



JOURNAL OF LAWS OF THE REPUBLIC OF POLAND

Warsaw, 24 April 2021

Item 765

REGULATION OF THE COUNCIL OF MINISTERS

of 05 March 2021

on the position of major importance for ensuring nuclear safety and radiation protection

Pursuant to Art. 12b(1) of the Act of 29 November 2000 - the Atomic Law (Dz. U. of 2021, item 623), it is ordered as follows:

§ 1. This Regulation shall establish:

- 1) specialisations within the scope of the position referred to in Art. 12(1) of the Act of 29 November 2000 - the Atomic Law, hereinafter referred to as the 'Act', and the detailed conditions for the granting of authorization to hold a position with a given specialization;
- 2) the manner of conducting and determining the results of the examination referred to in Art. 12(2)(4) of the Act, and the examination fee;
- 3) the manner of work of the examining committees of the examination board referred to in Art. 12a(6) of the Act and the remuneration of the members of this board for participation in the examining committee;
- 4) the scope of training courses and the forms of organization of such training courses for persons applying for the granting of the authorization referred to in Art. 12(1) of the Act;
- 5) the contents of an application for the granting of the authorization referred to in Art. 12(1) of the Act and a list of documents to be attached to such application.

§ 2. 1. The specializations for a position of major importance for ensuring nuclear safety and radiation protection and the detailed conditions for the granting of authorization to hold a position of a given specialization shall be set out in Annex 1 to this Regulation.

2. The contents of training courses for persons who apply for an authorization to be employed on the position of major importance for ensuring nuclear safety and radiation protection shall be defined in Annex 2 to this Regulation.

§ 3. A training shall be conducted in the form of lectures, computational exercises, laboratory exercises and on-the-job training, depending on the scope of such training.

§ 4. 1. The head of the competent examination board, when appointing the examining committee, shall indicate the head of the examination committee and its secretary.

2. An examining committee shall:

- 1) prepare the test and computational questions or problems for the written part of the examination as well as the questions for the oral part of it, taking into account the training contents referred to in § 2(2);
- 2) evaluate the written and oral parts of the conducted examination.

3. The examining committee shall take decisions by a simple majority of votes. In the event of an equal number of votes, the vote of the examining committee's head shall be decisive.

4. The examining committee shall prepare a report from the examination which shall include:

- 1) the description of the examining committee of the relevant examination board;
- 2) the number of the report and the date of their preparation;
- 3) the first name(s), surname and the identification number from the Universal Electronic System for Registration of the Population (the PESEL number), and in the case of a person who does not have a PESEL number – the series, number and name of a document confirming the identity of the examinee;
- 4) the number of points from the test obtained by the examinee;
- 5) the contents of the computational questions or problems in the written part of the examination and the number of points obtained by the examinee for solving each task;
- 6) the result of the written part of the examination;
- 7) the contents of the questions from the oral part of the examination and number of points received by the examinee for answering each question;
- 8) the information on a positive or negative result of the examination;
- 9) the first names, surnames and signatures of the head, the secretary and all other members of the examination committee.

5. The test completed by the examinee and the solutions to the computational questions or problems in the written part of the examination shall constitute annexes to the examination report.

§ 5. 1. The written part of the examination shall last 120 minutes.

2. For the written part of the examination, the examining committee shall award:

- 1) 1 point for each correct answer to a question from the test;
- 2) from 0 to 10 points for each computational question or problem.

3. The oral part of the examination shall be taken upon receiving at least 40 points from the written part of the examination, including at least 20 points from the test part and at least 20 points from the computational questions or problems.

4. In the oral part of the examination, 0 to 5 points shall be awarded for answering each question.

5. The result of the examination shall be positive if at least 15 points are awarded for the oral part of the examination..

6. The examination board shall issue a certificate of passing the examination, signed by the head of the examining committee, to a person who has passed the examination..

§ 6. The fee for the examination for the granting of authorization to hold the position of major importance for ensuring nuclear safety and radiation protection with a particular specialization shall be PLN 300.

§ 7. The remuneration of the member of the examination board who participates in the examining committee shall be PLN 30 for each examinee.

§ 8. 1. An application to the President of the National Atomic Energy Agency for the granting of authorization referred to in Art. 12(1) of the Act shall include:

- 1) first name(s), surname, the PESEL number, and in the case of a person who does not have a PESEL number – the series, number and name of a document confirming the identity of the person applying for the authorization;
- 2) indication of the specialization of the position relevant to nuclear safety and radiation protection which is being applied for;
- 3) the applicant's correspondence address;
- 4) information on the course of professional work of the person applying for the granting of authorization;
- 5) in case of a position of significant importance for ensuring nuclear safety and radiation protection in an organizational entity involved in the construction, commissioning, operation or decommissioning of a nuclear facility – also indicate the name of that entity.

2. The applicant referred to in paragraph 1 shall attach the following documents referring to the person applying for

the granting of authorization:

- 1) a document which confirms passing the examination;
- 2) a medical statement of lack of contraindications to work under the conditions of exposure, as referred to in Art. 12(2)(2) of the Act;
- 3) certified copies of diplomas or certificates confirming possession of the required education and occupation;
- 4) documents confirming the required length of employment under the conditions of exposure;
- 5) a declaration of full capacity to perform acts in law..

3. The persons permitted to take an examination without the necessity to complete training shall not attach to the application referred to in paragraph the documents which had been attached to an application for examination permission..

4. Persons submitting the application referred to in paragraph 1 who, on the day of submitting an application for the examination permission without the necessity to complete training, possessed a valid authorization for employment on the position of major importance for ensuring nuclear safety and radiation protection with a given specialization and are applying for the authorization for employment on such a position with the same specialization, shall not submit the documents listed in paragraph 2(3) and (4).

§ 9. 1. Training courses commenced and not completed by the date of entry into force of this Regulation shall be conducted in accordance with the existing provisions.

2. To applications for the granting of authorization referred to in Art. 12(1) of the Act, submitted to the President of the National Atomic Energy Agency and not examined before the date of entry into force of this Regulation, the existing provisions shall apply.

§ 10. This Regulation shall enter into force 14 days following its promulgation.¹

Prime Minister: *M. Morawiecki*

¹ This Regulation was preceded by the Regulation of the Council of Ministers of 2 September 2016 on the position of major importance for ensuring nuclear safety and radiation protection and radiation protection officers (Dz. U., item 1513), which pursuant to Art. 37(1)(2) of the Act of 13 June 2019 amending the Act - the Atomic Law and certain other acts (Dz. U., item 1593 and of 2020, item 284), shall be repealed as of the date of entry into force of this Regulation.

Annex No. 1

**SPECIALISATIONS FOR A POSITION OF MAJOR IMPORTANCE FOR ENSURING NUCLEAR SAFETY AND
RADIATION PROTECTION AND THE DETAILED CONDITIONS FOR GRANTING AUTHORIZATION TO
HOLD A POSITION WITH A GIVEN SPECIALISATION**

No.	Specialisation	Education		Length of service (years) under exposure conditions	Scope of training
		higher in	secondary in		
1	2	3	4	5	6
1	Research reactor operator	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	nucleonics, power engineering, electrical engineering, mechanics, electronics, electromechanics and related disciplines	2 in a nuclear reactor operating unit	R-O
2	Research reactor dosimetrist	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	electronics, chemistry, electromechanics, nucleonics	1 in a dosimetry laboratory or plant in a nuclear reactor operating unit	R-D
3	Senior research reactor dosimetrist	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	—	2 as a specialised research reactor dosimetrist	R-D

4	Research reactor shift manager	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	nucleonics, power engineering, electrical engineering, mechanics, electronics, electromechanics and related disciplines	with higher education — 1 with secondary education — 3 — as research reactor operator	R-OK
5	Research reactor manager	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	—	1 as a research reactor shift manager	R-OK
6	Deputy director for nuclear safety and radiation protection in an organizational unit having a research reactor	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	—	1 as research reactor manager or research reactor shift manager	R-OK + R-D

7	Specialist for nuclear material accountancy in a nuclear facility, in a radioactive waste repository, or in an organizational unit carrying out activity with nuclear materials in quantities equal to or greater than: (1) 200 g of U-235 enriched uranium, plutonium or U-233 uranium, or (2) 100 items of nuclear material subject to accountancy pursuant to Commission Regulation (Euratom) No 302/2005 of 8 February 2005 on the application of Euratom safeguards (OJ EU L 54, 28.2.2005, p. 1 and OJ EU L 158, 10.6.2013, p. 74)	in any field	in any field	1 in a unit having nuclear materials	S-E
8	Spent nuclear fuel storage operator	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	electronics, chemistry, mechanics, nucleonics	1 in a spent nuclear fuel storage operation unit	S-O
9	Manager of a radioactive waste repository	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	electronics, chemistry, mechanics, nucleonics	with higher education — 1 with secondary education — 3 — in a radioactive waste repository or radioactive waste management plant	S-O

10	Manager of a radioactive waste management plant	physics, chemistry, electrical engineering, electronics, mechanics, computer science or related disciplines	—	3 in a radioactive waste repository or radioactive waste management plant	S-O
11	Operator of an accelerator used for other than medical purposes, excluding accelerators used for vehicle inspection	physics, chemistry, computer science, any technical, any natural science	electrical engineering, electronics, mechanics, nucleonics and related disciplines	with higher education — 0 with secondary education — 1 — in an accelerator laboratory	A-A
12	Operator of accelerator used for vehicle inspection	in any field	in any field	0	A-A
13	Operator of accelerator used for medical purposes and teleradiotherapy equipment	physics, chemistry, biology, any medical, any technical	electrical engineering, electronics, mechanics, medicine, nucleonics	with higher education — 0 with secondary education — 1 — in an accelerator laboratory	S-A
14	Operator of brachytherapy equipment with radioactive sources	physics, chemistry, biology, any medical, any technical	electrical engineering, electronics, mechanics, medicine, nucleonics	with higher education — 0 with secondary education — 1 — in a radiotherapy laboratory with radioactive sources	S-Z

THE CONTENTS OF TRAINING COURSES FOR PERSONS WHO APPLY FOR THE GRANTING OF
AUTHORIZATION TO BE EMPLOYED ON THE POSITION OF MAJOR IMPORTANCE FOR ENSURING
NUCLEAR SAFETY AND RADIATION PROTECTION

1. Type A-A training

Lecture topics:

- 1) basic knowledge of modern physics (min. 1 hour);
- 2) radiation and matter interaction (min. 1 hour);
- 3) biological effects of ionizing radiation (min. 1 hour);
- 4) principles of accelerator physics (min. 1 hour);
- 5) principles of X and gamma radiation measurement, detection of ionizing radiation, basic dosimetric quantities and units (min. 3 hours);
- 6) principles of radiation protection (min. 1 hour);
- 7) Act of 29 November 2000 - the Atomic Law and its implementing regulations (min. 1 hour);
- 8) quality assurance programme in an accelerator laboratory (min. 1 hour);
- 9) principles of dealing with radiation emergencies (min. 1 hour).

Analysis of the technical and technological documentation of the accelerator and ionizing radiation sources and the procedures used in the laboratory, in the form of laboratory exercises with on-the-job training (min. 2 hours).

2. Type S-A training

Lecture topics as in type A-A training and:

- 1) principles of safe work in the accelerator and teleradiotherapy laboratory (min. 2 hours);
- 2) principles of radiation protection of patients (min. 2 hours);
- 3) quality assurance programme in the accelerator and teleradiotherapy laboratory (min 4 hours).

Analysis of the technical and technological documentation of the accelerator and teleradiotherapy equipment and the procedures used in the laboratory, in the form of laboratory exercises with on-the-job training (min. 2 hours).

3. Type S-Z training

Lecture topics as in type A-A training, excluding principles of accelerator physics, and:

- 1) principles of safe work in the brachytherapy laboratory (min. 2 hours);
- 2) principles of radiation protection of patients (min. 2 hours);
- 3) quality assurance programme in the brachytherapy laboratory (min. 4 hours);
- 4) basic knowledge of the construction and principles of operation of brachytherapy equipment (min. 2 hours).

Analysis of the technical and technological documentation of the equipment for brachytherapy with radioactive sources and the procedures used in the laboratory, in the form of laboratory exercises with on-the-job training (min. 2 hours).

4. Type S-E training

Lecture topics:

- 1) basic knowledge of modern physics (min. 1 hour);
- 2) radiation and matter interaction (min. 1 hour);
- 3) biological effects of ionizing radiation (min. 1 hour);
- 4) detection of ionizing radiation (min. 2 hours);
- 5) basic dosimetry quantities of the ionizing radiation unit (min. 2 hours);

- 6) principles of radiation protection (min. 4 hour);
- 7) fundamentals of fission reaction physics, including criticality and multiplication factor issues (min. 4 hours);
- 8) Act of 29 November 2000 - the Atomic Law and its implementing regulations (min. 2 hours);
- 9) international conventions and agreements in the field of nuclear material safeguards (min. 2 hours);
- 10) principles and methods of nuclear material accounting and recording (min. 2 hours);
- 11) principles and methods of physical protection of nuclear facilities and materials (min. 2 hours);
- 12) sources of radiation hazards when handling nuclear material, including spent nuclear fuel (min. 1 hour);
- 13) nuclear facility safety report (min. 1 hour).

5. Type S- O training

Lecture topics as in type S-E training, and:

- 1) principles of dose rate and radioactive contamination measurements (min. 2 hours);
- 2) principles of safe work with sealed radioactive sources, equipment containing such sources, open radioactive sources, in the laboratory and outside the laboratory (min. 4 hours);
- 3) principles of radioactive waste management - methods of treatment and segregation, transport, storage, disposal (min. 4 hours);
- 4) organization of radiation protection in the organisational unit, duties and powers of the head of the unit, the radiation protection officer, staff (min. 2 hours);
- 5) preparation of documents in the organizational unit: work regulations, technological work instructions, dose registers, source registers, on-site emergency plan (min. 2 hours).

Analysis of technical and technological documentation, including emergency response plans, of a radioactive waste repository (min. 2.5 hours) or a spent nuclear fuel storage (min. 6 hours), in the form of laboratory exercises.

6. Type R- O training

Lecture topics as in type S-E training, and:

- 1) fundamentals of nuclear and reactor physics (min. 6 hours);
- 2) reactor physical and thermal characteristics (min. 2 hours);
- 3) ionizing radiation detection - continuation training (min. 2 hours);
- 4) barrier system for stopping the spread of fission products (min. 2 hours);
- 5) sources of hazard in a nuclear research reactor (min. 2 hours);
- 6) basics of reactor dosimetry issues (min. 4 hours);
- 7) management of radioactive waste and nuclear fuel (min. 2 hours);
- 8) accidents in nuclear research reactors (min. 4 hours);
- 9) quality assurance principles in the operation of nuclear research reactors (min. 4 hours);
- 10) heat exchange in the reactor (min. 4 hours);
- 11) irradiation of disc material, recording and control of the movement of radioactive sources (min. 2 hours);
- 12) operating limits and conditions in the research reactor (min 1 hour).

Analysis of technical and technological documentation, including safety report, of the research reactor, in the form of laboratory exercises (min. 8 hours), with particular attention to the following topics:

- 1) reactor unit construction;
- 2) cooling circuits: primary and secondary;
- 3) safety systems;

- 4) ventilation systems;
- 5) control, safety and technological control systems;
- 6) electrical power systems;
- 7) operating and emergency procedures of the research reactor;
- 8) characteristics and construction of dosimetry control systems;
- 9) irradiation in the reactor;
- 10) chemical issues;
- 11) hot chambers and isotope expedition;
- 12) emergency response plans;
- 13) operating procedures.

Laboratory and computational exercises in reactor physics, including in particular calibration of control rods, reactor control methods, measurements of reactivity effects, neutron flux density and dose rates, monitoring of the condition of fuel elements in the reactor, monitoring of releases from the research reactor (min. 8 hours).

On-the-job training on the operating reactor, in selected operational services teams and the reactor laboratory, according to the individual programme prepared by the head of the unit (min. 4 hours).

7. Type R-OK training

Lecture topics as in type R-O training, and:

- 1) reactor physics - continuation training (min. 4 hours);
- 2) emergency planning (min. 5 hours);
- 3) determination of radiation exposure in a research reactor facility (min 2 hours).

Analysis of reactor technical and technological documentation, in the form of laboratory exercises, particularly on operating procedures, emergency procedures and physical protection of the reactor (min. 8 hours).

8. Type R-D training

Lecture topics as in type S-E training, and:

- 1) fundamentals of nuclear and reactor physics (min. 4 hours);
- 2) characteristics and construction of dosimetry control systems (min. 6 hours);
- 3) ventilation systems (min 2 hours);
- 4) control, protection and technological control systems (min 2 hours);
- 5) hot chambers and expedition of isotopes (min. 4 hours);
- 6) irradiation in the reactor (min. 2 hours);
- 7) shielding calculation methodology for mixed neutron and gamma radiation (1 hour);
- 8) control of individual exposure from radioactive contamination (surface and spatial) (min. 1 hour);

Analysis of technical and technological documentation, including safety report, of the research reactor, in the form of laboratory exercises (min. 8 hours), with particular attention to the following topics:

- 1) ventilation systems;
- 2) control, safety and technological control systems;
- 3) standard and emergency operating procedures of the research reactor;
- 4) characteristics and construction of dosimetry control systems;
- 5) irradiation in the reactor;

- 6) chemical issues;
- 7) hot chambers and isotope expedition;
- 8) emergency response plans.

Laboratory and computational exercises in reactor physics, including in particular calibration of control rods, reactor control methods, measurement of reactivity effects, neutron flux density and dose rates, measurement and assessment of personal contamination (min. 8 hours).

On-the-job training on the operating reactor, in particular in the dosimetry laboratory, according to the individual programme prepared by the head of the unit (min. 4 hours).