (formerly: Ministry of Science and Research in accordance with the Ministry of Agriculture, Forestry, Environment and Water Management)

The Radiation Protection Ordinances contain detailed provisions concerning radiation protection, installation safety and the handling of radioactive waste.

Major amendments of the Radiation Protection Act by the Radiation Protection-EU-Adaptation Act [BGBl. I No. 137/2004: Strahlenschutz-EU-Anpassungsgesetz] in 2004 (in force since January 2005) - together with the Ordinances described below - fully implement the following EU directives into national law:

- 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 ionizing radiation (OJ No. L 159 of 29 June 1996),
- EU Council Directive 90/641/EURATOM of 4 December 1990 on the operational protection of outside workers exposed to the risk of ionizing radiation during their activities in controlled areas (OJ No. L 349/21 of 13 December 1990),
- EU Council Directive 2003/122/EURATOM of 22 December 2003 on the control of high-activity sealed radioactive sources and orphan sources (OJ No. L 346/57 of 31 December 2003).
- EU Council Directive 2009/71/EURATOM of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations (OJ No. L 172/18 of 2 July 2009)

7.2.2 General Radiation Protection Ordinance

The General Radiation Protection Ordinance [BGBl. II No. 191/2006: Allgemeine Strahlenschutzverordnung] has been amended in year 2012 in order to implement Council Directive 2009/71/EURATOM into Austrian legislation. It comprises the following key issues:

- limits for the exposure for occupational exposed workers and members of the public,
- regulations of the release limits for reporting and authorisation obligations,
- regulations for the protection of outside workers and specific regulations concerning the dose passport,
- regulations concerning radioactive waste,
- regulations for the control of high activity sealed sources (HASS),
- obligation for the manufacturer to take HASS back,
- authorisation of training centres for radiation protection and nuclear safety officers,
- requirements for nuclear installation regarding nuclear safety,
- requirements for construction and operation of a research reactor,
- requirements for nuclear safety officer.

7.2.3 Ordinance for Interventions in Case of Radiological Emergencies and in Case of Lasting Exposure

The Ordinance for Interventions in case of Radiological Emergencies and in case of Lasting Exposure [BGBl. II No. 145/2007: Interventionsverordnung] entered into force on 26 June 2007. It aimed at the transformation of the following EU Council Directives into national law:

- Title IX of the EU Council Directive 96/29/EURATOM of 13 May 1996 (see above, 7.2.1),
- EU Council Directive 89/618/EURATOM of 27 November 1989 on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency (OJ No. L 357/31 of 7 December 1989).

The ordinance contains regulations in connection with interventions in case of radiological emergencies and in case of lasting exposure from a past radiological emergency or a past practice (see also Article 16 of this report). These include inter alia significant releases of radioactive material due to accidents involving facilities or practices, accidents during the transport of radioactive material or terrorist acts using radioactive material.

7.2.4 Ordinance on the Shipment of Radioactive Waste 2009

The Ordinance on the Shipment of Radioactive Waste 2009 [BGBl. II Nr. 47/2009: Radioaktive Abfälle-Verbringungsverordnung] entered into force on 19 February 2009. With this ordinance, the EU Council Directive 2006/117/EURATOM of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel was implemented in national law.

The major changes are the following:

- The existing procedure for the shipment of radioactive waste between Member States is simplified.
- The consistency with other Community and international provisions had to be guaranteed, in particular with the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management to which the Community accede on 2 January 2006.
- The scope of the council directive is also extended to shipments of spent fuel whether it is intended for disposal or for reprocessing.

7.2.5 Other Radiation Protection Ordinances

Radiation Protection Ordinance for Applications in Medicine

The Radiation Protection Ordinance for Applications in Medicine [BGBl. II No. 409/2004: Medizinische Strahlenschutzverordnung] entered into force on 1 January 2005. This ordinance was amended on 28 June 2010 [BGBl. II No. 197/2010: Änderung der Medizinische Strahlenschutzverordnung].

Radiation Protection Ordinance for Air Crew

The Radiation Protection Ordinance for Air Crew [BGBl. II No. 235/2006: Strahlenschutzverordnung fliegendes Personal] entered into force on 1 July 2006. It comprises a new set of special regulations for the radiation protection of persons who perform a function on board of an aircraft. Under this ordinance aircraft operators are obliged to conduct an estimation and, in case of a possible exceedance of 1 mSv, an assessment of the dose of the air crew.

Ordinance for Naturally Occurring Radioactive Material

The Ordinance for Naturally Occurring Radioactive Material [BGBl. II Nr. 2/2008: Natürliche Strahlenquellen-Verordnung] entered into force on 7 January 2008. The ordinance contains regulations for the protection of persons against increased exposure due to practices with natural radioactive sources (in accordance with the Radiation Protection Act) with the exemption of the concerns of air crew where a separate ordinance has been enacted.

7.3 Nuclear Non-Proliferation Act

The 2013 Nuclear Non-Proliferation Act [BGBl. I Nr. 42/2013: [Sicherheitskontrollgesetz 2013] regulates safeguards, nuclear export controls and the physical protection of nuclear material and nuclear facilities.

7.4 Act on the Transport of Dangerous Goods

The Act on the Transport of Dangerous Goods [BGBl. I No. 145/1998 as amended in: Bundesgesetz über die Beförderung gefährlicher Güter und über eine Änderung des Kraftfahrtgesetzes 1967 und der Straßenverkehrsordnung 1960 (Gefahrgutbeförderungsgesetz - GGBG)] regulates the transport operations.

7.5 The licensing system and the inspection, assessment and enforcement process governing the safety of nuclear installations

In general – as a result of Austria's federal structure –, the responsibility for licensing under the Radiation Protection Act is shared between federal (Bund) as well as regional (Länder) authorities.

The licensing authority for the Institute of Atomic and Subatomic Physics in Vienna is the Federal Ministry of Science and Research. The construction and the operation of installations for the handling of radioactive materials and radiation emitting devices require a license according to the Articles 5 to 8 of the Radiation Protection Act. The Radiation Protection Ordinance contains further provisions for the licensing procedure. The licensing procedure is also subject to the provisions of the General Administrative Procedures Act.

According to Article 5 of the Radiation Protection Act the design of installations with higher potential risk needs to be licensed prior to the beginning of the construction in order to save costs and facilitate the subsequent licensing procedure. According to Article 6 an operating license is granted if the installation has been constructed in compliance with the specified conditions and obligations, if the radiation protection officer has been nominated and if the regular operation of the installation entails no hazard from ionising radiation. A license further needs safety assessment, final safety analyses and a concept for emergency preparedness. Article 7 rules the licensing procedure for facilities with a lower potential risk, out of the scope of this convention. A concept for decommissioning and dismantling, a concept for the recycling or reuse of radioactive substances and the management of radioactive waste are obligatory for any installation.

According to Article 17, the operation of all installations licensed under this law is regularly inspected by the licensing authority in order to assure that the facility keeps the state of the art. In case of endangerment of the human health and life and if the requirements of the license are not observed, the competent authority may prohibit the further operation.

According to Article 18 of the Radiation Protection Act, in case of imminent danger from an installation, the authorities have to take all appropriate measures to avert the danger. They may issue promptly enforceable provisional injunctions and, after consulting the radiation protection officer of the installation, have to proceed in compliance with Article 4 of the 1950 Act on the Enforcement of Administration Decisions [BGBl. No. 53/1991: Verwaltungsvollstreckungsgesetz].

Any malfeasance or breach of these provisions is fined according to Article 39.

7.6 Radioactive Substances, Nuclear Fuels and Radiation Emitting Devices

According to the Radiation Protection Act, any handling of radioactive material or use of any other radiation emitting devices needs licensing if legally binding exemption levels are exceeded (see 7.5).

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

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 purposes (research and testing). 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.

With the amendment of the Radiation Protection Act in 2004, the EU Directive of the control of high-activity sealed radioactive sources and orphan sources was transformed into Austrian law (see above, 7.2.1). Moreover, the provision of deliberately illegal handling of radioactive material was a part of this transformation of the corresponding European regulation into national law. In addition, a central register for radioactive sources, licensing and emergencies was established.

According to the Radiation Protection Act the owner of radiation sources above exemptions limits has to make a notification to the Central Register of Radioactive Sources. The owner is also obliged to report on the status of the radioactive sources every year. If this annual reporting is missing, the competent authority has to initiate adequate measures to investigate the status of the radiation sources.

7.7 Regulation of Transport

In Austria the transport of radioactive material is regulated by the Act on the Transport of Dangerous Goods (GGBG). This law refers to the international modal regulations for the transport of dangerous goods.

Through the Directive 2008/68/EC of the European Parliament and the Council on the inland transport of dangerous goods the international contracts on the transport of dangerous goods in the international land transport in Europe are valid for national transports as well.

So for road transport the European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) is in force.

For rail transport 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) does apply.

For inland waterways the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) does apply.

Regardless of the applicable law of the state in which a harbour is located, the transport of radioactive materials by seagoing 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 regards air transport, the provisions of the ICAO-Technical Instructions for the Safe Transport of Dangerous Goods by Air are implemented by the GGBG.

All these modal regulations are based on the UN Recommendations on the Transport of Dangerous Goods and on the Regulations for the Safe Transport of Radioactive Material (SSR-6 former TS-R-1) from the IAEA.

Article 8 (Regulatory body)

Regulatory and Supervisory Authorities

In Austria, the legislative and executive powers are divided between the federal state ("Bund") and the provinces ("Länder"). Under the general clause of Art. 15 of the Federal Constitutional Law, the legislative and executive powers are vested in the Länder, with the exception of all matters which are explicitly listed in Art. 10 to 12 of the Federal Constitutional Law.

The competent authority for the TRIGA Reactor of the Institute of Atomic and Subatomic Physics in Vienna in the sense of this Convention is the Federal Ministry of Science and Research. The competent authority for the physical protection of nuclear material and facilities in use is the Federal Ministry of Interior.

Other ministries as well as the provincial authorities are also involved in the nuclear safety and physical protection of nuclear material, but not in the sense of this convention.

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

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

8.1 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 radiation protection, but not for radiation matters in the medical field and foodstuff. The Minister is also responsible for issues relating to the long-term storage of radioac-

tive waste, including the siting, construction and operation of storage facilities. Finally, the Federal Ministry of Agriculture, Forestry, Environment and Water Management is responsible for general affairs of nuclear co-ordination.

8.2 The Federal Ministry of Science and Research

(Bundesministerium für Wissenschaft und Forschung)

The Federal Ministry of Science and Research 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 energy research and development in general and nuclear research in particular.

8.3 The Federal Ministry of the Interior

(Bundesministerium für Inneres)

The Federal Ministry of the Interior is responsible for issuing licenses on the physical protection of nuclear material and facilities in use, storage and transport, including protective measures against interference or encroachment by unauthorised third persons [Safeguards Act, Part 3]. Moreover it is responsible for the coordination of the national crisis and disaster protection management and international disaster relief.

8.4 Other authorities

The Federal Ministry for Economy, Family and Youth (Bundesministerium für Wirtschaft, Familie und Jugend)

In his capacity as the National Nuclear Non-proliferation Authority under the 2013 Nuclear Non-Proliferation Act, the Federal Minister for Economy, Family and Youth is 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 regarding nuclear material, equipment, technology and non-nuclear material.

Under the 2011 Foreign Trade Act [BGBl. I No. 26/2011 as amended: Außenhandelsgesetz 2011], the Minister is responsible for the control of exports, brokering and transit of nuclear-related ”dual use” goods. In addition, the Minister is responsible for a limited number of matters concerning the safety of nuclear installations, e.g. pressure vessels and power engines.
The Federal Ministry of Health (Bundesministerium für Gesundheit)

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

The Federal Ministry of Justice (Bundesministerium für Justiz)

The Federal Ministry of Justice is responsible for all legal matters relating to the Act on Liability for Damage caused by Radioactivity.

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

The Federal Ministry for Transport, Innovation and Technology is the authority competent 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 e.g. 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 (SSR-6) as well as for the legislation enforcing these regulations.

The Federal Ministry of Labour, Social Affairs and Consumer Protection (Bundesministerium für Arbeit, Soziales und Konsumentenschutz)

Work inspections under relevant focus are actually in the competence of BMASK.

Regional and district Authorities (Landesbehörden und Bezirksverwaltungsbehörden)

In general, the provincial 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 is in charge. The latter is the case for all facilities in the sense of this convention. The district authorities are the competent ones for the commercial operation (Gewerbebetrieb).

These authorities issue i.e. licenses for the handling of radioactive material. Each licensee is inspected by the competent authority on a regular basis. As a part of this inspection process, the records about the balance of radioactive material and radioactive waste are subject to critical scrutiny.

With the amendment of the Administrative Reform Act [BGBl. I No. 65/2002] the Independent Administration Senate (Unabhängiger Verwaltungssenat) has been introduced on the Countries' level as the competent appeal court for administrative decisions of district authorities.

Article 9 (Responsibility of the license holder)

Each activity with radioactive material exceeding the exemption limits in Austria needs a license. The license holder must fulfil specific requirements, conditions and obligations laid down in connection with the operating license. The licensee is responsible for any breach towards the authority. In particular the license holder is responsible for the following issues:

- assessment and implementation of arrangements for the radiological protection of exposed persons,
- critical examination of plans for installations from the point of view of radiation protection,
- preparation of written instructions for work activities,
- information and training of exposed persons in the field of radiation protection,
- regular checks on the effectiveness of protective devices and techniques,
- periodic calibration of measuring instruments and periodic checks on the serviceability and the correct use.
- on-site emergency planning

9.1 Nuclear Third Party Liability

The liability for nuclear installations and nuclear substances is governed by the Act on Liability for Damage Caused by Radioactivity[2] of 1999. The Act covers any damage to persons or property resulting from ionizing radiation through nuclear installations, nuclear substances and radionuclides. Further coverable damages are the costs of the removal of impairments to the environment and the costs of preventing measures undertaken to avert immediate danger originating from nuclear installations, nuclear substances or radionuclides. In this context, impairment to the environment is defined as any interference with the environment, which lastingly alters the latter in such a way that it differs noticeably from natural processes either in quantity, in quality or in the temporal respect. Only the impairment which is of some significance is to be compensated.

The liability both of the operator of a nuclear installation and the carrier of nuclear substances does in principle not presuppose any negligence on their part. Accordingly the Act lays down as a rule the strict liability of the said persons. The operator of a nuclear installation is liable for all harm caused by operating the installation. Not only damages resulting from an accident during operation are covered, but also any damages in the ordinary course of operation (i.e. without any sudden incident). The carrier of nuclear substances is liable for damages caused by an accident during carriage. In addition he has to remedy any other harm caused during carriage (thus likewise independently of a possible incident).

The Act on Liability for Damage Caused by Radioactivity of 1999 designates in principle the unlimited liability of the person liable.

The Act also provides liability rules for the handling of radionuclides. Also in these cases the amount of compensation is in principle unlimited. The holder of the radionuclide, however, is

[2] Bundesgesetz über die zivilrechtliche Haftung für Schaden durch Radioaktivität (Atomhaftungsgesetz 1999 – AtomHG 1999, BGBl. I No. 170/1998)

liable only if he is to be blamed for negligence, since in these cases damage normally cannot reach dimensions comparable to those caused by nuclear installations or the substantially more dangerous nuclear material. Due to the yet given specific danger of radionuclides the burden of proof is shifted from the injured party to the holder of the radionuclide.

Furthermore, the Act abandons the principle of „channelling" of nuclear liability currently governing the international conventions on the subject-matter. That means that compensation cannot only be claimed from the operator of an installation, but the injured party can also take legal action against third parties, e.g. the supplier and the constructor. This is meant to make sure that the person injured can recover all damages even if it is more than the operator can pay.

To provide security for the claims of possible injured parties, the Act on Liability for Damage Caused by Radioactivity of 1999 obliges the following persons to effect liability insurances: the operator of a nuclear installation situated in Austria, the carrier of nuclear substances and the holder of a radionuclide with an activity of more than 370 GBq. Minimum amounts insured shall guarantee that all foreseeable hazards can be covered.

Taking into consideration that Austria is a party neither to the Paris Convention nor to the Vienna Convention, § 23 of the Act contains special rules for international cases. Whereas pursuant to § 48 of the Austrian Act on Private International Law non-contractual damage claims are governed by the law of the state, in which the act causing the damage was committed, § 23 (1) of the Act on Liability for Damage Caused by Radioactivity of 1999 provides that the person injured by ionizing radiation can demand that Austrian law be applied to claims for damages which occurred in Austria. If vice versa the incident causing the harm has taken place in Austria and thus Austrian law is applicable, damages which occurred abroad are only covered according to Austrian law as far as compensation is also provided for by the personal statute - usually the lex patriae - of the injured party.

Concerning the Paris and the Vienna Conventions on Liability for Nuclear Damage, Austria has mainly two concerns: First the maximum liability amounts seem to be insufficient; in contrast the Austrian Act on Liability for Damage Caused by Radioactivity of 1999 provides for unlimited liability combined with obligatory liability insurance covering relatively high amounts of damage. Secondly the channelling of liability according to which only operators and not also suppliers can be held liable seems inadequate. Above that, the prescription rules and the rules regarding the place of jurisdiction are to the detriment of potential victims.

General Safety considerations

For the following Articles 10 – 14, information on the only Austrian research reactor, the TRIGA reactor administered by the Vienna University of Technology, is provided:

Article 10 (Priority to safety)

As during the past 51 years of operation the Institute of Atomic and Subatomic Physics continues to apply the highest possible safety standards both to organisational and technical aspects. The safety systems are currently being upgraded and fulfil the present international safety requirements. It should be mentioned that the TRIGA reactor Vienna is the only TRIGA reactor in Europe with a digital I&C system with analogue back up. The safety of the facility is subjected to periodical inspection from daily, weekly, monthly, quarterly and annual

inspections some of them in presence with an independent expert assigned by the government. The regulatory aspects are aimed at prioritising safety.

Since November 2012 there are no more high enriched fuel elements located at the Austrian research reactor, only low enriched ones.

Article 11 (Financial and human resources)

The TRIGA research reactor is embedded in the Institute of Atomic and Subatomic Physics of the Vienna University of Technology. Thus, the Vienna University of Technology provides funds for staff, equipment, research and safety of the facility. The regular budget plus additional third party income assure the proper financial support to operate the reactor in a safe and efficient way; overall priority is given to the safety of the TRIGA reactor.

During the past years a transition took place in the reactor management due to retirement. The continuation of knowledge was assured by several years of overlapping between the old and new management. Thus, the human resources aspect has been resolved in an optimal procedure. In 2012 the Ministry of Science and Research and the Vienna University of Technology agreed upon the renewal of the reactor instruments and the control system. In the signed performance agreement the installation in the years 2013-2015 is foreseen.

Article 12 (Human factors)

Self-assessment of human and organisational factors has been carried out during the reporting period by evaluating all log book entries for the entire operation time and classifying and analysing all entries. In total 4500 entries during 48 years of operation (until 2011) were evaluated and classified into 12 reactor systems identified during a recent IAEA conference. From this data base important insights about component failures and human errors were extracted and have led to various improvements in organisation and operation.

Article 13 (Quality assurance)

A facility specific quality assurance program has already been established three decades ago and adapted and improved according to needs. This program has also been transferred to other TRIGA stations due to close cooperation (see also article 12). According to the national regulations the license holder is subject to an annual audit program which is the basis for the prolongation of the operating license. This audit is controlled by independent national experts.

Article 14 (Assessment and verification of safety)

According to Article 17 of the Radiation Protection Act, the licensing authorities regularly carry out inspections of the facilities, in order to control the compliance with respective laws and specific requirements from the granted license (see Article 7.2). The licensing authority for the Institute of Atomic and Subatomic Physics in Vienna is the Federal Ministry of Science and Research.

Reporting obligations regarding events in nuclear facilities are regulated by the General Radiation Protection Ordinance, respectively by the international Convention on Early Notification of a Nuclear Accident (IAEA/Emercon) and the European Council Decision 87/600/Euratom

(ECURIE). At national level incidents and accidents in nuclear facilities have to be reported to the licensing authority and to the Federal Ministry of Agriculture, Forestry, Environment and Water Management. The reporting obligations at international level have to be fulfilled by the Federal Ministry of Agriculture, Forestry, Environment and Water Management (see also article 16).

Article 15 (Radiation protection)

The Radiation Protection Act and the General Radiation Protection Ordinance form the legal basis for operational radiation protection in Austria. This legislation aims at protecting human life and health and the environment against ionising radiation. It is based on the recommendations of the International Commission on Radiological Protection (ICRP) and implements the internationally agreed principles of justification of a practice, optimisation of radiation exposure and dose limitation. After the amendment of the Radiation Protection Act and the publication of the new Radiation Protection Ordinances, the provisions of the Basic Safety Standards Directive 96/26/EURATOM are fully implemented in Austrian national law. Further radiation protection requirements are defined in non-binding national standards and specific obligations are stated in the construction and operation licences granted to each operator of nuclear facilities. All activities must be performed in accordance with radiation protection regulations.

The Austrian radiation protection legislation requires optimisation in line with the ALARA principle as a fundamental principle for limiting the radiation exposure of the workers and the public (Article 4 of the Radiation Protection Act and Article 3 of the General Radiation Protection Ordinance). It is the responsibility of the license holder to define and implement optimisation and to implement a system for control. Depending on the level of estimated collective dose, a dose relevant job has to be controlled by a radiation safety officer. During the annual inspections according to Article 17 of the Radiation Protection Act the supervisory authority also controls how optimisation is implemented.

According to the Radiation Protection Ordinance, the dose limit for individuals of the population is set to 1 mSv per year and the dose limit for occupational exposure to 20 mSv per year. These dose limits are in line with international standards. The Ordinance defines reference values, limits and constraints for dose and activity to ensure that the set dose limits are not exceeded. The dose limits and working conditions for underage and pregnant women are laid down in Article 12 of the General Radiation Protection Ordinance. As a general rule, the Radiation Protection Act states that pregnant women may not be assigned to any work which would result in being exposed workers (Art. 30). Nursing women may not be assigned to any work that contains handling with radioactive materials subject to licensing when there is an imminent danger of incorporation.

In the licence application for construction and operation of a facility for handling with radioactive material or radiation emitting devices, the technical measures, i.e., barriers and air filters, which are taken to reduce exposure from radioactive discharges, must comply with the ALARA principle. These measures are explicitly stated as obligations when granting the licence. The release of radionuclides to atmosphere and water bodies is monitored by the license holder and surveyed by the licensing authority. The inspection of the nuclear installations by the authorities concerning emission and immission is set up of two parts: inspection of the quality of the internal control by the operator and independent surveillance by examination of samples taken by the authority. Investigative measurements by the authorities of gase-

ous and liquid emissions and the internal surveillance by the operators show that maximum permissible levels never were exceeded. Also environmental monitoring in the surroundings did not detect any inadmissibly high gamma dose rates or immissions during operation of the research reactor.

Article 16 (Emergency preparedness)

16.1 National emergency arrangements

Article 36l., 37 and 38 of the Radiation Protection Act set forth the general principles concerning interventions, radiation monitoring and counter measures to be taken in the case of a radiological emergency.

The detailed requirements are given in the Ordinance on Interventions in Case of Radiological Emergencies and in Case of Lasting Exposure which has been enacted in June 2007. *Inter alia*, regulations for the following areas of radiological emergency management are provided:

- definition of intervention levels and a checklist of countermeasures to be taken into account in different phases of an emergency which provides the basis for a specific catalogue of counter measures in Austria,
- criteria for updating emergency plans at federal and at provincial level,
- regulations for education, training, individual dosimetric monitoring and medical surveillance of intervention teams,
- criteria for planning and conducting emergency exercises.

In accordance with the legislation, the responsibilities for off-site emergency management for events in Austria or abroad are summarised in the following table:

Institution	Responsibilities
Federal Ministry of Agriculture and Forestry, Environment and Water Management	• Evaluation of the consequences of radiological and nuclear emergencies • Decision on countermeasures (with involvement of the Federal Ministry of Health) • Environmental monitoring • Competent Authority for international information exchange (ECURIE, Convention on Early Notification and bilateral agreements)
Federal Ministry of Health	• Food monitoring • Pre-distribution of KI-blocking
National Crisis and Disaster Protection Management in the Federal Ministry of the Interior	• Federal co-ordinating institution for national crisis and disaster protection management and international disaster relief missions
Federal Alarm Centre in the Federal Ministry of Interior	• National information platform • 24/7 Contact Point for information exchange

	with foreign countries (ECURIE, Convention on Early Notification and bilateral agreements)
Nine Austrian Provinces	• Implementation of countermeasures

The majority of requirements of the Ordinance on Interventions in Case of Radiological Emergencies and in Case of Lasting Exposure has been fulfilled, including a specific catalogue of counter measures in Austria and updating of federal emergency plans in accordance with recommendations of IAEA (EPR-METHOD-2003). Reviewing and updating of emergency plans at provincial level on basis of the new federal plans has been finalized in most Austrian Provinces.

The exchange of information in case of a radiological or nuclear emergency with the competent authorities in the neighbouring countries is guaranteed by three information systems: Austria fulfils the obligations of the Convention on Early Notification of Nuclear Accidents (IAEA), is part of the ECURIE information exchange system organised by the EC and has bilateral agreements with the neighbouring countries operating nuclear power plants. In addition, the bilateral and regional co-operation have been extended within the last years, including an automatic exchange of information between emergency centres relevant for assessing the impact of a radiological or nuclear accident (such as dose rate measurements and source term information) and joint emergency exercises.

Different provisions have been made for informing the Austrian population in case of a radiological or nuclear emergency. In case of an emergency, urgent information for the public together with the recommendations of counter measures will be provided by the competent federal authorities. In addition, the National Crisis and Disaster Protection Management will be extended by representatives of the Austrian Broadcast Corporation and the Austrian Press Agency, if necessary. A call centre for answering questions from the public has been established. Printed guides for advance information of the public are available free of charge (also available on the internet) and will periodically be updated. According to the Ordinance on Interventions in Case of a Radiological Emergency, additional information prior and in case of a radiological emergency in accordance with the Council Directive 89/618/EURATOM will be provided on the internet (www.strahlenschutz.gv.at).

Several types of emergency exercises on international, bilateral, national and local level help to improve the emergency preparedness system and keep the emergency personnel trained. A specific goal for the next exercises is to test the new emergency plans. In 2012 an Austrian-wide exercise (INTREX 2012) was performed. The exercise scenario assumed a Fukushima-like severe NPP accident in a neighbouring country. Main parts of the new emergency plans were tested in these 3 days exercise. Specific weak points were identified and measures for improving the emergency management system in Austria are under implementation.

16.2 Radiation Monitoring Systems

According to § 37 of the Austrian Radiation Protection Act, the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) operates an automatic radiation monitoring system.

The Austrian Radiation Early Warning System (Strahlenfrühwarnsystem) continuously monitors ambient gamma dose rates with 336 measuring stations throughout the country. In addition, 10 aerosol monitoring stations have been installed near the Austrian borders. The meas-

urement data of these automatic on-line systems are transmitted to the National Centre at BMLFUW and also to nine provincial centres located in the provincial capitals. The on-line data of about 100 stations of this system are accessible to the general public via internet (www.strahlenschutz.gv.at) and on the Austrian Broadcast (ORF) Teletext service.

Additional measuring data can be imported from mobile and air-borne radiation survey units of the Federal Ministry of the Interior.

Data gathered by the Radiation Early Warning System are exchanged on-line with the corresponding systems in most of the neighbouring countries (Slovenia, Slovakia, Czech Republic, Hungary, Germany and Switzerland) on the basis of bilateral agreements. In parallel, exchange of these data is run on European level via the EURDEP system between the EU member states.

In addition, a laboratory-based monitoring network, financed by the BMLFUW and the Ministry of Health, performs a radionuclide-specific routine monitoring of air, precipitation, surface water bodies, feed- and foodstuffs. An emergency sampling concept for the case of radiological emergencies was updated.

BMLFUW is also obliged to operate adequate decision support systems (i.e. RODOS) based on meteorological forecast data. The information provided by the accident country (source term, other release parameters) is the basis for a prognosis of possible consequences. The environmental monitoring measurement results and the results of the decision support systems provide the basis for assessing the radiological situation and deciding on countermeasures.

Safety of installations

For the following Articles 17 - 19 information on the only Austrian Research Reactor, the TRIGA reactor administered by the Vienna University of Technology, is provided:

Article 17 (Siting)

All site relevant parameters are compiled in the Safety Analysis Report (SAR). The site for the TRIGA reactor Vienna has been selected in 1959 and the SAR contains all original expertise relevant for the site selection. Since the first issue in 1962 the SAR has been updated in 1975, 1986, 2006 and 2010. These updates reflect the progress in technical, legal and organisational procedures. The latest update was performed in December 2010. A new SAR version is under preparation. Therefore the present issue of the SAR reflects the actual safety of the TRIGA reactor Vienna including factors relevant for sub-paragraph (i) and (ii).

The safety impact on the individuals, the society and the environment has been extensively compiled in the SAR. In this report the impact of the reactor operation of the TRIGA reactor Vienna on individuals, society and the environment was evaluated in detail and found to be negligible during any operation mode. Recently a diploma thesis on that subject has been completed and the previous negligible results have been confirmed.

In addition all necessary relevant information is provided upon request to outside parties in order to provide the basis for an independent evaluation of any reactor operational impact.

Article 18 (Design and construction)

The TRIGA reactor Vienna has been designed and several times upgraded for the defence-in-depth (DiD) concept to prevent accident occurrences and release of radioactivity. Since initial criticality, the I&C system has been replaced three times. The TRIGA Vienna has a fully computerised I&C system. The area monitoring system and the environmental monitoring system are fully computerised and all relevant operational data are electronically stored. Defence-in-depth was a major issue for the operation license of the TRIGA reactor Vienna.

Due to its special fuel composition (which is U-Zr-H), the TRIGA reactor is an inherently safe reactor with an ultra-prompt negative temperature coefficient of the fuel which even allows transient operation (prompt criticality) as routine operation.

These so called reactor pulses are routinely performed for special experiments within the academic research program. Presently, about 36 TRIGA reactors operate world-wide with more than 1400 reactor-years of experience and no major incident or accident has so far been experienced with any TRIGA type reactor. Nevertheless, an extensive in-service-inspection (ISI) and maintenance program is carried out at the TRIGA reactor Vienna. The overall scope of this program is summarised in a manual available at the Institute of Atomic and Subatomic Physics. Experience from this program has been transferred to other TRIGA reactors world-wide through IAEA Technical Cooperation Projects.

Article 19 (Operation)

The operation license is based on a detailed SAR which has been updated several times during the past according to any modifications in the reactor systems (i.e. reactor instrumentation and control system, ventilation system, area monitoring system). The latest SAR dates to December 2006 and is currently being updated.

The SAR includes all operational limits and conditions (OLC) derived from the safety analysis and also including operational experience. Typical OLC's are i.e. excess nominal power, excess fuel or water temperature, short reactor period, any failure of PC components in the I&C system. In addition, any deviation from the nominal value is announced by an optical and acoustical alarm and thus allowing the operator to start any counteraction before an OLC is reached.

Detailed written procedures for operation, testing, maintenance and re-inspection exist and are regularly updated. These documents are available in electronic form as internal reports. Most of these reports are also available in English and have been a basis for the IAEA for implementation in overseas TRIGA type reactors through the TC Program.

Written procedures exist in the reactor operation manual for responding to operational occurrences and to accidents. Necessary engineering and technical support in safety related fields are available at the institute and through the Vienna University of Technology. Besides the in-house workshops business relations have been established with qualified institutions, companies and research institutes to respond to any technical problem which cannot be solved by the in-house facilities.

The license holder is obliged to report any incidents of safety significance to the regulatory body. In addition, the TRIGA reactor Vienna is a member of the incident reporting system of

the IAEA (IRSRR) and has established a model reporting and evaluation system which has been transferred to other TRIGA reactors through the IRSRR.

Operational experience is collected and shared among the TRIGA reactors worldwide as well as through the IAEA to the international research reactor community. The Institute of Atomic and Subatomic Physics is member of the

- TRIGA community (meets regularly)
- Arbeitsgemeinschaft Forschungsreaktoren (AFR - meets twice a year)
- Research Reactor Operators Group (RROG - meets once a year)
- Research Reactor Fuel Management Group (RRFM - meets once a year),
- International Group on Research Reactor (IGORR - meets every 18 month)
- European Atomic Energy Society (EAES-meets once a year)

The international experience is constantly exchanged and updated at these meetings. The result of this information exchange is reflected in the overall technical and organisational status of the Vienna TRIGA facility.

ACTIVITIES AND ACHIEVEMENTS REGARDING THE IMPROVEMENT OF SAFETY

Major achievements and changes since CNS Review Conference 2011

- Implementation of EU Council Directive 2009/71/EURATOM of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations and
- First steps towards the concentration of the competences of the authorities for nuclear safety and radiation protection:
    a) Sole responsibility of the Federal Ministry of Science and Research for the Austrian research reactor;
    b) Shifting of the competences for low risk applications from the districts to the provinces.

ANNEXES

Annex 1: Bilateral agreements in the field of nuclear safety and radiation protection

Annex 2: Multilateral agreements in the field of nuclear safety and radiation protection

Annex 1

Bilateral Agreements in the Field of Nuclear Safety and Radiation Protection

Belarus

Agreement on an exchange of information in the field of nuclear safety and radiation protection

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Republik Belarus über den Austausch von Informationen aus dem Bereich der nuklearen Sicherheit und des Strahlenschutzes)

BGBl. III 175/2005 entered into force in 19 September 2005.

Czech Republic

Protocol between the Government of the Republic of Austria and the Government of the Czech Republic amending the Agreement between the Government of the Republic of Austria and the Government of the Czechoslovak Socialist Republic to settle Issues of Common Interest in connection with Nuclear Safety and Radiation Protection.

(Protokoll zwischen der Regierung der Republik Österreich und der Regierung der Tschechischen Republik zur Änderung des Abkommens 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. III No. 71/2008, entered into force on 1 July 2008.

Agreement on mutual assistance in the event of disasters or serious accidents

(Vertrag zwischen der Republik Österreich und der Tschechischen Republik über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen)

BGBl III No. 215/2000, entered into force 1 November 2000.

Germany

Agreement on an exchange of information and experience in the field of radiation protection

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Bundesrepublik Deutschland über Informations- und Erfahrungsaustausch auf dem Gebiet des Strahlenschutzes)

BGBl. No. 128/1989 as amended in BGBl. No. 892/1994, entered into force in 11 December 1994.

Agreement on mutual assistance in the event of disasters or serious accidents
(Abkommen zwischen der Republik Österreich und der Bundesrepublik Deutschland über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen)
BGBl. No. 489/1992, entered into force in 6 August 1992.

Hungary

Agreement on the settlement of questions of mutual interest in connection with nuclear installations
(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. No. 454/1987, entered into force in 22 September 1987.

Agreement on mutual assistance in the event of disasters or serious accidents
(Abkommen zwischen der Republik Österreich und der Republik Ungarn über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen)
BGBl. III No. 76/1998, entered into force in 1 July 1998.

Liechtenstein

Agreement on mutual assistance in the event of disasters or serious accidents
(Abkommen zwischen der Republik Österreich und dem Fürstentum Liechtenstein über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücks fällen)
BGBl. No. 758/1995, entered into force in 1 January 1996.

Poland

Agreement on an exchange of information and co-operation in the field of nuclear safety and radiation protection
(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. No. 643/1990, entered into force in 1 December 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 related to nuclear installations
(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Union der Sozialistischen Sowjetrepubliken über die frühzeitige Benachrichtigung bei einem nuklearen Unfall und den Informationsaustausch über Kernanlagen)
BGBl. No. 130/1990 as amended in BGBl. No. 257/1994, entered into force in 26 March 1990 and 9 March 1994.

Slovakia

Agreement between Austria and Slovakia concerning questions of mutual interest in connection with nuclear safety and radiation protection
(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Slowakischen Republik zur Regelung von Fragen gemeinsamen Interesses im Zusammenhang mit der nuklearen Sicherheit und dem Strahlenschutz)
BGBl. No. 565/1990 as amended in BGBl. No. 1046/1994, entered into force in 1 January 1995.

Agreement on co-operation and mutual assistance in the event of disasters

(Vertrag zwischen der Republik Österreich und der Slowakischen Republik über die Zusammenarbeit und die gegenseitige Hilfeleistung bei Katastrophen)

BGBl. III No. 155/98, entered into force in 1 November 1998.

Slovenia

Agreement on an early exchange of information in the case of radiological dangers and on questions of mutual interest in the field of nuclear safety and radiation protection

(Abkommen zwischen der Republik Österreich und der Republik Slowenien über den frühzeitigen Austausch von Informationen bei radiologischen Gefahren und über Fragen gemeinsamen Interesses aus dem Bereich der nuklearen Sicherheit und des Strahlenschutzes)

BGBl. III No. 176/1998, entered into force in 1 December 1998.

Agreement on co-operation in the field of prevention and mutual assistance in the event of disasters or serious accidents

(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 No. 87/1998, entered into force in 1 July 1998.

Switzerland

Agreement on an exchange of information in the field of nuclear safety and radiation protection

(Abkommen zwischen der Regierung der Republik Österreich und dem Schweizerischen Bundesrat über den frühzeitigen Austausch von Informationen aus dem Bereich der nuklearen Sicherheit und des Strahlenschutzes)

BGBl. III No. 201/2000, entered into force in 1 January 2001.

Agreement on mutual assistance in the event of disasters or serious accidents

(Vertrag zwischen der Republik Österreich und der Schweizerischen Eidgenossenschaft über die gegenseitige Hilfeleistung bei Katastrophen oder schweren Unglücksfällen)

BGBl III No. 29/2002, entered into force 1 March 2002.

Tajikistan

Agreement between Austria and the former USSR concerning early notification and information in the case of nuclear accidents and exchange of information related to nuclear installations (used with Tajikistan)

(Abkommen zwischen der Regierung der Republik Österreich und der Regierung der Union der Sozialistischen Sowjetrepubliken über die frühzeitige Benachrichtigung bei einem nuklearen Unfall und den Informationsaustausch über Kernanlagen)

BGBl. No. 130/1990 and BGBl. III No. 4/1998, entered into force in 12 January 1998.

Ukraina

Agreement on an exchange of information and co-operation in the field of nuclear safety and radiation protection

(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)

BGBl. III No. 152/1998, entered into force in 18 August 1998.

Annex 2

Multilateral Agreements in the Field of Nuclear Safety and Radiation Protection

UN / IAEA

Convention on Early Notification of a Nuclear Accident

(Übereinkommen über die frühzeitige Benachrichtigung bei nuklearen Unfällen)
BGBl. No. 186/1988, entered into force in 20 March 1988.

Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency

(Übereinkommen über Hilfeleistung bei nuklearen Unfällen oder strahlungsbedingten Notfällen)
BGBl. No. 87/1990, entered into force in 22 December 1989.

Convention on Nuclear Safety

(Übereinkommen über nukleare Sicherheit)
BGBl. III No. 39/1998, entered into force in 24 November 1997.

Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

(Gemeinsames Übereinkommen über die Sicherheit der Behandlung abgebrannter Brennstäbe und die Sicherheit der Behandlung radioaktiver Abfälle)
BGBl. III No. 169/2001, entered into force in 11 September 2001.

Convention on the Physical Protection of Nuclear Material

(Übereinkommen über den physischen Schutz von Kernmaterial)
BGBl. No. 53/1989, 31 January 1989.

UN / ECE

Convention on Environmental Impact Assessment in a Transboundary Context

(Übereinkommen über die Umweltverträglichkeitsprüfung im grenzüberschreitenden Rahmen)
BGBl. III No. 201/1997, entered into force in 10 September 1997.

Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context

(Protokoll über die strategische Umweltprüfung zum Übereinkommen über die Umweltverträglichkeitsprüfung im grenzüberschreitenden Rahmen)
BGBl. III No. 50/2010, entered into force in 11 July 2010.

Convention on the Transboundary Effects of Industrial Accidents

(Übereinkommen über die grenzüberschreitenden Auswirkungen von Industrieunfällen)
BGBl. III No. 119/2000, entered into force in 19 April 2000.

Convention on the Protection and Use of Transboundary Watercourses and International Lakes

(Übereinkommen zum Schutz und zur Nutzung grenzüberschreitender Wasserläufe und internationaler Seen)
BGBl. No. 578/1996, entered into force in 23 October 1996.

Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention)

(Übereinkommen von Aarhus über den Zugang zu Informationen, die Öffentlichkeitsbeteiligung an Entscheidungsverfahren und den Zugang zu Gerichten in Umweltangelegenheiten samt Erklärung)
BGBl. III No. 88/2005, entered into force in 2005.

OTHER

Council of Europe, European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities

(Europäisches Rahmenübereinkommen über die grenzüberschreitende Zusammenarbeit zwischen Gebietskörperschaften)
BGBl. No. 52/1983, entered into force in 1983.

Danube River Protection Convention

Convention on Co-operation for the Protection and Sustainable Use of the Danube River
(Übereinkommen über die Zusammenarbeit zum Schutz und zur verträglichen Nutzung der Donau)
BGBl. III No. 139/1998, entered into force in 22 October 1998.

Alpine Convention

Convention on the Protection of the Alps
(Übereinkommen zum Schutz der Alpen)
BGBl. No. 477/1995 entered into force in 1995.

C.E.I. Convention

Cooperation Agreement on the Forecast, Prevention and Mitigation of Natural and Technological Disasters among the Government of the Republic of Austria, the Government of the Republic of Croatia, the Government of the Republic of Hungary, the Government of the Republic of Italy, the Government of the Republic of Poland, the Government of the Republic of Slovenia

(Abkommen über die Zusammenarbeit bei der Vorhersage, Verhütung und Milderung von Natur- und technologischen Katastrophen im Rahmen der Zentraleuropäischen Initiative (ZEI) 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)
BGBl. No. 228/2002 entered into force in 1 August 1994.