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ANNEX 1

to the Commission Implementing Decision on the Annual Action Plan for the European Instrument for International Nuclear Safety Cooperation for 2022

Action Document for Nuclear Safety Culture 2022

ANNUAL PROGRAMME 2022

This document constitutes the annual work programme within the meaning of Article 110(2) of Regulation (EU, Euratom) 2018/1046 within the meaning of Article 7 of the INSC regulation.

1 SYNOPSIS

1.1 Action Summary Table

1. Title OPSYS business reference Basic Act	Action Document for Nuclear Safety Culture 2022 OPSYS number: ACT-61250 (Component A) OPSYS number: ACT 61265 (Component B, C, D, E) Financed under 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 the basis of the Treaty establishing the European Atomic Energy Community, and repealing Regulation (Euratom) No 237/2014 ¹
2. Team Europe Initiative	No
3. Zone benefiting from the action	The action shall be carried out in Armenia, ASEAN, Nigeria, Turkey, and Ukraine
4. Programming document	European Instrument for International Nuclear Safety Cooperation Multiannual Indicative Programme (2021-2027) of 3.12.2021 (C(2021) 8687)
5. Link with relevant MIP(s) objectives / expected results	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 beneficiary countries.
PRIORITY AREAS AND SECTOR INFORMATION	
6. Priority Area(s), sectors	Nuclear Safety
7. Sustainable Development Goals (SDGs)	Main SDG: 16 (strong institutions) Other significant: SDG 11 (Disaster Risk Reduction) and SDG 5 (Gender Equality).

¹ OJ L 209, 14.6.2021, p. 79.

8 a) DAC code(s)	23510			
8 b) Main Delivery Channel	1000 – Public institutions			
9. Targets	<input type="checkbox"/> Migration <input type="checkbox"/> Climate <input type="checkbox"/> Social inclusion and Human Development <input checked="" type="checkbox"/> Gender <input type="checkbox"/> Biodiversity <input type="checkbox"/> Education <input checked="" type="checkbox"/> Human Rights, Democracy and Governance			
10. Markers (from DAC form)	General policy objective @	Not targeted	Significant objective	Principal objective
	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"/>
	Trade development	<input checked="" type="checkbox"/>	<input 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"/>
	RIO Convention markers	Not targeted	Significant objective	Principal objective
	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"/>
11. Internal markers and Tags:	Policy objectives	Not targeted	Significant objective	Principal objective
	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 type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	Connectivity @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	transport		<input type="checkbox"/>	<input type="checkbox"/>

	people2people energy digital connectivity		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
	Connectivity @	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	digital connectivity energy transport health education and research	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input 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"/>
	BUDGET INFORMATION				
12. Amounts concerned	Budget Line: 14.06.0100 Total estimated cost: EUR 18.5 M Total amount of EU budget contribution EUR 18.5 M				
MANAGEMENT AND IMPLEMENTATION					
13. Type of financing²	Component A, B, C, D: Direct management through Procurement Component E: Indirect management				

1.2 Summary of the Action

In accordance with the Multiannual Indicative Programme 2021-2027³, the overall objective of the Action is the promotion of an effective nuclear safety culture and implementation of the highest nuclear safety and radiation protection standards, and continuous improvement of nuclear safety.

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 Cooperation⁴ (INSC) is the specific tool of the European Union addressing nuclear safety issues in partner countries, including candidate countries, complementing the Neighbourhood, Development and International Cooperation Instrument – Global Europe 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 7th

² Art. 10 INSC

³ Commission implementing decision of 3.12.2021 approving the Multiannual Indicative Programme for the European Instrument for International Nuclear Safety Cooperation, (C(2021) 8687).

⁴ 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 the basis of the Treaty establishing the European Atomic Energy Community, and repealing Regulation (Euratom) No 237/2014

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 evaluation under the completed mid-term review of the External Financing Instruments of the EU⁵ recognises the positive contribution of the Instrument, noticing its capability to respond swiftly to new needs. The mid-term review 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 cooperation with Armenia will focus on one of the priority measures relating to the safety improvements as outcome of the nuclear stress-test which was performed in cooperation with the European Nuclear Safety Regulators.

The cooperation with the Association of South East Asian Nations (ASEAN) will focus on the strengthening of the regional cooperation in emergency preparedness and response based on the European experience.

The first cooperation with Nigeria will focus on supporting Nigeria in implementing Recommendations and Suggestions from the IAEA Integrated Regulatory Review Service (IRRS) mission in 2017 for which the Nigerian Nuclear Regulatory Authority (NNRA) has asked the support of the European Union.

Turkey is in the EU neighbourhood and Candidate for membership of the European Union. It expressed commitment to implement the EU *acquis*.

The activities with Ukraine will focus on supplies and/or works for the restoration or replacement of nuclear safety related equipment, installations, and related services, focusing on the installations in the Chornobyl Exclusion zone and other nuclear installations, which are damaged, looted or lost in relation to Russia’s war of aggression against Ukraine.

To ensure complementarity, synergy and coordination, the Commission may sign or enter into joint donor coordination declarations or statements and may participate in donor coordination structures, as part of its prerogative of budget implementation and to safeguard the financial interests of the Union. This could be for example the case with the International Atomic Energy Agency (IAEA).

A close working relationship will be maintained between the Commission services and the EEAS and with the EU Delegations in the beneficiary countries, in order to help ensure a coherent approach, taking the latest relevant developments into account.

2.2 Problem Analysis

Short problem analysis:

2.2.1 Component A: Armenia – Implementation of lessons from the post-Fukushima stress tests

The Armenian Nuclear Power Plant (ANPP) at Metamor is one of the vital sources of energy in the Republic of Armenia, which is almost completely dependent on imported primary energy sources.

Since 2011, under the Instrument for Nuclear Safety Cooperation (INSC), actions have been carried out to support the Armenian Nuclear Operator and the Armenian Nuclear Regulatory Authority (ANRA) in the implementation of EU stress tests (targeted safety re-assessment) for ANPP Unit 2, in accordance with the European Nuclear Safety Regulators Group (ENSREG)/ Western European Nuclear Regulators Association (WENRA) technical specifications used as the basis of the nuclear stress tests in the EU Member States.

The Armenian National Report on the stress test was submitted to the Commission in August 2015; later it was forwarded to ENSREG to carry out the peer-review which took place in June 2016. Chapter 7 (General conclusion) and Chapter 8 (Main Conclusions of the Peer Review Team) of the National Report summarizes potential safety improvement measures identified in the frame of the stress tests. The proposed measures were analysed and prioritised by the ANPP/ANRA with respect to the safety significance of the various measures. A priority list of

⁵ [swd-mid-term-review-insc_en.pdf \(europa.eu\)](#)

safety enhancement measures to be implemented at the ANPP was then established – with the approval of ANRA – and this list constitutes a solid basis for future ANPP safety improvements, partly to be financed by INSC projects.

Despite numerous safety improvements that have been implemented at the ANPP in the last 25 years, including several projects under international donor funding programmes, the Commission maintains the opinion that this reactor type cannot be upgraded to fully meet internationally accepted nuclear safety standards. Nevertheless, recognising the fact that the service time extension process of ANPP has started and it is now very likely that Unit 2 will be operated until at least 2026, the Commission continues to support Armenia in maintaining and enhancing nuclear safety in the priority areas identified during the above mentioned EU Stress Test peer review.

The objective of component A is to address one specific stress-test issue, by ensuring availability of seismically and environmentally qualified equipment designed to provide water supply from alternative sources in case of loss of ultimate heat sink.

The supply of an independent water supply for the Armenian NPP was programmed in 2017, but the call was unsuccessful in 2021. The component will build on the lessons learned from this call. Armenia has no technical means to set-up the system on its own, yet the system is essential and considered to be a priority recommendation from the stress tests having a significant potential impact on nuclear safety.

2.2.2 Component B: Association of South East Asian Nations (ASEAN) - Enhancing and strengthening the response to a radiological or nuclear emergency in ASEAN

ASEANTOM, the ASEAN network of regulatory bodies on atomic energy, was established following the 20th Summit of ASEAN Leaders in 2012. Its main objective is to strengthen nuclear safety, security and safeguards within the ASEAN community by enhancing cooperation and complementing the work of existing mechanisms at national, regional and international levels.

The need for improved capabilities within ASEAN, at both national and regional levels, for responding to radiological and nuclear emergencies was recognised in light of experience in responding to the accident at Fukushima Daiichi NPP in 2011. Several nuclear power plants are installed about 50 km from the ASEAN border with many more within a few hundred km; nuclear powered vessels also operate in the seas around ASEAN.

A strategy for enhancing regional cooperation within ASEAN on Emergency Preparedness and Response (EP&R), and an action plan for its implementation, were developed by ASEANTOM in 2016 with support from the EU and IAEA. Various elements of the action plan have been, or are being, implemented with support from the EU, IAEA and others. EU support is currently being provided through two INSC projects: firstly, the installation and customisation of tools (decision support systems) to aid decision making in an emergency and training in their use; and, secondly, the establishment of an ASEAN early warning radiation monitoring network (ASEAN-EWRMN) and radiation data exchange platform (ASEAN-RDEP) that will provide timely warning of any increase in the level of radiation or radioactive material over the ASEAN landmass. The first project has been completed in the first quarter of 2022 and the second is foreseen for completion in 2023.

Decision support systems (DSS) have been installed in all ten ASEAN Member States and training provided in their customisation to national conditions. Training has also been provided in using them to support decision making in an emergency and a technical capability to do so has been established in all ASEAN Member States, albeit with much variability between them in terms of the proficiency and sustainability with which this can be done. The remaining challenges are twofold: firstly, to bring capabilities in all ASEAN Member States to a minimum level commensurate with assuring a timely, effective and sustainable response, at both national and regional levels, to any future emergency that may affect ASEAN; and, secondly, to support the integration of DSS into national/regional emergency arrangements and their sustainable operational use in emergency centres. The latter will require effective interfaces to be established between the technical community that operates the DSS and decision makers who will be informed by their outputs; and appropriate provisions to be made by those responsible to ensure that emergency centres are properly and sustainably resourced (i.e., in terms of the number of people and their expertise). The proposed cooperation has been formulated specifically to address these challenges.

2.2.3 Component C: Nigeria – Increase the robustness of the Nigerian Nuclear Regulatory Authority

Nigeria has a government approved nuclear roadmap, which includes generation of at least 1,200 MWs of electricity through nuclear power plant by 2030 and increase the capacity by 2035. The responsible organisation is the Nigerian Atomic Energy Commission (NAEC). NAEC also plans to build a multi-purpose 5MW Research Reactor at the Sheda Science and Technology Complex (SHESTCO), Abuja through a Technical Cooperation Project with the IAEA. These facilities and other applications of nuclear energy and radioactivity fall within the

regulatory remit of the Nigerian Nuclear Regulatory Authority (NNRA).

The National Institute of Radiation Protection and Research (Institute) serves as a Technical Support Organization (TSO) to the NNRA. The NNRA established the Institute in August 2006 in cooperation with the University of Ibadan, Nigeria, following a Memorandum of Understanding (MOU) between the NNRA and the University.

To cover all areas of Nuclear Safety, Security, Safeguards, radiation protection, civil nuclear liability and Radioactive Waste/Spent Fuel Management, Nigeria has a new comprehensive bill, the Nuclear Safety, Security and Safeguards Bill (NSSS Bill), which is currently before the National Assembly for passage into law. The Bill seeks to transpose in Nigeria national obligations under the newly and previously ratified international treaties on Nuclear Safety, Security and Safeguards. These international Treaties and Conventions include:

- i. Agreement between the Federal Republic of Nigeria and the Agency for the Application of Safeguards in connection with the Treaty on Non-proliferation of Nuclear Weapons (Comprehensive Safeguards Agreement)
- ii. Convention on Early Notification of a Nuclear Accident
- iii. Convention on Assistance in the Case of Nuclear Accident or Radiological Emergency
- iv. Protocol Additional to the Agreement between the Federal Republic of Nigeria and the Agency for the Application of Safeguards
- v. Convention on Nuclear Safety
- vi. Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management
- vii. Convention on the Physical Protection of Nuclear Material
- viii. Amendment to the Convention on the Physical Protection of Nuclear Material
- ix. Vienna Convention on Civil Liability for Nuclear Damage

Nigeria has hosted an IAEA IRRS mission in 2017 and has made progress with implementing recommendations and suggestions. However, a follow up mission has not been organised yet. This project will focus mainly on attaining several of the recommendations and suggestions which will help to increase the regulatory and organisational robustness for present and future regulatory challenges and to prepare for a follow-up IRRS mission.

2.2.4 Component D: Turkey – Further strengthening the nuclear safety and radioprotection regulator in Turkey

Turkey has a long history in development and use of nuclear applications. Turkey has two research reactors, one in operation and the other in the long-term decommissioning action phase in Istanbul. One NPP with four 1200 MW units is under construction in Akkuyu, being built by Akkuyu Nuclear JSC, a company controlled by ROSATOM. Other possible sites for future NPP's are under serious consideration, in particular Sinop on the Black Sea and a site near Tekirdag. The technology for those NPP's is not decided, but a formal application for site approval is expected in the near future.

Responsible for the waste and spent fuel management is the Turkish Energy, Nuclear and Mineral Research Agency (TENMAK) which took over the research and radioactive waste management responsibilities from the Turkish Atomic Energy Authority (TAEK) in 2020.

The Akkuyu NPP is being constructed at the Mediterranean Sea, and its safety is of common interest to all involved parties. In the coming years (2024-2026), 4 units will be at different stages of construction, commissioning, and operation, which is a challenge to both the operator and the regulator. This project is orientated towards the strengthening of the regulator in the face of this wide and varied challenges.

The NPP is constructed using the Build Own Operate model, which includes specific challenges to the regulator.

Since 2018, Turkey has a new independent nuclear regulatory authority, Nükleer Düzenleme Kurumu (NDK), which is supported by the in-house Technical Support Organisation (TSO) Nükleer Teknik Destek Anonim Şirketi (NÜTED)⁶. Both organisations expect to almost double their staffing by 2024 compared to 2022.

⁶ In March 2021, the country's Constitutional Court annulled the 2018 Law by which the Nuclear Regulatory Authority (NDK) was established; to avoid a legal vacuum, the Court gave a transition period of one year for the nuclear regulatory body to continue its activities and requested the Government to prepare a new legislation which should enter into force no later than

The regulator is in state of construction in parallel to the construction of the NPP, which means that the challenges for the regulatory infrastructure are both internal and external.

Turkey has acceded and ratified most international conventions relevant for safety and non-proliferation of nuclear weapons, but not the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

Turkey is observer to ENSREG and participates at the EU/ENSREG nuclear ‘stress-test’ exercise on a voluntary basis commitment since 2011. An IRRS mission is planned for 2022.

Furthermore, there are nearly 50,000 radiation sources (in the field of medical, industrial, research-development, etc.), nearly 24,000 authorized organisations and a large number of radiation workers in Turkey. The number of these sources and organisations are rising continuously and new radiation technologies are regularly being introduced in line with international developments. Those new developments pose challenges in the regulatory activities to determine and confirm that the activities related to radiation facilities and radiation practices containing all these radiation sources are carried out in accordance to the state of the art in radiation protection, safety and security.

2.2.5 Component E: Ukraine – Restoration of nuclear safety

Following Russia’s war of aggression against Ukraine, the occupation of Ukrainian nuclear installations by Russia, the reported shelling and bombarding of some installations, including Radon (radioactive waste management) facilities, nuclear safety, radiation monitoring and radioprotection measures have to be restored.

The activity with Ukraine will focus on supply and/or works for the restoration or replacement of nuclear safety related equipment, installations, and related services, focusing on the installations in Chornobyl Exclusion zone and other nuclear installations, which are damaged, looted or lost in relation to the Russia’s war of aggression against Ukraine, in full coordination with the Ukrainian regulator.

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

Component A: Armenia: the main beneficiary of this component is the operator of the Nuclear Power Plant at Medzamor.

Component B: ASEAN: the main beneficiary of this component is ASEANTOM, an ASEAN network of regulatory bodies on atomic energy.

Component C: Nigeria: the main beneficiaries of this component are the Nigerian Nuclear Regulatory Authority (NNRA) and the National Institute of Radiation Protection and Research (Institute) which serves as its Technical Support Organisation (TSO).

Component D: Turkey: The main beneficiaries of this component are the Nuclear Regulator of Turkey (NDK), TENMAK and their TSO’s, in particular NÜTED.

Component E: Ukraine The main beneficiaries will be the Ukrainian operators, in particular the State Agency for Exclusion Zone Management and its subsidiaries and the regulatory authority SNRIU

3 DESCRIPTION OF THE ACTION

3.1 Objectives and Expected Outputs

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

The Specific Objectives (Outcomes) of this action are:

1. To improve the nuclear safety of the Armenian NPP in line with the results of the stress test.
2. To enhance arrangements for radiological and nuclear Emergency Preparedness and Response

March 2022’. It will be important, before the programme starts, to check that the legislative status of the nuclear regulatory authority.

(EP&R) in each ASEAN Member State⁷ and ensure that they are comparable with international standards and best practice.

3. To increase the robustness of the Nigerian Nuclear Regulatory Authority.
4. To strengthen the regulatory effectiveness of the Turkish nuclear safety regulator, NDK.
5. To restore nuclear safety in Ukraine.

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

- 1.1. Armenia: Improved independent water supply system of the Armenian NPP in line with the recommendations of the post-Fukushima stress tests measures related to loss of ultimate heat sink.
- 2.1. ASEAN: Enhanced national capabilities in using DSS to reliably inform decision makers on how best to prepare for, and respond to, any future radiological or nuclear emergency that may affect the ASEAN region.
- 2.2. ASEAN: Greater coherence within ASEAN of preparedness for, and response to, any future radiological or nuclear emergency that may affect the ASEAN region
- 2.3. ASEAN: Enhanced regional capacity and capabilities for EP&R.
- 3.1. Nigeria: Improved national strategic framework for nuclear safety.
- 3.2. Nigeria: Improved NNRA integrated management system.
- 3.3. Nigeria: Improved NNRA human resource Management.
- 3.4. Nigeria: Improved regulatory framework for the operation of the research reactor.
- 3.5. Nigeria: NNRA supported in preparing for an IAEA follow-up IRRS mission.
- 4.1. Turkey: Improved regulatory framework for the planned decommissioning of research reactors, radiation facilities and possible near-surface disposal.
- 4.2. Turkey: Improved regulatory framework for the life-time management of nuclear installation, in particular of those aspects of refuelling, ageing management, decommissioning, operating experience feedback and periodic safety review that should be addressed before and during commissioning and first operation
- 4.3. Turkey: Strengthened system of regulatory control of commissioning and first operation of a nuclear power plant, including first refuelling and possible use of risk informed regulation.
- 4.4. Turkey: Strengthened inspection and surveillance capacities of NDK and NÜTED in line with their developing responsibilities for regulatory support and the nuclear program in Turkey
- 4.5. Turkey: Strengthened integrated management system of NDK and NÜTED in line with their responsibilities.
- 4.6. Turkey: Enhanced regulatory control of transport of radioactive material, in particular fresh and spent fuel.
- 4.7. Turkey: Strengthened capacities of NDK and the Disaster and Emergency Management Authority (AFAD) in emergency preparedness and response.
- 4.8. Turkey: Better alignment of radioprotection regulation, authorization and inspection of advanced industrial and medical applications of radiation in line with *EU acquis* and international best practice.
- 5.1. Ukraine: Because of the ongoing war, the outputs will be defined later, but will include activities related to the continued further alignment of Ukraine with *EU acquis*.

⁷ Cooperation with Myanmar is not foreseen unless the political situation will change to allow restart of cooperation.

3.2 Indicative Activities

3.2.1 Component A: Armenia - Implementation of lessons from the post-Fukushima stress tests

Activities relating to Output 1.1 – All activities are related to the supply of an alternative independent water supply in line with the results of the stress test including supporting activities such as development of operation procedures/manuals, manufacturing or procurement of equipment, factory and sire acceptance tests (FAT, SAT), delivery of equipment, equipment auxiliaries and spare parts, support to customs clearance, warranty and after sales services.

3.2.1 Component B: ASEAN - Enhancing and strengthening the response to a radiological or nuclear emergency in ASEAN

Activities relating to Output 2.1 – providing technical assistance (through workshop/s, training, exercises, *in situ* support, etc) to ASEANTOM in: the development, planning, conduct and evaluation of national-level table-top emergency exercises, with particular attention given to ASEAN Member States whose capabilities are currently less well developed; training senior officials, in organisations with a significant role or responsibility in EP&R, in the use of the outputs of DSS in making informed decisions on managing an emergency; establishing and maintaining an effective interface between technical experts operating DSS and decision makers through training and/or exercises; transferring European experience on the resources and expertise needed to integrate and operate DSS within national emergency arrangements/emergency centres; providing specific training for technical experts in the use of models or features of DSS not previously addressed (e.g., hydrological dispersion).

Activities relating to Output 2.2 – Providing technical assistance (through workshop/s, training, exercises, *in situ* support, etc) to ASEANTOM in: the development, planning, conduct and evaluation of regional-level table-top emergency exercises involving the participation of all organisations with a significant role or responsibility for EP&R; holding a workshop to identify significant differences in national responses and decision making, understand their origins and agree measures that could be taken to achieve greater coherence within ASEAN in future; training and/or a workshop to transfer European experience in, and approaches for, coordinating emergency response at a regional level.

Activities relating to Output 2.3 – Providing technical assistance to, and at the request of, the ASEANTOM Technical Working Groups (TWG) in their development of a medium to longer term plan to build regional capacity and capabilities in EP&R, radiation monitoring, hazard assessment and radiological dispersion modelling, public emergency communication, etc. The nature and form of the assistance will, *inter alia*, comprise the transfer of relevant European experience and practice, participation in TWG meetings when requested, and reviewing the outputs of each TWG and the overall medium to longer term plan.

3.2.2 Component C: Nigeria - Increasing robustness of the nuclear and radioprotection regulatory regime in Nigeria

Activities relating to Outputs 3.1-3.5. All activities will be carried out together with the NNRA and activities may include, but are not limited to workshops, training courses and ‘on the job’ training and *in situ* support.

3.2.3 Component D: Turkey – Further strengthening the nuclear safety and radioprotection regulator in Turkey

Activities relating to Output 4.1-4.8. All activities will be carried out together with NDK and NÜTED and may include, but are not limited to, gap analysis, workshops, training courses, sustainable transfer of expertise, ‘on the job’ training, *in situ* support and expert consultancy. In particular

Activities relating to Output 4.1. Support the development of regulatory documents necessary for the decommissioning of TR2 and the related disposal facilities.

Activities relating to Output 4.2. Support the development of regulatory guidelines for life-time management of nuclear installations such as fuelling, aging management, decommissioning, operating experience feedback and periodic safety review.

Activities relating to Output 4.3. Support the development of robust system of regulatory control of commissioning and first operation of nuclear installations, in particular NPP, with special emphasis on commissioning and operation safety-related documents, e.g., licensing basis documents, assessment of final safety analysis review – including deterministic and probabilistic safety reviews – and periodic safety reviews. Capacity building of safety

assessment activities during all operational modes – including outages – with emphasis on regulatory inspections during commissioning and operation. This is foreseen to include safety related aspects of cyber security.

Activities relating to Output 4.4. Train staff of NDK and NÜTED on relevant knowledge, skills and competencies necessary to perform its role as regulator and technical support organisation during commissioning and first operation of nuclear installations in particular NPP, including safety performance monitoring tools.

Activities relating to Output 4.5. Strategical planning, benchmarking with other TSOs, competency and gap analyses and other institutional capacity building activities The alignment of NÜTED activities with the activities of other commercial and non-commercial TSOs will also be developed.

Activities relating to Output 4.6. Support the development of regulatory documents, improvement of safety assessment capabilities prior to authorization and inspection guidance for all regulatory control stages at the transport of radioactive material, including fresh and spent fuel.

Activities relating to Output 4.7. Capacity building studies in the field of emergency preparedness and response if needed by NDK and/or AFAD to perform their role.

Activities relating to Output 4.8. Capacity building concerning the regulation, authorization and inspection of advanced industrial and medical applications of radiation, including review and development of regulatory documents and inspection techniques.

3.2.4 Component E: Restoring nuclear safety infrastructure in Ukraine

Activities relating to Output 5.1. Restoration or replacement of nuclear safety related equipment, installations, and related services, focusing on the installations in Chornobyl Exclusion Zone and other nuclear installations, which are damaged, looted or lost in relation to Russia's war of aggression against Ukraine. Support of the regulatory authority and its TSO will complement the support to the Chornobyl Exclusion Zone. Support to operators Energoatom is not expected but if necessary, will be strictly limited to assessing and restoring safety infrastructure endangered or damaged by the war in full alignment with the Ukrainian regulator.

3.3 Mainstreaming

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.

Other considerations if relevant

The improvement of nuclear safety culture within this action will not be used as a support for the application of nuclear energy.

Gender equality and empowerment of women and girls

As per the OECD Gender DAC codes identified in section 1.1, this action is labelled as G1. This implies that all activities will be gender neutral.

3.4 Risks and Lessons Learnt

Category	Risks	Likelihood (High/ Medium/ Low)	Impact (High/ Medium/ Low)	Mitigating measures
All	Lack of political commitment and administrative support in the beneficiary countries	L	M	Close monitoring of project implementation and establishment of efficient communication channels at appropriate level by the Commission.

All	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
All	Impact on project implementation of covid-19 pandemic crisis or similar type of crisis avoiding or limiting travel possibilities in the targeted beneficiary countries	M	M	Close monitoring of COVID-19 or similar type of crisis situation in the beneficiary countries and close monitoring of project implementation and establishment of efficient communication channels to be able to adapt working method and project schedule in due time if needed.
A (Armenia)	Armenia follows the recommendation to close down the Medzamor NPP	L	H	No mitigating measures. This decision to close down Medzamor NPP and loss of the activity will be accepted.
B (ASEAN)	Lack of political commitment and administrative support in ASEAN or one or more of its Member States	M	M	Close monitoring of project implementation and establishment of efficient communication channels at appropriate level by the Commission.
B (ASEAN)	Senior officials/decision makers in organisations with a significant role or responsibility for EP&R fail to participate fully in exercises and apprise themselves of the resources and expertise needed to integrate and sustainability operate DSS in national emergency centres	M	H	The importance of full and active participation of senior officials for the success of the project to be communicated at a political level (e.g., via the EU Delegation to ASEAN and Delegations to individual or groups of ASEAN member states)
B (ASEAN)	One or more ASEAN Member	M	M	Close monitoring of project implementation to identify at an early

	State fails to build sufficient capacity or capability to reliably operate DSS in its emergency centre and/or use it to inform decision making in an emergency			stage any such Member State/s. Discuss with ASEANTOM how this situation can be best remedied or compensated for (e.g., capability to be provided, in the interim, by a neighbouring member state or at a regional level)
B (ASEAN)	Cooperation with Myanmar government remains impossible	H	M	Resources will be allocated to other ASEAN countries, unless the Declaration of Crisis is lifted.
C (Nigeria)	Start of construction of nuclear power plants, which would reduce the absorption capacity	M	M	Design the intervention to address not only the current but also include flexibility to address future activities
D (Turkey)	Start of construction second NPP during implementation, which would reduce absorption capacity	L	H	Design the intervention to address not only the current but also include flexibility to address future activities
E (Ukraine)	Engaging with Ukraine will be difficult because of the continuation of Russia's war of aggression against Ukraine	M	H	Maximum flexibility will be applied in the programming
E (Ukraine)	Needs of Ukraine for restoration of nuclear safety infrastructure will be much larger than can be covered from INSC budget, because of larger damaged caused by the war	H	H	1) The budget already allocated will be used for real emergencies and assessments. 2) Extra budget will be sought.

Lessons Learnt:

Extensive and broad experience has been gained in successfully implementing similar activities in other third countries, both in the framework of the TACIS⁸ 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 beneficiary and end-users will remain a key element for successful implementation.

3.5 The Intervention Logic

The underlying intervention logic for this action is that, if the activities foreseen in the action are carried out as described in Section 3.2, and 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 stakeholders, and coordination with the main partners and the International Atomic Energy Agency, 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.

⁸ Technical Assistance to the Commonwealth of Independent States

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 achieve an effective nuclear safety culture and standards for radiation and nuclear safety in third countries comparable with those in the European Union.	Number of countries that benefitted from the activities	0(2022)	6(2026)	Project documentation	<i>Not applicable</i>
Outcome 1	1 The nuclear safety of the Armenian NPP is improved in line with the results of the stress test.	1.1 Status of implementation of recommendations on severe accident management for leak-tightness and SBO/LUHS recommendations on alternative power/water supply	1.1 Not addressed or partially addressed (2022)	1.1 Addressed and lessons learned and reflected in the final report (2026)	1.1 Project's final report / assessments	NPP keeps operating, despite the opinion of the EU that the NPP must be closed

Outcome 2	2 Arrangements for radiological and nuclear EP&R in each ASEAN Member State are enhanced and comparable with international standards and best practice, as well as coherent and consistent across ASEAN	2.1 Extent to which EP&R arrangements in ASEAN are comparable with international standards and best practice.	2.1 Partial (2023)	2.1 100% (2028) in those areas targeted by the action	2.1 Triennial report under CNS EPREV peer review/s if undertaken ASEANTOM documentation	ASEANTOM maintains its policy of establishing coherent and consistent arrangements for EP&R in the region, in accord with international standards and best practice.
Outcome 3	3 Increased robustness of the Nigerian Nuclear Regulatory Authority	3.1 Extent to which the Suggestions and recommendations of the 2017 IRRS mission are fulfilled.	3.1 Partial (2020)	3.1 100% (2026) in those areas targeted by the action	3.1 IRRS follow-up mission	Government of Nigeria is prepared to invite the IAEA IRRS follow-up mission
Outcome 4	4 Strengthened regulatory effectiveness of the Turkish nuclear safety regulator, NDK	4.1. Level of compliance of NDK functioning with EU standards	4.1 TBD (2022)	4.1. TBD (2026)	4.1. NDK reports	Legal Status of NDK will be settled
Outcome 5	5 Restoration of nuclear safety infrastructure in Ukraine	Extent to which the nuclear safety infrastructure in Ukraine is restored to pre-war levels.	Absent (2022)	Present (2026)	Project documentation	The conditions in the country allow for the activities to be implemented
Output 1 relating to Outcome 1	1.1 Improved independent water supply system of the Armenian NPP in line with the recommendations of the post-Fukushima stress tests measures related to loss of ultimate heat sink	1.1.1 Delivered and tested equipment 1.1.2 Provisional Acceptance Certificate (PAC) / Final Acceptance Certificate (FAC) /SAT	1.1.1 None (2022) 1.1.2 None (2022)	1.1.1 equipment in operation (2026) 1.1.2 Sets of protocols (2026)	1.1.1 FAT and SAT reports issued 1.1.2 PAC protocols signed	Medzamor NPP keeps committed to improve safety in line with stress test recommendations.

Output 1 relating to Outcome 2	2.1 Enhanced national capabilities in using DSS to reliably inform decision makers on how best to prepare for, and respond to, any future radiological or nuclear emergency that may affect the ASEAN region	2.1.1 Number of senior officials trained on the use of DSS with EU support (by ASEAN member states and sex) 2.1.2 Status of the specification of resource and expertise needed to integrate and operate DSS within national emergency arrangements/emergency centres developed with EU support. 2.1.3 Number of national table-top exercises organised with EU support (by ASEAN member states)	2.1.1 0 (2022) 2.1.2 Not existing (2022) 2.1.3. 0 (2022)	2.1.1 TBD (2024) 2.1.2 Existing (2024) 2.1.3. TBD (2024)	2.1.1 – 2.1.3 Project documentation	ASENTOM's and ASEAN MS' capacities are sufficient to fully and effectively exploit the benefits generated by the action in a timely manner.
Output 2 relating to Outcome 2	2.2 Greater coherence within ASEAN of preparedness for, and response to, any future radiological or nuclear emergency that may affect the region	2.2.1 Number of major differences between ASEAN member states in responding to a given emergency identified/understood with EU support. 2.2.2 Number of initiatives to resolve differences and achieve coherent response in ASEAN launched with EU support 2.2.3 Number of European experiences for coordinating EP&R at a regional level transferred to ASEAN with EU support 2.2.4 Number of regional table-top exercises organised with EU support 2.2.5 Number of ASEANTOM staff trained with EU support by sex	2.2.1 0 (2022) 2.2.2 0 (2022) 2.2.3 0 (2022) 2.2.4 0 (2022) 2.2.5. 0 (2022)	2.2.1 TBD (2024) 2.2.2 TBD (2024) 2.2.3 TBD (2023) 2.2.4 TBD (2024) 2.2.5 TBD	2.2.1 – 2.2.4 Project documentation 2.2.5 Training certificates	Senior officials/decision makers in organisations with a significant role or responsibility for EP&R in ASEAN and its MS participate fully and actively, as foreseen, in implementing the action.

Output 3 relating to Outcome 2	2.3 Enhanced regional capacity and capabilities for EP&R.	2.3.1. Status of a medium to longer-term plan for further enhancing regional EP&R capacity and capabilities in ASEAN developed by ASEANTOM Technical Working Groups with EU support	2.3.2 TBD (2023)	2.3.3 Established and agreed (2025)	2.3.1. ASEANTOM Technical Working Groups documents	
Output 1 relating to Outcome 3	3.1 Improved national strategic framework for nuclear safety	3.1.1 Status of the national policy and strategy for nuclear safety developed with EU support	3.1.1 Partial (2022)	3.1.1 Policy developed (2026)	3.1.1 project documentation and/or IRRS follow-up report	Commitment to perform follow-up mission, or a new IRRS mission is supported by the Nigerian government.
Output 2 relating to Outcome 3	3.2 Improved NNRA integrated management system	3.2.1 Status of the NNRA integrated management system developed with EU support, IRRS Recommendations and Suggestions R6, R7, R8, S5	3.2.1 Limited (2022)	3.2.1 IMS developed (2026)	3.2.1 project documentation and/or IRRS follow-up report	
Output 3 relating to Outcome 3	3.3 Improved NNRA human resource management	3.3.1 Status of the NNRA HR plan and HR procedures developed with EU support	3.3.1 Limited (2022)	3.3.1 HR plan and procedures developed (2026)	3.3.1 project documentation and/or IRRS follow-up report	
Output 4 relating to Outcome 3	3.4 Improved regulatory framework for the operation of the research reactor	3.4.1 Status of regulations and requirements developed with NNRA with EU support for any operator under its responsibility to ensure sufficient resources for a safe operation, in particular for the operation of the research reactor	3.4.1 No regulation or requirements to ensure sufficient resources for nuclear operators	3.4.1 Requirements and regulations developed to address S7	3.4.1 Published regulations and requirements	
Output 5 relating to Outcome 3	3.5 NNRA supported in preparing for an IAEA follow-up IRRS mission	3.5.1 IRRS follow-up mission performed	3.5.1 No (2022)	3.5.1 Yes (2026)	IRRS follow-up report	

Output 1 relating to Outcome 4	4.1. Improved regulatory framework for the planned decommissioning of research reactors, radiation facilities and possible near surface disposal.	4.1.1. Status of regulatory document for decommissioning of research reactor developed with EU support 4.1.2. Status of regulatory document for near-surface disposal developed with EU support	4.1.1 No regulatory document (2022) 4.1.2 No regulatory document (2022)	4.1.1 Regulatory document developed and submitted to parliament for approval (2026) 4.1.2 Regulatory document developed and submitted to parliament for approval (2026)	4.1.1 – 4.1.2 Submission reports to parliament	Dedicated INSC radioactive waste management project will be requested for 2023
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Output 2 relating to Outcome 4	4.2. Improved regulatory framework for life-time management of nuclear installation, in particular of those aspects of refuelling, aging management, decommissioning, operating experience feedback and periodic safety review that should be addressed before and during commissioning and first operation timely regulated	<p>4.2.1. Status of regulatory document for ageing management of NPP developed with EU support</p> <p>4.2.2. Status of regulatory document for decommissioning of NPP developed with EU support</p> <p>4.2.3. Status of regulatory document for operating experience feedback developed with EU support</p>	<p>4.2.1. 0 (2022)</p> <p>4.2.2 0 (2022)</p> <p>4.2.3. 0 (2022)</p>	<p>4.2.1 Regulatory document developed and submitted to parliament for approval (2024)</p> <p>4.2.2 Regulatory document developed and submitted to parliament for approval (2026)</p> <p>4.2.3. Regulatory document developed and submitted to parliament for approval (2025)</p>	4.2.1 – 4.2.3 Submission reports to parliament	
Output 3 relating to Outcome 4	4.3. Strengthened system of Independent regulatory supervision by NDK of refuelling, commissioning and first operation of a nuclear power plant, including first refuelling and possible use of risk informed regulation	<p>4.3.1. Preparedness for commissioning</p> <p>4.3.2. Preparedness for regulating operation</p> <p>4.3.3. Strategy for including Risk Informed Regulation</p>	<p>4.3.1. TBD (2022)</p> <p>4.3.2. TBD (2022)</p> <p>4.3.3. Not developed (2022)</p>	<p>4.3.1 100% (2026)</p> <p>4.3.2 100% (2027)</p> <p>4.3.3 80% (2026)</p>	4.3.1 – 4.3.3 Self estimation and project documentation	

Output 4 relating to Outcome 4	4.4. Strengthened inspection and surveillance capabilities of NDK and NÜTED in line with their developing responsibilities for regulatory support and the nuclear program in Turkey.	4.4.1. Number of NDK and NÜTED staff trained with EU support to perform its role as regulator and technical support organisation during commission and first operation of nuclear installations in particular NPP, including safety performance monitoring tools (by sex)	4.4.1. 0 (2022)	4.4.1 TBD (2026)	4.4.1 Self-estimation and project documentation	
Output 5 relating to Outcome 4	4.5. Strengthened integrated management system of NDK and NÜTED in line with their responsibilities and HR development	4.5.1. Status of the NDK IMS for regulating and supervising commissioning and NPP operation 4.5.2. Status of the NÜTED IMS for regulating and supervising commissioning and NPP operation 4.5.3. Structured alignment of NÜTED and other TSO activities	4.5.1. TBD (2022) 4.5.2 TBD (2022) 4.5.3. TBD (2022)	4.5.1 TBD (2026) 4.5.2 TBD (2027) 4.5.3 TBD (2026)	4.5.1 – 4.5.3 Self-estimation and project documentation	Continuous update of the IMS
Output 6 relating to Outcome 4	4.6. Enhanced regulatory control of transport of radioactive material, in particular fresh and spent fuel.	4.6.1. Regulations capability of safety assessment and authorization by NDK fully adequate for transport of fresh and spent fuel 4.6.1. Inspection capacity and capability at NDK and NÜTED adequate for transport of fresh and spent fuel	4.6.1. TBD (2022) 4.6.2 TBD (2022)	4.6.1 100% (2026) 4.6.2 100% (2027)	4.6.1 – 4.6.2 Self-estimation and project documentation	
Output 7 relating to Outcome 4	4.7. Strengthened capacities of NDK and/or AFAD in emergency preparedness and response	4.7.1. Number of capacity building studies in the field of emergency preparedness and response by NDK and/or AFAD to perform their role.	4.7.1. 0 (2022)	4.7.1 TBD (2026)	4.7.1 Self-estimation and project documentation	

Output 8 relating to Outcome 4	4.8. Better alignment of radioprotection regulation, authorisation and inspection of advanced industrial and medical applications of radiation with <i>EU acquis</i> and international best practice.	4.8.1. Status of regulations developed with EU support for advanced industrial applications 4.8.2. Status of regulations developed with EU support for advanced medical applications	4.8.1. TBD (2022) 4.8.2 TBD (2022)	4.8.1 Regulations developed and aligned with EU and international best practices (2027) 4.8.2 Regulations developed and aligned with EU and international best practices (2027)	4.8.1 – 4.8.2 Submission reports to parliament	
Output 1 relating to Outcome 5	5.1. Regulatory control restored	5.1.1. Full regulatory control of all relevant activities in Ukraine	5.1.1. Severely impacted (TBD %) (May 2022)	5.1.1. 100% (ASAP)	Ukraine Report to CNS	
Output 2 relating to Outcome 5	5.2. Scope of restructuring of nuclear safety infrastructure in Ukraine defined	5.2.1. Inventory and cost of necessary works, services and supplies defined.	5.2.1. Rough estimate present	5.2.1. Well defined (2024)	Activity reports.	

4 IMPLEMENTATION ARRANGEMENTS

4.1 Financing Agreement

To implement this action, it is envisaged to conclude a financing agreement with Armenia for component A. To implement this action, it is not envisaged to conclude a financing agreement for component B, C, D and E with 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 76 months from the date of entry into force of the financing agreement for Component A, and 76 months from the adoption by the Commission of this Financing Decision for Components B, C, D and E.

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 measures⁹.

4.3.1 Direct Management (Procurement)

The procurement procedure will contribute to achieve the following objectives under the following components:

Subject	Indicative type (works, supplies, services)	
Component A: Armenia	1 (supply)	
Component B: ASEANTOM	1 (service)	
Component C: Nigeria	1 (service)	
Component D: Turkey	1 (service)	

4.3.2 Indirect Management with a pillar assessed entity

Component E, may be implemented in indirect management with an entity/entities, e.g. STCU, EBRD, IAEA, which will be selected by the Commission's services using the following criteria: experience with nuclear safety related projects, the demonstrated capacity to perform similar activities in Ukraine and the willingness to agree to comply with the European Commission visibility guidelines.

If negotiations on indirect management with above-mentioned entity/entities fail, Component E, wholly or

⁹ 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.

partially, may be implemented in direct management in accordance with the implementation modalities identified in section 4.3.1.

4.3.3 Changes from indirect to direct management mode (and vice versa) due to exceptional circumstances

In case of circumstances outside of the Commission's control preventing the implementation through indirect management for component E, the implementation modality under indirect management may be replaced by direct management.

Implementation by direct management for Components A, B, C or D may be replaced by implementation through indirect management with a pillar assessed entity meeting the following criteria: experience with nuclear safety related projects, the demonstrated capacity to perform similar activities in the country and the willingness to agree to comply with the European Commission visibility guidelines.

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.

Tenderers, applicants, and candidates from non-eligible countries may be accepted as eligible in the case of urgency or the 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 an action impossible or exceedingly difficult (Article 11(8) INSC Council Regulation (Euratom) 2021/948 of 27 May 2021).

4.5 Indicative Budget

Indicative Budget components	EU contribution (amount in EUR)	Third-party contribution, in currency identified
Procurement (direct management) – cf. section 4.3.1	18,500,000	
SO 1 To improve the nuclear safety of the Armenian NPP in line with the results of the stress test, composed of	2 M	
Procurement (direct management)	2 M	
SO 2 To achieve timely, effective and coherent arrangements within ASEAN for preparing for, and responding to, a radiological or nuclear emergency that may affect the region in future, and which are comparable with international standards and best practice, composed of	1 M	
Procurement (direct management)	1 M	
SO 3 To increase the robustness of the Nigerian Nuclear Regulatory Authority, composed of	1 M	
Procurement (direct management)	1 M	
SO 4 To strengthen the regulatory effectiveness of the Turkish nuclear safety regulator, NDK, composed of	1.5 M	

Procurement (direct management)	1.5 M	
SO 5 To restore nuclear safety in Ukraine, composed of	13 M	
Procurement direct management)	13 M	
Procurement – total envelope under section 4.3.1	18.5 M	N.A.
Evaluation – cf. section 5.2 Audit – cf. section 5.3	May be covered by another Decision	N.A.
Totals	18.5 M	

4.6 Organisational Set-up and Responsibilities

All interventions will include a steering committee. The steering committee will be set up with representatives of the key organisations, including the beneficiary and the implementing partner. The steering committee provides support, guidance and oversight of the interventions 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 respective implementing partners will be tasked with reporting on the indicators as defined in the Logical framework matrix.

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.

The evaluation reports shall be shared with the partner country and other key stakeholders following the best practice of evaluation dissemination. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

The evaluation reports may be shared with the partners and other key stakeholders following the best practice of evaluation dissemination. 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, 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.

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, grant beneficiaries 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

An Intervention (also generally called project/programme) is the operational entity associated to a coherent set of activities and results structured in a logical framework aiming at delivering development change or progress. Interventions are the most effective (hence optimal) entities for the operational follow-up by the Commission of its external development operations. As such, Interventions constitute the base unit for managing operational implementations, assessing performance, monitoring, evaluation, internal and external communication, reporting and aggregation.

Primary Interventions are those contracts or groups of contracts bearing reportable results and respecting the following business rule: 'a given contract can only contribute to one primary intervention and not more than one'. An individual contract that does not produce direct reportable results and cannot be logically grouped with other result reportable contracts is considered a 'support entities'. The addition of all primary interventions and support entities is equivalent to the full development portfolio of the Institution.

The present Action identifies

Action level		
<input type="checkbox"/>	Single action	Present action: all contracts in the present action
Group of actions level		

<input checked="" type="checkbox"/>	Group of actions	Actions reference: OPSYS#61250: Component A OPSYS#61265: Component B, C, D, E
Contract level		
<input checked="" type="checkbox"/>	Single Contract 1	Component A
<input checked="" type="checkbox"/>	Single Contract 2	Component B
<input checked="" type="checkbox"/>	Single Contract 3	Component C
<input checked="" type="checkbox"/>	Single Contract 4	Component D
<input checked="" type="checkbox"/>	Group of contracts 1	Component E