

Pursuant to Article 16(1) of the Law on Radiation and Nuclear Safety in Bosnia and Herzegovina (Official Gazette of BiH 88/07) and Article 61(2) of the Law on Administration (Official Gazette of BiH 32/02 and 102/09), the director of the State Regulatory Agency for Radiation and Nuclear Safety issues the

REGULATION ON RADIATION PROTECTION OFFICER

PART ONE – GENERAL PROVISIONS

Article 1 **(Subject)**

- (1) This regulation provides for the requirements that must be met by a natural person to be certified to perform duties of the radiation protection officer for a legal person that intends to carry out a practice involving radiation sources (hereinafter: legal person) or a holder of authorization for a practice involving radiation sources (hereinafter: authorization holder).
- (2) This regulation specifies the practices in which the radiation protection officer must be appointed and provides information about the procedure that must be followed by the legal person or authorization holder requesting certification for the officer in order to obtain and maintain the certification, the procedure for certificate issuance by the State Regulatory Agency for Radiation and Nuclear Safety (hereinafter: Agency), the certificate layout, and also other important matters in this field.
- (3) This regulation applies to candidates for the position of radiation protection officer and to the radiation protection officers that must be employed by the holders of authorization for some practices involving radiation sources as defined in applicable regulations for the purpose of controlling occupational and public exposures from authorized practices.

Article 2 **(Definitions)**

The individual terms, as used in this regulation, mean:

- a) *Radiation protection officer* – An individual who is technically competent in radiation protection matters relevant for a given type of practice to supervise or implement radiation protection tasks in a legal person or an authorization holder.
- b) *Occupational exposure* – All exposures of workers in the course of their work, except the exposures excluded from international standards and the exposures from radiation sources and practices exempted from the standards.
- c) *Public exposure* – Exposures of individuals in the critical group of population, excluding any occupational or medical exposure and the normal local natural background radiation but including exposure from authorized sources and practices and from intervention situations.

Article 3 **(Responsibilities of the authorization holder)**

- (1) The legal person or authorization holder:

- a) must appoint one radiation protection officer whose duties and obligations in the legal person or authorization holder are to supervise or implement radiation protection tasks laid down in this regulation;
- b) is responsible for selecting the candidate designated for appointment to the position of radiation protection officer and for contacting the Agency in order to begin the certification process;
- c) must obtain a written opinion of a radiation protection expert about the candidate selection, appointment and training of the radiation protection officer for the practices of possession and use of Categories 1 and 2 radiation sources, Categories 1 and 2 radiation generators, and Category 1 technical services, while the written opinion is not required for other practices;
- d) must ensure radiation protection training to the candidate in accordance with applicable regulations;
- e) must ensure all necessary requirements for radiation protection officer's smooth work;
- f) must authorize the radiation protection officer to stop operations if all necessary radiation protection measures are not taken;
- g) adopt a radiation protection program establishing the responsibilities of the radiation protection officer.

Article 4

(Duties of the radiation protection officer)

(1) The radiation protection officer must:

- a) implement the radiation protection program;
- b) directly report on their work to the responsible person in the legal person or authorization holder;
- c) be competent to perform radiation protection tasks by attending the relevant training in protection against ionizing radiation in accordance with applicable regulations;
- d) ensure that work with radiation sources is carried out in accordance with the requirements of any specified procedures or local rules;
- e) supervise implementation of the workplace monitoring program;
- f) maintain adequate records of all radiation sources in accordance with applicable regulations;
- g) carry out periodic assessments of the condition of the relevant safety and warning systems;
- h) supervise implementation of the individual radiological monitoring program;
- i) supervise implementation of the health surveillance program;
- j) providing new workers with an appropriate introduction to local rules and procedures;
- k) give expert advice and comments on work plans;
- l) establish work plans;
- m) provide reports to the management;
- n) participate in the arrangements for prevention, preparedness and response for emergency exposure situations;
- o) inform and train exposed workers;
- p) liaise with the radiation protection expert;
- q) promptly inform in writing the responsible person in the legal person or authorization holder and the Agency at the same time if it is established that radiation safety is compromised.

PART TWO – CERTIFICATION

Article 5 (Certification)

- (1) The Agency conducts certification of the candidate for radiation protection officer.
- (2) After the certification process, the Agency issues a certificate for the radiation protection officer.
- (3) The certificate must indicate the specific practice in which is an individual certified to perform duties of the radiation protection officer.

Article 6 (Submission of application for certification)

- (1) The legal person or authorization holder submits to the Agency the application for certification of the candidate for radiation protection officer using the Form no. 1 shown in Annex, which is an integral part of this regulation.
- (2) The application for certification of the candidate for radiation protection officer must contain the following information:
 - a) Name of the legal person or authorization holder;
 - b) Address of the legal person or authorization holder;
 - c) Number of authorization number (if any);
 - d) Name of the candidate for radiation protection officer;
 - e) Candidate's address, fax and phone numbers, and e-mail;
 - f) Type of specific practice for which the certification of radiation protection officer is requested;
 - g) Required signatures.
- (3) The candidate must personally sign consent to be the radiation protection officer.
- (4) The following documents must be attached to the application for certification:
 - a) A certified copy of the certificate of successfully passed appropriate radiation protection course, relevant for a given practice involving radiations sources;
 - b) A proof of candidate's education and training;
 - c) A proof of paid administrative tax.

Article 7 (Certificate)

- (1) After reviewing the submitted documents, the Agency issues an appropriate procedural decision and, as an integral part of it, the certificate for the position of radiation protection officer in a given specific practice.
- (2) The certification enters into force on the certificate issuance date.
- (3) The certificate layout is shown in the Form 2 in Annex.

- (4) The certificate must be kept legible and posted on a visible place in the premises of the legal person or authorization holder.

Article 8
(Refusal of certification)

- (1) If a candidate does not meet the requirements laid down in this regulation, the Agency may not certify him or her, and it will issue a relevant procedural decision thereof.
- (2) The candidate may not perform the duties of radiation protection officer if the Agency refuses his or her certification.
- (3) The individual who was refused issuance of the certificate has the right to complain in accordance with applicable regulations.
- (4) The legal person or authorization holder may resubmit the application for certification of the candidate six months after the certification was rejected.

Article 9
(Certificate withdrawal)

- (1) The certificate may be withdrawn from a radiation protection officer if the Agency has determined that the officer is no longer able to perform responsibilities of the radiation protection officer.
- (2) The Agency may withdraw the certificate if there is:
 - a) a proof that the radiation protection officer has seriously violated relevant regulations;
 - b) a proof that the radiation protection officer is not able to meet his or her obligations;
 - c) a request by the authorization holder to withdraw the certificate.
- (3) The individual whose certificate is withdrawn has the right to complain in accordance with applicable regulations.
- (4) If the certificate was withdrawn from the radiation protection officer for any of the reasons above, that individual may not apply for certification within three years from the date of certificate withdrawal.

Article 10
(Validity period)

- (1) The certificate for the radiation protection officer is valid five years from the certification date.
- (2) Upon the expiry of the period referred to in paragraph (1), recertification will begin.

Article 11
(Cessation of validity)

- (1) The certificate becomes invalid in the following cases:

- a) A radiation protection officer is no longer employed with the legal person or authorization holder.
 - b) A radiation protection officer begins to perform new duties that are considerably different from tasks and duties of the radiation protection officer.
 - c) A radiation protection officer does not perform tasks of the radiation protection officer for longer than 12 consecutive calendar months.
- (2) If a legal person or an authorization holder introduces a new specific practice involving radiation sources which is not covered by the valid certificate, then the legal person or authorization holder must file the application for certification of radiation protection officer for the new specific practice.

PART THREE – APPOINTMENT AND EMPLOYMENT STATUS

Article 12

(Appointment of the radiation protection officer)

- (1) Upon the receipt of the relevant procedural decision and the certificate from the Agency, the legal person or authorization holder must promptly appoint the radiation protection officer in the given specific practice.
- (2) The legal person or authorization holder may appoint only the individual with the certificate for the specific practice indicated in the certificate.
- (3) An individual may not be appointed to the position of radiation protection officer unless certified by the Agency.
- (4) If a legal person or an authorization holder carries out at least three types of specific practices involving radiation sources, then they must appoint radiation protection experts as the radiation protection officers in their organizations.
- (5) If a legal person or an authorization holder carries out two types of specific practices involving radiation sources, then they must appoint one radiation protection expert or the certified radiation protection officer for both practices in their organizations.
- (6) The provision referred to in paragraph (3) does not apply to the radiation protection expert, the expert in radioactive waste management, and the expert in transport of radioactive material.
- (7) The appointment is made in accordance with the provisions laid down in the Form no. 3 shown in Annex, which must be signed by the responsible person in the legal person or authorization holder.
- (8) The appointee must sign a statement accepting duties of the radiation protection officer.
- (9) The decision appointing the radiation protection officer must be sent to the Agency within seven days after the appointment.

Article 13
(Status)

- (1) The radiation protection officer must be employed with the holder of authorization for the specific practices laid down in Article 16.
- (2) The radiation protection officer may be either employed by the authorization holder or contracted as an external consultant-radiation protection officer for the specific practices laid down in Article 17.
- (3) A requirement to contract an external consultant to be the radiation protection officer is that the appointed external consultant-radiation protection officer must regularly monitor all relevant areas where radiation sources are used and always be available to the persons working in these areas.

Article 14
(Absence)

- (1) The radiation protection officer employed with an authorization holder must continuously perform the duties referred to in Article 4.
- (2) The certified individual who is absent from the position of radiation protection officer for up to 90 days may resume working for the authorization holder without restrictions after this period.
- (3) The certified individual who is absent from the position of radiation protection officer between 90 days and one year may resume working if the authorization holder, having consulted with the radiation protection expert, has sent a written opinion to the Agency, stating that the individual concerned has knowledge and skills to resume working as the radiation protection officer.

Article 15
(Temporary replacement)

- (1) Upon a proposal of the radiation protection officer, the authorization holder must designate a temporary replacement for the officer in writing within 24 hours after the absence of the radiation protection officer has begun.
- (2) The temporary replacement must be qualified to replace the radiation protection officer during his or her absence.
- (3) The temporary replacement may replace the certified radiation protection officer not longer than 60 working days in a period of 365 days.
- (4) The temporary replacement need not be certified to replace the certified radiation protection officer not longer than 60 working days in a period of 365 days.
- (5) If the absence period of 60 working days is exceeded, then the temporary replacement must be certified.

Article 16
(Employment status)

The legal person or authorization holder must employ a certified radiation protection officer in the following practices:

- a) Specific medical practices:
 - 1) Radiotherapy,
 - 2) Nuclear medicine,
 - 3) Interventional radiology and cardiology,
 - 4) Diagnostic radiology in medicine or veterinarian medicine.

- b) Specific non-medical practices:
 - 1) Industrial radiography,
 - 2) Application of sealed radiation sources and X-ray devices in industry,
 - 3) Industrial irradiation for the purpose of sterilization,
 - 4) Well examination,
 - 5) Measuring with portable gauges, detection or analytical techniques (thickness, density, level, humidity, etc.).

- c) Higher education and scientific research work;
- d) Transport of radioactive material;
- e) Category 1 technical services.

Article 17
(External consultant)

(1) The legal person or authorization holder may employ a certified radiation protection officer or contract an external consultant to be the radiation protection officer in the following practices:

- a) Specific medical practices:
 - 1) Intraoral dental radiology.

 - b) Specific non-medical practices:
 - 1) Measuring with fixed gauges, detection or analytical techniques (thickness, density, level, humidity, etc.),
 - 2) Non-medical application of unsealed radiation sources,
 - 3) Manufacture of sources,
 - 4) Manufacture of radiation generators and additional equipment.

 - c) Category 2 technical services.
- (2) An external consultant may only be an individual with the Agency certificate for radiation protection officer in relevant specific practices.
- (3) The external consultant may provide consultations only with a written consent of the legal person employing the consultant.

Article 18
(Requirements)

- (1) Only the individuals who meet the education and training requirements laid down in table 1 in Annex may be appointed as radiation protection officers provided that they have an appropriate certificate issued by the Agency.
- (2) The education and training requirements for the certification of radiation protection officer and the relevant types of specific practices are listed in table 1 in Annex.

Article 19
(Administrative tax)

The Agency collects an administrative tax on the certificate issuance in the amount determined under an applicable decision of the Council of Ministers of BiH.

PART FOUR – TRANSITIONAL AND FINAL PROVISIONS

Article 20
(Abrogation)

This regulations supersedes Article 6 of the "Regulation on requirements of transfer and use of ionizing radiation sources" (Official Gazette of BiH 66/10).

Article 21
(Harmonization)

The legal persons already possessing a valid licence for carrying out a practice must harmonize their operations with the provisions of this regulation within one year from the effective date of this regulation.

Article 22
(Entering into force)

This regulation enters into force on the eighth day following the date of its publication in the Official Gazette of BiH.

No.: 04-02-2-1227/15
Sarajevo, 3 November 2015

DIRECTOR
Emir Dizdarević

ANNEX

Form no. 1 – Application for certification of the candidate for radiation protection officer

APPLICATION FOR CERTIFICATION

Name of legal person/authorization holder	
Address of legal person/authorization holder	
Authorization no. (if any)	
Name of the candidate for radiation protection officer	
Candidate's address	
Candidate's fax and phone numbers, and e-mail	

Mark the designated field with X to indicate the practice for which certification of the radiation protection officer is requested.

1. MEDICAL PRACTICES

- Radiotherapy, nuclear medicine, diagnostic radiology and interventional radiology and cardiology
- Radiotherapy and nuclear medicine
- Nuclear medicine and diagnostic radiology or interventional radiology and cardiology
- Radiotherapy
- Nuclear medicine
- Diagnostic radiology or interventional radiology and/or cardiology
- Dental radiology
- Diagnostic radiology in veterinarian medicine

2. NON-MEDICAL PRACTICES

- Industrial radiography
- Industrial applications of sealed radiation sources and X-ray devices
- Industrial radiation for the purpose of sterilization
- Well examination
- Measuring with portable gauges, detection or analytical techniques (thickness, density, level, humidity, etc.)
- Measuring with fixed gauges, detection or analytical techniques (thickness, density, level, humidity, etc.)
- Non-medical applications of unsealed radiation sources
- Manufacture of sources
- Manufacture of radiation generators and accessory equipment

3. TECHNICAL SERVICES FOR RADIATION PROTECTION

- Radiation safety control
- Medical physics
- Installation, servicing and dismantling of devices
- Calibration of measuring instruments and/or individual monitoring equipment
- Operator of the central storage facility for radioactive waste
- Collecting spent and disused sealed sources in original devices or containers

- Controlling the presence of radioactive material in scrap metal shipments
- Protection and quality control in intraoral dental radiology
- Individual monitoring of exposed workers
- Radiation monitoring of the environment
- Medical surveillance of exposed workers
- Training in ionizing radiation protection

4. TRANSPORT OF RADIOACTIVE MATERIAL

- Transport of radioactive material

5. HIGHER EDUCATION AND SCIENTIFIC RESEARCH WORK

- Higher education and scientific research work

Day/month/year:

Responsible person in the legal person

(signature)

(STAMP)

STATEMENT

I hereby declare that I accept to be the candidate for the position of radiation protection officer in this legal person.

Day/month/year:

Name of the candidate for the position of radiation protection officer

.....

Signature of the candidate for the position of radiation protection officer

.....

Form no. 2 – Certificate

State Regulatory Agency for Radiation and Nuclear Safety

Pursuant to Article 7 of the "Regulation on Radiation Protection Officer", the State Regulatory Agency for Radiation and Nuclear Safety issues the

Certificate
for the position of radiation protection officer

.....

(Name)

This certificate allows its holder to perform duties of the radiation protection officer for the holder of authorization for a specific practice involving radiation sources within the framework of applicable regulations issued by the State Regulatory Agency for Radiation and Nuclear Safety.

This certificate is not transferable and is approved on the basis of submitted documents and after meeting the provisions laid down in the "Regulation on radiation protection officer." The validity period of the certificate is five years from the date of issuance except if the certificate is withdrawn.

Sarajevo, / / year

Director of the Agency

(signature)

(STAMP)

Certificate no.:

Valid from: / / year until / / year

Authorization holder

Practice involving radiation sources

Form no. 3 – Decision appointing the radiation protection officer

Legal person

Address of legal person

Number of authorization for practice

**Decision
appointing the radiation protection officer**

In accordance with the procedural decision no./....., the certificate no./....., issued by the State Regulatory Agency for Radiation and Nuclear Safety for the position of radiation protection officer, and Article 12 of the "Regulation on radiation protection officer," I, hereby appoint as the radiation protection officer in this legal person for the specific practice involving sources of ionizing radiation and I entrust the appointee with independent performance of duties of the radiation protection officer in this legal person.

Place/day/month/year:

(STAMP)

Responsible person in legal person

(signature)

STATEMENT

I hereby declare that I accept the position of radiation protection officer in this legal person and I fully understand responsibilities of the position.

Day/month/year: / /

Name of radiation protection officer

Signature of radiation protection officer

Table 1: Radiation protection officers classified by types of specific practices

PRACTICES INVOLVING RADIATION SOURCES		
No.	Types of specific practices involving radiation sources	Radiation protection officer
1.	Radiotherapy, nuclear medicine, diagnostic radiology and interventional radiology and cardiology	Radiation protection expert in medical practices
2.	Radiotherapy and nuclear medicine	Radiation protection expert in medical practices
		Medical physics specialist with appropriate radiation protection courses in both indicated practices, conducted in accordance with applicable regulations
3.	Nuclear medicine and diagnostic radiology or interventional radiology and cardiology	Radiation protection expert in medical practices
		Medical physics specialist with appropriate radiation protection courses in both indicated practices, conducted in accordance with applicable regulations
4.	Radiotherapy	Radiation protection expert in medical practices
		Medical physics specialist with an appropriate radiation protection course conducted in accordance with applicable regulations
5.	Nuclear medicine	Radiation protection expert in medical practices
		Medical physics specialist with an appropriate radiation protection course conducted in accordance with applicable regulations
6.	Diagnostic radiology and/or interventional radiology and cardiology	Medical physics specialist with an appropriate radiation protection course conducted in accordance with applicable regulations
		BSc in medicine – radiology specialist with an appropriate radiation protection course conducted in accordance with applicable regulations
		BSc in health science studies – medical radiology engineer with an appropriate radiation protection course conducted in accordance with applicable regulations
		Senior radiology technician (2-year university degree) with an appropriate radiation protection course conducted in accordance with applicable regulations
7.	Dental radiology	BSc in dentistry with an appropriate radiation protection course conducted in accordance with applicable regulations

		BSc in health science studies – medical radiology engineer with an appropriate radiation protection course conducted in accordance with applicable regulations
		Senior radiology technician (2-year university degree) with an appropriate radiation protection course conducted in accordance with applicable regulations
8.	Diagnostic radiology in veterinarian medicine	BSc in veterinarian medicine or graduated veterinarian (earlier university degree), and with an appropriate radiation protection course conducted in accordance with applicable regulations
		BSc in health sciences studies – medical radiology engineer with an appropriate radiation protection course conducted in accordance with applicable regulations
		Senior radiology technician (2-year university degree) with an appropriate radiation protection course conducted in accordance with applicable regulations
9.	Industrial radiography	Radiation protection expert in non-medical practices
		University graduate – faculty of nature sciences and mathematics, physics department, with an appropriate radiation protection course conducted in accordance with applicable regulations
		University graduate with a technical degree and an appropriate radiation protection course conducted in accordance with applicable regulations
10.	Application of sealed radiation sources and X-ray devices in industry	University graduate or 2-year university graduate with a technical degree or a degree from a faculty of natural sciences and mathematics, and with an appropriate radiation protection course conducted in accordance with applicable regulations
11.	Industrial radiation for the purpose of sterilization	University graduate – faculty of nature sciences and mathematics, physics department, or faculty of mechanical engineering or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
12.	Well examination	University graduate – faculty of nature sciences and mathematics, physics department, or faculty of mechanical engineering or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
13.	Measurement with portable gauges,	University graduate – faculty of nature sciences

	detection or analytical techniques (thickness, density, level, humidity, etc.)	and mathematics, physics department, or faculty of mechanical engineering or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
14.	Measurement with fixed gauges, detection or analytical techniques (thickness, density, level, humidity, etc.)	Graduate of a four-year technical high school with an appropriate radiation protection course conducted in accordance with applicable regulations
15.	Non-medical applications of unsealed radiation sources	University graduate – faculty of nature sciences and mathematics, physics department, or faculty of mechanical engineering or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
16.	Manufacture of sources	University graduate – faculty of nature sciences and mathematics, physics department, or faculty of mechanical engineering or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
17.	Manufacture of radiation generators and accessory equipment	University graduate – faculty of nature sciences and mathematics, physics department, or faculty of mechanical engineering or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
18.	Radiation safety control	Radiation protection expert
		University graduate – faculty of nature sciences and mathematics, physics department, or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
19.	Medical physics	Medical physics specialist with an appropriate radiation protection course conducted in accordance with applicable regulations
20.	Installation, servicing and dismantling of devices	University graduate with a technical degree and an appropriate radiation protection course conducted in accordance with applicable regulations
21.	Calibration of measuring instruments and/or individual monitoring equipment	University graduate – faculty of nature sciences and mathematics, physics department, with an appropriate radiation protection course conducted in accordance with applicable regulations
		University graduate with a technical degree and an appropriate radiation protection course conducted in accordance with applicable regulations

22.	Operator of the central storage facility for radioactive waste	Expert in radioactive waste management
		University graduate with a technical degree or a degree from a faculty of natural sciences and mathematics, and with an appropriate radiation protection course conducted in accordance with applicable regulations
23.	Collecting spent and disused sealed sources in original devices or containers	Graduate of a four-year technical high school with an appropriate radiation protection course conducted in accordance with applicable regulations
24.	Controlling the presence of radioactive material in scrap metal shipments	Graduate of a four-year technical high school with an appropriate radiation protection course conducted in accordance with applicable regulations
25.	Protection and quality control in intraoral dental radiology	University graduate – faculty of nature sciences and mathematics, physics department, or faculty of mechanical engineering or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
26.	Individual monitoring of exposed workers	University graduate – faculty of nature sciences and mathematics, physics department, or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
27.	Radiation monitoring of the environment	University graduate – faculty of nature sciences and mathematics, physics or chemistry department, or faculty of electrical engineering, and with a completed radiation protection course conducted in accordance with applicable regulations
28.	Medical surveillance of exposed workers	BSc in medicine, occupational medicine specialist, with a completed radiation protection course conducted in accordance with applicable regulations
29.	Training in ionizing radiation protection	Depending on the type of training
30.	Transport of radioactive material	Expert in transport of radioactive material
		University graduate with a technical degree or a degree from a faculty of natural sciences and mathematics, and with an appropriate radiation protection course conducted in accordance with applicable regulations
		University graduate with a medical or pharmaceutical degree and an appropriate radiation protection course, conducted in accordance with applicable regulations for transport of unsealed radiation sources for medical practice

31.	Higher education and scientific research work	Expert in radiation protection in higher education and scientific research work
		University graduate with a degree in technical field or from a faculty of natural sciences and mathematics, and with an appropriate radiation protection course conducted in accordance with applicable regulations