THE CROATIAN PARLIAMENT

Pursuant to Article 89 of the Constitution of the Republic of Croatia, I hereby issue the

DECISION

PROMULGATING THE ACT ON RADIOLOGICAL AND NUCLEAR SAFETY

I hereby promulgate the Act on Radiological and Nuclear Safety passed by the Croatian Parliament at its session on 15 November 2013.

Class: 011-01/13-01/247

Reg. No: 71/-05-03/1-13-2

Zagreb, 21 November 2013

The President
of the Republic of
Croatia

Ivo Josipović, m.p.

ACT

ON RADIOLOGICAL AND NUCLEAR SAFETY

I GENERAL PROVISIONS

Content

Article 1

This Act establishes measures for radiological safety, measures for physical protection and measures for non-proliferation of nuclear weapons in performing nuclear operations and operations involving sources of ionising radiation, for the purpose of ensuring adequate protection of individuals, society and the environment, in the present and in the future, against harmful effects of ionising radiation, and ensuring safe performance of operations involving ionising radiation sources, nuclear operations, radioactive waste management and physical protection of ionising radiation sources and nuclear installations.

Article 2

This Act contains provisions aligned with the following legal acts of the European Union:


*Exemption from the application of the Act*

**Article 3**

This Act does not apply to the natural level of ionising radiation of cosmic, Earth’s crust or human origin, where not modified by human activities, except in the case of the activities referred to in Article 9, paragraph 5 of this Act.
Definitions

Article 4

For the purposes of this Act the following terms have the following meanings:

*operation involving ionising radiation sources* is a human activity that can increase exposure of individuals to radiation from artificial sources of ionising radiation, or from natural ionising radiation sources when they are processed for their fissile or fertile properties, except in the case of an emergency exposure

*licence to use ionising radiation sources* is a decision whereby the State Office for Radiological and Nuclear Safety (hereinafter: the Office) authorises holders of the approval for performing operations involving ionising radiation sources to use a particular source of ionising radiation

*fission* is the process of splitting the nucleus of an atom into two parts of similar mass, resulting in the release of energy and emission of several neutrons

*physical inventory* means the sum of all the measured or estimated batch quantities of nuclear material on hand at a given time within a particular material balance area

*physical protection* means measures for preventing unauthorised access or damage, loss, theft or unauthorised transfer of ionising radiation sources, nuclear material or special equipment

*INES scale* is a categorisation of nuclear and radiological events, incidents and accidents as defined by the International Atomic Energy Agency

*interventions* means systematic, pre-programmed measures reducing the existing level of exposure to ionising radiation or the likelihood of exposure to ionising radiation resulting from an emergency event

*intervention levels* means levels of expected irradiation which could occur as the result of an emergency event or chronic exposure to ionising radiation in the environment, during which special protection measures are undertaken

*ionising radiation* means the transfer of energy in the form of electromagnetic waves or particles capable of producing pairs of positively and negatively charged particles – ions directly or indirectly

*disused source* means a radioactive source which is no longer used or intended to be used for a previously authorised operation

*spent nuclear fuel* means nuclear fuel that has been irradiated in a reactor core and permanently removed from it; spent fuel may be considered a usable source that may be re-processed, or may be intended for disposal if it is considered to be radioactive waste
exposed worker means a worker who occupies an exposed area while carrying out an operation

emergency means an event related to ionising radiation sources or safety of nuclear installations caused by circumstances which are no longer under control, and the result of which is or might be increased irradiation of an individual or a group of people or radioactive contamination of the environment

orphan source means a radioactive source which is not under supervision within the meaning of this Act, regardless of whether it used to be under supervision or has been abandoned, lost, transferred, stolen, or is the object of an unauthorised operation

ionising radiation source means any device, installation or substance generating or emitting ionising radiation, which is not excluded from the enforcement of this Act, including nuclear material

source material means uranium containing a mixture of isotopes occurring in nature, uranium depleted in the isotope 235, thorium, any of the foregoing in the form of metal, alloy, chemical compound or concentrate, any other material containing one or more of the foregoing in a concentration determined by the Office

beneficiary means a legal or natural person, a state administration body, any other state body or a body of a regional or local self-government unit that, in order to use an ionising radiation source, does not need an authorisation for carrying out a particular operation involving ionising radiation sources

principle of justification with regard to operations involving ionising radiation sources, or nuclear operations, is achieved if the operation involving exposure of humans to radiation provides benefits for the exposed individuals or the society which is in all circumstances greater than the damage incurred by the exposure to ionising radiation, bearing in mind the economic, social and other factors. The principle of justification with regard to an intervention is achieved in such a manner that each intervention must mitigate the consequences of an emergency, and in particular reduce the exposure of humans to ionising radiation due to an emergency

principle of optimisation of protection against ionising radiation with regard to operations involving ionising radiation sources, or nuclear operations, is achieved through implementation of protection measures which reduce the exposure of workers and other persons to ionising radiation arising from all operations involving ionising radiation sources, nuclear operations and all ionising radiation sources to the lowest reasonably achievable level within the prescribed limits, giving consideration to technical, organisational, economic, health and social factors. The principle of optimisation with regard to an intervention is achieved in such a manner that the implementation, scope and duration of each intervention must result in the highest positive effect that can be reasonably achieved

principle of dose limitation is implemented in such a manner that the exposure of an individual resulting from an operation involving ionising radiation sources, or nuclear operation, must be
limited, and the applied measures of radiological and nuclear safety stipulated by this Act must ensure that the exposure of persons to ionising radiation does not exceed the set limit values

*holder of the approval* is a legal or natural person, a state administration body, any other state body or a body of a local or regional self-government unit that has been granted a licence and that is responsible for performing a certain operation involving ionising radiation sources, or nuclear operation, or an operation involving management of radioactive waste, disused sources or spent nuclear fuel, or performing operations that are not considered operations involving ionising radiation sources but that may lead to increased exposure of workers and the population from natural sources of ionising radiation

*nuclear safety* means the achievement of adequate operating conditions for the purpose of preventing emergencies or mitigating consequences of an emergency and for the purpose of protection of workers, the general public and the environment against harmful effects of ionising radiation

*nuclear activities* are as follows:

a) use of nuclear material for energy-related purposes (nuclear reactor in a nuclear power plant, nuclear heating plant and nuclear propulsion)

b) use of nuclear material for research purposes (research reactor)

c) enrichment and production of nuclear fuel

d) processing of spent fuel

e) storage of radioactive waste at the site of a nuclear installation for the purpose of nuclear installation operation

h) storage of spent nuclear fuel

*nuclear fuel cycle* includes all activities connected with the production of nuclear energy, including: finding raw materials and production of nuclear fuel, use of nuclear fuel in a nuclear reactor, termination of operations of a nuclear installation and its decommissioning, management of radioactive waste originating from nuclear facilities, disposal of spent nuclear fuel, and all the research performed in relation to the aforementioned operations

*nuclear material* includes *special fissile material, source material* and *ores*. For the purpose of physical protection, nuclear material shall include only the special fissile material and source material subjected to physical protection measures in line with the Convention on the Physical Protection of Nuclear Materials (Official Gazette – International Treaties 5/01) and the ordinance regulating physical protection of nuclear materials

*Nuclear installation* means:
a) enrichment facility, nuclear fuel production facility, nuclear power plant, facility for processing irradiated nuclear fuel, research reactor, storage facility for spent nuclear fuel, and

(b) storage facility for radioactive waste situated at the site or directly related to the operations of the nuclear installation referred to in point a) of this definition

*enriched uranium* means uranium enriched in isotopes 235 or 233, that is, uranium containing isotopes 235 or 233, or both, in such a quantity that the ratio of the sum of these isotopes to isotope 238 is greater than the ratio of isotope 235 to isotope 238 found in nature

*enrichment* means proportion of the combined weight of uranium-233 and uranium-235 to the weight of the given uranium in total

*disposal facility* is a facility whose purpose is the disposal of radioactive waste, disused sources or spent nuclear fuel

*disposal* is the activity of controlled, permanent placement of radioactive waste, disused sources and spent nuclear fuel in a disposal facility with no intention to once again engage them in any operation involving radioactive substances

*approval for performance of operations involving ionising radiation sources* means a decision issued by the Office to a legal or natural person, a state administration body and any other state body, or a body of a local and regional self-government unit, authorising them to perform a particular operation involving ionising radiation sources, excluding nuclear operations

*approval for performance of nuclear operations* means a decision issued by the Office to a legal or natural person, a state administration body and any other state body, or a body of a local and regional self-government unit, authorising them to perform nuclear operations

*approval for performance of operations involving management of radioactive waste, disused sources and/or spent nuclear fuel* means a decision issued by the Office to a legal or natural person, a state administration body and any other state body, or a body of a local and regional self-government unit, authorising them to perform a particular operation related to the management of radioactive waste, disused sources and/or spent nuclear fuel

*depleted uranium* means uranium containing a lower amount of the isotope uranium-235 than natural uranium, i.e. less than 0.72%

*open radioactive source* is a radioactive source which is not a sealed radioactive source and may appear in the solid, liquid or gaseous state

*authorised nuclear safety expert* means a legal or natural person authorised pursuant to Office’s decision for carrying out particular professional tasks in the field of nuclear safety

*authorised professional technical service* means a legal person authorised pursuant to the Office’s decision for carrying out particular tasks in the field of radiological safety
irradiation means exposure to ionising radiation. It may be external or internal, depending on whether the source of ionising radiation is located outside or within the body.

batch data means the total mass of each element of nuclear material, and the isotope composition for plutonium and uranium.

exposed area is the area where the likelihood of exposure of an individual or group of people to ionising radiation exceeds the exposure limit prescribed per member of the public. An exposed area is divided into the supervised area and the controlled area.

member of the public means a natural person, excluding exposed workers, apprentices and students during their working hours and training.

special equipment means equipment and non-nuclear material which are used for peaceful nuclear purposes, but may also be employed to produce nuclear weapons.

special fissile material means plutonium-239, uranium-233, uranium enriched in isotopes 235 or 233, and any other material containing one or more of the aforementioned isotopes, and other fissile materials as determined by the Office.

natural radioactive substance having properties modified by technological processes is a natural substance in which the concentration of particular radionuclides has been modified by human intervention outside the nuclear fuel cycle, so that the activity or the concentration of radionuclide activity contained in such a radioactive substance exceeds the limit prescribed in an ordinance issued by the director of the Office.

generator of radioactive waste, disused sources or spent nuclear fuel means a legal or natural person whose operations result in the generation of radioactive waste, disused sources or spent nuclear fuel.

radioactive substances are substances containing, among other things, atoms having unstable nuclei, the decay of which produces ionising radiation.

radioactive source is a radioactive substance which is not exempted.

radioactive waste is the waste matter in the gaseous, liquid or solid state resulting from operations pertaining to disposal of radioactive waste, disused sources and spent nuclear fuel, operations involving ionising radiation sources, nuclear operations or operations of a nuclear installation that is no longer intended to be used, regardless of its physical form or chemical properties, containing radioactive substances whose activity, concentration or radiation exceeds the limits prescribed in an ordinance issued by the director of the Office.

radioactive contamination means a contamination of any material, area, environment or a member of the public by radioactive substances. As regards organisms, radioactive contamination also involves external contamination of the skin and internal contamination regardless of the method of introduction of radionuclides.
radiological safety includes measures aimed at reducing irradiation of an exposed worker or a member of the public, increasing operational safety in the course of work with ionising radiation sources, preventing circumstances which may cause an emergency and reducing potential harmful impacts to the minimum

radionuclide means an atom with a characteristic number of protons and neutrons, the energy state of whose nucleus has the feature of radioactivity, i.e. is not stable

ores, within the meaning of application of safety measures stipulated under this Act, are all the ores containing an average concentration of matter from which, using the appropriate chemical or physical process, it is possible to obtain source materials, i.e. all uranium ores that contain a minimum of 0.1% uranium, thorium ores containing a minimum of 3% thorium, and monazites containing a minimum of 10% thorium or 0.1% uranium

remediation means removal of radioactive contamination, disposal of radioactive sources or undertaking of any other indispensable measure in order to reduce the damage to people and the environment or eliminate further threats, hazards or damage

central storage installation is an installation for storage of radioactive waste and/or disused sources generated within the territory of the Republic of Croatia, for the demands of the entire territory of the Republic of Croatia

storage installation is an installation for storage of radioactive waste, disused sources or spent nuclear fuel for the purpose of performing operations related to the management of radioactive waste, disused sources and spent nuclear fuel

storage is the activity of controlled placement of radioactive waste, disused sources and spent nuclear fuel in an installation intended for storage, with the intent to reintroduce the radioactive waste, spent nuclear fuel and disused sources into any operation in the future

batch is a portion of nuclear material regarded as a unit for record-keeping purposes at a key measurement point, whose composition and quantity are defined by a single set of specifications or measurements

permanently exposed area means an area contaminated with radioactive materials to such an extent that removal of contamination would not be technically or financially justified

sealed radioactive source means a radioactive source sealed in an impenetrable shell made of non-radioactive substance so that the radioactive substance cannot come into contact with the environment

management of radioactive waste, disused sources and spent nuclear fuel implies any administrative and operational procedure involved in the operation of treatment, conditioning, handling, transport, storage and disposal, excluding transport outside the management site
material balance area means an area where it is possible, at a given time (when necessary), to perform physical inventory of nuclear material and, at any time, to determine the quantity of such material transferred into or out of the area.

Radiological and Nuclear Safety Council

Article 5

For the purpose of providing assessment of the state of radiological and nuclear safety in the Republic of Croatia and for the purpose of monitoring the work of the Office in the area of performance of operations pertaining to storage of radioactive waste and disused sources originating from the territory of the Republic of Croatia in the central storage installation, the Radiological and Nuclear Safety Council (hereinafter: Council) shall be established as an advisory body to the Croatian Parliament

Article 6

(1) The Council referred to in Article 5 of this Act shall perform the following activities:

a) issue opinions on proposals of acts regulating radiological and nuclear safety

b) submit proposals and opinions to the Croatian Parliament regarding:

– the state of radiological and nuclear safety in the Republic of Croatia

– organisation of nuclear and radiological safety in the Republic of Croatia

– the accession to and implementation of international treaties pertaining to the area of radiological and nuclear safety

– other aspects of radiological and nuclear safety in the Republic of Croatia.

(3) The Council shall consist of seven members, one of whom shall be its chairperson.

(4) The chairperson and other members of the Council shall be appointed and dismissed from office by the Croatian Parliament, at the proposal of the Government of the Republic of Croatia. Members of the Council shall be selected among experts in the area of radiological and nuclear safety for a term of four years.

(5) The vice-chairperson of the Council, following the proposal of the chairperson of the Council, shall be elected by the Council members, by majority vote.

(6) The Council’s work shall be regulated by its rules of procedure.

(7) Professional and technical activities for the Council shall be carried out by the Office.
II STATE OFFICE FOR RADIOLOGICAL AND NUCLEAR SAFETY

Competencies of the State Office for Radiological and Nuclear Safety

Article 7

(1) The Office, as a state administration body, shall be competent for activities pertaining to radiological and nuclear safety and shall perform activities pertaining to storage of radioactive waste and disused sources originating from the territory of the Republic of Croatia in the central storage installation.

(2) For the purpose of implementing radiological and nuclear safety measures, the Office shall:

1. approve performance of nuclear operations

2. approve performance of operations involving sources of ionising radiation

3. approve procurement, import, export, transport and transit of ionising radiation sources

4. approve the use of ionising radiation sources

5. conduct independent safety analyses and issue decisions or approvals regarding the location, design, construction, use and decommissioning of an installation in which a nuclear operation shall be performed

6. participate in the procedure for issuing location permits and building permits and in the procedure for issuing use permits for structures that accommodate ionising radiation sources or where operations involving ionising radiation sources are carried out in accordance with a special regulation

7. approve and supervise professional activities of authorised professional technical services and authorised nuclear safety experts

8. organise and supervise, and where necessary also carry out tests on the presence of the type and intensity of ionising radiation in the environment, food, feed and general use items under regular conditions and in cases of suspected emergency

9. keep records on the licences, approvals, decisions and certificates which it has issued within the scope of its authority, and keep and supervise registers on ionising radiation sources, holders of approvals for performing operations involving ionising radiation sources and nuclear operations, beneficiaries, exposed workers, levels of irradiation of exposed workers and levels of irradiation of persons subject to medical exposure and of other persons
10. conduct inspection activities related to supervision of implementation of the provisions of this Act and regulations adopted on the basis thereof

11. develop technical platforms for training curricula and programmes for regular and additional education as well as for refreshment of knowledge in the field of radiological safety

12. ensure expert assistance in the implementation of the regulation on the measures for protection against ionising radiation and interventions in emergencies

13. inform the media, competent bodies, organisations, associations and international institutions on emergencies connected with ionising radiation sources

14. provide expert assistance and cooperation in activities aimed at combating illicit trafficking of nuclear and other radioactive material to state administration bodies competent for such activities

15. monitor safety conditions at nuclear power plants in the region and conduct assessments of the threat of nuclear accidents in those plants, in particular in the Krško Nuclear Power Plant in Slovenia and Paks Nuclear Power Plant in Hungary

16. provide dosimetric assessments of the exposure to ionising radiation of exposed workers, of the population subject to medical exposure and exposure to ionising radiation originating from environmental radionuclides

17. fulfil the commitments which the Republic of Croatia has assumed according to international conventions, contracts and agreements pertaining to the protection against ionising radiation, nuclear safety, nuclear damage and the application of protective measures aimed at non-proliferation of nuclear weapons

18. cooperate with international and national organisations and societies active in the area of radiological and nuclear safety, and appoint its own expert representatives to take part in the work of such organisations and societies or to monitor their work

19. coordinate technical cooperation with the International Atomic Energy Agency for all the participants from the Republic of Croatia

20. stimulate and support scientific research and development activities, encourage development, statistic and other research in accordance with demands and requirements pertaining to the development of radiological and nuclear safety in the Republic of Croatia

21. issue instructions for the implementation of international recommendations and standards, and design standards and methods for monitoring the state of radiological and nuclear safety

22. perform management of the central storage installation
23. carry out other activities falling under its competence pursuant to this Act, regulations adopted on the basis thereof and other regulations.

Appointment of the head

Article 8

(1) The head of the Office shall be its director.

(2) The director shall be appointed by the Government of the Republic of Croatia.

(3) The director shall be responsible to the Government for his/her work.

III APPROVALS AND LICENCES

Approval for performance of operations involving ionising radiation sources

Article 9

(1) Operations involving ionising radiation sources shall not begin before the Office issues an approval.

(2) The approval referred to in paragraph 1 of this Article shall be granted or denied by means of a decision against which no appeal may be filed, but an administrative dispute may be initiated.

(3) The director of the Office shall prescribe by means of an ordinance the list of operations and the list of documents which, in the procedure of issuance of the approval referred to in paragraph 1 of this Article, prove that the conditions stipulated by this Act are fulfilled.

(4) The approval referred to in paragraph 1 of this Article shall be issued for a maximum period of ten years.

(5) The director of the Office shall prescribe by means of an ordinance the list of activities not included in operations involving ionising radiation sources, which may lead to an increased exposure of workers and general population to natural ionising radiation sources, and conditions for performance of such activities.

Licence to use ionising radiation sources

Article 10

(1) The holder of the approval for performance of operations referred to in Article 9, paragraph 1 of this Act shall not start using the ionising radiation source prior to issuance of a licence for use of that source by the Office.
(2) The licence referred to in paragraph 1 of this Article shall be granted or denied by means of a decision against which no appeal may be filed, but an administrative dispute may be initiated.

(3) The director of the Office shall prescribe by means of an ordinance the list of documents which, in the procedure of issuance of the licence referred to in paragraph 1 of this Article, prove that the conditions stipulated by this Act are fulfilled.

(4) The licence referred to in paragraph 1 of this Article shall be issued for a maximum period of five years.

**Exemption from the requirement to obtain the approval or licence for use**

**Article 11**

(1) The director of the Office shall prescribe by means of an ordinance the criteria for exemption from the requirement to obtain the approval for performance of an operation and the licence to use radioactive sources and electric devices generating ionising radiation.

(2) The provisions of Articles 9 and 10 of this Act shall not apply to substances or devices contaminated by radionuclides whose concentration does not exceed the concentrations prescribed in the ordinance issued by the director of the Office.

**Announcement of the intention to perform operations**

**Article 12**

The intention to perform a nuclear operation, to execute excavation of ores or separation and conversion of uranium and thorium, and to store radioactive waste above or below the Earth's surface without the intent to reuse the stored waste shall be announced to the Office at least two years prior to the planned commencement of performance of the operations or activities.

**Approval for performance of nuclear operations**

**Article 13**

(1) Nuclear operations shall not begin prior to the issuance of the approval by the Office.

(2) The approval referred to in paragraph 1 of this Article shall be granted or denied by means of a decision against which no appeal may be filed, but an administrative dispute may be initiated.

(3) The director of the Office shall prescribe by means of an ordinance the list of documents which, in the procedure of issuance of the approval referred to in paragraph 1 of this Article, prove that the conditions stipulated by this Act are fulfilled.

(4) The approval referred to in paragraph 1 of this Article shall be issued for a maximum period of ten years.
Analysis of the safety of the area selected for the location of a nuclear installation

Article 14

(1) Selection of an area for the location of a nuclear installation shall be carried out on the basis of a special safety analysis, which shall be used to assess the following:

– all the factors in the area where a nuclear installation would be located which may affect nuclear safety of the installation during its operations, and

– effects of the operations on the population and the environment.

(2) The director of the Office, in cooperation with the minister competent for environmental protection, shall prescribe by means of an ordinance the list of factors in the area selected for the location of a nuclear installation that may impact nuclear safety and the detailed content and scope of the analysis referred to in paragraph 1 of this Article.

Construction works affecting nuclear safety

Article 15

(1) Along with the application for issuing a location, building and use permit for a nuclear installation, the legal person intending to construct the nuclear installation shall submit an approval issued by the director of the Office.

(2) Construction of the installation referred to in paragraph 1 of this Article means:

– construction, reconstruction and decommissioning of a nuclear installation, and

– execution of construction works which affect nuclear safety in an area of limited use due to a nuclear installation, which may have an impact on nuclear safety.

(3) The director of the Office shall prescribe by means of an ordinance the nuclear safety criteria for issuance of the approval for the construction of a nuclear installation.

Approval for the construction of a nuclear installation

Article 16

(1) Along with the application for issuing the approval referred to in Article 15 of this Act, the legal person intending to construct a nuclear installation shall, in addition to the project documentation, submit a preliminary safety report and the opinion of an authorised nuclear safety expert on the nuclear safety measures for the construction or decommissioning of the installation.
(2) The legal person intending to construct a nuclear installation shall ensure that the preliminary safety report is amended should any changes of the status referred to in the preliminary safety report arise in the course of construction of the installation or during the period of its trial operations.

(3) The approval referred to in Article 15 of this Act shall be issued along with a project for obtaining the location, building and use permit.

(4) The Office shall approve the preliminary safety report referred to in paragraph 1 of this Article in the procedure of issuing the approval referred to in paragraph 3 of this Article.

(5) The director of the Office shall prescribe by means of an ordinance the details of the content of the project documentation and the preliminary safety report referred to in paragraph 1 of this Article.

(6) The approval referred to in Article 15 of this Act shall be issued within a period of 15 days upon receipt of a complete application.

(7) The approval referred to in Article 15 of this Act shall also contain conditions for the trial operations, the method of its implementation and the period of its duration.

(8) The approval referred to in Article 15 of this Act shall be withdrawn if, within two years from the day on which the approval became final and effective, the construction of the installation referred to in Article 15 of this Act has not commenced.

(9) Along with the safety report referred to in paragraph 1 of this Article, the investor shall submit a physical protection plan pursuant to the ordinance referred to in Article 66 paragraph 2 of this Act, as a separate and confidential document in accordance with regulations on data confidentiality.

Trial operations of a nuclear installation

Article 17

(1) Prior to its putting into regular operation, every nuclear installation must undergo a period of trial operations.

(2) In order to start a period of trial operations of a nuclear installation, it shall be necessary to obtain the approval from the director of the Office.

(3) Along with an application for obtaining the approval to start the period of trial operations, it shall be necessary to submit the final safety report and the opinion of an authorised nuclear safety expert on the nuclear safety measures and other prescribed documentation.
(4) The final safety report and other submitted documentation referred to in paragraph 3 of this Article shall be approved by the director of the Office in the procedure for issuing the approval to start the period of trial operations.

(5) The director of the Office shall prescribe by means of an ordinance the details on the content of the application for obtaining the approval to start the period of trial operations referred to in paragraph 2 of this Article and the content of the documentation referred to in paragraph 3 of this Article for the area of nuclear safety.

(6) The approval of trial operations may, at the applicant’s request, be extended if all the conditions laid down for its issuance remain fulfilled after the approval has expired.

Approval of the use permit

Article 18

(1) A prior approval of the director of the Office shall be obtained for:

1. commencement or termination of operations of a nuclear installation,

2. commencement or termination of decommissioning of a nuclear installation.

(2) The director of the Office, in cooperation with the minister competent for environmental protection and the minister competent for construction and physical planning shall prescribe by means of an ordinance the details on the content of the application and the documentation for obtaining the approval referred to in paragraph 1 of this Article.

Revoking the approval for performance of operations involving ionising radiation sources, the licence to use ionising radiation sources and the approval for performance of nuclear operations

Article 19

The Office may revoke the approval for performance of operations involving ionising radiation sources referred to in Article 9 paragraph 1 of this Act, the licence to use ionising radiation sources or the approval for performance of nuclear operations if it has established that the licence/approval holder or beneficiary does not meet the requirements prescribed pursuant to this Act and subordinate regulations adopted on the basis thereof.

Responsibilities of holders of the approval for performance of operations involving ionising radiation sources and holders of the approval for performance of nuclear operations

Article 20

The holder of the approval and the beneficiary shall be responsible for the implementation of radiological and nuclear safety measures and shall bear the costs of their implementation.
Import, export, transport and transit

Article 21

(1) Import, export, transport and transit of ionising radiation sources, special equipment, radioactive waste, spent nuclear fuel and disused sources may be carried out by legal and natural persons on the basis of an approval or a licence issued by the Office.

(2) The legal and natural persons referred to in paragraph 1 of this Article may perform transport or transit if they meet the requirements stipulated pursuant to this Act and subordinate regulations adopted on the basis thereof, as well as the requirements stipulated pursuant to acts regulating transport of dangerous goods and subordinate regulations adopted pursuant to the acts regulating transport of dangerous goods; and in relation to transport at the sea, if they meet the requirements stipulated pursuant to acts and subordinate regulations regulating the area of maritime affairs.

(3) The director of the Office shall prescribe by means of an ordinance the list of documents which, in the procedure of issuance of the approval or licence referred to in paragraph 1 of this Article, prove that the conditions stipulated pursuant to this Act are fulfilled.

(4) The approval or licence referred to in paragraph 1 of this Article shall be issued or denied by means of a decision against which no appeal may be filed, but an administrative dispute may be initiated.

(5) The approval or licence referred to in paragraph 1 of this Article shall be issued for a maximum period of six months.

(6) The director of the Office shall prescribe by means of an ordinance the methods to be used for financial warranties and for notification of the transport of ionising radiation sources, radioactive waste and spent nuclear fuel, methods and deadlines for notification of competent authorities in other countries involved in transport, conditions of radiological and nuclear safety and verification of capacities of other countries for the receipt or sending of consignments containing radioactive waste and spent nuclear fuel and ionising radiation sources.

Article 22

(1) Supervision of import and export of materials justifiably suspected to be contaminated by radionuclides or to contain radioactive sources shall be performed by the border police and Customs Administration of the Ministry of Finance, in cooperation with the Office.

(2) The director of the Office, in cooperation with the minister competent for finances and the minister competent for internal affairs shall prescribe by means of an ordinance the manner and procedure of the supervision referred to in paragraph 1 of this Article.
IV RADIOLOGICAL AND NUCLEAR SAFETY

1. Principles of radiological safety

   Article 23

The holder of the approval and the beneficiary shall ensure that the measures for protection against ionising radiation implement the principles of justification, optimisation and dose limitation.

2. Measures of radiological safety

   Dose limits

   Article 24

The director of the Office shall prescribe by means of an ordinance the dose limits and recommended dose limits for members of the public, exposed workers, certain organs or tissues of the human body, apprentices and students trained to work with ionising radiation sources, limits of exposure in special circumstances due to implementation of emergency interventions, and limits for supervised and controlled areas.

   Age limits for exposed workers, apprentices and students

   Article 25

(1) Persons under the age of 18 shall not work in an exposed area.

(2) Persons younger than 18 and older than 16 may be trained or educated for work with ionising radiation sources in an exposed area, but shall not be exposed to radiation exceeding the limits stipulated pursuant to the ordinance referred to in Article 24 of this Act.

   (1) Persons under the age of 16 undergoing training or education for work with ionising radiation sources shall not enter an exposed area.

   Protection during pregnancy and breastfeeding

   Article 26

(1) The holder of the approval or the beneficiary shall be obliged to warn exposed female workers, apprentices and students trained to work with ionising radiation sources of the need for early notification in the case of pregnancy.

(2) Once an exposed female worker, apprentice or student trained to work in an exposed area has notified the holder of the approval or the beneficiary of her pregnancy, the holder/beneficiary shall arrange such working conditions for the exposed female worker that the equivalent dose for
the baby is as low as reasonably achievable, with a minimum likelihood that the equivalent dose would reach 1 mSv until the end of the pregnancy.

(3) Breastfeeding women shall not occupy a work place where there is a possibility of radioactive contamination.

**Medical exposure**

**Article 27**

(1) The dose limits specified in this Act shall not apply to medical exposure.

(2) The director of the Office, in cooperation with the minister competent for health, shall prescribe by means of an ordinance the conditions, method and measures for protection of persons exposed to medical irradiation.

**Personal dose measurement**

**Article 28**

(1) Measurement of the personal dose of exposed workers or apprentices or students shall be performed systematically by individual measurements of external irradiation, and in the case of workers working with open radioactive sources internal irradiation must also be measured and/or assessed.

(2) The director of the Office, in cooperation with the minister competent for health, shall prescribe by means of an ordinance the method, scope and deadlines of the measurement of personal doses referred to in paragraph 1 of this Article.

**Medical fitness**

**Article 29**

(1) Pupils, students and interns educated for work in an exposed area, apprentices working in an exposed area and exposed workers shall fulfil special health requirements.

(2) Medical fitness for working in an exposed area must be checked among pupils, students and interns prior to the beginning of their education for work in an exposed area and in apprentices and exposed workers prior to the beginning of their work in an exposed area, as part of the preliminary medical examination.

(3) Medical fitness of the persons referred to in paragraph 1 of this Article shall be checked as part of a regular or extraordinary medical examination.

(4) The director of the Office, in cooperation with the minister competent for health and the director of the Croatian Institute for Health Protection and Safety at Work, shall prescribe by
means of an ordinance the medical requirements to be fulfilled by the persons referred to in paragraph 1 of this Article, frequency of examinations, content, manner and deadlines for keeping data on such examinations.

Article 30

Examination of medical fitness of the persons referred to in Article 29 of this Act shall be carried out by medical institutions practicing occupational medicine, companies practicing occupational medicine and private occupational medicine practitioners authorised by the minister competent for health.

Obligations of educational institutions

Article 31

(1) Institutions providing curricula for training and education of candidates for carrying out operations involving ionising radiation sources shall provide for their candidates the examination of medical fitness by the medical institutions, companies and private practitioners referred to in Article 30 of this Act and the measurement of personal doses in the course of training and education.

(2) Institutions providing curricula for training and instruction of candidates for carrying out operations involving ionising radiation sources shall not enrol candidates who do not meet the requirements set out in the ordinance referred to in Article 29 paragraph 4 of this Act.

Requirements concerning premises and devices

Article 32

(1) Premises, devices and installations which accommodate ionising radiation sources or where operations involving ionising radiation sources and/or activities referred to in Article 9 paragraph 5 of this Act take place, as well as ionising radiation sources, protective equipment and personal protective equipment, shall comply with the requirements ensuring radiological safety and protection of people and the environment against ionising radiation and contamination by radioactive substances.

(2) The director of the Office shall prescribe by means of an ordinance the requirements referred to in paragraph 1 of this Article.

(3) The ordinance specifying the requirements for the design, construction, use and decommissioning of structures which accommodate ionising radiation sources or in which operations involving ionising radiation sources take place and/or activities referred to in Article 9, paragraph 5 of this Act shall be issued by the director of the Office, in cooperation with the minister competent for construction, and in the part relating to physical safety, also with the minister competent for internal affairs.
Obligations of the holder of the approval

Article 33

The holder of the approval shall ensure the following:

– examination of medical fitness of exposed workers, apprentices and students trained and educated to work with ionising radiation sources

– measurement of personal doses of exposed workers and availability of data on the monitoring results to the exposed workers

– training on the application of measures for protection against ionising radiation for exposed workers

– training on the handling of ionising radiation sources for workers who handle ionising radiation sources

– inspection of ionising radiation sources and working conditions and measurement of prescribed parameters

– quality assurance programme and its implementation

– quality control

– personal protective devices and protective equipment for exposed workers and regular examination of proper working order of such devices

– regular calibration and examination of proper working order of measuring instruments and manner of their use

– checking of radioactive contamination of persons, objects, the environment, premises and air in the premises where operations are carried out or where ionising radiation sources are located

– adoption, regular updating and proceeding pursuant to the legal act regulating organisation and implementation of radiological safety measures

– adoption and regular updating of the risk analysis

– adoption, regular updating and proceeding pursuant to written instructions for working in exposed areas

– informing exposed workers on health risks associated with the work performed in an exposed area.
Method, scope and deadlines for measurements and inspections, content of the report, frequency, deadlines and reporting procedure

Article 34

The director of the Office shall prescribe by means of an ordinance the method, scope and deadlines for measurement of personal doses of exposed workers and persons exposed to medical irradiation, inspection of ionising radiation sources and working conditions, measurement of prescribed parameters, checking of proper working order of personal protective devices and equipment, checking of proper working order of measuring instruments, checking of radioactive contamination of persons, objects, the environment, premises and air in the premises where operations involving ionising radiation sources are carried out or where radioactive sources are situated, and the mandatory content of the report on inspections, examinations and measurements as well as the frequency, deadlines and procedure for reporting.

Obligation to implement self-protection measures

Article 35

In the course of work, exposed workers shall implement all prescribed and standard self-protection measures against ionising radiation and those for protection of other persons, shall use protective equipment and devices for measuring personal doses and shall use and implement any other measures necessary for protection against ionising radiation.

Person responsible for protection against ionising radiation

Article 36

(1) The holder of the approval and the beneficiary shall be obliged to appoint a person responsible for protection against ionising radiation.

(2) Professional qualifications of the person responsible for protection against ionising radiation shall comply with the requirements set out in the ordinance referred to in Article 47, paragraph 6 of this Act.

(3) The person responsible for protection against ionising radiation shall perform the following:

– implement internal control of the application of radiological safety measures

– provide for the use of protective equipment and devices for measurement of personal doses of exposed workers

– provide for the carrying out of examination of medical fitness of exposed workers
– provide for professional competency of exposed workers to handle ionising radiation sources, provide for application of radiological safety measures and for refreshment of knowledge of exposed workers

– provide for inspection of ionising radiation sources by prescribed deadlines

– attend inspection supervision and respond to inspector's findings

– ensure keeping of all prescribed records

– organise implementation of protective measures in emergency cases.

(4) The person responsible for protection against ionising radiation shall without delay inform the Office of a violation of the provisions of this Act and subordinate regulations adopted on the basis thereof that threatens the life and health of people.

(5) Where violation of the provisions of this Act and subordinate regulations adopted on the basis thereof threatens the nature or environment, the person responsible for protection against ionising radiation shall be obliged to immediately notify about this the state administration body competent for environmental protection and the Office.

**Prohibition to use radioactive substances**

Article 37

(1) Intentional addition of radioactive substances to general use items, as well as import and export of such goods shall be prohibited.

(2) Working and living premises shall not be used if they are contaminated by radionuclides above the limits prescribed in an ordinance issued by the director of the Office.

(3) Import, export and placing on the market of general use items shall be prohibited if they are contaminated by radionuclides above the limits prescribed in an ordinance issued by the director of the Office.

3. Nuclear safety

**Prohibition and responsibility for the safety of nuclear installations**

Article 38

(1) A nuclear installation shall not be constructed, tested, commissioned or used in any other way unless all the approvals and licences have been issued pursuant to this Act.

(2) The holder of a use permit for the nuclear installation referred to in paragraph 1 of this Article shall be responsible for nuclear safety of the installation referred to in paragraph 1 of this
Article, including safety when handling radioactive substances, radioactive waste or spent nuclear fuel located or generated in the aforementioned installations.

*Use of operating experience*

**Article 39**

(1) The holder of the approval shall ensure implementation of programmes for recording and analysing operating experiences at the nuclear installation.

(2) When performing assessment, examination and improvement of nuclear safety of the installation, the holder of the approval shall take into account the conclusions of the programmes referred to in paragraph 1 of this Article.

(3) The director of the Office shall prescribe for each nuclear installation the method, scope and frequency of reporting on the implementation of programmes for recording and analysing operating experiences in nuclear installations.

*Periodic safety review*

**Article 40**

(1) The holder of the approval shall ensure regular, complete and systematic assessment and examination of nuclear safety measures at the nuclear installation by means of periodic safety reviews.

(2) The director of the Office shall prescribe by means of an ordinance the frequency, content and scope, duration and method of carrying out periodic safety reviews and the method of reporting on the aforementioned reviews for nuclear installations.

*Reporting on the installation’s operations*

**Article 41**

(1) The holder of the approval shall submit regular reports on the operation of the nuclear installation to the Office, in particular regarding:

– equipment failures which may cause an emergency, actual emergencies and measures taken for mitigating the consequences of failures or emergencies

– employees’ errors made in the course of installation’s operations which may cause an emergency

– deviations from operational conditions and limitations

– all other events or operational circumstances affecting the nuclear safety of an installation.
(2) The director of the Office shall prescribe by means of an ordinance the content, scope, method and frequency of the reports referred to in paragraph 1 of this Article.

4. Authorised professional technical services and authorised nuclear safety experts

   Authorised professional technical services

   Article 42

   (1) Tasks pertaining to radiological safety shall be performed by authorised professional technical services authorised by means of Office’s decision.

   (2) The Office shall revoke the authorisation of an authorised professional technical service if it has been established that the requirements pursuant to which the authorisation was granted are not being met.

   (3) The director of the Office shall prescribe by means of an ordinance the list of tasks pertaining to radiological safety, requirements to be met by authorised professional technical services and the manner of granting authorisation.

   Authorised nuclear safety experts

   Article 43

   (1) Authorised activities of nuclear safety shall be performed by the nuclear safety experts authorised by Office’ decision for an individual nuclear safety area or for multiple areas, for a period of not longer than five years.

   (2) The Office shall revoke the authorisation of an authorised nuclear safety expert if it has been established that the authorised expert does not meet the requirements pursuant to which the authorisation was granted.

   (3) The director of the Office shall issue an ordinance stipulating the requirements for obtaining authorisation for performing individual tasks pertaining to nuclear safety, the records of authorised experts, the method and scope of regular and extraordinary reporting and other requirements relating to the assessment of nuclear safety to be met by the authorised experts for an individual nuclear safety area.

Foreign legal or natural persons

   Article 44

   (1) A foreign legal or natural person may be granted authorisation for performance of activities of the technical service referred to in Article 42 of this Act and the nuclear safety expert referred to in Article 43 of this Act if they possesses an authorisation issued by the competent authority of
the country in which they are registered based on conditions that are at least identical to those stipulated pursuant to this Act.

(2) Eligibility of the foreign legal or natural persons referred to in paragraph 1 of this Article shall be established by the Office.

5. Quality assurance

Article 45

(1) The holder of the approval and the beneficiary shall be obliged to establish and implement and to regularly update a quality assurance programme.

(2) The director of the Office shall prescribe by means of an ordinance the content of the quality assurance programme referred to in paragraph 1 of this Article, the manner, scope and deadlines for verifying the quality.

Article 46

(1) The holder of the approval shall plan and systematically implement measures for meeting the quality requirements for the nuclear installation, i.e. for constituent parts, systems for management and control of technological processes, and for constructions, including computer software and maintenance.

(2) For the purpose of quality assurance, the holder of the approval referred to in paragraph 1 of this Article shall establish and implement a quality assurance programme.

(3) The director of the Office shall prescribe by means of an ordinance the requirements pertaining to the content and form of the quality assurance programmes for nuclear installations.

6. Professional competency

Article 47

(1) Workers handling ionising radiation sources shall undergo adequate professional training for handling ionising radiation sources.

(2) Exposed workers and workers handling ionising radiation sources shall undergo special professional training on the application of radiological safety measures.

(3) Exposed workers and workers who handle ionising radiation sources shall undergo the training referred to in paragraph 2 of this Article pertaining to the application of radiological safety measures in the course of their regular schooling or as an additional training.

(4) Exposed workers and workers handling ionising radiation sources shall periodically refresh their knowledge on the application of radiological safety measures.
(5) The additional training referred to in paragraph 3 of this Article and the refreshment of knowledge referred to in paragraph 4 of this Article shall be organised and conducted by the legal persons that have obtained a certificate from the Office indicating their compliance with the prescribed requirements.

(6) The director of the Office shall prescribe by means of an ordinance the conditions, deadlines and manner of acquiring the professional training referred to in paragraph 1 of this Article, the special professional training referred to in paragraph 2 of this Article and the refreshment of knowledge on the application of radiological safety measures referred to in paragraph 5 of this Article.

Article 48

(1) Throughout the operating lifetime of a nuclear installation, the holder of the approval must ensure a sufficient number of qualified workers with suitable education, training and additional training for performance of all activities carried out in a nuclear installation and for implementation of nuclear safety measures.

(2) The activities and tasks pertaining to the management of technological processes in a nuclear installation referred to in paragraph 1 of this Article and to the supervision of such management shall be carried out by workers who meet the requirements related to professional qualifications stipulated in an ordinance issued by the director of the Office.

(3) The holder of the approval for a nuclear installation must ensure regular refreshment of professional knowledge of qualified workers and check their competency.

V RADIOACTIVE WASTE AND SPENT NUCLEAR FUEL

Management of radioactive waste, disused sources and spent nuclear fuels

Article 49

(1) Radioactive waste and spent nuclear fuel generated in the territory of the Republic of Croatia must be disposed in a long-term, sustainable manner in the territory of the Republic of Croatia.

(2) The provision of paragraph 1 of this Article shall not apply in the following cases:

– where bilateral agreements concluded prior to the date of the entry into force of this Act permit disposal of radioactive waste and spent nuclear fuel in the territory of another state, or

- where disposal of radioactive waste and spent nuclear fuel in the territory of another state guarantees equal or greater safety than the one guaranteed under Croatian laws and practice.

(3) Generators of radioactive waste, disused sources or spent nuclear fuel shall ensure that:
– the radioactive waste, disused sources or spent nuclear fuel are disposed of in the prescribed manner, and

– transfer of the burden of disposal of radioactive waste, disused sources or spent nuclear fuel to future generations is avoided to the greatest possible extent.

(4) Generators of radioactive waste, disused sources or spent nuclear fuel shall ensure that waste radioactive substances are generated in the smallest possible quantities.

(5) Generators of radioactive waste, disused sources or spent nuclear fuel shall ensure disposal thereof and bear the incurred costs.

(6) In case of application of the provision of paragraph 2 of this Article, prior to disposal of radioactive waste and/or spent nuclear fuel in a foreign territory, the Republic of Croatia shall notify the European Commission on the content of the valid agreement and undertake all reasonable measures to ensure the following:

– that the state in which disposal is intended has concluded an agreement with the European Commission covering radioactive waste and spent nuclear fuel or that it has signed the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Official Gazette – International Treaties 3/99),

– that the state in which disposal is intended has a valid programme of management and disposal of radioactive waste, the objectives of which represent a high security level, at least equivalent to the one prescribed by Croatian legislation.

(7) In case of application of the provision of paragraph 2 of this Article, the disposal facility in the state in which disposal is intended must be authorised to accept the radioactive waste intended to be shipped, must be in operation prior to acceptance of the radioactive waste consignment and must be managed in line with the requirements contained in the programme of management and disposal of radioactive waste of the state where the disposal facility is located.

(8) The conditions and manner of management of radioactive waste, disused sources and spent nuclear fuel, the obligation to keep records thereof, the content, manner of keeping and time periods for the storing of such records, the scope and method of reporting shall be stipulated in an ordinance issued by the director of the Office in cooperation with the minister competent for environmental and nature protection, and in the part pertaining to constructions also with the minister competent for construction and physical planning.

Approval for performing operations involving management of radioactive waste, disused sources and spent nuclear fuel

Article 50
(1) The operations involving management of radioactive waste, disused sources and spent nuclear fuel shall not commence prior to the issuance of the approval for such activity by the Office.

(2) The approval referred to in paragraph 1 of this Article shall be granted or denied by means of a decision against which no appeal may be filed, but an administrative dispute may be initiated.

(3) The approval referred to in paragraph 1 of this Article shall be issued for a maximum period of ten years.

(4) The director of the Office shall prescribe by means of an ordinance the list of operations involving management of radioactive waste, disused sources and spent nuclear fuel, the list of documents which prove that the requirements prescribed pursuant to this Act are met in the procedure of granting the approval referred to in paragraph 1 of this Article and the conditions for performing the operations referred to in paragraph 1 of this Article.

Disposal and storage pursuant to bilateral commitments

Article 51

(1) The Government of the Republic of Croatia, following Office’s proposal, shall by means of a decision, designate the legal person to carry out activities pertaining to disposal.

(2) The Government of the Republic of Croatia, following Office’s proposal, shall by means of a decision, designate the legal person to carry out activities pertaining to storage of radioactive waste and spent nuclear fuel generated out of the territory of the Republic of Croatia, whose obligation regarding disposal ensues from bilateral agreements concluded prior to the date this Act entered into force.

(3) The legal person referred to in paragraphs 1 and 2 of this Article shall be responsible for its work to the Government of the Republic of Croatia.

(4) The manner of financing the legal person referred to in paragraphs 1 and 2 of this Article shall be prescribed in a regulation issued by the Government of the Republic of Croatia.

Financing the management of radioactive waste, disused sources and spent nuclear fuel

Article 52

(1) The work of the legal person that will perform the activities of disposal referred to in Article 51 of this Act shall be financed from the designated fund established by the Act on the Fund for Financing the Decommissioning of the Krško Nuclear Power Plant and the Disposal of KNPP Radioactive Waste and Spent Nuclear Fuel.
(2) Setting up of the central storage installation for radioactive waste and disused sources generated in the territory of the Republic of Croatia shall be financed from the state budget of the Republic of Croatia.

(3) The director of the Office shall prescribe by means of an ordinance the amount of fees for disposal of radioactive waste and disused sources originating from the territory of the Republic of Croatia.

_Prohibition to import radioactive waste and spent nuclear fuel_

Article 53

Import of radioactive waste, disused sources and spent nuclear fuel not generated in the Republic of Croatia shall be prohibited, unless otherwise regulated by international agreements.

_Strategy for management of radioactive waste, spent nuclear fuel, disused sealed radioactive sources and ionising radiation sources which are not intended for further use_

Article 54


(2) The Office shall propose the Strategy referred to in paragraph 1 of this Article to the Government of the Republic of Croatia.

(3) The Office shall propose and coordinate regular updating of the Strategy referred to in paragraph 1 of this Article, taking into account the best technical and scientific accomplishments, recommendations and experiences acquired in the period prior to the revision and shall monitor implementation of the Strategy referred to in paragraph 1 of this Article and submit reports to the Government of the Republic of Croatia on the implementation of the Strategy referred to in paragraph 1 of this Article.

Article 55

(1) The Office shall coordinate preparation of the Strategy referred to in Article 54 of this Act.

(2) The Strategy referred to in Article 54 of this Act shall contain at least the following:

– generation of radioactive waste, disused sources and spent nuclear fuel shall be limited to the minimum reasonably achievable amount in the sense of the volume, organisation of technology and manner of management and decommissioning, including reuse of materials
– dependency between the phases of generation of radioactive waste, disused sources and spent nuclear fuel and their management shall be taken into account in the sense of rationalising procedures and increasing efficiency and radiological and nuclear safety

– radioactive waste, disused sources and spent nuclear fuel shall be managed in a safe manner, including long-term passive measures of radiological and nuclear safety

– application of measures of radiological and nuclear safety shall be proportionate to the risk

– costs of management of radioactive waste, disused sources and spent nuclear fuel shall be borne by generators of the radioactive waste, disused sources and spent nuclear fuel

– process of management of radioactive waste, disused sources and spent nuclear fuel shall be documented in all its phases

– legal or natural persons performing the operations referred to in Article 50, paragraph 1 of this Act shall be liable for the application of radiological and nuclear safety measures

– an efficient legal framework with institutional infrastructure for the management of radioactive waste, disused sources and spent nuclear fuel shall be secured long term

– management of radiological and nuclear safety shall be established in the facilities and for the installations included in the performance of the operations referred to in Article 50, paragraph 1 of this Act

– performance of the operations referred to in Article 50, paragraph 1 of this Act shall be secured in a manner that without any doubt demonstrates long-term justification of the selected manner of performing the operation, on the basis of its contribution to the common good

– in the course of performance of the operations referred to in Article 50, paragraph 1 of this Act, radiological and nuclear safety shall be optimised in a manner that ensures the highest reasonably achievable level of radiological and nuclear safety

– risk limitation shall ensure that the burden on an individual or the environment due to performance of the operations referred to in Article 50, paragraph 1 of this Act are below the permitted limits

– protection of the present and future generations against risks arising from performance of the operations referred to in Article 50, paragraph 1 of this Act shall be ensured

– all possible efforts shall be taken in order to prevent an emergency which could arise due to performance of the operations referred to in Article 50, paragraph 1

– arrangements necessary for a response in the case of an emergency shall be established and maintained
– activities for the protection from and/or mitigation of consequences of an emergency shall be justified and optimised in a manner that ensures contribution to the common good.

Article 56

The Strategy referred to in Article 54 of this Act shall unambiguously determine the following regarding institutional infrastructure for the management of radioactive waste, disused sources and spent fuel:

– division of responsibilities

– securing funds

– objectives of radiological and nuclear safety and of physical protection

– minimisation of radioactive waste, disused sources and spent nuclear fuel

– import/export of radioactive waste, disused sources and spent nuclear fuel

– management of radioactive waste, disused sources and spent nuclear fuel

– management of natural radioactive substances having properties that have been altered by means of technological procedures.

Article 57

The Government of the Republic of Croatia, following Office's proposal shall adopt the National programme for implementation of the Strategy referred to in Article 54 of this Act.

Article 58

(1) The Office shall coordinate preparation of the National programme referred to in Article 57 of this Act on the basis of provisions of the Strategy referred to in Article 54.

(2) The Office shall supervise implementation of the National programme referred to in Article 57 in all the phases of management of radioactive waste, disused sources and spent nuclear fuel, from their generation to the final disposal, and report to the Government of the Republic of Croatia thereon.

(3) The Office shall initiate and coordinate regular updating of the National programme referred to in Article 57, taking into account the best technical and scientific accomplishments, recommendations and experiences acquired in the period prior to the revision.

Article 59

The National programme referred to in Article 57 shall contain at least the following:
– overall objectives of the Strategy for management of radioactive waste, disused sources and spent nuclear fuel

– milestones with corresponding deadlines for their accomplishment for the purpose of achieving the overall objectives of the National programme for implementation of the Strategy for management of radioactive waste, disused sources and spent nuclear fuel

– inventory of radioactive waste, spent nuclear fuel and disused sources including decomposition and natural radioactive substances having properties that have been altered by means of technological procedures, for the existing state and expected generation in the future, in a manner that clearly discerns the accompanying locations with the quantity of materials classified according to their level of radiological danger

– concepts, plans and technical solutions for the management of the inventory referred to in subparagraph 3 from its generation to its final disposal

– concepts and plans for the period following the closure of the disposal facility, including the period in which appropriate controls are to be conducted, and resources necessary for long-term safekeeping of information on the facility in question

– description of the research and developmental activities necessary to demonstrate justification of solutions for the management of radioactive waste, spent nuclear fuel and disused sources, including natural radioactive substances having properties modified by means of technological processes

– basic steps to serve efficient monitoring of the implementation of individual parts of the National programme referred to in Article 57 of this Act, with clearly defined time lines in which these steps must be achieved and the division of responsibility for their implementation

– basic indicators of success of the implementation of the National programme referred to in Article 57 of this Act

– estimation of costs of the implementation of the National programme referred to in Article 57 of this Act, with clearly outlined assumptions and hypotheses of the assessment shown in the time profile of interest

– description of the financial scheme which shall include all costs with the guarantee for their implementation according to the envisaged schedule

– strategy of informing and communicating with the public, ensuring that necessary information on the management of spent nuclear fuel and radioactive waste are available to the workers and population in the manner that the Office informs the public on occurrences in its area of competence, with the exception of information that may potentially endanger security interests. The Strategy shall also envisage the manner of ensuring efficient participation of the public concerned in the decision-making process regarding management of spent nuclear fuel and radioactive waste
– an agreement or agreements on the management of spent nuclear fuel or radioactive waste, including use of disposal facilities, concluded with EU Member States or third countries, if there are any.

VI RESPONSE TO AN EMERGENCY

Plan and programme of measures for protection in emergency cases

Article 60

(1) In line with international regulations and recommendations, the director of the Office, upon a prior consent of the competent body for protection and rescue, the ministry competent for health and the ministry competent for internal affairs, shall propose, and the Government of the Republic of Croatia shall adopt, a regulation on the measures for protection against ionising radiation and interventions in emergency cases.

(2) The Office shall monitor the implementation of the regulation referred to in paragraph 1 of this Article and shall, where necessary, propose measures for its improvement.

Obligations of the holder of the approval in the planning of an emergency response

Article 61

(1) The holder of the approval shall draw up a Plan and programme of measures to be taken in emergency cases, which shall be approved by the Office.

(2) Costs of implementation of the Plan and programme referred to in paragraph 1 of this Article shall be provided for and borne by the holder of the approval and the holder of the use permit for a nuclear installation.

(3) The holder of the approval shall inform the public about important facts from the Plan and programme referred to in paragraph 1 of this Article.

(4) The director of the Office shall prescribe by means of an ordinance the scope and content of the Plan and programme referred to in paragraph 1 of this Article, the obligation, frequency and time periods for efficiency verifications and the method, scope and deadlines for informing the public and competent authorities.

International notifications and cooperation

Article 62
(1) In the case of an emergency which is likely to cause harm to human health in the territory of other countries as well, the Office shall ensure notification in accordance with international agreements.

(2) The Government of the Republic of Croatia shall decide on the acceptance of assistance from other countries and the International Atomic Energy Agency and on the provision of assistance to other countries in emergency cases.

Remediation

Article 63

(1) The holder of the approval and the beneficiary whose operations cause radioactive contamination of the environment, premises, areas, objects and persons by radioactive substances exceeding the limits set out in the ordinance or that causes damage due to loss of control over the source or for some other reason, shall be liable for the damage incurred and shall without delay take care of remediation at their own expense.

(2) The ordinance referred to in paragraph 1 of this Article shall be issued by the director of the Office.

(3) The holder of the approval and the beneficiary shall notify the Office without delay of the hazard or damage caused by loss of control over a radioactive source or as a result of radioactive contamination incurred by their operations.

(4) Should the holder of the approval and the beneficiary fail to ensure remediation referred to in paragraph 1 of this Article, the Office shall order that the remediation shall be carried out at the expense of the holder of the approval or the beneficiary.

Subsidiary liability of the Republic of Croatia

Article 64

(1) If the holder of the approval or the beneficiary, due to bankruptcy, liquidation or for another reason, cannot ensure implementation of remediation, or if the holder of the approval or the beneficiary cannot be determined or is not located in the territory of the Republic of Croatia, the Republic of Croatia shall ensure the entire remediation process.

(2) The Republic of Croatia shall cover the costs of the remediation referred to in paragraph 1 of this Article if the financial warranties provided by the holder of the approval or the beneficiary are not sufficient and that person does not have the means to cover the costs in question.

(3) When the reasons referred to in paragraphs 1 and 2 of this Article cease to apply, the Republic of Croatia shall demand remuneration of the costs for carrying out the remediation referred to in paragraph 1 of this Article from the responsible party obliged to cover the costs.
Remediation of an area of permanent exposure

Article 65

(1) The Government of the Republic of Croatia shall assign the status of a danger zone to a permanently exposed area and shall order remediation for the aforementioned area.

(2) When a permanently exposed area is a consequence of an emergency occurred in another country, the Government of the Republic of Croatia shall, in addition to proclaiming a danger zone and ordering remediation, determine the measures for preventing adverse impacts and appoint the persons responsible for their implementation in the territory of the Republic of Croatia.

VII PHYSICAL PROTECTION OF IONISING RADIATION SOURCES AND NUCLEAR INSTALLATIONS

Article 66

(1) The holder of the approval for performing operations shall be liable for the implementation of physical protection of ionising radiation sources and nuclear installations and shall bear the costs of its implementation.

(2) The director of the Office, in cooperation with the minister competent for internal affairs, shall prescribe by means of an ordinance the manner of implementation of the physical protection referred to in paragraph 1 of this Article.

VIII NON-PROLIFERATION OF NUCLEAR WEAPONS

Licenses and prohibition to produce, possess and use nuclear materials and special equipment

Article 67

(1) It shall not be permitted to use nuclear materials and special equipment for the construction of nuclear weapons or other explosive devices or for research and development of nuclear weapons or similar devices.

(2) In order to produce, possess or use special equipment that may be used for research and development of nuclear weapons, it shall be necessary to obtain a licence from the Office.

(3) The licence referred to in paragraph 2 of this Article shall be granted or denied by means of a decision against which no appeal may be filed, but an administrative dispute may be initiated.
(4) Users of nuclear materials and special equipment shall allow representatives of international organisations to inspect the materials and equipment if they are performing inspection in accordance with international treaties, and shall cooperate with representatives of the aforementioned organisations in the course of inspection in accordance with international treaties.

(5) The director of the Office shall prescribe by means of an ordinance the list of the special equipment referred to in paragraph 1 of this Article, the requirements for issuance and validity period of the licence referred to in paragraph 2 of this Article.

IX MONITORING THE STATUS OF RADIOACTIVITY IN THE ENVIRONMENT

Article 68

Testing and monitoring of the type and activity of radioactive substances in the air, soil, sea, rivers, lakes, ground water, solid and liquid precipitation, drinking water, foodstuffs and general use items, and in residential and working premises, shall be carried out under the conditions, in the manner, at the locations and within the deadlines prescribed in an ordinance issued by the director of the Office.

X REPORTING AND SELF-ASSESSMENT OBLIGATIONS

Reporting obligation

Article 69

(1) The director of the Office shall submit a report to the Government of the Republic of Croatia every two years, and more often if required, on the protection against ionising radiation and nuclear safety for the previous period.

(2) After its adoption by the Government of the Republic of Croatia, the report referred to in paragraph 1 of this Article shall be published by the Office in a manner that guarantees public access.

(3) The director of the Office shall report to the European Commission on the implementation of Directive 2011/70/EURATOM by 23 August 2015, and every three years afterwards.

Content of the report

Article 70

The report referred to in Article 69 of this Act shall contain information on the:
– state of radiological safety, state of safety of nuclear installations, safeguards and implementation of protection measures in the Republic of Croatia

– international cooperation in the field of radiological and nuclear safety, particularly in relation to the signing of international agreements from this field

– assessment of non-proliferation of nuclear weapons and unauthorised use of special equipment

– proposals to improve radiological and nuclear safety

– other issues related to radiological and nuclear safety in the Republic of Croatia

– work of the Office.

**Obligation and implementation of self-assessment**

**Article 71**

(1) The director of the Office shall be obliged to conduct self-assessment of the national legislative framework and of the competent authorities at least every ten years and shall provide for international audit of important segments of the national legislative framework and competent authorities with the purpose of continuous improvement of radiological and nuclear safety.

(2) Results of the conducted self-assessment and available results of every international audit shall be public.

(3) The director of the Office shall inform the European Union Member States and the European Commission on the results of the conducted self-assessment and available results of each international audit.

**XI REGISTERS**

**Obligation to keep registers and their content**

**Article 72**

(1) The holders of the approval, beneficiaries, authorised professional technical services and authorised nuclear safety experts shall be obliged to keep registers.

(2) The Office shall be obliged to keep registers.
(3) The director of the Office shall prescribe by means of an ordinance the mandatory content of the registers referred to in paragraphs 1 and 2 of this Article, their content, method of keeping, time period for which they are kept, and method and deadlines for reporting.

XII FINANCIAL OBLIGATIONS

Article 73
The holder of the approval for performance of operations or the beneficiary shall bear the costs arising from the obligations pursuant to this Act.

Article 74
The director of the Office shall prescribe by means of an ordinance the amounts of the fees, types and amounts of additional expenses and method of payment for activities performed by the Office.

Provision of financial resources for ensuring safety of a nuclear installation

Article 75
(1) The holder of the use permit for a nuclear installation shall have secured financial resources for implementation of the prescribed nuclear safety measures throughout the operating lifetime of the installation.

(2) The financial resources referred to in paragraph 1 of this Article shall also cover payment of all the costs of disposal of radioactive waste generated as a result of the installation's operation, disposal of spent fuel and decommissioning of the nuclear installation.

(3) The holder of the use permit for a nuclear installation shall secure the financial resources referred to in paragraph 1 of this Article in the amount that covers all the operating and investment maintenance costs, including investments in technological upgrading and nuclear safety measures.

(4) The method of securing financial resources, their amount, forms of guarantees and methods of enforcing the guarantees shall be prescribed by the Office for each nuclear installation, in the procedure of granting approval for the operation of nuclear installation.

XIII INSPECTION SUPERVISION

Article 76
Inspection supervision over implementation of this Act and subordinate regulations adopted on the basis thereof shall be performed by the Office’s inspectors and senior inspectors for radiological and nuclear safety (hereinafter: the inspectors).

Inspectors

Article 77

(1) Activities of Office’s inspectors may be performed by persons who have university diploma from the field of natural or technical sciences.

(2) Office’s inspectors shall be appointed by the director of the Office.

(3) Activities of the inspectors referred to in paragraph 1 of this Article shall be considered as work performed under special working conditions.

(4) Against a first-instance decision issued by an inspector an appeal may be filed to a special commission whose members shall be appointed by the Government of the Republic of Croatia, and an administrative dispute may be initiated against a second-instance decision.

(5) The commission referred to in paragraph 4 of this Article shall have three members.

(6) The commission referred to in paragraph 4 of this Article shall adopt its rules of procedure.

(7) Supervision related to pressurised containers, fire prevention and physical protection in nuclear installations and in facilities accommodating radiation sources shall be carried out by nuclear and radiological safety inspectors in cooperation with the state administration bodies competent for such activities.

Official identification card and badge

Article 78

(1) An inspector shall have an official identification card and a badge proving his/her official status, identity and powers.

(2) The director of the Office shall prescribe by means of an ordinance the format and content of the identification card, the form and content of the badge and the method of keeping a register on issued official identification cards and badges referred to in paragraph 1 of this Article.

Inspectors’ rights, obligations and powers

Article 79

While performing an inspection, the inspector shall be authorised to inspect all the working and auxiliary premises and facilities, documents, prescribed registers, equipment, persons, the objects
of work and business under inspection, to take statements from responsible persons and testimonies from witnesses, to perform sampling, and, where necessary, to use services of renowned experts and legal persons.

Article 80

(1) The inspector shall perform inspection without prior announcement, but shall be obliged to inform the responsible person in the supervised legal person and the natural person, if available, of his/her presence before commencing his/her work.

(2) In case of absence of the persons referred to in paragraph 1 of this Article, the inspector shall be obliged to inform of his/her presence a worker found present at the inspected legal or natural person.

(3) In the course of inspection, the inspector shall be authorised to request and inspect identification documents in order to establish the identity of persons (identification card, passport, etc.) and the persons subject to inspection shall be obliged to present such documents to the inspector when so requested.

Article 81

(1) The inspector shall be obliged to draw up minutes on the performed inspection.

(2) One copy of the minutes referred to in paragraph 1 of this Article shall be given to the party that has undergone inspection supervision.

(3) The inspector shall be obliged to keep a register of performed inspections.

Article 82

(1) Inspected legal and natural persons shall be obliged to ensure undisturbed performance of the inspection.

(2) The legal and natural persons referred to in paragraph 1 of this Article shall be obliged, at the inspector's request and within the deadline set by the inspector, to submit information and business documentation needed for performance of the inspection supervision and potential further procedures.

(3) The legal and natural persons referred to in paragraph 1 of this Article shall be obliged, at the inspector's request, to temporarily suspend operations at the inspected installation for the duration of the inspection supervision if the inspector cannot perform the supervision or determine the facts otherwise.

Article 83
If the inspector finds, in the course of inspection supervision, a violation of regulations falling under the competence of another state administration body, the inspector shall be obliged to immediately inform thereof the authority competent for the area for which the violation of regulations has been found.

Article 84

(1) The inspector shall be obliged to initiate inspection supervision proceedings after he/she has established or discovered that, given the existing facts, public interest has been jeopardised; while doing so, he/she shall take into account potential petitions.

(2) The inspector shall be obliged to consider a petition submitted by a legal or natural person related to the inspection under his/her competence and inform the petitioner in writing about the undertaken actions and measures.

(3) Information about the petitioner referred to in paragraph 2 of this Article shall be considered confidential.

Article 85

(1) The inspector shall be authorised to temporarily confiscate the objects by means of which a misdemeanour or criminal offence was committed.

(2) The legal or natural person whose objects were confiscated shall receive a certificate with a specification of the types and quantities of the confiscated objects.

(3) Within eight days from the day of temporary confiscation of the objects, the inspector shall be obliged to file charges to initiate misdemeanour proceedings and shall hand over the temporarily confiscated objects to the competent court, unless otherwise stipulated pursuant to a special regulation.

(4) The inspector shall not freely dispose of (destroy, sell, give away, etc.) temporarily confiscated objects prior to their handing over to the competent court, unless otherwise stipulated pursuant to a special regulation.

(5) The costs incurred by the confiscation referred to in paragraph 1 of this Article shall be borne by the supervised legal or natural person.

Article 86

(1) If the inspector, in the course of inspection supervision, establishes that the Act or any other regulation has been violated, he/she shall be obliged to issue a decision ordering the established irregularity to be removed by a set deadline for its removal, if it is possible to do this in the course of regular operations, at the expense of the inspected legal or natural person.
(2) If the Act or any other regulation has been violated, the inspector shall, in the course of inspection supervision, issue a decision prohibiting the use of working and auxiliary premises or facilities, installations, devices and equipment for performing the operations, and prohibiting the work of people if all the prescribed requirements are not met.

(3) If this Act or another regulation stipulates that an administrative measure is to be applied for the established irregularity, the inspector shall be obliged to issue a decision ordering that measure.

Article 87

(1) If the inspector establishes a violation of the Act or any other regulation, he/she may issue a decision without interrogating the parties.

(2) The inspector shall issue the decision referred to in paragraph 1 of this Article within no more than eight days from the date of completion of the inspection, stating the established facts critical for issuance of such a decision. Non-issuance of the decision by that deadline shall not eliminate the obligation of its issuance.

Article 88

(1) While carrying out an inspection supervision, the inspector shall be authorised to issue a verbal order to the inspected legal or natural person, temporarily prohibiting the use of working and auxiliary premises or facilities, installations, devices and equipment for performing the activity, as well as prohibiting the work of people until the irregularities are removed, and may immediately enforce the decision pursuant to the provisions of Article 89, paragraph 1 of this Act, without issuing a special legal act permitting enforcement of the decision in the following cases:

1. where there is hazard or suspicion of hazard for human health or lives, requiring that a certain safety measure is undertaken immediately, without delay

2. where there is danger or suspicion of danger that evidence could be hidden, replaced or destroyed unless a safety measure is undertaken immediately

3. where the prescribed requirements are not met and cannot be met in the course of normal operations

4. where there are gross omissions in the technological process.

(2) At the request of the party, a written copy of the issued verbal order shall be issued within eight days from the day of its pronouncement.

Article 89
(1) Inspector's executive decision on a non-financial obligation that, given the nature of the obligation, may be executed by direct enforcement shall be carried out by sealing of the premises, installations, devices and other equipment or in another appropriate manner.

(2) If the decision cannot be enforced pursuant to paragraph 1 of this Article, the inspector shall force the party to fulfil the obligations through fines.

Article 90

(1) If the inspector establishes that violation of regulations represents a misdemeanour, he/she shall be obliged to use the established facts relevant for undertaking measures and file charges to initiate misdemeanour proceedings.

(2) The court that has received the charges pursuant to paragraph 1 of this Article shall be obliged to inform the person filing the charges about the outcome of the proceedings.

Article 91

While performing inspection supervision, the inspector shall be independent and shall conduct the procedure, issue administrative acts and undertake measures within the scope of the rights, obligations and authorities stipulated pursuant to this Act and/or other regulations.

XIV PENAL PROVISIONS

Misdemeanours

Article 92

(1) A fine for a misdemeanour amounting from HRK 100 000.00 to HRK 500 000.00 shall be imposed on a legal person if they:

1. perform operations without an approval (Article 9, paragraph 1, Article 13, paragraph 1 and Article 50, paragraph 1)

2. perform operations without complying with the prescribed requirements (Article 9)

3. use an ionising radiation source without a licence (Article 10, paragraph 1)

4. do not notify the Office of their intention to perform the operations referred to in the Article 12 by the prescribed deadline (Article 12)

5. commence the period of trial operations of a nuclear installation without prior approval of the Office (Article 17, paragraph 2)
6. start or terminate the operations of a nuclear installation or start or terminate the decommissioning of a nuclear installation without prior approval of the Office (Article 18, paragraph 1)

7. do not ensure implementation of radiological safety measures and nuclear safety measures (Article 20)

8. import, export, transport and transit ionising radiation sources, special equipment and radioactive waste, spent nuclear fuel and disused sources without having obtained the approval or licence from the Office (Article 21, paragraph 1)

9. engage persons under the age of 18 in activities exposing them to potential irradiation exceeding the limits prescribed in Article 24 of this Act (Article 25)

10. do not ensure the working conditions prescribed pursuant to this Act for a pregnant woman or do not provide a workplace for a breastfeeding woman where there is no possibility of radioactive contamination (Article 26)

11. intentionally add radioactive substances in general use items and import and export such goods (Article 37, paragraph 1)

12. construct, test, commission or use a nuclear installation in any other manner without having obtained the approvals or licences stipulated by this Act (Article 38, paragraph 1)

13. do not ensure regular, full and systematic assessment and examination of nuclear safety measures in the installation by means of periodic safety reviews (Article 40)

14. do not regularly report to the Office on the operations of the nuclear installation (Article 41, paragraph 1)

15. carry out expert activities in the field of nuclear safety without authorisation of the Office or contrary to the provisions of this Act and ordinances adopted on the basis thereof (Article 43)

16. do not manage radioactive waste, disused sources or spent nuclear fuel in the prescribed manner (Article 49, paragraph 1)

17. do not ensure that waste radioactive substances are generated in the smallest possible quantities (Article 49, paragraph 4)

18. import radioactive waste, disused sources or spent nuclear fuel not generated in the Republic of Croatia (Article 53)

19. through their operations cause radioactive contamination of the environment, premises, areas, objects and persons by radioactive substances exceeding the limits set out in the ordinance or cause damage due to loss of control over the source or for some other reason, and do not carry out remediation (Article 63, paragraph 1)
20. do not implement physical protection of ionising radiation sources and nuclear installations (Article 66, paragraph 1)

21. use special equipment for the construction of nuclear weapons or other explosive devices or for research and development of nuclear weapons or similar devices (Article 67, paragraph 1)

22. produce, possess or use special equipment without a licence issued by the Office (Article 67, paragraph 2)

23. do not allow representatives of international organisations to conduct inspection if they are performing it in accordance with international treaties, and do not cooperate with representatives of the aforementioned organisations in the course of inspection of nuclear materials and special equipment in accordance with international treaties (Article 67, paragraph 4).

(2) The responsible person in the legal person shall also be fined for the misdemeanours referred to in paragraph 1 of this Article, in the amount from HRK 20 000.00 to HRK 50 000.00.

Article 93

(1) A fine for a misdemeanour amounting from HRK 50 000.00 to HRK 100 000.00 shall be imposed on a legal person in the following cases:

1. if they use a source of ionising radiation contrary to the radiological safety principles (Article 23)

2. if they do not ensure that the exposure level of a member of the public, an exposed worker, apprentice and student is lower than the prescribed limit (Article 24)

3. if they use ionising radiation sources for medical purposes contrary to the prescribed conditions (Article 27)

4. if persons who have not undergone a medical examination or persons who do not meet the special health requirements work in an exposed area (Article 29, paragraph 1)

5. if they do not ensure regular medical examinations of exposed workers and/or trainees or do not prohibit work in an exposed area (Article 29, paragraph 3, Article 31, paragraph 1 and Article 33, subparagraph 1)

6. if they carry out examination of medical fitness of exposed workers, pupils and students and exposed apprentices without authorisation of the minister competent for health (Article 30)

7. if they enrol candidates who do not meet the prescribed requirements (Article 31, paragraph 2)

8. if they do not ensure inspection of the ionising radiation sources and working conditions and the measurement of the prescribed parameters (Article 33, subparagraph 5)
9. if they do not ensure personal protective devices and equipment for exposed workers and examination of proper working order of such devices (Article 33, subparagraph 8)

10. if they do not ensure regular calibration and examination of proper working order of measuring instruments (Article 33, subparagraph 9)

11. if they do not ensure checking of radioactive contamination of persons, objects, the environment, premises and air in the premises where operations are carried out or where ionising radiation sources are located (Article 33, paragraph 10)

12. if they do not provide for a quality assurance programme and/or its implementation (Article 33, subparagraph 6 and Article 46, paragraph 2)

13. if they do not report to the Office in the prescribed manner and by the prescribed deadlines (Article 34, Article 39, paragraph 3, Article 40, paragraph 2, Article 41, paragraph 1, Article 63, paragraph 3, Article 72, paragraph 3)

14. if they do not ensure that the exposed workers in the course of their work implement all prescribed and standard self-protection measures against ionising radiation and those for protection of other persons, use protective equipment and devices for measuring personal doses and use and implement any other measures necessary for protection against ionising radiation (Article 35)

15. if they do not appoint a person responsible for protection against ionising radiation of adequate professional qualifications (Article 36)

16. if they do not ensure measuring of personal doses of exposed workers or trainees (Article 28 and Article 33, subparagraph 2)

17. if they carry out nuclear safety activities without authorisation from the Office or contrary to the provisions of this Act and ordinances adopted on the basis thereof (Article 42)

18. if ionising radiation sources are handled by workers who have not undergone special professional training for operating ionising radiation sources (Article 47, paragraph 1)

19. if the exposed workers have not undergone special professional training on the application of radiological safety measures (Article 47, paragraph 2 and Article 33, subparagraph 3)

20. if the exposed workers do not periodically refresh their knowledge on the application of radiological safety measures (Article 47, paragraph 4)

21. if they do not draw up the Plan and programme of measures in emergency cases (Article 61, paragraph 1)

22. if they do not inform the public on important facts from the Plan and programme referred to in Article 61 paragraph 1 of this Act (Article 61, paragraph 3)
23. if they do not keep the prescribed registers (Article 72, paragraph 1)

24. if they do not execute the ordered measures referred to in Article 86 of this Act.

(2) The responsible person in the legal person shall also be fined for the misdemeanours referred to in paragraph 1 of this Article, in the amount from HRK 10 000.00 to HRK 15 000.00.

Article 94

(1) A fine for a misdemeanour amounting from HRK 30 000.00 to HRK 80 000.00 shall be imposed on a legal person in the following cases:

1. if they use working and living premises and import, export and place on the market water, food, feed and products which are contaminated by radionuclides above the prescribed limits (Article 37, paragraphs 2 and 3)

2. if they do not ensure implementation of programmes for collecting and analysing operating experiences at a nuclear installation (Article 39)

3. if they do not ensure a sufficient number of qualified workers with suitable education, training and additional training for performance of all nuclear operations carried out in an installation and for implementation of nuclear safety measures throughout the operating lifetime of the nuclear installation (Article 48, paragraph 1)

4. if activities and tasks pertaining to the management of technological processes in a nuclear installation and to the supervision of such management are carried out by workers who do not meet the prescribed requirements with regard to their professional qualifications, psychophysical characteristics and non-addiction to alcohol and drugs (Article 48, paragraph 2)

5. if they do not ensure regular refreshment of professional knowledge of qualified workers and do not check their competencies, psychophysical characteristics and non-addiction to alcohol and drugs (Article 48, paragraph 3)

6. if they employ a worker without a valid permit (Article 48, paragraph 2).

(2) The responsible person in the legal person shall also be fined for the misdemeanours referred to in paragraph 1 of this Article, in the amount from HRK 5 000.00 to HRK 8 000.000.

XV TRANSITIONAL AND FINAL PROVISIONS

Article 95
(1) The Government of the Republic of Croatia shall, within 18 months from the date this Act enters into force, adopt the regulation referred to in Article 51, paragraph 4 and Article 60, paragraph 1 of this Act.

(2) The Government of the Republic of Croatia shall adopt the National programme referred to in Article 57 of this Act by 1 August 2015.

(3) The Croatian Parliament shall adopt the Strategy referred to in Article 54 of this Act by 1 August 2014.

(4) The Regulation on the measures for protection against ionising radiation and interventions in emergency cases (Official Gazette 102/12) shall remain in force until the adoption of the regulation referred to in Article 60 of this Act.

(1) The Regulation on the conditions and method of disposal of radioactive waste spent sealed radioactive sources and ionising radiation sources which are not intended for further use (Official Gazette 44/08) shall remain in force until the adoption of the ordinance referred to in Article 49, paragraph 8 and the ordinance referred to in Article 50, paragraph 4 of this Act.

Article 96

The ordinances referred to in Article 9, paragraphs 3 and 5, Article 10 paragraph 3, Article 11, paragraphs 1 and 2, Article 13, paragraph 3, Article 14, paragraph 2, Article 15, paragraph 3, Article 16, paragraph 5, Article 17, paragraph 5, Article 18, paragraph 2, Article 21, paragraphs 3 and 6, Article 22, paragraph 2, Article 24, Article 27, paragraph 2, Article 28, paragraph 2, Article 29, paragraph 4, Article 32, paragraphs 2 and 3, Article 34, Article 37, paragraphs 2 and 3, Article 40, paragraph 2, Article 41, paragraph 2, Article 42, paragraph 3, Article 43, paragraph 3, Article 45, paragraph 2, Article 46, paragraph 3, Article 47, paragraph 6, Article 48, paragraph 2, Article 49, paragraph 8, Article 50, paragraph 4, Article 52, paragraph 3, Article 61, paragraph 4, Article 63, paragraph 2, Article 66, paragraph 2, Article 67, paragraph 5, Article 68, Article 72, paragraph 3, Article 74 and Article 78, paragraph 2 of this Act and other legal acts for the adoption of which the director of the Office is authorised pursuant to this Act shall be adopted within two years from the date of entry into force of this Act.

Article 97

Until the ordinances referred to in Article 96 of this Act enter into force, the following shall remain in force, unless they are contrary to this Act:

1. Ordinance on medical requirements for exposed workers and persons trained to work with sources of ionising radiation (Official Gazette 80/13)

2. Ordinance on the education required for handling ionising radiation sources and the application of measures for the protection against ionising radiation (Official Gazette 63/11)
3. Ordinance on the measurement of personal doses, examination of ionising radiation sources and working conditions and on reports and registers (Official Gazette 41/12 and 89/13)

4. Ordinance on the conditions for application of ionising radiation sources in medicine and dentistry (Official Gazette 89/13)

5. Ordinance on the limits of exposure (Official Gazette 59/13)

6. Ordinance on the physical protection of radioactive sources, nuclear material and nuclear installations (Official Gazette 38/12)

7. Ordinance on the monitoring of the radioactivity status in the environment (Official Gazette 121/13)

8. Ordinance on the conditions and measures of ionising radiation protection for performing operations involving electrical devices generating ionising radiation (Official Gazette 41/13)

9. Ordinance on the requirements for the design, construction and removal of structures accommodating sources of ionising radiation or in which practices involving sources of ionising radiation take place (Official Gazette 99/08)

10. Ordinance on authorisations and licenses for use of and movement of ionising radiation sources (Official Gazette 71/12 and 89/13)

11. Ordinance on the method of removal of radioactive contamination, disposal of the radioactive source or undertaking other indispensable measures in order to reduce the damage to people and the environment or eliminate further threats, hazards or damage (Official Gazette 53/08)

12. Ordinance on performing nuclear activities (Official Gazette 74/06)

13. Ordinance on special requirements which expert organisations must fulfil in order to perform certain activities in the field of nuclear safety (Official Gazette 74/06)

14. Ordinance on conditions for nuclear safety and protection with regard to the siting, design, construction, use and decommissioning of a facility in which a nuclear activity is performed (Official Gazette 71/08)

15. Ordinance on the authorisation of professional technical services for the performance of expert tasks in the protection against ionising radiation (Official Gazette 72/11)

16. Ordinance on the manner and procedure for supervision during import or export of material for which there is justified suspicion of contamination by radionuclides or of containing radioactive sources (Official Gazette 114/07)
17. Ordinance on the confidentiality of data from the State Office for Nuclear Safety (Official Gazette 15/09)

18. Ordinance on the conditions and measures of ionising radiation protection for performing operations involving radioactive sources (Official Gazette 41/13)

19. Ordinance on the amount of the fees, types and amounts of additional expenses and method of payment for tasks performed by the State Office for Radiation Protection (Official Gazette 89/09)

20. Ordinance on the official identification card and badge of inspectors for radiological and nuclear safety (Official Gazette 28/11)

21. Ordinance on the scope and content of the Plan and programme of measures in emergency cases and notification of the public and of competent authorities (Official Gazette 123/12)

22. Ordinance on the supervision and control of cross-border transport of radioactive waste and spent fuel (Official Gazette 11/13)

23. Ordinance on the conditions and manner of issuing and withdrawing the approval for packaging for transport of radioactive substances and nuclear materials (Official Gazette 42/13).

Article 98

Authorised expert technical organisations shall be obliged to harmonise their work and operations with the provisions of this Act within one year from the date this Act enters into force; otherwise, procedures for revoking their authorisations shall be initiated.

Article 99

Holders of the approval for performing operations involving ionising radiation sources, nuclear operations or operations involving management of radioactive waste, disused sources or spent nuclear fuel shall be obliged to harmonise their work and operations with the provisions of this Act within one year from the date this Act enters into force; otherwise, procedures for revoking their authorisations shall be initiated.

Article 100

The Nuclear Safety Council established pursuant to Article 25 of the Nuclear Safety Act (Official Gazette 173/03) shall be disbanded on the day of establishment of the Radiological and Nuclear Safety Council pursuant to this Act.

Article 101

On the day of the entry into force of this Act, the Radiological and Nuclear Safety Act (Official Gazette 28/10) shall cease to have effect.
Article 102

This Act shall enter into force on the eighth day after the day of its publication in the Official Gazette.

Class: 022-03/13-01/244

Zagreb, 15 November 2013

THE CROATIAN PARLIAMENT

The President
of the Croatian Parliament

Josip Leko, m.p.