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**THIS ACTION IS FUNDED BY THE EUROPEAN UNION**

**ANNEX 1**

to the Commission Implementing Decision on the Annual Action Plan for the European Instrument for International Nuclear Safety Cooperation for 2023

**Action Document for Nuclear safety culture 2023**

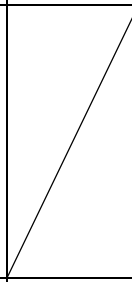
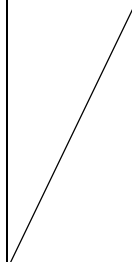
**ANNUAL PLAN**

This document constitutes the annual work programme within the meaning of Article 110(2) of the Financial Regulation, within the meaning of Article 7 of the INSC regulation.

# 1 SYNOPSIS

## 1.1 Action Summary Table

<b>1. Title</b> <b>OPSYS reference</b> <b>Basic Act</b>	Nuclear safety culture 2023 ACT-61676 Financed under the European Instrument for International Nuclear Safety Cooperation Regulation
<b>2. Team Europe Initiative</b>	No
<b>3. Zone benefiting from the action</b>	The action shall be carried out worldwide, in particular in the Neighbourhood East, Neighbourhood South, Central Asia and Africa
<b>4. Programming document</b>	European Instrument for International Nuclear Safety Cooperation Multiannual Indicative Programme (2021-2027) of 3 December 2021 (C(2021)8687)
<b>5. Link with relevant MIP(s) objectives / expected results</b>	This action is contributing to the promotion of an effective nuclear safety culture and implementation of the highest nuclear safety and radiation protection standards in the partner countries
<b>PRIORITY AREAS AND SECTOR INFORMATION</b>	
<b>6. Priority Area(s), sectors</b>	Promotion of an effective nuclear safety culture and implementation of the highest nuclear safety and radiation protection standards
<b>7. Sustainable Development Goals (SDGs)</b>	Main SDG: 16 (strong institutions) Other significant SDGs: SDG 11 (Disaster Risk Reduction) and SDG 5 (Gender Equality)
<b>8 a) DAC code(s)</b>	23510 – Nuclear energy electric power plants and nuclear safety – 100%
<b>8 b) Main Delivery Channel</b>	10000 – Public sector institutions

<b>9. Targets</b>	<input type="checkbox"/> Migration <input type="checkbox"/> Climate <input checked="" type="checkbox"/> Social inclusion and Human Development <input checked="" type="checkbox"/> Gender <input type="checkbox"/> Biodiversity <input checked="" type="checkbox"/> Education <input type="checkbox"/> Human Rights, Democracy and Governance			
<b>10. Markers (from DAC form)</b>	<b>General policy objective @</b>	<b>Not targeted</b>	<b>Significant objective</b>	<b>Principal objective</b>
	Participation development/good governance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Aid to environment @	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Gender equality and women's and girl's empowerment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Reproductive, maternal, new-born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Disaster Risk Reduction @	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Inclusion of persons with Disabilities @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Nutrition @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>RIO Convention markers</b>	<b>Not targeted</b>	<b>Significant objective</b>	<b>Principal objective</b>
	Biological diversity @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change adaptation @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>11. Internal markers and Tags</b>	<b>Policy objectives</b>	<b>Not targeted</b>	<b>Significant objective</b>
Digitalisation @		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
digital connectivity digital governance digital entrepreneurship digital skills/literacy digital services		YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	NO <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Connectivity @		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
digital connectivity energy transport health education and research		YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	NO <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	

	Migration @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Reduction of Inequalities @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Covid-19	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BUDGET INFORMATION</b>				
<b>12. Amounts concerned</b>	Budget line: 14.060100 Total estimated cost for 2023: EUR 17 618 008.83 Total amount of EU budget contribution for 2023: EUR 17 618 008.83			
<b>MANAGEMENT AND IMPLEMENTATION</b>				
<b>13. Type of financing</b>	<b>Direct management</b> through: <ul style="list-style-type: none"> <li>- Grants</li> <li>- Procurement</li> </ul> <b>Indirect management</b> with: <ul style="list-style-type: none"> <li>- the Science and Technology Center in Ukraine (STCU) and/or the European Bank for Reconstruction and Development (EBRD) for Component C (Ukraine)</li> <li>- the United Nations Development Programme (UNDP) for Component D (Central Asia)</li> <li>- the entity(ies) to be selected in accordance with the criteria set out in section 4.3.3 for part of Component A</li> </ul>			

## 1.2 Summary of the Action

The overall objective of the action is to contribute to an effective nuclear safety culture and standards for radiation and nuclear safety in third countries and regions, comparable with those in the European Union.

The cooperation with Africa will focus on strengthening regulatory capacity in several African countries interested in nuclear energy (e.g. Egypt, Ghana, Kenya, Morocco, Nigeria, South Africa and Zimbabwe), partly through bilateral cooperation and partly through regional cooperation in the framework of the Forum of Nuclear Regulatory Bodies in Africa (FNRBA) or other relevant regional and international bodies.

The cooperation with Jordan will focus on strengthening the regulatory capabilities and enhance the legal and procedural base, including for radiation protection, environmental monitoring, decontamination, remediation, and management of radioactive waste including Naturally Occurring Radioactive Material (NORM).

The cooperation with Ukraine will focus on the restoration of some radioprotection measures that were damaged, looted or lost during Russia's unprovoked war of aggression against Ukraine.

The cooperation with Central Asia will focus on inclusive and meaningful local stakeholder engagement in support of the ongoing remediation of Uranium Legacy Sites (ULS) co-funded by the EU.

The activities in the area of education will focus on students and staff of regulatory authorities of European Instrument for International Nuclear Safety Cooperation (INSC) partner countries and the areas of nuclear safety, spent fuel and radioactive management and nuclear safeguards.

## 2 RATIONALE

### 2.1 Context

The promotion of radiation protection and nuclear safety is a key priority for the EU since the early days of the European Economic Community and EURATOM. The European Instrument for International Nuclear Safety Cooperation<sup>1</sup> (INSC) is the specific tool of the EU addressing nuclear safety issues in partner countries, including

<sup>1</sup> Council Regulation (Euratom) 2021/948 of 27 May 2021 establishing a European Instrument for International Nuclear Safety Cooperation complementing the Neighbourhood, Development and International Cooperation Instrument – Global Europe on

candidate countries, complementing other financing instruments for external action such as the Neighbourhood, Development and International Cooperation Instrument – Global Europe (NDICI) and the Instrument for Pre-Accession Assistance (IPA III).

The international recognition of the added value of the Instrument was acknowledged in 2017 at the 7<sup>th</sup> Convention on Nuclear Safety review meeting, where “the implementation of the Instrument for Nuclear Safety Cooperation Program for assisting non-EU countries” was officially recognised world-wide as ‘good practice’. The final evaluation of the INSC 2014-2020<sup>2</sup> recognises the positive contribution of the Instrument, noticing its capability to respond swiftly to new needs. It acknowledged the INSC's unique added value due to the institutional framework that allows the Commission to act at a global level; the instrument is supporting complementarities, coordination and synergies and is effective in leveraging financial resources for nuclear safety.

The main target of this action is to support partner countries in achieving the highest possible level of nuclear safety by aligning their regulatory framework with the EU *acquis* and by transferring best EU practices in the field.

The European Commission's services maintain a close working relationship with the EEAS and its EU Delegations in partner countries, in order to help ensure a coherent approach, taking the latest relevant developments into account.

The action is in line with the EU Gender Action Plan 2021-2025 (GAP III)<sup>3</sup> and its thematic area of engagement “Promoting economic and social rights and empowering girls and women” as well as “Promoting equal participation and leadership”.

## 2.2 Problem Analysis

### **Component A: Africa – Strengthening nuclear safety regulatory capacity**

Several member countries of the Forum of Nuclear Regulatory Bodies in Africa (FNRBA) have jointly approached the European Commission for support in the development of the nuclear regulatory infrastructure in line with standards of the International Atomic Energy Agency (IAEA) and international best practices. Previous surveys conducted by several thematic working groups of FNRBA have identified a number of weaknesses in regulatory frameworks where international cooperation could be most fruitful. In addition, Morocco and Ghana have requested an extension of the ongoing INSC partnership projects.

### **Component B: Jordan – Strengthening of regulatory capacity and safety**

Jordan is expanding its nuclear sector, mainly in the direction of medical isotope production in its research reactor and in developing its potential in uranium mining, while preparing itself for the possible introduction of one or more small modular reactors for electricity generation. The activities will support necessary changes and adaptation of nuclear safety, and spent fuel and radioactive waste management. The regulator needs to be strengthened to ensure safety in line with international best practices and the radioactive waste management organisation needs to be prepared.

### **Component C: Ukraine – Restoration of safety features compromised by Russia's invasion**

Following Russia's unprovoked war of aggression against Ukraine, the illegal occupation and seizure of Ukrainian nuclear installations by Russia, and the reported shelling and bombarding of some nuclear facilities, nuclear safety, radiation monitoring and radioprotection measures have to be restored. The activities with Ukraine will focus on providing support to the nuclear regulator in the regulatory assessment of activities related to the supply and/or works for the restoration or replacement of nuclear safety related equipment, installations, and related services. Activities in the Chornobyl Exclusion Zone and other nuclear facilities will focus on replacement and recovery of radiation monitoring equipment, damaged, looted or lost during Russia's unprovoked war of aggression against Ukraine. Ukraine is an EU candidate country since 23 June 2022 and will need to align with the Euratom *acquis*. The related activities will support all relevant Ukrainian regulators in the continuous development and implementation of a strategic roadmap for full implementation of the Euratom *acquis*. It will, in particular, concern the Nuclear Safety Directive 2014/87/Euratom on nuclear safety of nuclear installations, Directive 2011/70 on Spent Fuel and Radioactive Waste management and Directive 2013/59/Euratom on Basic Safety Standards.

### **Component D: Central Asia – Local engagement**

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the basis of the Treaty establishing the European Atomic Energy Community, and repealing Regulation (Euratom) No 237/2014

<sup>2</sup> [https://international-partnerships.ec.europa.eu/system/files/2022-09/evaluation-report-insc-2014-2020\\_en.pdf](https://international-partnerships.ec.europa.eu/system/files/2022-09/evaluation-report-insc-2014-2020_en.pdf)

<sup>3</sup> [https://www.eeas.europa.eu/eeas/gender-action-plan-iii-towards-gender-equal-world\\_en](https://www.eeas.europa.eu/eeas/gender-action-plan-iii-towards-gender-equal-world_en)

The intervention builds on previous activities (Phases I and II), which increased understanding of local and national decision-makers and pilot communities about uranium waste risk and safety measures. Phases I and II contributed to establishing sustainable and feasible mechanisms for civic engagement of local communities in more inclusive uranium legacy site (ULS) management. Phase II supported remediation activities implemented by the European Bank for Reconstruction and Development (EBRD), with EU and other donors' contributions to the Environmental Remediation Account (ERA). These community engagement mechanisms - coupled with tailored participatory 'grant-pilot projects' addressing socio-economic needs in targeted communities - proved effective. They have contributed considerably to establishing good relations between local communities, authorities and the international community for uranium legacy remediation in Central Asia. Small-scale local actions addressing socio-economic aspects aim to support the revival of once thriving communities that were deserted and degraded when the uranium mines closed down. Considering the long-term nature of remediation works at target ULSs (over the next five years or so) and ongoing degradation of the socio-economic situation in the region, it is important to sustain the established regular and effective working level dialogue/cooperation channels with local communities. They should ensure that local citizens' rights are observed, and needs are addressed in a timely manner during highly sensitive technical operations on the ground. Furthermore, remediation works should continue to go hand in hand with socio-economic rehabilitation of affected areas for uranium remediation. This work will continue in a Phase III that will utilize an integrated approach to management of uranium related risks and remediation at sites, while socio-economic rehabilitation of affected communities will proceed along with uranium remediation activities in target sites. Considering the challenging social and political environments in recipient countries, it would be desirable that the EU maintains and even increases its presence in Central Asia, including engagement in uranium legacy remediation in the region.

**Component E: Education in the areas of nuclear safety, spent fuel and radioactive waste management, and nuclear safeguards**

There are four ongoing INSC activities in the education area, which help to establish a strong knowledge, skills and attitude set based on EU experience and best practices. The access to those initiatives for INSC partners needs to be strengthened. The initiatives are: Training and Tutoring of regulators, European Leadership for Safety Education (ELSE), Decommissioning Management and Leadership for Safety Education (DMA LSE) and the Safeguards Training and Education (SaTE).

Identification of main stakeholders and corresponding institutional and/or organisational issues (mandates, potential roles, and capacities) to be covered by the action:

**Component A – Africa:** Member countries of the Forum of Nuclear Regulatory Bodies in Africa (FNRBA), in particular those represented by the Egyptian Nuclear and Radiological Regulatory Authority (ENRRA), the Kenya Nuclear Regulatory Authority (KNRA), the Moroccan Agency for Nuclear and Radiological Safety and Security (AMSSNuR), the National Nuclear Regulator of South Africa (NNR), the Nigerian Nuclear Regulatory Authority (NNRA), the Nuclear Regulatory Authority of Ghana (NRA) and the Radiation Protection Authority of Zimbabwe (RPAZ).

**Component B – Jordan:** The Jordanian nuclear safety regulator, the Energy and Minerals Regulatory Commission (EMRC) and the Jordanian waste management organisation of the Jordan Atomic Energy Commission (JAEC)

**Component C – Ukraine:** The Ukrainian nuclear regulatory authorities and nuclear operators, the Ministry of Health, the Ministry of Environmental Protection and Natural Resources as well as their supporting organisations in charge of radiation protection and remediation issues

**Component D – Central Asia:** The population, local authorities, academia and small local NGOs or associations living and/or active in the vicinity of environmental remediation areas. As rights holders, particular attention will be paid to ensure that all women as well as those people living in the most vulnerable situations (people with disabilities, young people, etc...) and those organisations representing their rights and interests will be actively and meaningfully consulted and involved in remediation and socio-economic rehabilitation related activities. From the academia side, they will contribute to build stronger evidence on the differentiated impact and needs of women and the most vulnerable people affected by uranium waste risk and safety measures within the communities.

**Component E – Education:** Regulatory staff and staff involved in nuclear safety, spent fuel and radioactive waste management, decommissioning and nuclear safeguards in INSC partner countries; partners involved in the European Nuclear Education Network (ENEN). Particular attention will be paid to ensure a gender balanced and inclusive access and participation of women as well as people with disabilities by adopting special measures such as, non discriminatory criteria/requirements, quotas when needed, accessibility measures, public communication campaigns to visualise the role of women in the nuclear sector and combat gender stereotypes.

### 3 DESCRIPTION OF THE ACTION

#### 3.1 Objectives and Expected Outputs

The Overall Objective (Impact) of this action is to contribute to an effective nuclear safety culture and standards for radiation and nuclear safety in third countries and regions, comparable with those in the European Union.

The Specific Objectives (Outcomes) of this action are:

1. Competent, independent and sustainable regulatory authorities effectively regulating nuclear safety in several African partner countries
2. Strengthened regulatory capabilities of Jordan's Energy and Minerals Regulatory Commission (EMRC) and waste management capabilities of the Jordan Atomic Energy Commission (JAEC)
3. Further alignment with EU *acquis* and restored safety infrastructure, which was damaged by Russia's unprovoked war of aggression against Ukraine
4. Inclusive and meaningful local stakeholders engagement with Uranium Legacy Sites remediation in Central Asia
5. EU knowledge of nuclear safety, spent fuel and radioactive waste management, and nuclear safeguards shared with third countries and regions

The Outputs to be delivered by this action contributing to the corresponding Specific Objectives (Outcomes) are:

Contributing to Outcome 1 (Africa):

- 1.1 Increased regulatory capacity to assess radioprotection measures, manage spent fuel and radioactive waste, assess safety, and communicate in an accessible way with the public
- 1.2 Plan developed for (regional) radiation monitoring systems
- 1.3 Harmonised radioprotection and nuclear safety regulations
- 1.4 Detailed plan for emergency preparedness and response
- 1.5 Ghana's Nuclear Regulatory Authority is better prepared for its nuclear power programme
- 1.6 Establishment of a national centre for nuclear or radiological emergencies in Morocco

Contributing to Outcome 2 (Jordan):

- 2.1 Improved regulatory capacity for uranium mining activities
- 2.2 Improved Integrated Management System (IMS) for the regulator concerning all regulatory activities
- 2.3 Improved spent fuel and radioactive waste management
- 2.4 Improved practical and legal capacity for decontamination and remediation of contaminated areas
- 2.5 Enhanced oversight and licensing capacity for nuclear safety, radiation protection and environmental-social monitoring plans submittals
- 2.6 Improved capacity in emergency preparedness and response (EPR)
- 2.7 Developed Environmental Impact Assessment (EIA) for radiation and nuclear facilities

Contributing to Outcome 3 (Ukraine):

- 3.1 Actualised strategic road map for full compliance with EU *acquis*
- 3.2 All regulatory authorities supported in the implementation and alignment of the strategic road map
- 3.3 Restored and strengthened nuclear safety and radioprotection functions affected by Russia's unprovoked war of aggression against Ukraine

Contributing to Outcome 4 (Central Asia):

- 4.1 Increased inclusive and meaningful dialogue with, improved capacity building, awareness raising and improved socio-economic aspects of diverse local stakeholders in targeted Uranium Legacy Sites (ULS)
- 4.2 Uranium legacy risk reduced in target communities with an inclusive and participatory approach

Contributing to Outcome 5 (Education):

- 5.1 Consolidation of the European Leadership for Safety Education (ELSE) project
- 5.2 Consolidation of the Decommissioning Management and Leadership for Safety Education (DMaLSE) project
- 5.3 Consolidation of the Safeguards Training and Education (SaTE) project
- 5.4 Nuclear safety regulatory authorities trained and tutored

## 3.2 Indicative Activities

The description of the activities may not be exhaustive.

### **Outcome 1 - Competent, independent and sustainable regulatory authorities effectively regulating nuclear safety in several African partner countries**

Activities relating to Output 1.1:

- Hold multi-country and national training sessions and workshops focused on regulatory capacity building concerning assessment of radioprotection measures, spent fuel and radioactive waste management, safety assessment and communication in an accessible way with the public

Activities relating to Output 1.2:

- Organise site visits and joint drafting of a step wise roll out and implementation plan for radiation monitoring

Activities relating to Output 1.3:

- Hold joint bilateral and multi-country workshops and training for drafting radioprotection and nuclear safety related regulations

Activities relating to Output 1.4:

- Organise joint site visits, workshops and training related to emergency preparedness and response (EPR)

Activities relating to Output 1.5:

- Hold workshops and training specifically targeted at the stage of the nuclear power programming and its implementation in Ghana

Activities relating to Output 1.6:

- Support the development of AMSSNuR's Emergency Centre with all necessary capacities and capabilities to ensure an adequate response to a nuclear or radiological emergency, including prevention and mitigation from emergency exposure situations. The centre includes a Capacity Building Centre for Emergency Preparedness and Response (CBC-EPR) to ensure continuous improvement of the national EPR capacities and capabilities on EPR, and to maintain their performance
- Strengthen the cooperation with the national counterparts, regional and international organizations involved in EPR, through the organization of workshops, meetings and exercise on EPR

### **Outcome 2 - Strengthened regulatory capabilities of Jordan's EMRC and waste management capabilities of JAEC**

Activities relating to Output 2.1:

- Conduct joint oversight of uranium mining activities. Draft regulatory requirements related to safety, radiation protection and safeguards for the different stages of uranium mining activities, including exploration, mining, construction, commissioning, operation and decommissioning
- Develop regulatory procedures to cover activities related to uranium mining including licensing, inspection and review & assessment

Activities relating to Output 2.2:

- Draft operational procedures for a comprehensive IMS covering all directorates involved in the radiological and nuclear work rather than the Nuclear Safety Directorate and the Radiation Protection Directorate only

Activities relating to Output 2.3:

- Develop a strategy for the management of the spent fuel from the Jordan Research and Training Reactor (JRTR) and future small modular reactors (SMR) in line with EU directives and international best practice.
- Draft regulatory requirements for Naturally Occurring Radioactive Material (NORM) management, procedures for treating the residue produced at the Jordanian water treatment pilot plant, radiation protection procedures and a roadmap for treating such radioactive residues for future water treatment plants based on the radiation level and volume, procedures for spent fuel management for SMR, Waste Acceptance Criteria for the waste management facilities in Jordan, and radioactive waste discharge levels
- Develop and update the radioactive waste management strategy in line with the EU directives.
- Build capacity and organise trainings related to safety assessments for radioactive waste management facilities and siting low-level waste disposal facilities

Activities relating to Output 2.4:

- Build practical and regulatory capacity for decontamination and remediation of contaminated areas

Activities relating to Output 2.5:

- Draft instructions on the licensing of Qualified Experts (Radiation Protection Experts) and the mechanism for the formal recognition of such experts

- Draft regulatory guides to the operators and licensees on the contents and methods for developing radiation protection programs
- Draft inspection checklists for inspection missions covering the JRTR, the Jordanian Subcritical Assembly and SESAME<sup>4</sup>
- Build capacity related to quality control tests, occupational and medical exposure results (including from a gender perspective), and inspection of Gamma Knife facilities and radioisotope production in cyclotrons
- Build capacity of the regulator's staff in fields related to the inspection of radiation protection programmes of nuclear facilities and the review & assessment of licensee submittals related to radiation protection and environmental-social monitoring
- Perform independent analyses and assessment using nuclear computational software and tools
- Build practical capacities for environmental impact assessment for nuclear and radiation facilities

Activities relating to Output 2.6:

- Draft regulatory guides to the operators and licensees on the contents and methods for developing inclusive and gender responsive emergency plans
- Draft and review documents for enhanced capabilities related to EPR, including the Protection Strategy for Radiological and Nuclear Emergencies, and the Radiological Monitoring Strategy. The Protection Strategy is aimed at effectively taking preventive and other gender responsive response actions in the event of a nuclear or radiological emergency. The Monitoring Strategy will address the radiological monitoring architecture for Jordan
- Review and enhance the National Emergency Plan to take into account national, regional and interregional hazards

Activities relating to Output 2.7:

- Provide practical insight to those involved in the EIA process
- Build capacities for preparing good quality EIA reports and guiding competent authorities and other interested parties as they review the report
- Draft clear procedures showing the roles and responsibilities of the Ministry of Environment in radiological or nuclear emergencies and its connections with the Regulator (EMRC)

### **Outcome 3 - Further alignment with EU *acquis* and restored safety infrastructure, which was damaged by Russia's unprovoked war of aggression against Ukraine**

Activities relating to Output 3.1:

- Complement the existing status reports and strategy documents with additional analysis for the alignment with the EU *acquis* on nuclear and radiation safety
- Develop and complete a strategic road map based on workshops and EU experience

Activities relating to Output 3.2:

- Prepare documents, on-site meetings, workshops and legal analysis

Activities relating to Output 3.3:

- Provide regulatory support in the assessment of safety restoration efforts by nuclear operators
- Support nuclear operators in implementing and proposing safety restoration activities and necessary upgrades in line with EU *acquis* and best practices

### **Outcome 4 – Inclusive and meaningful local stakeholders engagement with Uranium Legacy Sites remediation in Central Asia**

Activities relating to Output 4.1:

- Raise awareness, transfer knowledge, build capacity (including human-rights based and gender equality approaches)
- Ensure institutional set-up of the engagement platform
- Enhance cooperation at regional and national levels
- Promote regional exchange of knowledge and best practices on awareness raising and inclusive and meaningful engagement with diverse local communities (including women's rights organisations and those representing the interests and rights of those people in the most vulnerable situations)

Activities relating to Output 4.2:

- Ensure participatory, inclusive and gender balanced planning and implementation
- Build capacity of local partners, including on gender and human rights issues relevant to ULS

<sup>4</sup> Synchrotron-light for Experimental Science and Applications in the Middle East



- Develop human rights based business model/mechanisms and build capacity of and promote local small and medium-sized businesses (including women & youth entrepreneurship)
- Share knowledge and lessons learned, including from the human rights and gender perspectives
- Prepare tailored, inclusive and gender responsive community business projects
- Monitor grant projects and share knowledge/lessons learnt

#### **Outcome 5 – EU knowledge of nuclear safety, spent fuel and radioactive waste management, and nuclear safeguards shared with third countries and regions**

Activities relating to Output 5.1:

- Select and support participants to the Master in ELSE

Activities relating to Output 5.2:

- Select and support participants to the Master in DMaLSE

Activities relating to Output 5.3:

- Select and support participants to the Master in SaTE

Activities relating to Output 5.4:

- Develop training courses and workshops for nuclear safety related regulatory knowledge, skills and competences, select and support nuclear safety regulatory staff in the participation in those training, workshops and tutoring modules.

During the design and implementation of these activities, a gender balanced participation will be ensured, as well as an inclusive enrolment through specific measures, if needed, such as gender quotas, accessibility measures, non discrimination criteria or public communication campaigns to visualise the role of women in the nuclear sector and combat gender stereotypes.

### **3.3 Mainstreaming**

#### **Environmental Protection & Climate Change**

The activities contribute to the protection of the environment by enhancing nuclear safety.

#### **Gender equality and empowerment of women and girls**

Women are underrepresented in nuclear safety, as well as in the nuclear field in general, so it is important to understand and tackle the barriers that women can face to joining and thriving in this field. The contribution of the INSC to gender equality is mainly achieved through activities related to training and tutoring for which the European Commission strongly encourages the participation of women that in turn will provide additional opportunity for career development. Women are also underrepresented in STEM<sup>5</sup> and leadership roles, even when considered in terms of their representation in the nuclear workforce.<sup>6</sup> This action aims amongst others at gender balanced training and tutoring on nuclear safety culture, and promoting women's representation at senior level within nuclear institutions as well as during the engagement and dialogue with diverse local stakeholders. Studies and advisory services will fully integrate gender aspects. Gender-specific indicators and data disaggregated by sex, age and disability will be included, where relevant. This action will work with partners to ensure a balanced representation of women and men in all activities. Therefore, as per the OECD Gender DAC codes identified in section 1.1, this action is labelled as G1.

#### **Human Rights**

This action is designed and will be implemented taking into account the need to uphold national and international human rights and to respect the five working principles of the human rights-based approach: respecting all human rights, non-discrimination, accountability and transparency principles, as well as ensuring participation of all stakeholders.

#### **Disability**

As per OECD Disability DAC codes identified in section 1.1, this action is labelled as D0. This implies that the action is not considered relevant for inclusion of persons with disabilities. However, this action will ensure that rights of persons with disabilities will be respected and will encourage stakeholders and programme participants to

<sup>5</sup> STEM: Science, Technology, Engineering, Mathematics

<sup>6</sup> [Gender Balance in the Nuclear Sector, Nuclear Energy Agency \(NEA\) 2023](#)

take the initiatives to protect and ensure equal access of persons with disabilities. This action is in line with the Convention on the Rights of Persons with Disabilities (CRPD)<sup>7</sup> and the EU Strategy for the Rights of Persons with Disabilities 2021-2030<sup>8</sup>.

#### Disaster Risk Reduction

All components have aspects of disaster risk reduction, because nuclear safety activities are directly and indirectly reducing the chance of or the impact of incidents or accidents relating to nuclear activities or applications of radioactivity.

### 3.4 Risks and Lessons Learnt

Category	Risks	Likelihood (High/ Medium/ Low)	Impact (High/ Medium/ Low)	Mitigating measures
People and the organisation	Lack of political commitment and administrative support in the partner countries	L	M	Continued dialogue with authorities at all levels in partner countries on the importance of INSC actions
People and the organisation	No relevant international peer review missions in the relevant time frame	M	M	Reporting requirements at contracting level will include the obligation to provide relevant information for the indicators. If no international peer review mission is available, they will be reviewed by independent experts, e.g., from JRC
People and the organisation	Africa: not all partner countries benefit equally	M	L	Close project follow-up to ensure benefits for all partner countries
External environment	Ukraine: Engaging will remain difficult because of the continuation of Russia's unprovoked war of aggression against Ukraine	H	H	Maximum flexibility will be applied
External environment	Central Asia / Africa: Political instability might lead to discontinuation or delays in implementation	M	M	Close monitoring of political situation Flexibility applied to adjust activities
People and the organisation	Education: Limited interest in some INSC partner countries and gender resistance due to discriminatory social and cultural	L	L	Increased networking and information sharing on gender responsive education opportunities with all INSC partner countries (including specific measures to ensure a gender balanced and inclusive participation) Use of available knowledge and tools of

<sup>7</sup> [Convention on the Rights of Persons with Disabilities \(CRPD\)](#)

<sup>8</sup> [EU Strategy for the Rights of Persons with Disabilities 2021-2030](#)

	norms and gender stereotypes			gender mainstreaming
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### **Lessons Learnt:**

Extensive and broad experience has been gained in successfully implementing similar INSC projects in partner countries and regions, both in the framework of the TACIS<sup>9</sup> Nuclear Safety Programme and the Instrument for Nuclear Safety Cooperation (INSC). This experience will be used in optimising the design and implementation of this action.

Communication and support from the partners and end-users will remain a key element for successful implementation.

The findings, conclusions and recommendations of the report of the ‘Evaluation of the Instrument for Nuclear Safety Cooperation 2014-2020’<sup>10</sup> have informed the formulation of this Action.

### **Component A (Africa)**

Cooperation with Morocco: With INSC support, the Kingdom of Morocco adopted in 2014 the Law 142-12 on Nuclear and Radiological Safety and Security, allowing the creation of a dedicated regulatory authority AMSSNuR. Its main functions are related to regulatory control for development of regulations, safety assessment, inspections, communication with the public, management of emergency situations, as well as international cooperation. After its setup in 2016, AMSSNuR further benefited from INSC support to develop its human and organizational capacities, as well as to establish its regulatory functions, taking advantage of established European good practices in the field of nuclear safety. The second INSC project (2018-2022) was perfectly integrated into AMSSNuR's strategic plan and enabled it to revise regulatory texts drawn up for the application of Law 142-12 and the nuclear safety policy, the national emergency plan, the strategy for recovering orphan sources and dosimetry in the medical environment. The development of human resources and regulatory competences, along the adoption of an integrated management system was equally supported. In terms of international communication, particularly within the regional networks FNRBA, the Regulatory Cooperation Forum (RCF), the Arab Network of Nuclear Regulators (ANNuR) and the IAEA Global Nuclear Safety and Security Network (GNSSN), AMSSNuR presents its cooperation with the EU as a success story in supporting the establishment of safety authorities in accordance with the recommendations of the IAEA and international best practices referring to the experiences of European regulatory bodies.

INSC cooperation projects with Ghana and South Africa are on-going with a positive track record of implementation. INSC cooperation with Nigeria has just started after completion of the international restricted call for tenders as foreseen under the INSC Annual Action Plan 2022.

### **Component B (Jordan)**

The partnership with regulatory authorities in Jordan lasts for 15 years. Three previous projects took place associating also waste management (AAP 2008, AAP 2010 and AAP 2013). The last project was implemented up to the end of 2020 and its follow up was postponed for two years. The last project aimed at providing assistance related to developing and strengthening the capabilities of the Energy and Minerals Regulatory Commission (EMRC) and related to radioactive waste management (JAEC) in Jordan. It included the licensing of SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East). The project also supported the legal basis on nuclear and radiation safety in Jordan and the first national report for the Joint Convention on the safety of spent fuel management and radioactive waste management. It finally developed the radioactive waste management strategy for Jordan and the Action Plan for its implementation, and defined a way to cope with the radioactive waste stored on the Sewaqa site.

### **Component C (Ukraine)**

Since the start of the war with Russia on 24 February 2022, outputs and activities of ongoing INSC interventions had to be adapted, as well as their implementation modality and timeframe, due to dramatic events, e.g. extensive damage in the Chornobyl Exclusion Zone. Hence for Ukraine in particular, new INSC interventions should be defined with a broad enough scope and timeframe to allow for an easy and rapid adaptation to changing circumstances.

### **Component D (Central Asia)**

Long-term experience in implementing environmental remediation programmes revealed that there might be certain

<sup>9</sup> Technical Assistance to the Commonwealth of Independent States

<sup>10</sup> [https://international-partnerships.ec.europa.eu/policies/climate-environment-and-energy/nuclear-safety\\_en](https://international-partnerships.ec.europa.eu/policies/climate-environment-and-energy/nuclear-safety_en)

constraints posed by stakeholder engagement, which is an important part of the decision making process for any project in environmental remediation. Surveys conducted within the framework of such initiatives showed that stakeholder opinion is among the biggest barriers to the implementation of this type of projects. Very often, misunderstandings may arise from lack of information, communication or the inability to listen and understand opposite positions. Two phases of stakeholder engagement in uranium remediation in Central Asia took place in the last years. The experience showed that the subject is very specific and sensitive. Effective implementation of such project required careful approach, harmonization and support from the relevant higher-level state structures and local authorities. The co-ordination of activities among remote and distant target areas required substantial project management capacities.

#### Component E (Education)

For over 10 years, INSC is supporting Training and Tutoring projects and upscaled its support when introducing Master degrees through AAP 2018. Nowadays, INSC Education projects include a large Training & Tutoring 5 (T&T5) and the development and organisation of Master degrees on nuclear safety for INSC and EU Member States:

- Master on Nuclear Safeguards started in 2021-2022 with ENEN / University of Milano
- Master on Leadership for nuclear safety started in 2022-2023 at the Université Côte d'Azur with ENEN and SKEMA Business School
- Master on Decommissioning management will start in 2025 at the Université Côte d'Azur with SKEMA Business School and the Karlsruher Institut für Technologie (KIT).

Developed Master programmes proved of high quality, very useful to INSC countries and attracted a high number of applicants. The Master on Safeguards 2021-2022 was the first such Master worldwide. As students are employees of Regulatory Authorities and their Technical Support Organizations, the duration will be prolonged to allow more time for studying, exams, labs and tutoring sessions. Participation of EU students (financed by other sources) is a strong asset to allow exchange between non-EU and EU countries.

### 3.5 The Intervention Logic

If the assumptions in the logical framework matrix hold true (see Section 3.6), then the outputs described in Section 3.1 will be produced.

If the outcome/s are achieved and the assumptions in the logical framework matrix at this level hold true, then the action will contribute to the desired impact (see Sections 3.1 and 3.6). Experience has shown that enhancing capabilities within a regulatory authority in one or other technical or organisational area improves safety culture more generally, not only in the areas targeted by the intervention.

The underlying intervention logic for this action is based on requests of the beneficiary, which will ensure their commitment and lessons learned of previous activities and assessments during expert missions, discussions with the relevant and diverse stakeholders, and coordination with the main partners and the IAEA, with which this programme is strongly coordinated.

The interventions are designed on the basis of lessons learned, previous activities and with a focus on the expected impact and outcomes. During implementation, the actual situation will be reanalysed, and flexibility will be built into the implementation to adjust to developing circumstances using independent experts, in particular JRC technical experts.

This will ensure that the impact and expected objectives will be achieved and the sustainability will be ensured.

### 3.6 Logical Framework Matrix

This indicative logframe constitutes the basis for the monitoring, reporting and evaluation of the intervention. On the basis of this logframe matrix, a more detailed logframe (or several) may be developed at contracting stage. In case baselines and targets are not available for the action, they should be informed for each indicator at signature of the contract(s) linked to this AD, or in the first progress report at the latest. New columns may be added to set intermediary targets (milestones) for the Output and Outcome indicators whenever it is relevant.

- At inception, the first progress report should include the complete logframe (e.g. including baselines/targets).
- Progress reports should provide an updated logframe with current values for each indicator.
- The final report should enclose the logframe with baseline and final values for each indicator.

The indicative logical framework matrix may evolve during the lifetime of the action depending on the different implementation modalities of this action.

The activities, the expected Outputs and related indicators, targets and baselines included in the logframe matrix may be updated during the implementation of the action, no amendment being required to the Financing Decision.

PROJECT MODALITY (3 levels of results / indicators / Source of Data / Assumptions - no activities)

Results	Results chain (@): Main expected results (maximum 10)	Indicators (@): (at least one indicator per expected result)	Baselines (values and years)	Targets (values and years)	Sources of data	Assumptions
Impact	To contribute to an effective nuclear safety culture and standards for radiation and nuclear safety in third countries and regions, comparable with those in the European Union	1 Feedback on INSC cooperation during meetings of the IAEA Convention on Nuclear Safety (CNS) 2 Feedback from IAEA peer reviews	1 Recognised as good practice (2017) 2 Depending on country (2023)	1 Positive (2028)  2 Positive in all INSC partner countries (2028)	CNS report  IAEA reviews	<i>Not applicable</i>
Outcome 1 (Africa)	1. Competent, independent and sustainable regulatory authorities effectively regulating nuclear safety in several African partner countries	1.1 Number of countries in Africa effectively regulating nuclear safety following EU support  1.2 Number of new legislative and regulatory documents on nuclear safety developed with EU support and adopted by the relevant national parliaments and/or authorities	1.1 Improvements needed at different levels (2023)  1.2 0 (2023)	1.1 All partner countries involved (2028)  1.2 TBD <sup>11</sup> (2028)	Project documents  International peer reviews	African countries continue assigning a high priority to nuclear safety and match sufficient national budget allocations

<sup>11</sup> To be determined

<b>Outcome 2 (Jordan)</b>	2. Strengthened regulatory capabilities of EMRC and waste management capabilities of JAEC	2.1 Status of capacities of the Jordan regulator on all types of nuclear and radioactive installations 2.2 Types of radioactive waste for which a consolidated management strategy is defined	2.1 Lacking in a number of fields (2023) 2.2 Spent fuel and NORM waste not covered (2023)	2.1 TBD (2028) 2.2 All types covered (2028)	Reports in international fora	Jordan remains fully committed to improving its nuclear safety and waste management
<b>Outcome 3 (Ukraine)</b>	3. Further alignment with EU <i>acquis</i> and restored safety infrastructure, which was damaged by Russia's unprovoked war of aggression against Ukraine	3.1 Implementation of the roadmap for alignment of Ukraine with EU <i>acquis</i> 3.2 Degree of restoration of the damaged nuclear and radiation safety infrastructure	3.1 0% (2023) 3.2 0% (2023)	3.1 >80% (2028) 3.2 TBD (2028)	Project reports and reports in international fora	Ukraine has access to sufficient financing
<b>Outcome 4 (Central Asia)</b>	4. Inclusive and meaningful local stakeholders engagement with Uranium Legacy Sites remediation in Central Asia	4.1 Level of confidence within the local community on remediation	4.1 Improved in those sites covered by prior interventions. Lacking in other sites (2023)	4.1 High in all sites covered by INSC interventions (2028)	Project reports and reports in international fora	Concerned governments continue exchanging with local stakeholders
<b>Outcome 5 (Education)</b>	5. EU knowledge of nuclear safety, spent fuel and radioactive waste management, and nuclear safeguards shared with third countries and regions	5.1 Number of partner countries annually with participants in Master programmes supported by INSC  5.2 Number of graduates annually in Master programmes supported by INSC (by sex, age and disability)	5.1 12 (2023)  5.2 20	5.1 12 per Master (every year)  5.2 20 per Master (every year)	Project reports	Continued interest of partner countries in EU knowledge
<b>Output 1 relating to Outcome 1 (Africa)</b>	1.1 Increased regulatory capacity to assess radioprotection measures, manage spent fuel and radioactive waste, assess safety, and communicate in an accessible way with the public	1.1.1 Number of African experts trained annually with EU support in multi-country and national trainings and workshops focused on regulatory capacity building (by sex, age and disability)	1.1.1 40 (2023)	1.1.1 TBD	Project reports	
<b>Output 2 relating to Outcome 1 (Africa)</b>	1.2 Plan developed for (regional) radiation monitoring systems	1.2.1 Number of African countries covered by established radiation monitoring systems with EU support	1.2.1 0 (2023)	1.2.1 TBD	Project reports and reports in international fora	

<b>Output 3 relating to Outcome 1 (Africa)</b>	1.3 Harmonised radioprotection and nuclear safety regulations	1.3.1 Number of workshops with EU support including attendants (by sex, age and disability) from at least 2 African countries covering harmonisation of nuclear safety regulations	1.3.1 0 (2023)	1.3.1 TBD	Project reports	
<b>Output 4 relating to Outcome 1 (Africa)</b>	1.4 Detailed plan for emergency preparedness and response	1.4.1 Number of African countries with approved EPR plans following EU support	1.4.1 TBD (2023)	1.4.1 9 (2028)	Project reports and reports in international fora	
<b>Output 5 relating to Outcome 1 (Africa)</b>	1.5 Ghana's Nuclear Regulatory Authority is better prepared for its nuclear power programme	1.5.1 Number of Ghanaian experts trained in national training sessions and workshops with EU support focused on regulatory capacity building (by sex, age and disability)	1.5.1 Appr. 120 (2023)	1.5.1 TBD (2028)	Project reports	
<b>Output 6 relating to Outcome 1 (Africa)</b>	1.6 Establishment of a national centre for nuclear or radiological emergencies in Morocco	1.6.1 Degree to which the centre is fully operational  1.6.2 Number of EPR exercises or workshops with EU support and the participation of AMSSNuR	1.6.1 Partially operational (2023) 1.6.2 0 (2023)	1.6.1 100% (2028) 1.6.2 TBD	Project reports	
<b>Output 1 relating to Outcome 2 (Jordan)</b>	2.1 Improved regulatory capacity for uranium mining activities	2.1.1 Number of regulatory documents prepared with EU support to cover regulatory requirements related to safety, radiation protection and safeguards for the different stages of uranium mining 2.1.2 Number of regulatory procedures with EU support to cover activities related to uranium mining including licensing, inspection and review & assessment	2.1.1 1 (2023)  2.1.2 0 (2023)	2.1.1 TBD  2.1.2 TBD	Project reports and reports in international fora	
<b>Output 2 relating to Outcome 2 (Jordan)</b>	2.2 Improved Integrated Management System (IMS) for the regulator concerning all regulatory activities	2.2.1 Number of operational procedures drafted with EU support for a comprehensive IMS covering all directorates involved in the radiological and nuclear work	2.2.1 Procedures exist for the Nuclear Safety Directorate and the Radiation Protection Directorate (2023)	2.2.1 IMS procedures exist for all involved directorates	Project reports	

<b>Output 3 relating to Outcome 2 (Jordan)</b>	2.3 Improved spent fuel and radioactive waste management	2.3.1 Status of strategy document for the management of spent fuel 2.3.2 Status of strategy document for the management of NORM waste 2.3.3 Status of procedures for treatment of radioactive waste from water treatment facilities 2.3.4 Status of waste acceptance criteria and radioactive discharge levels for waste management facilities	2.3.1 30% (2023) 2.3.2 5% (2023) 2.3.3 Not available (2023) 2.3.4 60% (2023)	2.3.1 Finalised (2028) 2.3.2 Finalised (2028) 2.3.3 Finalised (2028) 2.3.4 Finalised (2028)	Project reports and reports in international fora	
<b>Output 4 relating to Outcome 2 (Jordan)</b>	2.4 Improved practical and legal capacity for decontamination and remediation of contaminated areas	2.4.1 Status of regulatory requirements for remediation of contaminated areas 2.4.2 Number of staff trained annually with EU support (by sex, age and disability)	2.4.1 Not available (2023) 2.4.2 0 (2023)	2.4.1 Finalised (2028) 2.4.2 TBD (2028)	Project reports and reports in international fora	
<b>Output 5 relating to Outcome 2 (Jordan)</b>	2.5 Enhanced oversight and licensing capacity for nuclear safety, radiation protection and environmental-social monitoring plans submittals	2.5.1 Status of instructions on the licensing of qualified experts 2.5.2 Number of regulatory guides developed with EU support 2.5.3 Number of inspection lists developed with EU support 2.5.4 Number of trainings annually (by subject) with EU support 2.5.5 Number of staff trained annually with EU support (by sex, age and disability)	2.5.1 Not available (2023) 2.5.2 0 (2023) 2.5.3 0 (2023) 2.5.4 0 (2023) 2.5.5 0 (2023)	2.5.1 Finalised (2028) 2.5.2 TBD 2.5.3 TBD 2.5.4 TBD 2.5.5 TBD	Project reports	
<b>Output 6 relating to Outcome 2 (Jordan)</b>	2.6 Improved capacity in emergency preparedness and response (EPR)	2.6.1 Number of regulatory guides with EU support for developing emergency plans 2.6.2 Number of documents drafted or reviewed with EU support related to EPR 2.6.3 National Emergency Plan reviewed and enhanced with EU support to take into account national, regional and interregional hazards	2.6.1 0 (2023) 2.6.2 0 (2023) 2.6.3 Not started (2023)	2.6.1 TBD 2.6.2 TBD 2.6.3 Finalised (2028)	Project reports	
<b>Output 7 relating to Outcome 2 (Jordan)</b>	2.7 Developed Environmental Impact Assessment (EIA) for radiation and nuclear facilities	2.7.1 Number of trainings annually (by subject) with EU support 2.7.2 Number of staff trained annually with EU support (by sex, age and disability) 2.7.3 Status of procedures on roles and responsibilities regarding EIA	2.7.1 0 (2023) 2.7.2 0 (2023) 2.7.3 Not available (2023)	2.7.1 TBD 2.7.2 TBD 2.7.3 Finalised (2028)	Project reports	



<b>Output 1 relating to Outcome 3 (Ukraine)</b>	3.1 Actualised strategic road map for full compliance with EU <i>acquis</i>	3.1.1 Status of road map	3.1.1 Not actualised (2023)	3.1.1 Actualised (2028)	Project reports and reports in international fora	
<b>Output 2 relating to Outcome 3 (Ukraine)</b>	3.2 All regulatory authorities supported in the implementation and alignment of the strategic road map	3.2.1 Number of documents prepared with EU support 3.2.2 Number of on-site meetings and workshops with EU support	3.2.1 0 (2023) 3.2.2 0 (2023)	3.2.1 TBD 3.2.2 TBD	Project reports	
<b>Output 3 relating to Outcome 3 (Ukraine)</b>	3.3 Restored and strengthened nuclear safety and radioprotection functions affected by Russia's unprovoked war of aggression against Ukraine	3.3.1 Number of activities with EU support on regulatory support in the assessment of safety restoration efforts by nuclear operators 3.3.2 Number of activities with EU support in support of nuclear operators in implementing and proposing safety restoration activities and necessary upgrades	3.3.1 0 (2023) 3.3.2 0 (2023)	3.3.1 TBD 3.3.2 TBD	Project reports	No further major destruction by the war
<b>Output 1 relating to Outcome 4 (Central Asia)</b>	4.1 Increased inclusive and meaningful dialogue with, improved capacity building, awareness raising and improved socio-economic aspects of diverse local stakeholders in targeted Uranium Legacy Sites (ULS)	4.1.1 Number of initiatives for stakeholder engagement with EU support 4.1.2 Number of people actively and meaningfully consulted (by sex, age and disability) 4.1.3 Number of CSOs actively and meaningfully consulted and engaged	4.1.1 0 (2023) 4.1.2 0 (2023) 4.1.3 0 (2023)	4.1.1 3 in each country (2026) 4.1.2 TBD 4.1.3 TBD	Project reports	
<b>Output 2 relating to Outcome 4 (Central Asia)</b>	4.2 Uranium legacy risk reduced in target communities with an inclusive and participatory approach	4.2.1 Number of local small & medium-sized businesses promoted with EU support (disaggregated by sex, age and disability of the owner)	4.2.1 0 (2023)	4.2.1 TBD	Project reports	
<b>Output 1 relating to Outcome 5 (Education)</b>	5.1 Consolidation of the European Leadership for Safety Education (ELSE) project	5.1.1 Number of graduates of ELSE (by sex, age and disability)	5.1.1 TBD (2023)	5.1.1 TBD	Project reports Diplomas	
<b>Output 2 relating to Outcome 5 (Education)</b>	5.2 Consolidation of the Decommissioning Management and Leadership for Safety Education (DMaLSE) project	5.2.1 Number of graduates of DMaLSE (by sex, age and disability)	5.2.1 TBD (2023)	5.2.1 TBD	Project reports Diplomas	
<b>Output 3 relating to Outcome 5 (Education)</b>	5.3 Consolidation of the Safeguards Training and Education (SaTE) project	5.3.1 Number of graduates of SaTE (by sex, age and disability)	5.3.1 TBD (2023)	5.3.1 TBD	Project reports Diplomas	

<b>Output 4 relating to Outcome 5 (Education)</b>	5.4 Nuclear safety regulatory authorities trained and tutored	5.4.1 Number of participants (by sex, age and disability) in training courses and workshops developed with EU support	5.4.1 0 (2023)	5.4.1 TBD	Project reports	
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## 4 IMPLEMENTATION ARRANGEMENTS

### 4.1 Financing Agreement

In order to implement this action, it is not envisaged to conclude a financing agreement with the partner countries.

### 4.2 Indicative Implementation Period

The indicative operational implementation period of this action, during which the activities described in section 3 will be carried out and the corresponding contracts and agreements implemented, is 84 months from the date of adoption by the Commission of this Financing Decision.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer by amending this Financing Decision and the relevant contracts and agreements.

### 4.3 Implementation Modalities

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures<sup>12</sup>.

#### 4.3.1 Direct Management (Grants)

##### **Grants: (direct management)**

##### **(a) Purpose of the grant(s)**

The grant(s) will contribute to achieving Specific Objective (Outcome) 5 (Education) on EU knowledge sharing of nuclear safety, spent fuel and radioactive waste management, and nuclear safeguards with third countries and regions. It will consolidate the on-going INSC support to 3 master courses (ELSE, DMaLSE and SaTE).

##### **(b) Type of applicants targeted**

European universities and business schools devoted to higher education and research.

##### **(c) Justification of a direct grant**

Under the responsibility of the Commission's authorising officer responsible, a grant may be awarded without a call for proposals to a consortium of European universities and business schools devoted to higher education and research, selected using the following criteria: activities with specific characteristics that require a particular type of body on account of its technical competence, its high degree of specialisation or its administrative powers, on condition that the activities concerned do not fall within the scope of a call for proposals (Financial Regulation Article 195f). The recourse to an award of a grant without a call for proposals is justified because the activities cover highly specific topics and require a consortium of not-for-profit partners with a unique, recognised and excellent technical competence. The grant will provide comprehensive support for the participation of INSC partner country professionals in advanced master courses related to nuclear safety.

#### 4.3.2 Direct Management (Procurement)

Components A and B will contribute to enhancing the capabilities of Ghana and Jordan to levels comparable with those in the EU in the area of nuclear safety culture.

Subject	Indicative type (works, supplies, services)
Component A: Africa (Ghana part)	1 (services)
Component B: Jordan	1 (services)

<sup>12</sup> [www.sanctionsmap.eu](http://www.sanctionsmap.eu). Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

#### 4.3.3 Indirect management with an entrusted entity

A part of Component A (Africa) of this action may be implemented in indirect management with an entity/entities, which will be selected by the Commission's services using the following criteria: experience with similar nuclear safety related projects, capacity to lead and coordinate a consortium of European implementing partners, demonstrated capacity to implement activities in Africa and the willingness to comply with the EU communication and visibility guidelines.

Component C (Ukraine) of this action may be implemented in indirect management with the Science and Technology Center in Ukraine (STCU) and/or the European Bank for Reconstruction and Development (EBRD). This implementation entails all activities detailed under chapter 3.2 (Outcome 3). The envisaged entities have been selected using the following criteria:

- STCU: Strong expertise in managing nuclear safety related projects; close and productive working relationship with the Ukrainian authorities in charge of nuclear safety; demonstrated management capacities under recent and on-going INSC interventions; necessary competences and privileges (e.g. tax exemptions) for project implementation; proven track record in efficient and effective implementation of nuclear safety projects; up-to-date knowledge on the situation in Ukraine; and headquarters in Kyiv since 2005 with many of its staff based in Ukraine.
- EBRD: Strong expertise in managing funds linked to nuclear safety related programmes in Ukraine; Close relationship with the Ukrainian authorities in charge of nuclear safety; manager of the multi-donor fund (International Chernobyl Cooperation Account (ICCA), to which the EU is the main contributor, dedicated to the reconstruction of the nuclear safety capacities in Ukraine; demonstrated management capacities under recently closed and still ongoing multi-donor funds to which INSC contributed substantial amounts; necessary competences and privileges (e.g. tax exemptions) for project implementation; and proven track record in efficient and effective implementation of nuclear safety projects.

Component D (Central Asia) of this action may be implemented in indirect management with the United Nations Development Programme (UNDP). This implementation entails all activities detailed under chapter 3.2 (Outcome 4). The envisaged entity has been selected using the following criteria: UNDP has the necessary expertise and experience in regional projects on the given sector and topic; UNDP has the logistical and management capacities to manage locally and nationally in each identified country, while coordinating centrally; UNDP has a strong presence in Central Asia, capable of navigating conflicts and crises; UNDP has a proven track record in efficient and effective implementation of similar projects in Central Asia.

#### 4.3.4 Changes from indirect to direct management mode (and vice versa) due to exceptional circumstances (one alternative second option)

If the part of the action in direct management as per sections 4.3.1 and 4.3.2 cannot be implemented due to circumstances outside the Commission's control, it may be replaced by implementation through indirect management with a pillar assessed entity meeting the following criteria: experience with nuclear safety related projects, demonstrated capacity to perform similar activities in the partner country or region and the willingness to agree to comply with the EU communication and visibility guidelines.

If negotiations with potential entities in indirect management as per section 4.3.3 fail due to circumstances outside the Commission's control, that part of this action may be implemented in direct management in accordance with the implementation modalities identified in section 4.3.2.

#### 4.4 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply.

The Commission's authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of services in the markets of the countries or territories concerned, or in other duly substantiated cases where application of the eligibility rules would make the realisation of this action impossible or exceedingly difficult (Article 11(8) INSC Council Regulation (Euratom) 2021/948 of 27 May 2021).

#### 4.5 Indicative Budget

<b>Indicative Budget components</b>	<b>EU contribution (amount in EUR)</b>	<b>Indicative third party contribution (amount in EUR)</b>
<b>Implementation modalities</b> – cf. section 4.3		
<b>SO 1</b> Competent, independent and sustainable regulatory authorities effectively regulating the sector in several African partner countries, composed of		
Procurement (direct management) – cf. section 4.3.2	300 000	
Indirect management with an entrusted entity – cf. section 4.3.3	4 800 000	
<b>SO 2</b> Strengthened regulatory capabilities of EMRC and JAEC, composed of		
Procurement (direct management) – cf. section 4.3.2	2 500 000	
<b>SO 3</b> Further alignment with EU <i>acquis</i> and restored safety infrastructure, which was damaged by Russia's unprovoked war of aggression against Ukraine, composed of		
Indirect management with an entrusted entity – cf. section 4.3.3	4 000 000	To be determined
<b>SO 4</b> Improved local stakeholders engagement with Uranium Legacy Sites remediation in Central Asia, composed of		
Indirect management with an entrusted entity – cf. section 4.3.3	2 000 000	
<b>SO 5</b> EU knowledge of nuclear safety, spent fuel and radioactive waste management, and nuclear safeguards shared with third countries and regions, composed of		
Grants (direct management) – cf. section 4.3.1	3 000 000	
<b>Grants</b> – total envelope under section 4.3.1	3 000 000	
<b>Procurement</b> – total envelope under section 4.3.2	2 800 000	
<b>Indirect management</b> – total envelope under section 4.3.3	10 800 000	
<b>Evaluation</b> – cf. section 5.2 <b>Audit</b> – cf. section 5.3	may be covered by another Decision	
<b>Contingencies</b>	1 018 008.83	

<b>Total</b>	17 618 008.83	To be determined
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## 4.6 Organisational Set-up and Responsibilities

Each intervention will tentatively include a steering committee, set up with representatives of the key organisations, including the partner country and the implementing partner. Each steering committee provides support, guidance and oversight of the intervention and shall meet whenever deemed necessary by the end user, the European Commission, or the implementing partner.

As part of its prerogative of budget implementation and to safeguard the financial interests of the Union, the Commission may participate in the above governance structures set up for governing the implementation of the action.

# 5 PERFORMANCE MEASUREMENT

## 5.1 Monitoring and Reporting

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (Outputs and direct Outcomes) as measured by corresponding indicators, using as reference the logframe matrix (for project modality) and the partner's strategy, policy or reform action plan list (for budget support).

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

Roles and responsibilities for data collection, analysis and monitoring:

- The indicators, corresponding data sources and baselines are indicated in the logframe above. Arrangements for monitoring and reporting will be specified in the individual contracts.

All monitoring and reporting shall assess how the action is considering the principle of gender equality, human rights-based approach, and rights of persons with disabilities.

## 5.2 Evaluation

Having regard to the nature of the action, a final evaluation will not be carried out for this action or its components.

In case an evaluation is not planned, the Commission may, during implementation, decide to undertake such an evaluation for duly justified reasons either on its own decision or on the initiative of the partner.

All evaluations shall assess to what extent the action contributes to gender equality and women's empowerment and disability inclusion and how it is taking into account the human rights-based approach. Expertise on gender equality, disability and human rights will be ensured in the evaluation teams.

The evaluation reports may be shared with the partners and other key stakeholders following the best practice of evaluation dissemination<sup>13</sup>. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, apply the necessary adjustments.

Evaluation services may be contracted under a framework contract. The financing of the evaluation may be covered by another measure constituting a Financing Decision.

## 5.3 Audit and Verifications

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action,

<sup>13</sup> See best [practice of evaluation dissemination](#)

the Commission may, on the basis of a risk assessment, contract independent audit or verification assignments for one or several contracts or agreements.

## 6 STRATEGIC COMMUNICATION AND PUBLIC DIPLOMACY

The 2021-2027 programming cycle will adopt a new approach to pooling, programming and deploying strategic communication and public diplomacy resources.

In line with the 2022 “[Communicating and Raising EU Visibility: Guidance for External Actions](#)”, it will remain a contractual obligation for all entities implementing EU-funded external actions to inform the relevant audiences of the Union’s support for their work by displaying the EU emblem and a short funding statement as appropriate on all communication materials related to the actions concerned. This obligation will continue to apply equally, regardless of whether the actions concerned are implemented by the Commission, partner countries, service providers (duty bearers), grant beneficiaries (rights holders) or entrusted or delegated entities such as UN agencies, international financial institutions and agencies of EU member states.

However, action documents for specific sector programmes are in principle no longer required to include a provision for communication and visibility actions promoting the programmes concerned. These resources will instead be consolidated in Cooperation Facilities established by support measure action documents, allowing Delegations to plan and execute multiannual strategic communication and public diplomacy actions with sufficient critical mass to be effective on a national scale.

## Appendix REPORTING IN OPSYS

A Primary Intervention<sup>14</sup> (project/programme) is a coherent set of activities and results structured in a logical framework aiming at delivering development change or progress. Identifying the level of the primary intervention will allow for:

- Articulating Actions or Contracts according to an expected chain of results and therefore allowing them to ensure efficient monitoring and reporting of performance;
- Differentiating these Actions or Contracts from those that do not produce direct reportable development results, defined as support entities (i.e. audits, evaluations);
- Having a complete and exhaustive mapping of all results-bearing Actions and Contracts.

Primary Interventions are identified during the design of each action by the responsible service (Delegation or Headquarters operational Unit).

The level of the Primary Intervention chosen can be modified (directly in OPSYS) and the modification does not constitute an amendment of the action document.

The intervention level for the present Action identifies as:

<b>Action level (i.e. Budget Support, blending)</b>		
<input type="checkbox"/>	Single action	
<b>Group of actions level (i.e. top-up cases, different phases of a single programme)</b>		
<input type="checkbox"/>	Group of actions	
<b>Contract level</b>		
<input checked="" type="checkbox"/>	Single Contract 1	Addendum to contract in Ghana under Component A (Africa)
<input checked="" type="checkbox"/>	Single Contract 2	Contract under Component A (Africa)
<input checked="" type="checkbox"/>	Single Contract 3	Contract under Component B (Jordan)
<input checked="" type="checkbox"/>	Single Contract 4	Contract under Component C (Ukraine)
<input checked="" type="checkbox"/>	Single Contract 5	Contract under Component D (Central Asia)
<input checked="" type="checkbox"/>	Single Contract 6	Contract under Component E (Education)
<b>Group of contracts level (i.e. series of programme estimates, cases in which an Action includes for example four contracts and two of them, a technical assistance contract and a contribution agreement, aim at the same objectives and complement each other)</b>		
<input type="checkbox"/>	Group of contracts 1	

<sup>14</sup> For the purpose of consistency between terms in OPSYS, DG INTPA, DG NEAR and FPI have harmonised 5 key terms, including 'Action' and 'Intervention' where an 'Action' is the content (or part of the content) of a Commission financing Decision and 'Intervention' is a coherent set of activities and results which constitutes an effective level for the operational follow-up by the EC of its operations on the ground. See more on the [concept of intervention](#).