

## Norwegian Radiation and Nuclear Safety Authority and International Science and Technology Centre cooperation in Central Asia, 2019-2021

DSA has extended its cooperation with regulatory bodies from Kazakhstan, Kyrgyzstan, and Tajikistan as a Foreign Collaborator through the International Science and Technology Centre (ISTC) led project in Central Asia (CA) (2019-2021) to support the regulatory bodies in developing the regulations related to remediation.



Picture 1. Degmai tailings sites in Tajikistan (Source -NRSA, Tajikistan)

Norwegian Radiation and Nuclear Safety Authority (DSA) is cooperating with the ISTC - an intergovernmental organization which was originally established in Moscow by international agreement in November 1992 as a non-proliferation program and since 2015 operates globally from its Headquarters in Nur -Sultan, Kazakhstan.

ISTC coordinates the efforts of governments, international organizations, and private sector industries, providing scientists from the Commonwealth of Independent States (CIS) and other countries to advance global peace and prosperity through cooperative Chemical, Biological, Radiological and Nuclear (CBRN) risk mitigation by supporting civilian science and

technology partnerships that address global security threats and advance non-proliferation while focusing expertise on peaceful R&D fields.

Norway is a Party to ISTC along with the European Union, the United States, Japan, the Republic of Korea, Kazakhstan, Kyrgyzstan, Tajikistan, Georgia and Armenia and takes part in their meetings annually (*Picture 2*).

Since 2019, DSA joined a 2 years project funded by ISTC as a Foreign Collaborator to support central Asian countries with development of the regulations related to the ongoing remediation under the European Bank for Reconstruction and Development (EBRD) and The Environmental

Remediation Account for Central Asia (ERA) activities in the region.



Picture 2. ISTC Governing board meeting in Nur-Sultan, Kazakhstan, July 2019. (Source -ISTC).

Central Asia served as an important source for uranium in the former Soviet Union (SU). After the collapse of SU and fully or partially closure of uranium mines in 1995 radioactively contaminated material was placed in mining waste dumps and tailing sites. There was no proper regulatory control, nor remediation. The accumulated amount of radioactively contaminated material in the region is a threat to the environment and to the health of the population as also recognised by the 2013 UN resolution 68/218, calling on the international community to assist Central Asia with addressing this urgent issue.

ERA was established in 2015 at the initiative of the European Commission to fund environmental rehabilitation projects in Central Asian recipient countries and managed by EBRD. The aim of the account is to pool donor funds to assist the Kyrgyz Republic, Tajikistan and Uzbekistan to remediate some of the most dangerous sites left by uranium production in these countries (Pictures 1 and 3).

Norway as a donor country has contributed into EBRD-ERA fund as well as supporting ISTC funded project as a Foreign Collaborator by assisting Tajikistan, Kyrgyzstan and Kazakhstan in the development of the regulations needed for remediation. The gaps related to radioactive waste management and remediation were identified during bilateral cooperation between DSA and CA countries through the comprehensive analysis of the regulatory situation during 2009-2011 and

2018-2020 in the above-mentioned central Asian countries.

The participating parties in the ISTC TJ2512 project are the regulatory authorities of Kyrgyzstan, State Agency on Environment Protection and Forestry (SAEP); Tajikistan, The Nuclear and Radiation Safety Agency (NRSA); Kazakhstan: Committee for Atomic Energy Supervision and Control (CAESC).

The main objectives of the ISTC-CA -DSA project is to develop the legal acts directed for carrying out supervision over remediation activities of territories contaminated by uranium industry's radioactive waste in Tajikistan, Kyrgyzstan, and Kazakhstan in accordance with the international requirements and recommendations.

Under the ISTC project TJ2512 during 2019-2021 in cooperation with DSA, the CA countries are developing the following regulatory documents:

- Draft of Law of the Republic of Tajikistan "On use of atomic energy" and others.
- Draft of amendments to the Law of Republic of Tajikistan "On licensing of separates types of activities
- Draft of amendments to the Decree of Government of the Republic of Tajikistan "On regulation on licensing specifics of separate kinds of activities"
- Draft amendments and additions to the Law of the Republic of Tajikistan "On regulatory legal acts"
- Draft amendments and additions to the Law of the Republic of Tajikistan "On inspections of the activities of business entities"
- Draft amendments and additions to the Law "About the Academy of sciences of the Republic of Tajikistan".
- Draft of "Order on carrying out inspection during remediation process in Kyrgyzstan"
- Draft of Decree of Government of the Kyrgyz Republic "On the Licensing

procedure for Remediation of Uranium Production Legacy Sites”

- Draft of “Requirements for post-remediation monitoring of the legacy uranium territory considering the climatic conditions of the region in Kazakhstan”
- Draft of “Remediation rules for facilities and territories contaminated with radioactive substances: Rules, Criteria and Requirements in Kazakhstan”.

Draft document of the “Regulations for Remediation of Contaminated Sites” has been developed in 2020 by NRSA, Tajikistan in cooperation with the IAEA as a guidance. The document has been shared with CAESC and SAEP&F to follow in preparation of the above - listed regulatory documents.

The results of the proposed project will have direct influence on ISTC, EU, IAEA, and EBRD-ERA ongoing activities/goals.

The ISTC-CA-DSA Project is relevant to:

- ISTC project “Regional Watershed Monitoring System” with participation of Kyrgyzstan, Tajikistan and Uzbekistan.
- EU project “Establishment of a Legislative and Regulatory Framework, a Regional Watershed Monitoring System and Capacity Building for Remediation of Uranium Mining Legacy Sites in Central Asia”
- IAEA – “Strategic Master Plan” on “Environmental Remediation of Uranium Legacy Sites in Central Asia”
- EBRD – ERA fund where Norway contributed 31,000,000 Norwegian Kroner during 2017 and 2021.

In case of successful completion of the planning



Picture 3. Monitoring of uranium tailings sites (Courtesy to NRSA, Tajikistan).

project, an integrated systemic approach will be created to build a system regulatory framework for uranium industry waste management.

Achievements of the ISTC-CA-DSA project bringing together affected countries, international organisations as well as bilateral donors.

DSAs activities in this field is financed through the Norwegian Governments Nuclear Action Plan, with allocation of funds from the Norwegian Ministry of Foreign Affairs. Within the Regulatory Support Program of DSA during 2011-2019 CA countries have developed more than 50 regulatory documents to fill the gaps in the field of radiation and nuclear safety. The gaps identified during the Regulatory Threat Assessment reports in 2009-2011 and 2018-2020 in Kazakhstan, Tajikistan, and Kyrgyzstan serve as a platform for international cooperation and knowledge sharing via Coordination Group for Uranium Legacy Sites (CGULS), European and Central Asia Safety Network (EuCAS), Regulatory Supervision of Legacy Sites (RSLS) and other IAEA initiatives as well as for cooperation with the ISTC and other interested parties.

