Pursuant to Article 8(1)k, 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 THE NATIONAL REGISTER OF INDIVIDUALS EXPOSED TO IONIZING RADIATION

PART ONE – GENERAL PROVISIONS

Chapter I. General provisions

Article 1
(Subject)

This regulation provides for the establishment and maintenance of the National Register of Individuals Exposed to Ionizing Radiation (hereinafter: register), the classification of radiation sources for the purpose of the register, the dose recording levels for their recording in the register, the data on individual exposure monitoring, and also other matters important for occupational exposure.

Article 2
(Definitions)

The terms used in this regulation mean:

a) *National Register of Individuals Exposed to Ionizing Radiation*: The national register of individuals exposed to ionizing radiation, used to realize the data system for individual radiological monitoring of workers in Bosnia and Herzegovina and kept by the State Regulatory Agency for Radiation and Nuclear Safety (hereinafter: Agency);
b) *Effective dose (E)*: The sum of the weighted equivalent doses in all the tissues and organs of the body from internal and external exposure;
c) *Exposure*: The act of exposing or condition of being exposed to ionizing radiation emitted outside the body (external exposure) or within the body (internal exposure);
d) *Dose limits*: The maximum values of doses resulting from exposure of occupationally exposed workers, apprentices, university students and the public;
e) *Exposed worker*: An individual occupationally exposed to ionizing radiation, either self-employed or working under an employer, who is subject to exposure at work carried out within a practice and liable to receive doses exceeding the dose limits for public exposure;
f) *Controlled area*: An area subject to special rules for the purpose of protection against ionizing radiation or preventing the spread of radioactive contamination and to which access is controlled;
g) *Apprentice*: A person receiving instruction or training by an authorization holder with a view to exercising specific skills;
h) *Radiation protection officer*: An individual who is technically competent in radiation protection matters relevant for a given type of practice to supervise or implement the radiation protection arrangements;
i) *Monitoring*: The systematic measurement of dose or contamination levels related to an exposure or radioactive contamination, and the interpretation of the results;

j) *Supervised area*: An area subject to supervision for the purpose of protection against ionizing radiation;
k) *Recording level*: The level of dose, exposure and intake above which the values of dose, exposure and intake for an exposed worker are recorded in the register;
l) *Authorization holder*: A legal person responsible under the law for carrying out a practice involving radiation sources and the practice of technical service;
m) *Personal dose equivalent, Hp(d)*: The *dose* equivalent in soft tissue below a specified point on the body at an appropriate depth *d*; the unit of personal dose equivalent is sievert (Sv);
n) *Occupational exposure*: Exposure of workers, apprentices and students, incurred in the course of their work;
o) *Technical service for individual monitoring*: A dosimetry service authorized by the Agency for the tasks of calibration, determination or interpretation of individual monitoring results, or for the measurement of radioactivity in human body or biological samples, or for dose assessment;
p) *Intake*: The total activity of radionuclides entering the body from the external environment;
q) *Outside worker*: Any exposed worker who is not employed by the authorization holder responsible for the supervised and controlled areas, but performs activities in those areas, including apprentices and students.

Chapter II. Responsibilities of the authorization holder

Article 3
(Records)

The holder of authorization for a practice involving ionizing radiation sources must keep records containing the results of individual monitoring for each Category A worker and also for each Category B worker where such monitoring is required.

Article 4
(Submitting data)

The holder of authorization for a practice involving ionizing radiation sources must submit the data for the register to the Agency in accordance with this regulation.

Article 5
(Provision of information)

The holder of authorization for a practice involving ionizing radiation sources must:

a) ensure that the worker is informed about the results of individual radiological monitoring;
b) inform the workers that the results of individual radiological monitoring, the personal data about the worker subject to the monitoring, and the medical surveillance data will be submitted to the Agency for the purpose of keeping the data system for individual radiological monitoring.

Chapter III. Responsibilities of the Agency and the technical service

Article 6
(Responsibilities of the Agency)

(1) The Agency is responsible for establishing, keeping and maintaining the register.

(2) The Agency may verify the received data on individual radiological monitoring and, if necessary, correct them.

(3) The Agency must keep records on the corrected data on individual radiological monitoring.

(4) The Agency must use the data from the register in accordance with the Law on Personal Data Protection.

Article 7
(Responsibilities of the technical service)

(1) Individual radiological monitoring and the control of external and internal exposure of the worker must be conducted by a technical service for individual radiological monitoring that is authorized by the Agency.

(2) The technical service referred to in paragraph (1) must send the following information for the register to the Agency:

a) a method used to determine the radiation dose;
b) a report on the individual dose measurement.

(3) The data on individual radiological monitoring submitted to the register must be in accordance with Article 10 of this regulation.

(4) The data referred to in paragraph (3) must be submitted in a way determined by the Agency, within 30 days, after every reading of individual dosimeters.

(5) If unusually high individual doses are recorded, the data must be promptly sent to the Agency.

(6) The technical service for medical surveillance of exposed workers submits the data on the worker's medical surveillance for the register to the Agency at the latest within seven days from the conducted medical examination of the worker.

PART TWO – DATA SYSTEM IN THE NATIONAL REGISTER

Article 8
(General requirements)

(1) The register must contain the data on:

a) the worker's identity;
b) the worker's medical surveillance;
c) the authorization holder employing the worker, and for outside workers, the employer of the outside worker;
d) the results of the individual radiological monitoring of the exposed worker.

(2) The data for the national register referred to in points (a) and (c) above must be sent to the Agency by the authorization holder, and the data referred to in points (b) and (d) by the authorized technical service.

Article 9
(Data)

The data that must be included in the register data system are:

(a) Data on the worker's identity, which must include:

1) last name;
2) first name;
3) sex;
4) date of birth;
5) nationality;
6) the unique identification number assigned by the Agency.

(b) Data on the medical surveillance of the worker, which must include:

1) the medical classification of the worker (fit, fit under certain condition(s) and a recommendation);
2) information on restrictions on working with radiation;
3) the date of the last medical examination;
4) the name of the technical service for medical surveillance of exposed workers;
5) the period of validity of the result of the last medical examination.

(c) Data on the authorization holder, which must include:

1) name;
2) address;
3) unique identification number of the authorization holder.

(d) Data on the worker's employment, which must include:

1) the name, address, phone and fax numbers, e-mail, and employer's unique identification number;
2) the starting date of individual radiological monitoring and, where available, the end date;
3) the categorization of the worker (A or B);
4) the occupation (in accordance with the applicable occupational classification in Bosnia and Herzegovina);
5) the radiation source causing exposure of the worker (external and/or internal), in accordance with the classification of radiation sources established for the purpose of register and shown in Annex 2, which is an integral part of this regulation.

(e) the results of the individual radiological monitoring of the exposed worker:

1) the official dose record (year; effective dose in mSv; in the event of non-uniform exposure, equivalent doses in the different parts of the body in mSv; and in the event of an intake of radionuclides, the committed effective dose in mSv),
2) the name of the authorized technical service for individual radiological monitoring that has determined the doses.

Article 10
(Levels and classification)

(1) The quantities, units and recording levels entered in the register must be submitted to the register in accordance with Annex 1 and table 1, which are integral parts of this regulation.

(2) The classification of radiation sources for the purpose of the register is shown in Annex 2, which is an integral part of this regulation.

Article 11
(Reporting on the register data)

(1) The worker whose data are in the register may check the data and receive an excerpt of the data.

(2) The details on the worker's exposure may be sent to the technical service for medical surveillance of exposed workers and to the authorization holder without the worker's consent.

(3) To obtain the requested information, a written request must be sent to the Agency. The information is sent to the requester in writing.

Article 12
(Sanctions)

A legal person that fails to comply with the provisions of this regulation will be sanctioned in accordance with laws and regulations.

PART THREE – TRANSITIONAL AND FINAL PROVISIONS

Article 13
(Submitting the data to the Agency)

For the purpose of establishing the register, the holder of authorization for carrying out a practice involving ionizing radiation sources must send the following to the Agency within 60 days from the effective date of this regulation:

a) the name of the contact person from the authorization holder for cooperation with the Agency in establishing the register;
b) the name of the contact person from the technical service for cooperation with the Agency in establishing the register;
c) the data indicated in Article 9, points a), b), c) and d);
d) the data for the previous year indicated in Article 9(e).

Article 14
(Harmonization of operations)

The authorization holder must harmonize its operations with the provisions of this regulation within six months from the date of publication of this regulation in the Official Gazette of BiH.

Article 15
(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.
Date:

D I R E C T O R
Emir Dizdarević

A N N E X E S

ANNEX 1. The dose quantities, units and recording levels entered in the National Register of Individuals Exposed to Ionizing Radiation

- Doses due to external exposure must be reported to the National Register of Individuals Exposed to Ionizing Radiation by using the quantities personal dose equivalents Hp(10) and Hp(0.07).
- Personal neutron dose equivalent Hp(n) for neutron radiation must be reported separately from Hp(10) for photon radiation.
- Dose to fingers and other parts of the hand must be reported as personal dose equivalent Hp(0.07).
- Dose to eye lens is determined by using personal dose equivalent Hp(3) for measuring dose to eye lens.
- Doses determined by calculation must be reported by using the quantity effective dose E.
- Doses due to internal exposure must be reported by using the quantity committed dose or equivalent dose to thyroid.
- Doses must be reported in milisieverts (mSv) with two decimals.
- Doses lower than the recording levels are registered as 0.00 mSv.
- The recording level for a calculated effective dose from external exposure is 0.10 mSv.
- The recording level for a committed effective dose from internal exposure is 0.10 mSv.
- The recording level for an equivalent dose to thyroid is 2.00 mSv.
- The recording levels for external exposure measurements are shown in table 1.

Table 1: Recording levels (external exposure)

Quantity	**Recording level (mSv)**	
	Monitoring period 1 month	**Monitoring period 3 months**
Personal dose equivalent Hp(10) (photon radiation)	0.10	0.30
Personal dose equivalent Hp(10) (neutron radiation)	0.20	0.60
Personal dose equivalent Hp(0.07)	1.00	3.00
Dose to fingers Hp(0.07)	1.00	3.00
Dose to eye lens Hp(3)	1.00	3.00

Annex 2. Classification of radiation sources for the purpose of the register

CLASIFICATION OF RADIATION SOURCES FOR THE PURPOSE OF THE REGISTER

The sources causing external exposure:

1. X-radiation;
2. Sealed sources;
3. Unsealed sources.

The sources causing internal exposure:

1. Radioactive substances.