



External Evaluation of the Instrument for Nuclear Safety Cooperation (2014 – mid 2017)

Final Report – Vol. I

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External Evaluation of the Instrument for Nuclear Safety Cooperation

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Evaluation of the Instrument for Nuclear Safety Cooperation (INSC) Evaluation Report

The report consists of two volumes.

Volume I: Main report

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VOLUME I: MAIN REPORT

- 1. Introduction and evaluation goals**
- 2. Background, approach and evaluation questions**
- 3. Responses to the evaluation questions**
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List of acronyms and abbreviations

3S	Safety, Security and Safeguards
AAP	Annual Action Programme
AD	Action Document
ADB	Asian Development Bank
ASEANTOM	ASEAN Network of Regulatory Bodies on Atomic Energy
BSS	Basic Safety Standards
CBRN	Chemical, Biological, Radiological, and Nuclear
CCC&S	Coherence, Consistency, Complementarity and Synergies
CCMF	Climate Change Mainstreaming Facility
CEG	Contact Expert Group
CGULS	Coordination Group for Uranium Legacy Sites
CIR	Common Implementing Regulation
CNS	Convention on Nuclear Safety
CPPNM	Convention on Physical Protection of Nuclear Material
CRIS	Common RELEX Information System
CSF	Chernobyl Shelter Fund
DAC	Development Assistance Committee (of OECD)
DCI	Development Co-operation Instrument
DEVCO	Directorate-General for International Co-operation and Development
DG CLIMA	Directorate-General for Climate Action
DG ECFIN	Directorate-General for Economic and Financial Affairs
DG ENER	Directorate-General for Energy
DG ENVI	Directorate-General for Environment
DG GROW	Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
DG JUSTICE	Directorate-General for Justice and Consumers
DG NEAR	Directorate-General for Neighbourhood and Enlargement Negotiations
DG RTD	Directorate-General for Research and Innovation
DG TRADE	Directorate General for Trade
DP	Development Partners
EAMR	External Assistance Management Report
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECA	European Court of Auditors
EDF	European Development Fund
EEAS	European External Action Service
EESC	European Economic and Social Committee
EFI	External Financing Instrument
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EIDHR	European Instrument for Democracy and Human Rights
ENI	European Neighbourhood Instrument
ENPI	European Neighbourhood and Partnership Instrument
ENSREG	European Nuclear Safety Regulators Group
ENSREG WG1	ENSREG Working Group 1 'Improving Nuclear Safety Arrangements'
EP	European Parliament
EQ	Evaluation Question
ETSON	European Technical Safety Organisation Network

EU	European Union
EUD	European Union Delegation
Euratom	European Atomic Energy Community
EURDEP	European Radiological Data Exchange Platform
FA	Financing Agreements
FS	Feasibility Study
FSU	Former Soviet Union
GD/GL	Greenland Decision
GPEDC	Global Partnership for Effective Development Cooperation
HERCA	Heads of Radiation Protection Authorities
IAEA	International Atomic Energy Agency
IcSP	Instrument contributing to Stability and Peace
IDB	Islamic Development Bank
IfS	Instrument for Stability
ILO	International Labour Organisation
INGO	International Non-Governmental Organization
INIR	Integrated Regulatory Review Service
INSC	Instrument for Nuclear Safety Cooperation
INSC-II	Second Instrument for Nuclear Safety Cooperation
IPA	Instrument for Pre-Accession
IRRS	Integrated Regulatory Review Service
ISC	Inter-service consultation
ISG	Inter-Service Group
JC	Judgement Criterion
JCPoA	Joint Comprehensive Plan of Action
JRC	Joint Research Centre
JSO	Joint Support Office
LTO	Long-Term Operation
M&E	Monitoring and Evaluation
MAN	Management Support
MFF	Multiannual Financial Framework
MIP	Multi-annual Indicative Programme
MS	Member State
MTR	Mid Term Review
NEA	Nuclear Energy Agency (of OECD)
NIP	National Indicative Programme
NPP	Nuclear Power Plant
NPT	Non-Proliferation Treaty
NRA	Nuclear Regulatory Authority
NRC	Nuclear Regulatory Commission
NS	Nuclear Safety
NSA	Nuclear Safety Account
NSD	Nuclear Safety Directive
NSSG	Nuclear Safety and Security Group
OECD	Organisation for Economic Co-operation and Development
OJT	On Job Training
OSART	Operational Safety Review Team
PAGODA	Pillar Assessed Grant Or Delegation Agreements
PI	Partnership Instrument
QSG	Quality Support Group
RCF	Regulatory Cooperation Forum

ROM	Results-Oriented Monitoring
RWD	Radioactive Waste Directive
RWM	Radioactive Waste Management
SAMEZ	State Agency for the Management of the Exclusion Zone
SEA	Strategic Environmental Assessment
SG	Secretariat-General of the Commission
SIP	Shelter Implementation Plan
SME	Small and Medium-sized Enterprises
SNRIU	State Nuclear Regulatory Inspectorate of Ukraine
SP	Strategic Plan
SSTC	State Scientific and Technology Centre (supporting SNRIU)
SWOT	Strengths, Weaknesses, Opportunities and Threats
T+T	Training and Tutoring
TACIS	Technical Assistance to the Commonwealth of Independent States
TAEK	Turkish Atomic Energy Authority
TIPINS	TACIS-INSC-PHARE-IPA Nuclear Safety
ToR	Terms of Reference
TSO	Technical Support Organisation
USB	Ukraine Supervisory Board
WANO	World Association of Nuclear Operators
WENRA	Western European Nuclear Regulators Association
WLAHQ	External Workload Analysis
WNA	World Nuclear Association

Executive Summary

Objectives

The objective of the mid-term review evaluation is to provide an external assessment of the Instrument for Nuclear Safety Cooperation over the period 2014-2017, contributing to lesson-learning and accountability; the focus of the evaluation is on the Instrument, and on whether it is fit for purpose and still a valid basis for the Commission's undertaking of its activities in a changing context.

Context

The evaluation is part of a broader effort of assessment of the EU's nine External Financing Instruments (EFIs), with a view to inform i) the Mid-Term Review Report of the nine EFIs, ii) the definition of the Multiannual Financial Framework for the next generation of Instruments, and iii) the final evaluation of the EFIs 2014-2020. All evaluations employ a common set of six Evaluation Questions, based on the DAC (Organisation for Economic Cooperation and Development's Assistance Committee) evaluation criteria.

The support to nuclear safety in third countries by the EC started in 1991 under TACIS¹ in response to increased awareness of transboundary effects of the Chernobyl accident (1986) and the dissolution of the Soviet Union in 1991. The new independent states had an urgent need for assistance for safe operation, regulation and remediation of legacy waste. International cooperation (IAEA, G7/8, EBRD) was at the basis of the EC cooperation which – after addressing highly urgent needs – became more centred around assistance to regulators, safe management of radioactive waste and safeguards while the geographic scope since 2007 was enlarged to a world-wide dimension with focus on countries near the EU.

Key challenges and methodology

The analysis mostly concerns the Instrument regulations, mechanisms and processes while attention to project implementation and results supports the analysis of efficiency and effectiveness. Evaluation challenges included the early stage of implementation of INSC-II, with few results yet on the ground and only limited availability of external assessments and monitoring data.

Data collection tools included document review, interviews with a broad range of Instrument stakeholders (in Brussels and Ukraine) and a comparative analysis of documents at strategy, programming and project levels, including Action Documents and Result Oriented Monitoring (ROM) reports. A detailed case study was developed for Ukraine, to which over 40% of the INSC budget has been allocated. A survey questionnaire was also designed and addressed to relevant INSC stakeholders. Data have been triangulated through close team coordination and the use of an evaluation matrix.

Main findings

The findings on the six Evaluation Questions (EQs) are summarized as follows.

EQ 1 on relevance. INSC-II specific objectives are well aligned on the EU policies and priorities and are relevant to partners' needs and priorities. The pursued promotion of high-level regulations, standards and practices are in-line with the Europe 2020 strategy whereas the environmental remediation (of radioactive waste legacy sites), building strong regulators and life-long learning are at the core of the 2030 Agenda for Sustainable Development.

The main objectives of the INSC-II are based on the promotion and transfer of the Union's nuclear safety approaches, rules, standards and practices. The INSC's legal basis, the Eur-

atom Treaty, substantiates this cooperation with nuclear safeguards expertise and a set of three Directives on radiation protection, nuclear safety, and management of radioactive waste and spent fuel. High standards in Member States underpin the regulatory basis.

The INSC promotes international coordination with Conventions on nuclear safety and radioactive waste management, and respect for the NPT (Treaty on the Non-Proliferation of Nuclear Weapons). The Commission has had long-standing cooperation with the International Atomic Energy Agency (IAEA) and the European Bank for Reconstruction and Development (EBRD).

Compliant with the INSC-II Regulation, partners' policies and needs are accounted for through consultations, road maps, strategies and dedicated structures. The conditionality under which partner countries ratify these provisions allow for a periodic peer review of relevant national systems. The reports of the peer reviews also provide an external view of the state of the play and identified needs in nuclear safety. Proper oversight of evolving international challenges is provided through meetings with IAEA, EBRD and the G7/8-Nuclear Safety and Security Group. The flexibility of the instrument is adequate for adjusting to evolving challenges (for example through mid-term strategy revisions and adjustments to MIP).

EQ 2 on effectiveness. Since 2007, the Instrument has been consistently delivering outputs contributing to its specific nuclear safety objectives. The INSC has also been contributing to EU cross-cutting issues, particularly the goals of a better environment and sector governance, and to a minor extent also to ownership and gender equality.

The analysis also reveals that the Instrument does not support measurability of outcomes and lacks a comprehensive monitoring system for following its achievements at outcome and impact level. Strategy and programming documents are in need of increased detail. Baselines have not been developed systematically at national and regional levels and programming documents do not define measurable targets for expected changes.

The instrument processes and documents are well-focused on activities and delivery of outputs, but overall "results orientation" needs to be developed and better documented with constant attention to management processes for the achievement of expected measurable changes. Over the evaluation period the Instrument made very limited use of external evaluations constraining lesson learning and accountability.

EQ 3 on efficiency. INSC-II is a well-performing Instrument with mechanisms and resources appropriate to support the project pipeline and the delivery of outputs. A 2014 workload assessment, however, showed how human resource limitations were affecting the time dedicated to supporting quality processes. An important factor constraining project performance is the limited absorption capacity of Partner Countries. Support arrangements provide adequate capacities comprising technical expert support (JRC) and dedicated support for the beneficiaries and end-users in Ukraine. Centralized management of the INSC-II is a justified arrangement to ensure that qualified assistance is provided on the basis of high-level nuclear expertise. Centralized management in the same unit also supports close coordination of the INSC with the Instrument contributing to Stability and Peace (IcSP dealing with nuclear security).

INSC-II responds satisfactorily to CIR requirements and cross-cutting issues. In particular, the Instrument contributed to a better environment and good sector governance. The Instrument is also well aligned for flexibility, speed of delivery and partially in promoting ownership. However, policy markers in the Action Documents can be improved.

EQ 4 on added value. The Instrument fosters unique added value to engagement in nuclear safety cooperation with third countries, well beyond the capacities of Member States and other donors, viz.:

- the institutional framework allows the Commission to act at a global level on nuclear safety cooperation with consultations with the G7/8, and features specialized know-how and

expertise, high nuclear safety standards and exclusive EU powers to address nuclear safeguards;

- a relatively substantial financial provision and continuity for nuclear safety cooperation with a track record of over a quarter of a century.

The Instrument allows the EU to assume a world leading role in nuclear safety and permits engagement in policy level dialogue with Partner Countries and, in specific cases, the triggering of political dialogue in the wake of nuclear safety negotiations.

EQ 5 on coherence, consistency, complementarities and synergies. Internal coherence and complementarity of actions is ensured through the adopted mechanisms and management processes, including the committee reviews such as those by the Quality Support Group, Inter-Services Consultation, and INSC Committee, and consultations with the Working Group 1² of the European Nuclear Safety Regulator Group (ENSREG).

The INSC is set up as a specific instrument with limited scope for interaction with other instruments (e.g. IPA II, ENI and DCI), owing to its specialized thematic focus on nuclear safety. The instrument established synergies with other instruments, particularly related to the environment and security and there is scope for further strengthening and documenting these interactions.

EQ 6 on leverage. The INSC supports leveraging of both political engagement and financial resources for the nuclear safety sector. The EU plays a leading role in following up challenges and initiatives identified in the G7/8 Nuclear Safety and Security Group.

The Instrument can provide swift reactions through the promotion of a concerted political and policy effort and giving the EC the opportunity to lead civil cooperation on nuclear safety, as demonstrated by INSC-I and INSC-II interventions. In specific cases the instrument has proved that it works as a door-opener to the EU for political engagement. The policy dialogue is supported by sound coordination between DEVCO, DG ENER, JRC and EEAS.

The Instrument also contributes to the leveraging of significant financial resources for nuclear safety cooperation from donors as well as from partner countries.

Conclusions and Recommendations

Conclusions: The findings of the six Evaluation Questions led to the development of four main Conclusions:

C.1 The Instrument is fit for purpose and is well aligned with nuclear safety priorities and EU cross-cutting issues (*conclusion based on all EQs*).

C.2 Instrument processes, including strategy, programming and project design are well coordinated within the Commission and Member States. However, the different phases of the INSC project cycle need strengthening with increased attention to results orientation and measurability (*conclusion based on EQ 2*).

C.3 The INSC has been consistently delivering outputs enhancing the nuclear safety culture, the regulatory framework, the safe management of radioactive waste and safeguards measures (*conclusion based on EQ 2 and Case Study*).

C.4 INSC-II programming and implementation is closely coordinated with relevant Commission DGs, Member States and the ENSREG Working Group 1, while the INSC promotes international cooperation, all of which contributes to supporting value added and sector leadership, with scope for strengthened interactions and complementarities (*conclusion based on EQs 4-5*).

Recommendations: the foregoing Conclusions support the following set of Recommendations:

R.1 EU Cooperation on nuclear safety, radiation protection and safeguards should be continued under the Instrument for Nuclear Safety Cooperation and possibly reinforced to meet priority needs, maintaining its current features of centralized management, highly technical content, transfer of know-how and international outreach (*recommendation linked to conclusion C1*).

R.2 The Instrument should develop an approach in which criteria for the selection process as well as results appraisal need to be better documented, shifting away from the current focus on activities and outputs towards more results-focused and measurable processes. Capacities in management-by-results should be strengthened at all levels. Strategy and programming documents should be more specific. A comprehensive monitoring system should be developed. ROM review missions need to be regularly applied to representative project samples to strengthen accountability and results-orientation. Evaluations should be used as a standard lesson-learning and accountability tool. An impact evaluation should be carried out. The Instrument's visibility and communications performance should also be increased (*recommendation linked to conclusion C2*).

R.3 To reinforce result delivery the Instrument should continue to address evolving challenges and new issues, including with a more comprehensive approach to safeguards, preventing creation of new legacy waste sites and address long term operation of nuclear power plants follow-up and visibility of cross-cutting issues should be strengthened (*recommendation linked to conclusion C3*).

R. 4 Political and policy dialogue should be reinforced including through strategies, plans, results frameworks, close monitoring and external assessments. ENSREG working group 1 should have an important role in the Programming as well as for the appraisal of the results delivered. Support services should assist in the process of result orientation, improving the instrument measurability and strengthening strategies and quality of programming and action documents. Complementarities with other instruments should be reinforced, with special attention to reinforcing safety and security linkages. In general, INSC should "open up", working less in isolation and increasing relevant interactions with Delegations and other EU players. Finally, human resources should be adjusted to meet the challenges of all these recommendations (recommendation linked to all conclusion).

1 Introduction and evaluation goals

The mid-term review evaluation has the objective of providing an external assessment of the Instrument for Nuclear Safety Cooperation over the period 2014-2017, contributing to lesson-learning and accountability; the focus of the evaluation is on the Instrument, and on whether it is fit for purpose and still a valid basis for the Commission's undertaking of its activities in a changing context.

The assessment also reviews the Instrument's capacity to interact adequately with other External Financing Instruments, other interventions and other cooperation players to achieve the Instrument's goals and broader EU priorities.

This evaluation therefore focuses on the achievement of the objectives of the INSC and the Instrument's contributions to EU crosscutting issues. The temporal scope of the evaluation runs from 1 January 2014 to 1 June 2017. In order to assess possible outcomes and impact opportunities the evaluation considers the previous INSC programming period (2007 – 2013) as a significant amount of available data refers to this period.

The evaluation was conducted between August 2016 and January 2017 and, following an Open Public Consultation, the Evaluation Report was issued on 1 June 2017.

2 Background, approach and evaluation questions

2.1 Background

The evaluation is part of a broader effort of assessment of the cooperation's nine External Financing Instruments (EFIs), with a view to informing the definition of the next Multiannual Financial Framework.

The analysis mostly concerns the Instrument's regulations, mechanisms and processes while due attention to project implementation and results underpins the analysis of efficiency and effectiveness. The evaluation also covers the INSC's interface with the implementation rules as set out in the CIR.

2.2 The Evaluation Questions

A common set of six Evaluation Questions, based on the DAC (Organisation for Economic Cooperation and Development's Development Assistance Committee) evaluation criteria was drawn up for all the evaluations of the External Financing Instruments:

- EQ 1** To what extent do the specific objectives (INSC Regulation, Article 2) and the design of the INSC respond to (i) EU priorities and beneficiary needs identified at the time the Instrument was adopted (end 2013)?; (ii) Current EU priorities and beneficiary needs, given the evolving challenges and priorities in international context?
- EQ 2** To what extent does the INSC deliver results against the Instrument's objectives and specific EU priorities?
- EQ 3** To what extent is the INSC delivering efficiently?
- EQ 4** To what extent do the INSC programmes add value compared to interventions by Member States or other key donors?
- EQ 5** To what extent does INSC facilitate coherence, consistency, complementarity and synergy (CCC&S): both internally in its own set of objectives and programmes, and *vis-à-vis* other EFIs (see also INSC Regulation, Article 4)?
- EQ 6** To what extent has the INSC leveraged further funds and/or political or policy engagement?

2.3 The evaluation process

The evaluation process was structured in three main phases:

- The Desk Phase, from August 2016 to November 2016, with two main deliverables: i) the Inception Report, which provided the basis for the design and planning of the INSC-II evaluation and set up the evaluation framework, with its judgement criteria and indicators, and ii) the Desk Report, which provided an interim response to the Evaluation Questions and set hypothesis for each question, defining information gaps and planning validation work.
- The Validation Phase gathered additional information to prove (or disprove) the desk phase hypothesis and develop preliminary findings and “emerging messages” presented to the Inter Services Group (ISG) on 15 December 2016³.
- The Synthesis Phase, when the evaluation team, on the basis of preliminary findings and the feedback from the evaluation ISG, finalised the present evaluation report.

2.4 Structure of the Evaluation Report

The report is structured in four chapters:

1. Introduction and evaluation goals
2. Background, approach and Evaluation Questions
3. Responses to the Evaluation Questions
4. Conclusions and Recommendations

The Evaluation Report also contains the following Annexes: i) Instrument intervention logic, ii) Evaluation framework and final indicator list, iii) Overview of the Instrument, iv) Key methodological elements, v) CIR Assessment, vi) Case study, vii) ROM comparative analysis, viii) Evaluation matrix, ix) Internal working document for analysis of activities and results, x) Detailed analysis and illustrative material for the evaluation questions, xi) Consultation process following the publication of the draft final report, and xii) Consultation strategy.

2.5 Challenges and methodology

Evaluation challenges involved the early stage of implementation of INSC-II, with few results yet on the ground and only limited availability of external assessments and monitoring data.

Data collection tools included a document review, interviews with a broad range of Instrument stakeholders (in Brussels, Ukraine and Luxembourg) and a comparative analysis of documents at strategy, programming and project levels. A detailed case study was developed for Ukraine, to which over 40% of the INSC budget had been allocated. A survey questionnaire was also designed and addressed to relevant INSC stakeholders. Data have been triangulated through close team coordination and the use of an evaluation matrix.

2.6 Implementation State of Play

With the submission of this report the evaluation is reaching its conclusive phase. The assessment, with its conclusions and recommendations, has been reviewed in detail by the Instrument stakeholders and by the broad public, following an Open Public Consultation. The evaluation team used stakeholders and OPC feedback to adjust and finalize the study. The evaluation report was issued on 1 June 2017.

3 Responses to the evaluation questions

3.1 EQ 1 on relevance

EQ 1. To what extent do the specific objectives (INSC Regulation, Article 2) and the design of the INSC respond to: (i) EU priorities and beneficiary needs identified at the time the Instrument was adopted (end 2013)?; (ii) Current EU priorities and beneficiary needs, given the evolving challenges and priorities in international context (up to mid-2017)?

Summary

INSC-II specific objectives on promoting a nuclear safety culture, the safe management of radioactive waste, spent fuel and remediation, and safeguards of nuclear material are well aligned on the EU policies and priorities and are relevant to partners' needs and priorities. The pursued promotion of high-level regulations, standards and practices are in-line with the Europe 2020 strategy whereas the environmental remediation (of radioactive waste legacy sites), building strong regulators and life-long learning are at the core of the 2030 Agenda for Sustainable development. (All JCs)

The INSC-II is set to promote and to transfer the Union's nuclear safety approaches, rules, standards and practices. The INSC's legal basis, the Euratom Treaty, substantiates this cooperation with nuclear safeguards expertise and a set of three Directives on radiation protection, nuclear safety, and management of radioactive waste and spent fuel. High standards in Member States underpin the regulatory basis. INSC-II interventions are contributing as well to cross-cutting issues and duly pursue 7 out of the 17 Sustainable Development Goals (SDG). (JC 1.1)

The Commission maintains a long-standing cooperation with IAEA (International Atomic Energy Agency) and EBRD (European Bank for Reconstruction and Development). (JC 1.1)

The INSC promotes international cooperation with Conventions on nuclear safety and radioactive waste management, and the NPT (Treaty on the Non-Proliferation of Nuclear Weapons). The partner countries are encouraged to become party to mentioned conventions allowing for an IAEA-assisted periodic peer review of relevant national systems. The Convention's summary review report provides an external view of the state-of-play and challenges in nuclear safety.

The Instrument is well equipped to respond to evolving partners' needs. (JC 1.2)

Compliance with the INSC-II Regulation, partners' policies and needs are accounted for through consultations, road maps, strategies and dedicated structures. Oversight of current international challenges is provided through meetings with IAEA, EBRD and the G7/8-NSSG (Nuclear Safety and Security Group). The instrument has adequate flexibility to adjust to evolving challenges (for example through mid-term adjustments to MIP). (JC 1.3)

JC 1.1 INSC-II specific objectives and design align with EU policies/priorities at the end of 2013.

INSC-II specific objectives on promoting a nuclear safety culture, the safe management of radioactive waste, spent fuel and remediation, and safeguards of nuclear material are well aligned on the EU policies and priorities and are relevant to partners' needs and priorities. The pursued environmental remediation of legacy waste sites and the building of strong regulators are at the core of the 2030 Agenda for Sustainable Development.

1. Alignment with Euratom / EU priorities for Nuclear Safety.

The **Euratom Treaty** (1957) provides the legal basis for the INSC-II with a long-established

policy on safeguards and radiation protection including a Directive on Basic Safety Standards (BSS)⁴. The treaty's preamble states that Member States are "anxious to create conditions of safety necessary to eliminate hazards to the life and health of the public".

End 2013, the EU policy framework was extended with the 2009 Nuclear Safety Directive (NSD, the 2014 Amendment was not adopted at that time) and the 2011 Directive for Radioactive Waste Management (RWM)⁵ providing a more pertinent policy framework closely associated with two Conventions (Convention on Nuclear Safety; 'CNS', and Joint Convention both supported by the IAEA)⁶ (see Table 1 in Annex 10.1.A). The INSC-II Regulation states that *"These Directives and the high standards ... implemented in the Community are examples to be used in order to encourage third countries to adopt similar high standards."* The EU press release on the NSD (IP/12/412) indicates its alignment with IAEA: *"Nuclear safety in the EU has been based on the requirements of the main international Instruments, namely the CNS and the Safety Fundamentals established by IAEA."*

The ENER 2014 Management Plan (implementing DG for Euratom) is well aligned with INSC-II objectives on *monitor nuclear material used for civil purposes, and protect citizens against dangers from ionising radiation*.

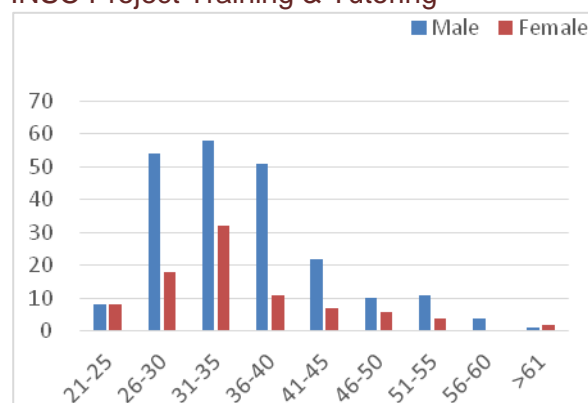
The European "Stress tests" specifications (2011) established by ENSREG⁷ was adopted by INSC-I for application for Ukraine (concluded in 2012 in the frame of the Peer Review for the EU countries) and Armenia (2016). DG ENER and ENSREG organise the peer review process. Presently, under INSC-II stress tests are part of the cooperation with Iran and considered for Belarus.

INSC-II is closely aligned with the EU Nuclear Regulators with a Working Group of ENSREG providing consultations to INSC-II based on a framework (position, ToR, liaison⁸) on (i) assessing and prioritising needs and defining strategic objectives of cooperation with regulatory bodies, (ii) defining a set-up for programming documents (Strategy, MIP), (iii) promoting transparency by making information available to the public, and (v) pursuing international co-operation. ENSREG excludes competence on safeguards.

Safeguards as part of the Euratom Treaty and the NPT are addressed by INSC-II with a budget allocated through an administrative arrangement with JRC. This competence is mostly developed under Euratom with DG ENER responsible for inspections and JRC Ispra-Karlsruhe for methods and practices. Safeguard measures are coordinated with the IcSP at the level of DEVCO. However, the measures lack 'critical mass' for visibility and added value. Closer involvement of DG ENER in strategic programming, proactive initiatives at international level (NPT, IAEA), and a set-up covering illicit trafficking and forensics now under IcSP, together could support a more comprehensive approach.

Figure 1: Number (Horizontal axis) and age groups age male/female trainees (Vertical axis)

INSC Project Training & Tutoring



Source: JRC

The evaluation concludes that INSC-II objectives are well aligned with EU and Euratom policy and priorities (see Table 2 in Annex 10.1.B).

2. Alignment with EU policy priorities and CIR. The Common Implementation Regulation (CIR)⁹ for EFIs on coherence and consistency of the Commission's actions and policies is par-

tially referred in the INSC-II Regulation (8 of the 17 articles, 47%). In the spirit of harmonisation, a wider reference to CIR may apply. However, while pursuing harmonization the following aspects require consideration:

1. The legal basis for INSC (Euratom Treaty) differs from all other EFIs.
2. INSC focus is on nuclear safety cooperation with only limited overlaps with other instruments' goals. Action Documents indicate a significant contribution to better environment and good governance (see Table 4 in Annex 10.1.C) while the instrument is well-aligned for flexibility, speed of delivery and promoting ownership. Gender mainstreaming is considered a *significant objective* for 9 of the 11 ADs of 2016. JRC's Database on Training and Tutoring monitors the gender and age balance in training actions since 2015 (see **Error! Reference source not found.** showing 29% women in training). The AD for Cooperation with Iran presents "Promotion of gender equality" as a specific objective with associated indicator: Number of women trained. Although the specific cross-cutting markers in the ADs ("CRIS DAC Markers") are yet to be informed on the Sustainable Development Goals (SDGs) of the 2030 Agenda¹⁰, the evaluation team assessment evidences how 7 of the 17 SDGs have relevance for the INSC-II: (4) Quality education/ lifelong learning, (5) Gender equality/ empower all women and girls, (6) Clean water/ sanitation, (12) Sustainable production patterns, (13) Combat climate change, (14) Conserve oceans, seas and marine resources, and (16) Peace, justice and strong institutions.

Regarding the global political context, INSC-II addresses key priorities of the EU Global Strategy¹¹ in relation to ensuring stability in cooperation with third countries (i.e. cooperation with Iran), promoting the use of highest safety standards for new nuclear technology (i.e. in Belarus), and preventing potential crises due to a threat of dispersion of radioactivity through cross-border rivers (i.e. in Central Asia).

The Action Document template encourages attention to cross-cutting issues. Alignment with 'human rights' is indirect as actions are to result in an improved health and well-being of present and future generations. Scope exists for the ADs to align further the policy markers with the SGDs and to address the relevant key priority or priorities of the EU Global Strategy.

3. Alignment with International Conventions.

The INSC-II Regulation requires partner countries to fully subscribe to NPT principles and the main Conventions such as CNS and the Joint Convention. The triennial review meetings of the Conventions can be considered as an external review of the state-of-play in associated areas. The overviews in the Conventions' summary reports provide an external view of present status and key points for the near future (see JC 1.3). However, the INSC-II MIP does not take full advantage of these overviews and other status reports (IAEA) (see also JC 2.1).

At the 2010 NPT Review Conference¹² organised under auspices of the UN, the EU participated as observer with a delegation including the High Representative of the EU for Foreign Affairs and Security. Euratom, managing the largest Regional System for Accounting for and Control of Nuclear Material¹³, presented over ten documents for consideration. However, the EU did not participate in the following smaller scale 2015 NPT Review Conference. Although the conference has a political nature, the presence of the EC would have been favourable for the cooperation and visibility of safeguards actions; NPT review outcomes could inform the preparation of the MIPs.

The comprehensive peer review organised by ENER with ENSREG on the Ukrainian stress tests and their national action plan¹⁴ are a good example of transparent reporting and open communication. Availability of national reports submitted under the main conventions (CNS, Joint Convention) for public access could further promote transparency.

Overall the relevance of the INSC-II to nuclear safety goals is profound due to the specialized technical nature of the instrument. The Instrument enables as well policy and political dialogue as further elaborated under EQ-6 (leverage).

JC 1.2 INSC-II responds to 2013 partner's needs

The Instrument is well equipped to respond to partners' needs and actions match well to existing needs

Mechanisms and INSC-II Regulation support the instrument alignment to partner's needs:

1. Exploratory missions are organized to support identification of needs for 'new' third countries with a review of eligibility criteria (priorities, Conventions, focus on regulator). The mission's organization involves EEAS, the EU Delegation, DEVCO and experts from JRC and the Working Group of ENSREG. Potential partners and authorities are consulted as part of the process.
2. An official request for assistance by the Government to the Commission as follow-up confirming the common understanding, Government committing.
3. Partners' needs are considered in the MIP aiming to align the instrument programming with partner country's development and economic policies. The assessment of effectiveness (EQ 3) shows however that needs at national and regional level are often not quantified in MIP and AD, constraining the measurability and result orientation of programming, project formulation and management.
4. Financing Agreement with the Government of the Partner Country promote as well the alignment of actions to national needs and priorities.

Box 1: INSC need assessment in Ukraine

The Ukraine Supervisory Board (USB), co-chaired by the Ministry of Energy and Coal Industry and DEVCO, provides an effective mechanism to support the project cycle management including a needs assessment up to the final endorsement. The USB includes the Regulator, the Radioactive waste management organisation, and the Operator.¹⁵

DEVCO does not actively promote nuclear safety cooperation with new partners as this could be regarded as support to nuclear energy and could create expectations beyond the INSC-II budget. The INSC programme, with its possibilities and restrictions, is well recognized in the global nuclear community.

IAEA peer review services referred in the INSC-II Regulation (IRRS/ OSART/ INIR¹⁶) are well-informed independent views for identifying needs.

The INSC-II Action Documents generally address specific and relevant needs in the partner countries. DEVCO staff is well informed of the status of needs and challenges worldwide through their network (IAEA, EBRD assembly meetings, G7/8). However, the documented evidence of needs and challenges in the MIP and in Action Documents is at present insufficient (see EQ 2).

JC 1.3 INSC-II adequately identifies and responds to evolving challenges.

The INSC-II has demonstrated to be able to respond to evolving challenges and the instrument continues to maintain its relevance considering the global context.

The INSC-II Regulation can address evolving challenges in (i) a mid-term strategy revision; (ii) an adoption of subsequent MIP; (iii) the AAP where flexibility exists, for example, cooperation with Iran is included in AAP 2016; (iv) a derogation for nuclear or radiological emergencies; and (v) procedures external to INSC-II, for example additional support for the completion of

the Chernobyl shelter¹⁷. The INSC-II mechanisms allowed for a quick response to the Iran deal with a comprehensive intervention through adopting the AAP and streamlining the process.

Other evolving challenges not requiring an expedient response can be incorporated in a subsequent instrument, (for example review of Long-Term Operation 'LTO' of NPPs).

Since 2014 the following mechanisms have been contributing as well to support INSC-II flexibility:¹⁸:

- **The 2017 peer review meeting re-affirmed that the principles contained in the Vienna Declaration** on Nuclear Safety should continue to be reflected in the actions of Contracting Parties. The 2014 peer review meeting initiated the preparation of the Vienna Declaration on "avoiding early radioactive releases or radioactive releases large enough to require long-term protective measures and actions." The 2015 summary report identifies more 'standard' priorities such as regulator's independence, safety culture and oversight, transparency, emergency preparedness, and peer reviews (OSART, IRRS) together with the need for a safety framework on Long Term Operation (LTO), possibly through multilateral arrangements. The 2017 review meeting identified "the implementation of the Instrument for Nuclear Safety Cooperation program for assisting non-EU countries" as one of the four good practices.
- **The 2015 Joint Convention** summary report provides the focus for the 2018 Review on: (i) staff development, and reliability of funding; (ii) public involvement and engagement in waste management; (iii) developing a sustainable strategy for RW and spent fuel; and (iv) management of disused sealed sources. The report states that remediation of legacy waste sites can benefit from sharing of experiences.
- **The amended Nuclear Safety Directive 2014** states that "*Member States shall ensure that the national nuclear safety framework requires that nuclear installations are designed, sited, constructed, commissioned, operated and decommissioned with the objective of preventing accidents and, should an accident occur, mitigating its consequences and avoiding: (a) early radioactive releases that would require off-site emergency measures but with insufficient time to implement them; (b) large radioactive releases that would require protective measures that could not be limited in area or time*".
- Additionally, the 2014 NSD stresses the need for a "strong competent regulatory authority with effective independence in regulatory decision-making".
- **Iran Deal**; this agreement (16 Jan. 2016) by E3/EU+3 with Iran on the Joint Comprehensive Plan of Action (JCPoA) is followed by a comprehensive intervention in line with the provision of Annex 3 of the JCPoA. The associated Action Document was expediently prepared and approved with actions to start in 2017.
- **The DG ENER 2016 Management Plan** addresses new technologies to increase efficiency and effectiveness of non-proliferation regime (EC support to IAEA), best practices to ensure financial viability of decommissioning, pursue the above-mentioned Vienna Declaration, and support the implementation of the JCPoA with Iran.

3.2 EQ 2 on effectiveness, impact and sustainability

EQ 2. To what extent does the INSC deliver results against the Instrument's objectives and specific EU priorities?

Summary

Overall the Instrument delivers consistently against its goals but needs to reinforce quality of design and results orientation while establishing measurability, accountability and lesson-learning (all JCs)

The Instrument's regulation provides adequate dispositions, supporting good design and ef-

effectiveness principles throughout the Instrument's project cycle. Processes and documents are well-focused on activities and delivery of outputs, but measurability and overall "results orientation" needs to be developed with increased attention of management processes on achievement of expected measurable changes. INSC lacks a comprehensive monitoring system for following its achievements, with lack of attention at outcome and impact levels; INSC did not develop a specific monitoring system to define the responses of the Instrument to a changing context and national and regional priorities; this evaluation found very limited information from monitoring and evaluation data. Strategy and programming documents need increased detail on important aspects defined by regulations (as assessment of needs, donor mapping and definition of key strategic choices). Action Documents need strengthening, including on such aspects as quantification of results, analysis of sustainability factors and risks, and the outlining of a clear theory of change, linking financial resources to results (JC 2.1)

Since 2007 the Instrument consistently delivered outputs contributing to its specific nuclear safety objectives; INSC has also been contributing to EU policy priorities, particularly the goals of a better environment and sector governance, and to a minor extent also to ownership and gender equality. (JC 2.2)

The Instrument made very limited use of external evaluations constraining lesson learning and accountability. (JC 2.3)

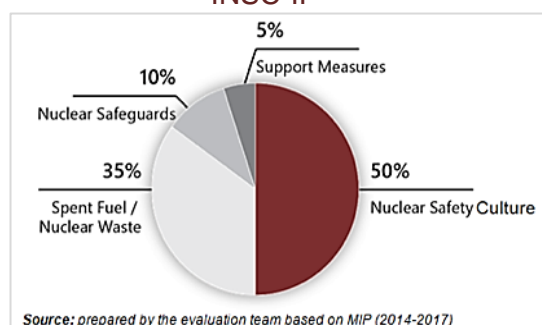
JC 2.1 INSC-II governance, mechanisms and DEVCO business processes are conducive to sustaining results/ impact.

Overall the Instrument through its governance, mechanisms and processes is well set to deliver results; INSC effectiveness deserves strengthening in terms of increased measurability, specification and results orientation in all phases of the project cycle.

The Instrument's regulations adequately support the INSC project cycle, providing suitable dispositions for design of strategy, programming and action documents¹⁹. As discussed in EQ 1 and EQ 3, DEVCO processes encourage consultation and interactions with key stakeholders. Support mechanisms provide adequate expertise through the different phases of the project cycle to support effective delivery (see also EQ 3).

However, the evaluation revealed that strategy, programming and action documents need increased detail to comply with important aspects defined by regulations (as assessment of needs, donors mapping, definition of key strategic choices, result orientation), an increased attention of the instrument processes to outcomes and impacts, ensuring full measurability and a strengthened analysis and follow up of sustainability.

Figure 2: Resource allocation
INSC-II



The analysis of the different phases of the INSC project cycle, detailed in Annex 10 / EQ2, highlights the scope of strengthening the following aspects of the project cycle:

- Strategy:** the INSC strategy needs to improve the quality of the diagnostic, with specification of needs by country and region, definition of needs prioritisation and of strategic choices for resource allocation; the analysis also reveals the scope for additional specification of the strategic choices required for strengthening nuclear safety cooperation effectiveness, including for aspects of ownership, and results orientation.
- Programming:** The review of programming documents revealed a need to reinforce several aspects including: i) a detailed mapping of needs by Country and Region; ii) mapping

of Donors; iii) definition of priorities to inform resource allocation; and iv) specification of stakeholders' consultation processes to increase ownership of programming. In terms of support to ownership and sustainability the MIP needs to develop the identification of policy support measures, national contributions and assessment of risks related to implementation at national level. Expected results are not adequately defined or measurable. Indicators appear relevant but have not yet been operationalized. The INSC-II programming document does not specify targets or baseline for expected changes.

- **Action Documents:** Action documents provide an adequate detail of tasks but do not specify and quantify expected results (outcomes of INSC projects). Overall action documents do not support measurability and results-orientation; the focus is on activities and outputs rather than on results, expected changes are not systematically specified and quantified, indicators are provided without baseline and target values, logical frameworks are weak (at times very weak) and not supported by a measurable cause-effect relationship credibly linking financial inputs, activities, results and objectives. Assumptions are few and perfunctory. The logical framework matrices in their current format do not support results-oriented management, monitoring and evaluation processes.²⁰ None of the Action Documents of INSC-II specifies a measurable results framework.²¹ Lack of attention to results at outcome level however does not prevent close management of contracts and outputs delivery: the analysis of management processes (for details see JC 3 and Annex 10 / EQ 2) shows that output management is well followed and consistently applied at contract level as is evidenced from contracts, terms of reference and actions' reports.²²

Action documents provide only a limited analysis of institutional capacities, national policies, or the legislative and regulatory framework²³ and actions need to strengthen linkages to context analysis and problems. The discussion of risks is perfunctory as no in-depth risk analysis and management plans are included in Action Documents^{24 25}; action documents lack clear identification of measures to follow up national ownership, including a policy agenda and commitment of financial and human resources, hindering the capacity to follow up levels of appropriation, limiting mutual accountability and ownership principles (Regulations title II, article 5). Increased in-depth analysis and detail on these aspects would also strengthen contributions to sector governance. Actions include comprehensive budget envelopes²⁶ related in general to procurement of services and do not provide the basis for understanding the rationale for the calculation of the financial envelope and the quantification of the costs of each output. Most outputs do not specify the estimated number of working days or other parameters to quantify services and costs. The detailed definition of costs at activity and output levels is developed during the tendering process.

The absence of results orientation and of a detailed cost structure in Action Documents constrains the Instrument's analytical base and the capacity to appreciate the value-for-money of actions implemented.

- **Sustainability and impact:** none of the 2016 Action Documents provides an analysis of project sustainability, particularly for aspects of financial sustainability (or how for instance accrued operation and maintenance costs will be met following the end of INSC support) and institutional sustainability.
- **Monitoring:** The Instrument has not established a results-based monitoring system to support its management set-up and did not develop a specific monitoring system to define the response of the instrument to a changing context and/or national and regional priorities; this evaluation found very limited information from monitoring and evaluation data. The setting-up of MIP indicators is a positive step forward, and indicators should now be operationalized and applied to the follow-up of interventions and progress at project, country and regional levels to provide a comprehensive control panel of the Instrument's performance, achievement of results and impacts.

JC 2.2 INSC analyses whether results supporting objectives

The Instrument since 2007 has been consistently delivering results contributing to its specific objectives of Nuclear Safety; INSC has also been contributing to EU policy priorities, particularly to the goals of a better environment, sector governance, security and, to a minor extent, ownership and gender equality. The absence of monitoring systems and evaluations constrained a quantitative analysis of results and does not allow the definition of the "value for money" of INSC achievements.

1. Results contributing to nuclear safety objectives

Analysis of results is based largely on internal sources as, with the exception of ROM reports, the Instrument provides limited external assessment of its actions (see for detail Annex 10 / EQ2, JC 2.2).²⁷

The INSC evaluation (2007 - 2013)²⁸ has been reviewed as a baseline for INSC-II. The evaluation described results areas for the main sectors of intervention and identified contributions to the following areas i) strengthening regulatory authorities and TSOs²⁹; ii) support for increased safety of nuclear facilities, safety of nuclear materials and radioactive waste management³⁰; iii) accounting and control of fissile materials (safeguards); iv) off-site emergency preparedness³¹, and v) international cooperation for high-level nuclear safety culture. The evaluation also identifies major achievements for the Instrument, viz.: i) development of programmes for training and tutoring experts from nuclear regulatory authorities and their TSOs, ii) widening of the thematic scope from support for operators to promotion of the safety culture, iii) widening of cooperation from three countries (2007) to twenty (2013), iv) increased globalization with ratio of neighbouring countries to other third countries improving from 7:1 to 2:1, v) increased flexibility to facilitate rapid adjustment of programming in response of unforeseen events, vi) increased use of regional and multi-country projects, and vii) increased cooperation with international organizations.

The Case Study for Ukraine (see Annex 6) presented three main categories of results:

- **Strengthening Regulatory Authorities.** The competence of the regulatory authority and TSO (SNRIU and SSTC) has been enhanced in relation to the NPP operation; support is now redirected to the management of radioactive waste, spent fuel and remediation and decommissioning (five projects; total budget EUR 7.38m);
- **Energoatom operator support:** The safety of the Ukrainian NPPs has improved as a result of the TACIS and INSC-I cooperation and the nuclear safety culture became more in line with the best international practice; hence Energoatom could qualify for a loan agreement with EBRD and Euratom to realise the Safety Upgrade Programme of their NPPs; INSC-II includes provisions for addressing specific needs only (stress test). (ten projects; total budget around EUR 20m; Energoatom is the main beneficiary);
- **Radioactive Waste Management:** The national Road Map for radioactive waste management as supported by JSO provides a solid basis for setting priorities and interventions by INSC and other donors for delivery of results in the radioactive waste management sector. According to interviews with the Delegation and JSO INSC results have substantially contributed to implementation of the State Programme for radioactive waste management and to the decommissioning of the Chernobyl power plant. The main Beneficiary has been SAMEZ with subordinated enterprises, including Chernobyl NPP (24 projects; total budget more than EUR 25m).

The programme statement provides information on performance for the three objectives; however selected indicators tend to be generic and activity- or output-oriented (i.e. number of waste management documents produced) and do not allow an insight into the Instrument's results and their value for money. The programme statement also summarizes key achievements during the period 2007 - 2013,³² including support for Ukraine in addressing the consequences of the Chernobyl disaster, cleaning of contaminated sites, along with health and eco-

logical measures supporting the population in Ukraine and Belarus; the large preventive programme in Tanzania to address the risks from uranium mining sites for local populations, describing the results which the report includes as an *"important and direct impact on the affected population"*. Other achievements specified by the report include the large remediation programme in Central Asia including feasibility studies and environmental impact assessments to support future interventions. The support for regulatory authorities successfully contributed to the reduction of risks, particularly in countries within the EU's neighbourhood policy. Results also included the reduced risk of malevolent use of contaminated materials. Important results also relate to the support for regulatory authorities and the development of national legislative and regulatory frameworks and organization strengthening. The training and tutoring initiative is also mentioned as a very successful tool and a long-standing effort.

Project monitoring reports represent for INSC the main external source of evidence related to results; their contribution to a quantitative analysis of results is very limited, due to a) the lack of specification and measurability of INSC results frameworks, b) the nature of the monitoring exercises which focus on project implementation issues and c) a coverage of about 20% of all interventions. Monitoring reports do not assess quantity and quality of outcomes achieved by INSC projects. In total 11 Results Oriented Monitoring assessments have been performed over the period January 2014 to early 2017. The ratio of projects monitored over all the ongoing projects is approximately 20%. The analysis of the 11 monitoring reports (see Annex 7) shows that projects are generally assessed as being effective (scores are no longer used). Recommendations mainly focus on project implementation.

Responses from ENSREG WG 1 *'Improving Nuclear Safety Arrangements'* to the questionnaire issued by the evaluation team shows that, in the views of respondents, INSC is *"effective in delivering results contributing to nuclear safety goals. The priorities of the instrument, first of all the cooperation with national nuclear regulatory authorities and the promotion of nuclear safety culture, are well addressed"*.

The review of INSC-II Action Documents reveals a pipeline of new projects designed to contribute to the three specific objectives. Activities and outputs are well-defined, supporting a hypothesis that, if external factors do not differ significantly from INSC-I, the instrument will maintain a regular flow of outputs for the period ahead (2017 - 2020) delivering products and services contributing to nuclear safety objectives. The information available does not allow provision of a forecast on outcomes.

2. Results contributing to EU cross-cutting issues

The analysis of INSC's contribution to cross-cutting issues (see detailed analysis in Annex 5) shows how the Instrument, through its projects, contributes significantly to EU policy priorities:

- The Instrument has a goal of environmental protection and all interventions contribute to a better environment; several projects yielded specific important results contributing to the improvement of the environment.³³ While in some case policy markers recognize a principal action in terms of environmental contributions, several projects yielding specific important results contributing to the improvement of the environment were not adequately scored by policy markers..
- Several projects, in both INSC-I and II, have inbuilt results for better governance (including support for regulators and improved legislative and regulatory frameworks).
- The weak results frameworks and absence of results-based M&E systems do not allow assessment of the extent to which the Instrument contributed to improved sector administration, transparency and the fight against corruption.
- In terms of alignment on CIR some interventions provided support for increased ownership of institutions and partner countries.

- The evaluation shows limited contributions to gender and does not reveal significant contributions to priorities for human rights and climate change, nor on the weaker relevance of these aspects to nuclear safety goals.

JC 2.3 INSC-II incorporates lessons from INSC-I to improve mechanisms for effective delivery of results

The instrument makes a very limited and insufficient use of lesson learning tools such as external evaluations and monitoring³⁴. Lesson learning from INSC-I has not been supported by project-level evaluation, impact assessment or systematic assessment of results. Also, evaluations at Instrument level³⁵ lacked attention to results, effectiveness, impacts and sustainability.

Lesson-learning works mainly as an empirical function based on limited review mechanisms and stakeholders' know-how (including DEVCO, JRC, and JSO) and their in-depth understanding of nuclear safety and of the national and regional contexts³⁶.

The very limited use of evaluations is undermining the adherence to regulations, particularly in the dispositions relating to the application of Aid Effectiveness principles. Lack of measurability and scarcity of evaluations are weakening lesson-learning capacities and limiting the Instrument's accountability and analytical base.

A positive step towards the development of a methodology for the evaluation of nuclear safety cooperation was started under INSC-I by the Project "Provision of policy and advice related to the cooperation with NRAs and their TSOs"³⁷. The contract aimed to develop "a methodology to evaluate the impact of the assistance projects. Such methodology will include the use of verifiable criteria/indicators to measure the improvement of the nuclear regulatory system and regulatory culture in the beneficiary countries and the sustainability of the achieved improvements". The methodology and an assessment of results related to regulatory support in Ukraine and Armenia were carried out (2010), but the Instrument did not provide any follow-up and the methodology was not applied subsequently.

Visibility and communication of the Instrument could also benefit from presentation of the evaluation's evidence on measurable results to the public and stakeholders. Interviews with stakeholders, including DEVCO staff not directly involved with nuclear safety projects, confirmed that within the Commission there is an overall limited knowledge and understanding of the instrument and what it is about.

3.3 EQ 3 on efficiency

EQ3. To what extent is the INSC delivering efficiently?

Summary

INSC-II is a well-performing Instrument with mechanisms and resources appropriate to support the project pipeline and the delivery of outputs. A 2014 workload assessment, however, showed how human resource limitations were affecting the time dedicated to supporting quality processes. The levels of flexibility and performance in delivery are satisfactory and improving. Time overrun is often caused by Partner Country delays, mainly due to the limited capacity of Partner Country institutions. An important factor constraining project performance is the limited absorption capacity of Partner Countries. Support arrangements provide adequate capacities comprising technical expert support (JRC) and dedicated support for the beneficiaries and end-users in Ukraine. Centralized management of the INSC-II is a justified arrangement to ensure that qualified assistance is provided on the basis of high-level nuclear expertise. Centralized management in the same unit also supports close coordination of the INSC with the Instrument contributing to Stability and Peace (IcSP dealing with nuclear security). (JC 3.1)

Enlarging the size of projects allows for a reduction of the administrative burden. The specific technical nature of the Instrument will continue to require technical expertise for the production of the Action Documents and project reports. (JC 3.1)

The evolution from INSC-I to INSC-II takes into account the INSC-I evaluation findings to improve performance. Measures do address a more efficient project implementation through enlarging the project size and avoiding the set-up of Financing Agreements where relevant and possible. Instrument adjustments, following INSC-I lessons, include an increased attention to safeguards, decommissioning strategies and remediation of nuclear sites. (JC 3.2)

INSC-II responds satisfactorily to CIR requirements and cross-cutting issues. In particular, the Instrument contributed to a better environment and good sector governance. The Instrument is also well aligned for flexibility, speed of delivery and partially in promoting ownership. However, policy markers in the Action Documents can be improved. (JC 3.3)

JC 3.1 INSC resources and management systems support efficient implementation.

Overall INSC resources and management systems are adequate to support a performing delivery, although constraints of human resources have been limiting time dedicated to quality support processes.

Instrument management and support to management. The Nuclear Safety section of the Commission DG DEVCO in charge of the INSC, with 7 staff has a limited workforce to handle the EUR 225m instrument, with responsibilities for programming, identification and formulation of new interventions (about 10 Action Documents per year), and centralised management of ongoing projects and associated tasks (currently about 100 contracts).

The analysis of the Instrument performance takes into account: a) the significant reduction of the INSC-II budget (less 60% compared to INSC-I), b) its broadened geographic and thematic scope with the inclusion of pre-accession countries (Turkey, Serbia) and c) the thematic sector for safeguards.

INSC administrative and management support costs include as well:

- Administrative expenditure per programme statement since 2014 is EUR 1.4 m per year³⁸
- Support measures of 5% of the INSC-II budget for conferences, visibility actions, specific studies and evaluations.
- Annual budget for JRC is approximately EUR 1 m.
- Annual budget for the JSO is approximately EUR 1 m.

Overall these costs appear quite contained when compared to the volume of projects in preparation and under implementation.

The budget for missions often constrains staff in performing field visits which is partially mitigated by JRC experts participating in missions.

An external Workload Analysis³⁹ (WLAHQ, 2014) identifies the Unit at DEVCO charged with the implementation of the INSC as having limited time to spend on ensuring "quality of operations" and "policy work", a finding that supports the evaluation's conclusions on not adequately specified programming and action documents, lack of measurability and limited use of management by result processes. Programme impact indicators listed in the MIP are discussed in Annex 10.3 together with a proposed set of more comprehensive impact indicators.

Well-qualified assistance is provided on the basis of proper European expertise and through professional Contractors, comprising technical expert support by JRC, and dedicated support

by the Joint Support Office (JSO) to the beneficiaries and end-users in Ukraine. An independent expert advisory working group of ENSREG⁴⁰ provides support to formulation of the instrument strategy and MIP.

JRC plays an important role in assisting the Nuclear Safety section through 8 experts. JRC support functions include the following:

- (i) JRC Brussels supports the coordination and technical review meeting of working documents,
- (ii) JRC Petten is contracted⁴¹ for assistance “to facilitate the effective and efficient implementation of the programmes and projects of the INSC”, and
- (iii) JRC Karlsruhe/ Ispra is contracted for safeguards.

The JSO is contracted to assist the Ukrainian partners to implement the INSC-II programme. The set-up of the team includes five full-time senior experts and two part-time international experts. Involved EU experts are to ensure that actions are fully aligned with EU practices both on business processes and on adherence to nuclear safety standards. The JSO supports capacity development of Ukrainian experts through contracting four national senior experts. DEVCO's actions in planning and implementing interventions are effectively supported by the JSO as further discussed in the Case Study for Ukraine.

The specific nature of INSC justifies a centralised management because of:

- (i) need to have expertise on nuclear safety and safeguard issues,
- (ii) this set-up facilitates expert services by JRC and for the programming consultations by a working group of ENSREG,
- (iii) EU Headquarters leveraging facilitates the engagement in cooperation with international organisations (EBRD, IAEA), and
- (iv) regional approaches in Central Asia are best coordinated and managed from a neutral location.

The rationale for centralised management maintains its validity for INSC-II. Moreover, the management of the INSC and IcSP by the same DEVCO Unit supports complementarities (see EQ 5). The Case Study illustrates how the centralized management is supporting the policy dialogue with Ukraine, coordination with local actors, consultation with beneficiaries, monitoring of results and lessons learning. Proper coordination with the EU Delegation in Kiev is in place to facilitate the policy dialogue, diplomatic liaison and visibility actions.

Project performances and timeliness of implementation

Projects under INSC-II are being contracted more expeditiously than INSC-I projects although the number of contracts is still small. The speed of contracting closely relates to the need for a Financing Agreement (FA) with the Partner Country Governments which can require even up to 12 months (see text box).

Box 2: Financing Agreement

Financing Agreement (FA) is needed for projects that:

- i) include equipment supply for exempting tax/ duties,
- ii) are large requiring explicit acceptance by Governments,
- iii) need protection against possible liability claims.

Financing Agreements strengthen ownership, mutual accountability and sustainability. As a trade-off obtaining such agreement is time-consuming and delays the project start up (some by 6 to even 12 months). Projects without an FA need to be contracted within one year after approval of the Action Document (N+1 rule). Projects with an FA need to be contracted within 3 years (N+3 rule).

The INSC-II programme statement⁴² mentions that all actions of the AAP 2014 without a Financing Agreement (N+1 rule) were contracted before end 2015 and all Financing Agreements were signed before 4 December 2015 and contracted in 2016 except for one action for Ukraine that will be contracted in 2017 or 2018 after ongoing projects are completed. The risks and constraints of this specific project were duly considered in the QSG meeting. The finding that the 2014 INSC-II projects established contracts in a shorter time than under INSC-I, confirms the conclusion of the INSC-I final evaluation report⁴³: *“On average, projects requiring signature of an FA took 1.5 years longer to contract than those that did not”*.

From January 2014 to early 2017 11 ROM reports were issued all concerning projects under INSC. The budgets of individual projects range from 0.8 m EUR up to 3 m EUR except for one smaller project of 0.3 m EUR. The geographic coverage of projects covered by ROM is Ukraine (5 projects), China (4), Mexico (1) and Egypt (1).

ROM recommendations focus mostly on project implementation aspects (timeliness, reporting, log frame and indicators). Few recommendations address the improvement of impact or sustainability.

Increasing the project size reduces the number of interventions and can alleviate the workload. However, larger projects may increase the complexity and the need to strengthen the quality of design, oversight and dialogue. Additionally, an increased project size is not in-line with the Court of Auditors⁴⁴ recommendation *“to encourage the participation of Small and Medium-sized Enterprises (SME) and to divide contracts into lots wherever possible to increase participation in the procurement”*. When attracting eligible contractors of partner countries, it is to be ensured that EU best practices will be transferred where relevant (see below JC 3.3). The evaluation team noted that one enlarged contract (U3.01/10 - support to regulator authority) comprised different target groups unduly complicating its contracting and implementation and increasing the need for management attention.

JC 3.2 The Instrument improved its mechanisms to support implementation performances from INSC-I to INSC-II.

The evolution from INSC-I to INSC-II takes into account the findings to improve performance. Measures do address a more efficient project implementation through enlarging the project size and avoiding the need for a Financing Agreement where possible. Instrument adjustments, following INSC-I lessons include an increased attention to safeguards, decommissioning strategies and remediation of nuclear sites.

Main changes from INSC-I to INSC-II concern the inclusion of pre-accession countries (earlier under IPA), and the inclusion of programming of safeguard actions. The implementation mechanisms were not changed except that a working group of ENSREG provides advice under INSC-II on programming and the definition of the strategy and the MIP.

The 2014 INSC-I evaluation identified a lack of understanding of EC administrative procedures by new countries, a limited absorption capacity of regulatory authorities, and the need to more expediently contract projects that require a Financing Agreement (FA). The evaluation recommended to further limit the need for FAs and to start the procedure for signing earlier.

Although, the present evaluation has not received evidence of an investigation on the causes of delays, the evolution from INSC-I to INSC-II takes into account the findings to improve performance. Measures do address a more efficient project implementation through enlarging the project size and avoiding the need for a Financing Agreement where possible (see JC 3.1). With dedicated attention, the project on cooperation with Iran has been prepared in less than 12 months (see JC 1.3). Additionally, INSC-II gives attention to safeguards, decommissioning

strategies and remediation of nuclear sites while thematic and geographic priorities are properly defined in the Regulation.

JC 3.3 INSC regulations align on CIR for aspects of flexibility, ownership, climate change, environmental mainstreaming, promotion of human rights, effective and efficient implementation methods and promoting visibility.

The analysis of the six-relevant cross-cutting issues identified by CIR shows that, in practice, INSC-II responds satisfactorily to CIR requirements. Particularly the Instrument makes very significant contributions to i) a better environment and ii) good sector governance. The Instrument is also well aligned as regards aspects of flexibility / speed of delivery and promotion of ownership. The evaluation analysis also showed how design, policy marking, follow-up, monitoring and evaluation of these aspects needs strengthening.⁴⁵

Nationality and rules of origin. Action Documents usually highlight the exceptions available to the nationality and origin rules which, in practice, do not represent stumbling-blocks in contract award procedures.

Ownership. Promoting ownership is acknowledged as a significant objective, both in the Instrument's design and in practice. Technically, art.8.6 CIR (participation of local contractors) and 4.11 CIR (participation of local and regional contractors) apply to INSC-II projects, whereas art.1(5) CIR (promotion of the use of partner country systems) and art.15 CIR (involvement of stakeholders of beneficiary countries) do not apply to INSC-II actions (art.9 INSC-II Regulation).

In practice, due to the very nature of nuclear safety actions, specialized nuclear safety local contractors are rarely available on the local market. Also, many projects involve the transfer of EU know-how. However, local subcontractors are frequently used, both for translation purposes and technical advice purposes.

In considering the INSC-II, the ownership is promoted through in the involvement of stakeholders in the need analysis process (EQ1), international Conventions (CNS, Joint Convention), the NPT and other actions. The case study for Ukraine identified the following additional mechanisms supporting national ownership: the engagement of the Regulator in WENRA (Western European Nuclear Regulators Association), the TSO in ETSON (European Technical Safety Organisation Network), the Operator in WANO (World Association for Nuclear Operators), and the transposition of EU Nuclear Directives in national legislation. The active participation of the stakeholders is an additional sign of ownership as the request to WANO for a peer review mission to the Rovno NPP (Ukraine) end 2016.

Alignment on cross-cutting environmental issues. The instrument's main contribution to cross-cutting issues relates to the preservation of the quality of the environment. The Instrument is inherently aligned on EU policy priorities for the environment. This applies particularly to actions relating to the safe transport, treatment and disposal of spent nuclear fuel and radioactive waste as well as decommissioning and remediation actions. The evaluation on cross-cutting priorities revealed that the INSC environmental achievements are insufficiently acknowledged or made visible, both from a design point of view and in practice.

Human rights and fundamental freedoms, the rule of law and democracy are sufficiently taken into account by the Instrument's design and practice, in particular the EU's dual track approach and gender mainstreaming awareness.

Financial flexibility is adequate, given the possibility on paper and in practice to engage in donor coordination, parallel and joint co-financing, multi-donor funds (see assessment of flexibility in EQ1).

Coordination with other donors is adequately addressed (see EQ 5). Finally, the INSC-II sufficiently promotes EU **visibility**.

When applying CIR to INSC-II, a balance needs to be struck between promoting human rights and rule of law and democracy, on the one hand, and promoting the INSC-II nuclear safety objectives on the other.

INSC-II's design and practice meets the main principle of the Agenda for Change: human rights, democracy and other key elements of good governance.

The alignment with cross-cutting issues is further assessed in Annex 5 on CIR.

Interviews showed that the INSC is perceived by internal and external stakeholders as a “very specific” Instrument. This perception also emerged in interviews on cross-cutting issues evidencing as for many stakeholders crosscutting priorities have a limited relevance to the specialized nature of INSC. The evaluation finding of INSC significant contributions to crosscutting issues provides scope and opportunity to improve stakeholders’ perceptions and support the instrument communication and visibility.

3.1 EQ 4 on added value

EQ4. To what extent do the INSC programmes add value compared to interventions by Member States or other key donors?

Summary

The Instrument fosters unique added value as its distinctive features allow for interventions in the nuclear safety sector well beyond actions by Member States and other donors. In particular:

- (i) Support by its institutional framework and engagement in international collaborations allows INSC to act at a global level, featuring specialized know-how and expertise, high nuclear safety standards and exclusive EU competences to handle nuclear safeguards (JC 4.1.a);
- (ii) A relatively large financial allocation and continuity of nuclear safety cooperation with a track record of over a quarter of a century (JC 4.1.b); and
- (iii) The Instrument allows the EU to assume a leading role in nuclear safety on the basis of the advanced safety requirements and standards as established under Euratom and by the Member States; the Instrument also allows engaging in policy and political dialogue with Partner Countries as follow-on to cooperation arrangements (JC 4.1.c).

An analysis of these dimensions of the added value of the Instrument allows the counterfactual hypothesis that, in absence of the Instrument, Member States would not be able to address the nuclear safety and safeguards priorities with comparable standards as achieved by INSC.

JC 4.1 INSC adds value compared to interventions by Member States or other key donors.

The Instrument fosters unique added value as its distinctive features allow for interventions in the nuclear safety sector well beyond capabilities of individual Member States, and other donors or the capacity of engagement of the private sector and of national institutions

The INSC-II Regulation recognises the importance of added value in its preamble (4) “... *the Union alone has the critical mass to respond to global challenges and is also best placed to coordinate cooperation with third countries.*” Regulation states as well that the Strategy and the Multi-Annual Programme (MIP) “... *shall also indicate the added value of the cooperation*”.

Indirectly the Regulation recognises the added value of Community action as reference is made to the high standards implemented in the Community as examples for third countries. Added value considerations were also taken into account in the 2011 Impact Assessment⁴⁶ and the proposal for establishing the INSC-II Regulation⁴⁷.

a) Added value related to institutional framework and expertise.

Unique added value in the field of nuclear safety is triggered by the Instrument's opportunity to benefit from the EU and Euratom institutional framework, including (i) EEAS⁴⁸; (ii) DG ENER of the European Commission as empowered by the Euratom Treaty⁴⁹; (iii) Euratom Research and Training Programme (2014-2018)⁵⁰; (iv) JRC with specialised expertise on nuclear safety cooperation and safeguards, (v) the early exchange of information between competent authorities in the event of a radiological emergency system (ECURIE), managed by DG ENER; (vi) NEAR's Support Group for Ukraine and JSO⁵¹; and (vii) Working Group 1 of ENSREG⁵².

The INSC engages in multiple international collaboration arrangements that allows optimising the know-how, to realise larger scale contracts, to merge financial capacity and to act at a global level⁵³. The Instrument's collaboration with the IAEA is widespread in INSC projects⁵⁴. The Case Study on interventions in Ukraine evidences an effective use of OSART and IRRS missions in support of an EC-IAEA-Ukraine joint project evaluating the safety of nuclear power plants in Ukraine. The INSC positions the EU in the G7 Nuclear Safety and Security Group. The INSC also involves collaboration with the EBRD on the Chernobyl Shelter Fund⁵⁵ and the Nuclear Safety Account ("NSA")⁵⁶, as well as with other multilateral platforms (e.g. "ASEANTOM"⁵⁷ or the Northern Dimension Environmental Partnership, bilaterally with the US NRC, Sandia Laboratory⁵⁸ and Russia⁵⁹). The international pivotal role of the EU in nuclear safety would be significantly reduced in the absence of the Instrument. This prominent role is underpinned by the fact that the EU is the largest donor to the Chernobyl Shelter Fund⁶⁰ (see Annex 10.4.A).

The Instrument's institutional arrangements allow mobilizing a unique level of specialized expertise for nuclear safety cooperation that would not be affordable by individual Member States, including Commission expertise and WG1 ENSREG. The EU's expertise is key to the success of INSC projects. The EU's expertise is not an addition of technical expertise available in the various Member States but is Community expertise, acquired at supranational level, e.g. through the JRC⁶¹ and research reactors.

The EU has exclusive competences to act on nuclear safeguards⁶² as the EC per the Euratom Treaty is the competent authority. Thereby the JRC plays an important supporting role in several actions related to nuclear safeguards. Finally, although it is formally not a party to it, the EU should play a key role in the periodic Non-proliferation of Nuclear Weapons Treaty Conferences organised by the UN Office for Disarmament Affairs. This expertise allows the Instrument to transfer EU know-how on nuclear safety. Several actions relate to training and tutoring courses on nuclear safety and waste management. The EU's expertise also allows funding high-tech training centres (e.g. a training centre in Ukraine with a unique power plant simulator⁶³).

The recognition of INSC by Euratom as one of the 4 world-wide good practices during the Convention on Nuclear Safety in March-April 2017 is a recent additional evidence of the instrument unique value-added.

b) Size and continuity of cooperation.

The EU offers budget resources for cooperation well beyond the reach of Member States. The EU's contribution to the Chernobyl Shelter Fund is nearly double that of the US contribution and four times larger than the largest contribution by a single Member State (France); the EU's contribution to the Northern Dimension Environmental Partnership Fund is double the

Russian contribution and double the largest contribution by a single Member State (France). Even after INSC-II's budgetary cutback, INSC can count on some EUR 30 million per year. The international collaboration platforms (IAEA, EBRD, G7, etc.) facilitate co-financing arrangements⁶⁴, which also increase the size of the Instrument (see EQ 6.2). In the G7 context⁶⁵, pledging conferences are held on an ad-hoc basis to the benefit of Chernobyl, at which the European Commission usually pledges substantial amounts – more than the individual G7 donors (comprising France, Italy, Germany and the UK) – that trigger additional pledges by other donors (see EQ6).

EU nuclear safety action started in the early 1990s through TACIS and PHARE⁶⁶. Since then it has been continued for over a quarter of century. Hence EU nuclear safety commitments can reliably be planned, albeit often in limited detail, through EU multi-annual financial frameworks, the Instrument strategy and its MIPs (see EQ2). Nuclear safety achievements need strengthening and consolidation through time, hence the crucial importance of the Instrument's continuity over time⁶⁷. For instance, an acceptable degree of independence of Ukraine's nuclear regulator was reached in 2010 according to an IAEA assessment⁶⁸; however, a new law in Ukraine challenges this independence which is being given attention for urgent correction⁶⁹.

c) Sector leadership.

The Instrument allows the EU to engage in a political and policy level dialogue with Partner Countries (see EQ 6, JC 6.1) and promotes EU leadership in the nuclear safety sector. This leadership is a rare feature in international cooperation, as in many sectors the EU is perceived as playing a passive role as financier and much less as a leader. Evidence of this leading role, include: (i) the INSC positions the EU in the G7 Nuclear Safety and Security Group (NSSG), which the EU has chaired since its creation; (ii) a leading role in CGULS, the Chernobyl Shelter Fund and the NSA; (iii) the EU has consistently supported G7 pledging conferences (see 4.1.a); and (iv) the EU plays a central role in the Armenian nuclear power plant coordination group, the Iran Deal and the policy on political dialogue with the Ukrainian NRA (see EQ6, JC 6.1).

The EU endeavours to open a political and policy dialogue in the wake of nuclear safety. For example, the Iran Deal, in which the EU started a very sensitive political dialogue, includes a contribution by the INSC⁷⁰. Several sources confirm that the EU is perceived as a neutral, impartial player in the international arena. Yet the weight of EU political influence depends on the cooperation by the Member States⁷¹. In response to different views and priorities with the MSs related to nuclear energy⁷², the INSC-II instrument has excluded the support to nuclear operators with the exception of support to the stress test; being part of the response to the 2011 Fukushima-Daiichi accident.

The analysis of the added value of the Instrument allows a hypothesis that, in the absence of such an Instrument, the needs and priorities currently addressed by the INSC could not be tackled by individual Member States and or by other Donors. This hypothesis is presented in Annexes 10.4.B and 10.4.C.

Box 3: Statements on INSC Added Value

Euratom and all the Member States are parties to the Convention on Nuclear Safety and the Joint Convention on the safe management of spent fuel and radioactive waste and they have also put in place the most advanced safety requirements and standards. On this basis, the INSC can effectively pool the resources necessary to contribute to the promotion and dissemination of its high safety standards. The INSC is therefore an effective mean for the Community and the Member States to adhere to their international obligations and to develop recognized leadership in this field.

Good practice and best experience from the EU as a whole is being provided to the benefit of those countries, and ultimately – as nuclear incidents affect everyone – to the EU citizens. If

the Instrument was not there, in most cases a high level of safety requirements and oversight might not be in place, jeopardizing people and the environment.

Source: Contribution of the Working Group 1 ENSREG to the Evaluation Survey⁷³.

3.2 EQ 5 on coherence, consistency, complementarity and synergies

EQ5. To what extent does INSC facilitate coherence, consistency, complementarity and synergies (CCC&S) both internally between its own set of objectives and programmes and vis-à-vis other EFIs (see also INSC Regulation, Article 4)?

Summary

The self-contained and centrally-managed Instrument ensures internal coherence. INSC mechanisms and management processes support a sound level of coherence, consistency, complementarity and synergies throughout strategy, programming and implementation. However, Strategy, MIP, AAP and Action Documents do not provide guidance on how to deal with complementarities and do not include a mapping of Member States' and donors' interventions. Action Documents merely mention the existence of complementarities but do not provide operational mechanisms explaining how complementarities should best be dealt with. QSG, Interservice Consultation, INSC Committee, meetings with WG1 ENSREG and JRC support are mechanisms conducive to supporting internal coherence and complementarities. (JC 5.1).

Even though the Instrument is well set for coordination and coherence relating to nuclear safety, INSC is set in relative isolation and has limited mechanisms for coordination and interaction outside the nuclear safety world. This condition is only partially justified by the limited scope of external interactions. There is significant scope for coordination and interactions between INSC and IcSP and the link between safety and security deserves strengthening; coordination with IcSP is facilitated by the management in the same Unit of both instrument and common support from JRC.

The scope for overlap and synergies with IPA II, ENI and DCI is limited, because of the specialized thematic focus on nuclear safety. No significant interactions have been identified with the other instruments. Where complementarities with other EFIs are relevant, the Action Documents do not identify specific measures to avoid duplication and establish synergies⁷⁴; the instrument has not developed monitoring and evaluation mechanisms to support and strengthen coherence, complementarities and synergies (JC 5.2).

JC 5.1 The INSC set up and processes are conducive to promoting coherence, consistency, complementarity and synergies⁷⁵

INSC mechanisms and management processes support a sound level of coherence, consistency, complementarity and synergies throughout strategy, programming and implementation. However, Strategy, MIP, AAP and Action Documents do not provide specifications for complementarity arrangements and do not include a mapping of Member States' and donors' interventions

Mechanisms supporting complementarities, coherence and synergies. The INSC Regulation, Strategy Paper, MIP and Action Documents emphasize the importance of coherence, consistency, complementarities and synergies but fall short of defining operational arrangements, viz.:

(i) INSC-II Regulation: principles of coherence and complementarity are well addressed by the Instrument Regulation⁷⁶,

(ii) Strategy Paper: coordination mechanisms are outlined by the strategy, mentioning coordination with IAEA and its RCF, the G7 NSSG, the Global Partnership Programme, support to IAEA INSAG-21 and Action Plan on Nuclear Safety⁷⁷. The Strategy states that synergies will be sought with the Instrument contributing to Stability and Peace (IcSP). The Strategy also indicates how the Commission will draw from European expertise (from Member States regulatory authorities, WG1 ENSREG, WENRA and HERCA). However, no further mechanisms are specified;

(iii) MIP: Art. 6(3) of INSC-II Regulation states *"in order to achieve complementarity and avoid duplication the MIP shall take into account the current and planned international cooperation...."*.

The MIP includes a paragraph on *"Guidelines to avoid duplications"* referring to IAEA and G7 meetings, a 2013 Memorandum of Understanding between Euratom and IAEA on nuclear safety cooperation, the IAEA RCF, EBRD cooperation (Chernobyl Shelter Fund, NSA). However, a specific donor mapping at regional and country level specifying mechanisms for identifying and developing complementarities is not developed (see EQ 2);

(iv) Action Documents: None of the INSC-II Action Documents refer to complementarities with EFIs, except for the Instrument contributing to Stability and Peace ("IcSP"). Some Action Documents include statements that support of coherence, consistency, complementarity and synergies between INSC and IcSP but without mentioning specific measures, e.g. IQ.3.01/14⁷⁸, which mentions complementarity only once despite the fact that it followed an earlier IfS project⁷⁹. Coordination arrangements with the EU Delegations are not specified;

(v) Internal processes: QSG, Interservice Consultation, INSC Committee, meetings with WG1 ENSREG and JRC support are all mechanisms conducive to supporting of coherence, consistency, complementarity and synergies mechanisms, particularly for aspects of internal coherence⁸⁰. QSG (including EC DEVCO Units, EAAS, DG ENER, NEAR, Legal Service, SG and JRC) comments on the Action Document were used to strengthen the INSC's CCC&S with the EU and Euratom policy⁸¹; and

(vi) Coordination with the EU Delegations: Coordination with EU Delegations is not confined to the start of cooperation with new partner countries for establishing contacts, as Delegations also support formal requests for cooperation, signature of the financial agreement, organization of exploratory missions and visibility events⁸². The Case Study in Ukraine shows that the role of the EU Delegation in Kiev goes beyond a limited initial assistance⁸³. Similarly, in Central Asia the EU Delegations support the policy dialogue for a broader environmental agenda⁸⁴. The Ukrainian Case study also evidences that complementarities and the avoidance of duplication with other projects - INSC projects and external actions (national, other EFIs and international donors) – are attained by means of a "roadmap" (radioactive waste management roadmap).

To strengthen coherence with EU directives and best practices, sustainable uranium mining practices are to be promoted in INSC projects to avoid creating new legacy waste sites requiring remediation in future⁸⁵.

JC 5.2 INSC is adequately set to ensure coherence, consistency, complementarity and synergies with other EFIs

Even though the Instrument has an adequate level of coordination and coherence relating to nuclear safety, it is set in relative isolation and has limited mechanisms for coordination and interaction outside the nuclear safety world. There is significant scope for coordination and interactions between INSC and IcSP and the link between safety and security deserves strengthening; The scope for overlap and synergies with IPA II, ENI and DCI is limited, because of the specialized thematic focus on nuclear safety. No significant interactions have been identified with the other instruments.

The only financial instrument for which there exists scope for increased coordination and complementarities is the IcSP, in the light of the strategic nexus of safety and security (see below). Minor interactions exist (and could be further expanded) with IPA II, ENI and DCI. The other instruments are either thematic (European Instrument for Democracy and Human Rights “EIDHR” and Partnership Instrument “PI”) or geographical (European Development Fund “EDF” and Instrument for Greenland “GL”) and the evaluation did not reveal scope for significant interactions.

MIP and Action Documents do not adequately specify operational arrangements for complementarities, pointing to the need for increased attention during the project design phase. The instrument has not developed monitoring and evaluation arrangements to follow up and strengthen complementarities. INSC-II Regulation states that the financial, economic and technical cooperation is complementary to that provided by the EU under other Instruments⁸⁶. The INSC has in common with other Instruments a substantial and sustainable contribution to safe and healthy living conditions for the well-being of present and future generations. However, the INSC’s objectives on nuclear safety have limited overlaps with other EFIs, except for the Instrument contributing to Stability and Peace (IcSP)⁸⁷. Furthermore, the INSC is the only EFI that has the Euratom Treaty as a legal basis. The specific nature of the INSC has not stimulated discussions within the Commission on further alignment with other instruments. The CIR, while referring expressly to most EFIs, does not make a reference to the INSC. In the Chapeau Survey (2016), the three EU Delegations that used the INSC therefore did not consider that the INSC overlaps with other EFIs⁸⁸.

Even though no overlaps were identified, the evaluation revealed specific, although often limited, complementarities of the INSC with the following instruments: the Instrument for Pre-Accession Assistance (“IPA”), the European Neighbourhood Instrument (“ENI”), the Instrument for Development Cooperation “DCI” and the Instrument contributing to Stability and Peace (“IcSP”)⁸⁹:

- **INSC and IcSP⁹⁰**: The only instrument for which the evaluation found ample scope for complementarities is IcSP, given the strong link between safety and security (see also EQ 1). The evaluation gathered several examples illustrating an adequate level of complementarities established *de facto* across the two instruments, as for instance in a regional project in Tanzania⁹¹.
- **INSC and IPA II⁹²**: There is a limited scope for coordination and complementarities with IPA II with respect to civil society, governance and policy dialogue actions in pre-accession countries engaging in nuclear activities. Given that nuclear safety cooperation has thus far been relatively limited with the Pre-Accession countries (a slow take-off in Turkey and halted in Serbia) complementarities between INSC and IPA could be strengthened.
- **INSC and ENI⁹³**: Also for ENI the evaluation revealed scope for complementarities in areas of civil society, governance and policy dialogue in Eastern Partnership countries engaging in nuclear activities (currently Armenia, Belarus, Ukraine and, to a lesser extent, Georgia). In the case of Ukraine, sound coordination has been established between different Commission

Services. So far, complementarities between INSC and ENI have been relatively scarce, providing scope for exploring and strengthening synergies between INSC and ENI.

- **INSC and DCI⁹⁴:** There is a limited scope for coordination with DCI with respect to environmental issues, civil society, governance and policy dialogue actions organized in Central Asia countries. Additional complementarities with DCI could be sought and custom-tailored to project needs, as for instance when INSC is seeking to support the socio-economic conditions of local populations, providing access to potable water for communities potentially affected by uranium mining activities, in which case DCI could provide resources for supporting actions in full synergy with INSC interventions.

We refer to Annex 10.5.B for a more detailed analysis of complementarities between INSC and other EFIs.

Simplified SWOT analysis: Comparison of new stand-alone INSC versus hypothetical merging of INSC and IcSP.

A simplified SWOT analysis has been carried out in the context of this evaluation to identify threats and opportunities of a new stand-alone INSC versus a hypothetical merger of the two instruments into one (notwithstanding the different legal bases). The conclusion is that a merger would be viable but would likely negatively affect the effectiveness and quality of nuclear safety interventions.

3.3 EQ 6 on leverage

EQ6. To what extent has the INSC leveraged further funds and/or political or policy engagement?

Summary

The INSC facilitates leveraging of both political engagement and financial resources for the nuclear safety sector.

The EU plays a leading role in the nuclear safety sector and in following up challenges and initiatives identified in the G7/8 Nuclear Safety and Security Group. The leading role in nuclear safety cooperation represents a noticeable feature in EU cooperation (JC 6.1)

Several INSC-I and INSC-II interventions support the finding that the instrument can provide a swift reaction through promotion of a concerted political and policy effort and through giving the EC the opportunity to lead civil cooperation on nuclear safety. The policy dialogue is supported by sound coordination between DEVCO and EEAS. Although the instrument has limited scope for supporting political dialogue, in specific cases it has proved to work as a door-opener to the EU for political engagement. There is scope for strengthening mechanisms and contributions for a more strategic dialogue and for developing a monitoring system for policy and political engagements. (JC 6.1)

The Instrument is also contributing to leveraging significant financial resources for nuclear safety cooperation, from donors as well as from partner Countries. (JC 6.2) Opportunities for blending operations have been demonstrated, particularly in the neighbourhood, although projects have not yet been identified. (JC 6.2)

JC 6.1 INSC has leveraged political and policy engagement

The instrument can provide a swift reaction through promotion of a concerted political and policy effort and through giving the EC the opportunity to lead civil cooperation on nuclear safety. The policy dialogue is supported by sound coordination between DEVCO and EEAS. Although

the instrument has limited scope for supporting political dialogue, in specific cases it has proved to work as a door-opener to the EU for political engagement. There is scope for strengthening mechanisms and contributions for a more strategic dialogue and for developing a monitoring system for policy and political engagements

The Instrument supports the EU leading role in nuclear safety cooperation with third countries. This leadership represents a remarkable positive exception, as several sources, including external evaluations, point to the weak capacity of the EC to establish itself as a lead global player in development cooperation⁹⁵. Evidences of the Instrument's support to a leading role include:

- G7 contact group for Chernobyl has been chaired by the EC since its inception in 2009;
- The EC has been consistently supporting G7 NSSG presidencies on pledging efforts⁹⁶;
- Leading role in the Coordination Group for Uranium Legacy Sites (CGULS);
- A prominent, leading role on the Chernobyl Shelter Fund and the Nuclear Safety Account
- Central role in Ukrainian coordination;
- The expedient response to the Iran deal on commencing cooperation on civil nuclear safety
- The EU has a leading role, with the support of the Member States, in the policy and political dialogue to correct the independence of the Ukrainian Regulatory Authority⁹⁷.

According to interviews with sector' stakeholders this leadership has been largely the effect of the proactive and leading role of the management of the DEVCO unit dealing with nuclear safety. With the recent retirement of two senior staff members, the Instrument's capacities for leadership and recognition in the international arena might be temporarily weakened, with a need to renew resources.

Although EEAS Global Issues Division lacks nuclear safety expertise, the sound and continuous cooperation between EEAS and DEVCO provides an appropriate environment for joint development of strategies and policy dialogue. Coordination is also maintained with services responsible for security issues.⁹⁸

The evaluation revealed, from INSC documents and interviews with instrument stakeholders, several results related to the leverage for policy and political engagement in support to nuclear safety goals, including:

- The EU-Ukraine Association Agreement pursues regulatory reforms aligned on EU directives' rules, complying with the priority shared by Europe 2020 and INSC-II.
- Three nuclear safety Directives (BSS, NSD, and Transport) are being transposed into Ukraine's national legislation.
- Adherence to EU practices and reference levels as demonstrated by SNRIU becoming a member of WENRA in 2015.
- Based on EU expertise through projects UK/TS/46 and UK/TS/39, SNRIU developed four essential guidelines for radioactive waste management⁹⁹(see paragraph 2.10).
- The EU has a leading role, with support from the Member States, in the policy and political dialogue aimed at correcting the independence of the Ukrainian Regulatory Authority¹⁰⁰ and to ensure that the Government provides adequate funds for its functioning and capacity-building¹⁰¹.
- The expedient response to the Iran deal on commencing cooperation on civil nuclear safety shows how INSC-II can promote a concerted political and policy effort and give the EC the initiative to lead civil cooperation on nuclear safety.
- Remediating the consequences of the Chernobyl accident comprises a number of important plans as the construction of the New Safe Confinement, and the Liquid Radioactive Waste Treatment Facility funded by the Chernobyl Shelter Fund and Nuclear Safety

Account.

- Another major construction at the Chernobyl site concerns a new Interim Storage Facility for spent fuel from reactors 1, 2 and 3 funded by the Nuclear Safety Account (NSA).
- QSG meeting minutes recognize that the Action Document for Training and Tutoring¹⁰² has a high priority as it allows the EU to be present and to maintain good visibility.
- For about 10 years the IAEA has supported donor coordination and has been setting priorities and defining actions for international support to the Armenian nuclear power plant.
- Radiation Safety in Central Asia is contributing to initiate a dialogue and feeding into efforts for increased engagement on the environment.¹⁰³

However, these actions to achieve policy results are not supported by documented evidence of quantifiable achievements (see also EQ2 on lack of measurability of the Instrument). There is scope for strengthening the Instrument's policy and political dialogue, particularly on the following aspects:

- The dialogue is not consistently supported by country- and region-specific strategic frameworks and road maps for policy adjustments; the policy agenda and roadmaps for the dialogue are not clearly defined by MIPs, AAPs and Action Documents. Only in a few cases the results are measurable and specific indicators have been used set to measure progress in sector policies.
- There is an absence of specific monitoring arrangements at project, country, region and instrument levels (including indicators, baseline and targets) to follow up progress on political and policy engagement.
- Delegations could play a more significant role in supporting the dialogue with government and institutions to promote the nuclear safety agenda.
- There is scope for increasing both internal and external visibility for INSC and EU work through the Instrument. As an example, over recent years DEVCO has been insisting on more recognition and visibility for its contribution to IAEA¹⁰⁴.
- Policy and political dialogue need to be regularly reviewed by external evaluations, contributing to the lesson-learning and accountability of the instrument.

JC 6.2 INSC has leveraged additional funds to support Nuclear Safety

The Instrument is contributing to leveraging significant financial resources for nuclear safety cooperation, from donors as well as from partner Countries. Opportunities for blending operations have been demonstrated, particularly in the neighbourhood, although projects have not yet been identified.

Leveraging additional funds for nuclear safety cooperation through co-financing arrangements is a priority for DEVCO and is well supported by the Instrument's regulation, its strategy and MIP:

- INSC-II Regulation explicitly states that the "(...) Commission must (...) seek the most efficient use of available resources through, in particular, the use of financial Instruments with leverage effect." The INSC-II Regulation refers to CIR Article 4 that allows financial Instruments such as loans, guarantees, equity or quasi-equity, investments or participations, and risk-sharing Instruments. One of the preferred possibilities is under the lead of a multi-lateral European financial institution (e.g. EBRD) compliant with EU objectives, standards and policies, and best practices in the use and reporting on EU funds.
- DEVCO's 2015 Management Plan¹⁰⁵ recommends the use of blending to leverage additional funds,¹⁰⁶ and recognises blending as an important vehicle for leveraging additional resources for development and increasing the impact of EU aid¹⁰⁷.
- The 2014-2020 Strategy Paper supports the possibility of co-funding with MS and/or regional/ multinational entities¹⁰⁸.

- The INSC-II MIP 2014-2017 also promotes co-financing or joint projects¹⁰⁹.

The importance of co-financing was also highlighted by the INSC-I evaluation.¹¹⁰

The Instrument is also contributing to leveraging significant financial resources for nuclear safety cooperation from donors as well as from partner countries.¹¹¹ Examples of the Instrument's achievements in mobilising additional funds include:

- The Instrument's leading role in G7 on pledging¹¹² financial resources for nuclear safety cooperation.
- The Instrument's central role in the Chernobyl Shelter Fund¹¹³ and the Nuclear Safety Account allowing to attract very large sums of co-financing
- A new fund is being established for Central Asia, aiming to pull together contributions from G7 along with new strategic donors for the region;¹¹⁴ the EU as sole contributor to the EBRD multi-donor trust fund expects that this leading role will attract new donors.
- INSC's support for the Regulator expertise for licensing the EBRD's 'Nuclear Power Plant Safety Upgrade Program' for all 15 operating nuclear power units in Ukraine. Of the total estimated costs of EUR 1.4bn the EBRD and Euratom each provide a loan of EUR 300m.
- The support for the Training Centre in Ukraine, with an envelope of EUR 14m, leveraged a contribution by Energoatom of approximately EUR 40 million.¹¹⁵

The EU, with support from the Member States, has a leading role in the policy and political dialogue aimed at supporting the independence of the Ukrainian Regulatory Authority¹¹⁶ and ensuring that the Government provides adequate funds for its functioning and capacity-building¹¹⁷, in support of national spending in favour of the nuclear safety sector.

Interviews with EBRD also revealed possible opportunities for blending, particularly in the neighbourhood, although projects have not yet been identified.

Box 4: Blending and nuclear safety cooperation

It is noted that interventions aligned with the INSC-II objectives are typically non-revenue-generating activities (waste remediation, regulatory support). Blending therefore should not involve private financiers as this might not be allowed under national legislation and not desirable in the spirit of the Conventions. Moreover, revenue-generating activities could be regarded as support for nuclear energy which is explicitly excluded in INSC-II.

The Instrument lacks specific monitoring and evaluation mechanisms to follow up financial leverage and the mobilization of resources (both national and international) for nuclear safety goals. The Instrument's support for the mobilization of additional financial resources was not assessed in past evaluations.

4 Conclusions and Recommendations

Conclusions

1. Overall conclusion: the Instrument fits its purpose well and is well-aligned with nuclear safety priorities and EU crosscutting issues (conclusion based on all EQs).

C 1.1 The Instrument fits its purposes well and responds to priority needs related to nuclear safety. If the Instrument did not exist, a mechanism would be required to address EU nuclear safety priorities in the neighbourhood and third countries (based on EQ 1 and EQ 4).

Thanks to its distinctive features the INSC has unique value added, mobilizing a critical mass with specialized know-how and specific expertise in the EU, disseminating the high nuclear safety standards of the EU Member States, and exclusive competences to handle nuclear safeguards under Euratom. The value added is strengthened by the institutional framework including Euratom, DG ENER, JRC, and ENSREG. Links with IAEA and participation in the G7 allow operation and influence at global level, and promotion of EU priorities in its neighbourhood. In the absence of the Instrument, opportunities would be lost not only on nuclear safety and safeguards cooperation, but also on political dialogue and promotion of EU priorities in the EU's close neighbourhood and globally (*Conclusion based on EQ1 and EQ4*).

C 1.2 INSC-II responds properly to CIR requirements, significantly contributing to a better environment and good sector governance. The Instrument is also well-aligned on EU priorities in terms of flexibility, speed of delivery and, to a limited extent, promotion of ownership. There is scope for improving the criteria for selecting the interventions, the use of Peer Review outcomes in the Programming and the appraisal of results to be reflected in the Action Documents. The Instrument's contributions to EU priorities beyond nuclear safety are not fully appreciated by development cooperation and nuclear safety stakeholders, giving rise to a perception that the Instrument, due to its very specialized nature, has limited opportunity for supporting EU crosscutting issues (*Conclusion based on JC 1.3 and 3.3*).

C 1.3 The INSC-II objectives are well-aligned with the policy and priority of Euratom on radiation protection and safeguards, and the Euratom directives on nuclear safety, radioactive waste management and basic safety standards for protection against the dangers arising from exposure to ionising radiation, (*Conclusion based on EQ1*).

2. Instrument processes, including strategy, programming, project design, monitoring and evaluation need strengthening and do not offer adequate results orientation and measurability (*Conclusion based on EQ 2*).

C 2.1 INSC strategies, programming, formulation and management processes provide a coherent framework, focused on the delivery of outputs contributing to nuclear safety objectives. Overall the Instrument lacks results orientation and attention on impacts. The Instrument's Strategy, programming and Action Documents lack adequate detail including on the assessment of needs and expected results. Changes promoted by the Instrument can, in most cases, not be quantified. Analysis of sustainability issues in Action Documents is weak or absent. Logical frameworks are not specific enough and financial resources are not clearly linked to expected outputs. The absence of a clear cost structure implies that financing decisions are based on limited information and weakens the Instrument's transparency (*Conclusion based on JC 2.1*).

C 2.2 The Instrument has very limited measurability, at outcome level, with management focus (including Action Documents, terms of reference, contracts) on activities and outputs rather than outcomes. As a consequence, measurability of results, including for instance strengthened regulatory infrastructure and enhanced levels of nuclear safety, is weak or absent. It is acknowledged that indicators on improving the nuclear safety culture in nuclear regulation, operation, and waste management are at times difficult to define and previous attempts have not yet led to the development of an Instrument monitoring system. The Instrument does not make use of external assessments. Lack of indicators and inadequate monitoring and evaluation arrangements are key Instrument shortcomings, affecting accountability, clarity of the analytical base and visibility. Additionally, measurability of results, supported by performance and impact indicators would strengthen the lesson-learning capacity, appreciation of outcomes and impacts, improving communication and supporting results-based management (*Conclusion based on JC 2.2*).

C 2.3 Country-level strategies and road maps for nuclear safety with measurable indicators should be better defined, supported by policy dialogue and integrated into the overall framework of EU cooperation and external action (*Conclusion based on EQ 2*).

C 2.4 There is scope for increased attention to issues of sustainability and good governance of the nuclear safety sector (*Conclusion based on EQ 2*).

C 2.5 Visibility and communication: the Instrument should promote transparency and public communication as an emerging policy on nuclear safety in the EU/Euratom; visibility of nuclear safeguards actions should be strengthened. To enhance the transparency, the INSC should be encouraged to provide summary information on where and when its INSC interventions have taken place, and to make public in a timely manner including the benefiting country and the achieved results.

3. INSC has been consistently delivering support for nuclear safety, although its achievements cannot be quantified (conclusion based on EQ 2 and Case Study)

C 3.1 Since its set-up in 2007 the Instrument has been delivering a steady flow of relevant actions and outputs. The case study on Ukraine shows significant results contributing to enhanced nuclear safety culture and safe management of radioactive waste (*Conclusion based on EQ 1, EQ 2, and case study*).

C.3.2 The Instrument effectively leverages financial resources from donors and partner countries and promotes policy dialogue in support of nuclear safety. Opportunities exist for applying blending in the neighbourhood area (*Conclusion based on EQ 6*).

C 3.3 However INSC outcomes and impacts cannot be quantified for lack of measurability and of monitoring and evaluation arrangements (see C.2), and it is not possible to assess the "value for money" of the Instrument. INSC should develop a tool capable of incorporating lessons and of ensuring that external reviews appropriately address quantitatively and qualitatively regulatory effectiveness, operational safety, design safety, and emergency preparedness and response. (*Conclusion based on EQ 2, and case study*).

C 3.4 The evaluation identified specific niches with scope for strengthening the Instrument's effectiveness, particularly on i) strengthening linkages between safety and security, and ii) increased visibility for safeguards (*Conclusion based on EQ 1 and EQ 4*).

C 3.5 The EU Directive on management of mining waste (Directive 2006/21/EC) and practices provides a basis for coherence and for the transfer of lessons learned into the remediation of legacy uranium mining sites in Central Asia (*Conclusion based on EQ 5*).

4. A distinctive set-up, supporting value added and sector leadership, with scope for strengthened interactions and complementarities (conclusion based on EQ 4 and 5)

C 4.1 The institutional set-up and the centralized management of the INSC-II is a relevant and adequate arrangement for ensuring that qualified assistance is provided on the basis high-level European expertise with adequate expert review during programming and implementation; management support arrangements provide adequate capacities comprising technical support (JRC), an independent expert advisory group to the Commission (ENSREG), and dedicated support for the beneficiaries and end-users in Ukraine (JSO) (*Conclusion based on EQ 3*).

C 4.2 Role of ENSREG: The consultations with experts of Regulatory Bodies of MS should be key in the Programming Process as well as for the appraisal of the results delivered.

C 4.3 The Instrument has little visibility outside the nuclear safety sector and has few interfaces with other EFIs, and only limited connections with other Commission stakeholders, including EU Delegations. While the evaluation finds that the relative isolation is partially justified by the specialized nature of the Instrument, there is scope for the Instrument to strengthen interactions and complementarities with other players (*Conclusion based on all EQs*).

C 4.4 The current level of human resources dedicated to the Instrument constitutes a limitation to addressing the challenges identified by the evaluation, including the need to reinforce the quality of strategy, programming and Action Documents and the need to strengthen policy and political dialogue and the instrument future leadership (*Conclusion based on EQ 3 and EQ 2*).

Recommendations

1. Overall recommendation: cooperation of nuclear safety should be pursued and reinforced

EU Cooperation on nuclear safety, radiation protection and safeguards should be continued and possibly reinforced to meet priority needs, maintaining the current features of centralized management, highly technical content, transfer of know-how and international outreach.

Recommendation linked to conclusion C1

2. Strengthening measurability and effectiveness

The Instrument should develop a new results-oriented approach, shifting from the current focus on activities and outputs to more results-focused, detailed and measurable strategy, programming and actions.

Recommendation linked to conclusion C2

The following operational measures are recommended for improving the Instrument's measurability and effectiveness:

2.1 Capacity-building for results-based management should be applied to design and implementation of INSC interventions: adequate capacity-building measures for key stakeholders, including Instrument managers, staff, EEAS, JRC and stakeholders in partner countries (the range of possible capacity-building measures include: workshops on results-oriented management, coaching, specific expertise, study and road map on results-oriented management) (*Recommendation linked to conclusion C2*).

2.2 Strengthening the Instrument Strategy and Programming: country-level strategies and road maps for nuclear safety with measurable indicators should be better defined, supported by policy dialogue and integrated into the overall framework of EU cooperation and external action, viz.:

- programming documents should specify needs and define medium-term priorities at country and regional levels, taking into account donor coordination principles;
- details on support for governance and an outline of key issues for policy dialogue should be provided, along with mechanisms and indicators to follow up policy engagements;
- National reports submitted by contracting parties for Conventions and other status reports (IAEA) should be used in the MIPs; possibly DG ENER could take the lead in such action.

(Recommendation linked to conclusion C2)

2.3 Increased detail and quality of Action Documents: the quality and level of detail of Action Documents should be strengthened, including adequate analysis of the needs of stakeholders and of institutional and policy frameworks; clear definitions of impacts and quantified definition of results (at outcome and output levels); sound theory of change with clear logical frameworks detailing measurable outputs and outcomes; sound analyses of external factors; risk analyses and risk management plans; fully developed monitoring systems; full analyses of financial, institutional, technical and policy sustainability, establishing a clear causality link between financial resources and activities and between activities and expected results.

Action documents should increase attention to issues of sustainability and good governance of the nuclear safety sector (*Recommendation linked to C 2.2*).

Commission Quality Support mechanisms and standards for INSC Action Documents should be strengthened (Recommendation linked to C 2.2).

2.4 Develop a comprehensive (results-based) monitoring and management system: a comprehensive results-based monitoring and management system should be designed and implemented at the levels of Instrument, region, partner country and programmes. Indicators (already identified) at outcome level should be used in programming and Action Documents, with clearly-defined baselines and target values. ROMs should remain an important tool, part of the monitoring system and be customized to the Instrument's needs, providing a regular external assessment of the programmes as well. The monitoring system should support programme and Instrument management, providing a control panel for following up progress, including financial performance. technical performance indicators from peer reviews outcomes, international lessons learned and European experience (e.g., stress tests) should be built into the Instrument's monitoring and evaluation system; (*Recommendation linked to C 2.2*).

2.5 Evaluation should become an important tool for the Instrument's lesson-learning and accountability: re-introduce evaluation as a key tool for external assessment of the Instrument; programme-level evaluations should be systematically used and lesson-learning mechanisms developed.

An impact evaluation should be carried out to assess the results and impacts achieved since 2007.

The Instrument should use the results of the Peer Review missions to support monitoring and evaluation arrangements. (*Recommendation linked to conclusions C 2.2 and C 3.3*)

A study should be carried out to develop the instrument monitoring and evaluation mechanisms (Recommendation linked to C 2.2).

2.6 Transparency, visibility and communication: the Instrument should further promote transparency and public communication on nuclear safety:

ENSREG reporting on peer reviews is an example to be used to encourage partner countries to adopt similar transparency in making the national reports on the Conventions available to the wider public so as to encourage open communication. The ENSREG Working Group on transparency arrangements could advise on this.

Visibility of nuclear safeguards actions should be strengthened. The visibility and knowledge of the instrument beyond the restricted circle of people directly working on nuclear safety issues should be actively promoted. (*Recommendation linked to C 4.2*)

3. Reinforcing results delivery

The Instrument's delivery should be strengthened on specific areas related to the goals of safety, waste management and safeguards.

Recommendation linked to Conclusion C3

The following operational measures are recommended for improving the Instrument's delivery:

3.1 Safeguards: a more comprehensive approach to safeguards, combating illicit trafficking and forensics can create synergies and wider interest as well as the visibility of EC actions. Participation of the EU in the periodic review conference on the Treaty on the Non-Proliferation of nuclear weapons (NPT) is to be pursued, possibly supported by proactive actions on visibility and attracting donors for remediation of legacy sites (*Recommendation linked to conclusion 3.4*).

3.2 Prevent new legacy waste sites are created by current uranium mining: in countries where the INSC-II engages in remediation of legacy uranium waste sites it is important to ensure that sustainable mining practices are applied to prevent creation of new legacy waste sites (*Recommendation linked to conclusion 3.4*).

3.3 Long-term operation of nuclear power plants: INSC-II Regulation provides the opportunity to cooperate with the operator “in specific and duly justified cases (See Article 3(4))”; it is advised that consideration be given to whether verification measures for the Long-Term Operation (LTO) of NPPs together with an IAEA Safety Assessment for LTO could qualify as such a case (*Recommendation linked to the case study*).

3.4 Radiological data exchange: the EC’s nuclear safety cooperation with Ukraine on radiological data exchange (EURDEP - European Radiological Data Exchange Platform) could further benefit from an expert advisory mission to Ukrainian organisations on radiological monitoring networks (*Recommendation linked to the case study*).

3.5 Strengthening follow-up and visibility of cross-cutting issues, particularly for aspects of improved governance, environmental actions and national ownership; these aspects should be better defined in project design, with improved definition and accuracy of policy markers; contributions to crosscutting issues should be followed up by the Instrument’s monitoring system; increased visibility should be provided for contributions to crosscutting issues (*Recommendation linked to conclusion 1.2*).

4. Strengthening the institutional set-up and improving the linkage of the Instrument

Resources and capacities should be adjusted to support the strengthened functions recommended by the evaluation

Recommendation linked to Conclusion C4

Recommended operational measures include:

4.1 Strengthen policy and political dialogue and sector leadership: strengthening strategies, plans, result frameworks and monitoring and evaluation mechanisms for policy and political dialogue; renew resources for maintaining sector leadership (*Recommendation linked to C.2 and C4.3*)

4.2 Support: support to the production of Action Documents and contracts (JRC, JSO) should be designed as “results-oriented” with increased focus on outcomes and results such as:

- development of a comprehensive Instrument monitoring system (see R.2),
- design of interventions reflecting EU standards,
- support for strategy and programming documents, with adequate detail, prioritisation of needs, and donor mapping,
- planning, design of terms of reference, and follow-up of implementation of programme evaluations,
- Development of lesson-learning mechanisms for the Instrument.

(*Recommendation linked to conclusion C 2*)

4.3 Role ENSREG: consultation of the Working Group of ENSREG comprising senior experts of Regulatory Bodies of MS should have an important role in the Programming as well as for the appraisal of the results delivered. (*Recommendation linked to conclusion C 3*).

4.4 Strengthening complementarities with other EFIs: complementarities across safety and security should be strengthened, particularly with IcSP, not only at action level but also in a more strategic way as part of the cooperation mechanisms and strategies. The Instrument needs also to develop limited complementarities with IPA, ENI and DCI. Action Documents

need to specify operational arrangements for coordination and complementarities. Monitoring mechanisms should follow up implementation of complementarities (*Recommendation linked to conclusion C 3*).

4.5 Opening up: the Instrument should remain faithful to its very specialized nature although to some extent it should "open up", working less in isolation and increasing relevant interactions with Delegations and other EU players, while improving external knowledge and understanding of the Instrument (*Recommendation linked to conclusions C 2.6 and C4*).

4.6 Nuclear Safety resources: improving quality while maintaining the performance and scope of interventions requires strengthening of the dedicated human resources at the nuclear safety sector of the Commission service implementing the INSC (*Recommendation linked to conclusion 4.3*).

APPENDIX: Endnotes

¹ Technical Assistance to the Commonwealth of Independent States

² Working Group 1 (WGNS) - Improving Nuclear Safety arrangements.

³ Also representatives of ENSREG WG 1 joined the ISG meeting.

⁴ Directive laying down BSS for protection against the dangers arising from exposure, latest update 2013/59/Euratom.

⁵ NSD: "Directive establishing a Community framework for the nuclear safety of nuclear installations", 2009/71/Euratom; RWM: "Directive ... for the responsible and safe management of spent fuel and radioactive waste", 2011/70/Euratom.

⁶ Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

⁷ On request of the European Council's response (EUCO 10/11) to the 2011 Fukushima-Daiichi accident.

⁸ ToR for "Working Group International Cooperation", 2013; ENSREG – INSC Position Paper, 2014; Draft Guidance for National Regulatory Organisations: Principles for Openness and Transparency, Jan. 2011 for approval by ENSREG.

⁹ Regulation (EU) No 236/2014 laying down common rules and procedures for implementation of the EU's EFIs.

¹⁰ Transforming our world: the 2030 Agenda for Sustainable Development, United Nations, A/RES/70/1.

¹¹ Shared Vision, Common Action: A Stronger Europe, A Global Strategy for the EU's Foreign and Security Policy, June 2016.

¹² 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation on Nuclear Weapons.

¹³ The other regional system Brazil- Argentine Agency for Accounting and Control 'ABACC' is partner in INSC cooperation.

¹⁴ Action plan Follow-up of peer review stress tests; and Rapporteurs' Report Ukraine, ENSREG national action plans, 2013.

¹⁵ As cooperation with the Operator is no longer a priority under INSC-II the focus of the USB will gradually shift, although on-going projects continue to require attention.

¹⁶ Integrated Regulatory Review Service, Operational Safety Assessment Review Team, Integrated Nuclear Infrastructure Review; independent expert review services organised by IAEA.

¹⁷ The EC Programme Statement 2017 indicates that "Additional appropriations amounting to EUR 100 million are mobilised under the INSC to continue EU's contribution to the Chernobyl Shelter Fund (CSF) and the Nuclear Safety Account (NSA)."

¹⁸ See also Table 3 in Annex 10.1.B

¹⁹ See analysis of regulations for strategy, programming and action documents, Annex 10 / EQ 2

²⁰ These observations apply to all logical frameworks attached to the Commission Implementing Decision on the AAP 2016 (11.4.2016)

²¹ The evaluation methodology identified as indicator for result orientation " *Number and % of Action Documents that develop measurable results framework (both at output and intermediate outcome level)*"

²² Several interviews held with Commission staff confirmed that Action Documents focus on the definition of objectives and activities. Interviews pointed that further design, definition of results and results management is followed up through contracts.

²³ For instance, Action Document for Belarus Nuclear Safety cooperation (AAP 2016) and A3.01/2015 enhancing capacities of the Armenian Nuclear Regulatory Authority.

²⁴ Finding based on the analysis of individual Action Documents (INSC II) and the lack, in all of them, of an in-depth risk analysis and management plan.

²⁵ Statement supported by several interviews at the Commission.

²⁶ The review of 2016 AAP shows that in most cases an envelope is allocated under budget item 4.3 "procurement", matching Action Total Amount.

²⁷ The analysis of results has been supported by several sources: i) Case Study, focusing on main results in Ukraine, ii) INSC I evaluations, iii) INSC programme statement, iv) ROMs and review of monitoring reports, v) analysis of INSC II Action Documents and result frameworks and the responses

to a questionnaire shared with nuclear safety cooperation stakeholders. These sources have been triangulated with interviews with Instrument stakeholders.

²⁸ Italtrend, March 2014; Note of the evaluation team: although the document covers a period outside the scope of the evaluation, the information supports a preliminary finding of the instrument capacity to deliver results against its goals

²⁹ One of the major priorities of the Instrument over the evaluation period, with 48 projects and a financial envelop of 102 M €, with 41 projects providing director support to the regulatory authority and or TSO.

³⁰ Between 2007 and 2013 47 projects supported this sector (36 in areas of decommissioning, radioactive waste and site remediation and 11 supporting regulatory authorities).

³¹ 11 projects over the period included support to emergency preparedness and response.

³² Note of the evaluation team: also in this case the document covers a period outside the scope of the evaluation and the information supports the finding of the Instrument's capacity to deliver results against its goals.

³³ DEVCO's 2014 Annual Report and the 2016 EU Draft Budget highlight "*drastic improvements of environmental conditions (clean water)*" from INSC's remediation projects in Central Asia legacy uranium mining and milling activities and stresses the importance of preliminary feasibility studies, environmental impact assessments and funding of direct remediation activities. They also highlight the importance of similar preventive projects in African uranium mines.

³⁴ See detailed analysis and evidence of INSC evaluation mechanisms Annex 10 - EQ 2

³⁵ INSC I evaluation (2012)

³⁶ Existing review mechanisms include: i) ENSREG peer review of stress tests and national action plans, and ii) Internal projects review and assessment by Commission staff and JSO.

³⁷ Contract EC RISKAUDIT N°2009/220331 Project N°REG.01/07.

³⁸ Source: INSC programme statement, Draft general budget of the EC for the financial year 2017, COM (2016)300, June 2016.

³⁹ Work Load Assessment of EuropeAid Head Quarters (WLAHQ), external assessment, DEVCO, 17/12/2014.

⁴⁰ ENSREG key responsibilities vis à vis INSC II and its support to the instrument value added are discussed in EQ 1 and 5

⁴¹ Action Document for Technical Support - Joint Research Centre, Annex 11 to AAP 2016.

⁴² Draft general budget of the EC for the financial year 2017, INSC-II Programme Statement.

⁴³ INSC-I Final Evaluation report of INSC-I in the period 2007 - 2013, March 2014.

⁴⁴ Court of Auditors: Special report no 17/2016: The EU institutions can do more to facilitate access to their public procurement?

⁴⁵ As related articles in the CIR (1(5) and 15) are not referred by the INSC-II Regulation there is scope for further alignment.

⁴⁶ Impact Assessment accompanying Council Regulation on INSC-I, SEC(2011) 1472 final; a public consultation (Jan. 2011) pointed out that 70% of respondents confirm the substantial added value of EU interventions; indicators global field presence, wide-ranging expertise, supranational nature, role as facilitator of coordination, and economies of scale.

⁴⁷ Proposal for a Council Regulation establishing INSC-II, an Instrument for Nuclear Safety Cooperation, COM (2011) 841 final.

⁴⁸ The EEAS assists the High Representative in ensuring the consistency and coordination of the EU's external action, as well as by preparing policy proposals and implementing them.

⁴⁹ Chapter 7: Euratom safeguards system, as a regional system for nuclear material accountancy and control also contributing to developing IAEA methodologies (2010 NPT Review Conference, Volume II); Art. 31: consultations on radiation protection standards (BSS) of Group of Experts of MSs; Art. 35: verification of environmental monitoring; and Art. 37: consultations on plans for new or modified nuclear facilities of a Group of Experts of MSs.

⁵⁰ With associated countries eligible for funding notably INSC-II partner countries Serbia, Turkey, Ukraine, Georgia.

⁵¹ JSO – Joint Support Office in Kiev supporting the Ukrainian partners in the INSC interventions.

⁵² ENSREG is an independent, expert advisory group composed of senior officials from the national nuclear regulatory authorities and competent senior civil servants from all 28 EU Member States.

⁵³ An INSC Project Level Evaluation of 2014 states that *“the joint EU-IAEA cooperation and actions result in synergic effects and it would be appropriate to continue applying this approach also in the next INSC cycle. The support delivered by the JRC has also been an asset in facilitating the implementation of INSC projects at all levels”*, EuropeAid 129783/C/SER/multi on indicators.

⁵⁴ Annex to INSC-II Regulation states that the use of the Integrated Regulatory Review Service (IRRS) and the Operational Safety Review Team (OSART) missions (both services of IAEA) are viewed favourably. IRRS is designed to provide a clear indication of the strengths and weaknesses of the national regulator, whilst OSART concerns the safety of nuclear power plants.

⁵⁵ International fund for the Chernobyl Shelter Implementation Plan (SIP) managed by EBRD within G7 NSSG/EBRD Contact Group, chaired by EC. See Action Documents for Chernobyl (Annex 10 2015 AAP and Annex 3 2015 AAP).

⁵⁶ G7 NSSG/EBRD Contact Group, chaired by the EU Commission created the NSA, to which the INSC participates.

⁵⁷ The ASEAN Network of Regulatory Bodies on Atomic Energy AD for ASEAN Network (Annex 6 2016 AAP).

⁵⁸ AD for Iraq (Annex 2 2014 AAP).

⁵⁹ Russia participates in CGULS, the Armenian nuclear power plant coordination group and the Iran deal.

⁶⁰ EU contribution is nearly double that of US and four times the largest contribution of single Member State (France).

⁶¹ 2015 Annual Report on the EU's development and external assistance policies and their implementation in 2014 COM(2015) 278 final, p. 153. Already during TACIS, an evaluation stated that *“the closer involvement of the JRC since 2005 had improved the project implementation and reduced the necessary time”*, TACIS Nuclear Safety Review Report, Italtrend, May 2010, p.49. See also TAREG01/13's 2nd Annual Report (DEVCO contract 2014/338-129) on the JRC's Technical Support for the project cycle management of nuclear safety and safeguard projects for the period October 2015-October 2016.

⁶² Chapter 7 Euratom Treaty, Article 85 of Euratom Treaty requires unanimous approval of amendments by the Council after consulting the EP; and ECJ Case 1/78 Draft IAEA Convention on Physical Protection of Nuclear Materials... Nov. 1978, ECR, 2151.

⁶³ Ukrainian Management and Maintenance Training Centre for NNEGC Energoatom staff partially funded by the EU (€ 14 million) providing a nuclear power unit simulator being the first of its type in the world. See EUD Ukraine Brochure *“The EU is the largest donor supporting Ukraine in nuclear safety since the 1986 Chernobyl Accident”*.

⁶⁴ INSC-II Strategy Paper 2014-2020 supports international coordination (p. 6). INSC-I allows for parallel and joint co-financing (art.10 INSC-I Reg.). Art.4.9 CIR, which applies to INSC-II (art.9 INSC-II Reg.), also allows for parallel and joint co-financing.

⁶⁵ Report of the NSSG during the German Presidency in 2014/2015; 27 May 2016.

⁶⁶ INSC Project Level Evaluation of 2014 acknowledges that INSC projects in Ukraine and Armenia would not have been so successful if previous assistance under TACIS was not there (EuropeAid 129783/C/SER/multi).

⁶⁷ Validation interview with Commission services, 30 November 2016.

⁶⁸ EC-IAEA-Ukraine Joint Project «Safety Evaluation of Ukrainian NPPs», IAEA/EC Agreement 2007/145268, Feb. 2010.

⁶⁹ Court of Auditors Special Report No. 32 (EN 2016) on EU Assistance to Ukraine states: *“EU support for Ukraine remains a work in progress, despite good efforts by the Commission. ... there was a strong political commitment to public administration reform. But management changes jeopardised the reforms and low salaries created openings for corruption. Further steps are needed to meet objectives”*.

⁷⁰ Interviews with Commission services and additional interview with EEAS.

⁷¹ The progress report on the implementation of the Nuclear Safety Directive (NSD) of 18/11/ 2015 states that *“The Commission ... will encourage an effective cooperation among Member States to ensure added value from existing resources”*.

⁷² Study on Legal Instrument and Lessons Learned from the Evaluations Managed by the Joint Evaluation Unit, Final report, (Lot 5: EuropeAid/122888/C/SER/Multi), July 2011: *“While all other results were of a positive nature, ... sustainability of the action is therefore not yet assured. Finally, one result was*

negative by indicating that “EU Member States have very different sensitivities regarding nuclear power production”.

⁷³ Response to the Open Public Consultation supports the assessment on the profound added value of INSC.

⁷⁴ Possibly because of the Instrument’s “specific” nature the risk for overlap is small and opportunities for complementarity limited.

⁷⁵ Note: the analysis of the instrument internal coherence with policies and other actions of Euratom, EU and Member States is discussed also in EQ1 (JC 1.1. and JC 1.3).

⁷⁶ See: preamble (20); in Title I, article 4 (compliance, coherence and complementarity), in article 5 of the Strategy Paper and article 6 of the Multiannual Indicative Programme; and in Title III, article 8 (provisions on use of mid-term reviews).

⁷⁷ Plan adopted in 2012 after Fukushima accident.

⁷⁸ IQ.3.01/14 - Support to Regulatory Body of Iraq on Radioactive Waste Management, Decommissioning and Remediation of Sites.

⁷⁹ Redirection Former Iraqi Weapons of Mass Destruction Scientists through Capacity Building for Decommissioning of Facilities.

⁸⁰ Interviews with Commission services and the Evaluation Team participating in WG1 ENSREG meeting (11 October 2016) support this preliminary finding.

⁸¹ Quality Support Group (QSG) for AAP 2015 commented on balancing resources between neighbourhood countries and other countries. Cooperation with Ukraine on radioactive waste management was postponed as an earlier radioactive waste projects experienced delays. For 2016 AAP, the QSG requested to ensure harmonization of the ADs regarding the policy context and EU legislation. QSG further recommended to set out a transparent overview of the funds per topic and region. DAC markers on gender and environment were included in ADs.

⁸² For example for a Europa Day or inauguration day for moving Chernobyl shelter.

⁸³ Case Study interview, November 2016. EUD Kiev ensures coherence and consistency and provides non-technical support to complement JSO’s and Commission’s roles on (i) administrative support (e.g. translations of strategic documents to support political dialogue; (ii) project registrations at Ministry of Economy; (iii) assistance on social projects (hospital equipment, greenhouse, wood incinerator); and (iv) visibility (e.g. 29 November 2016 event related to the Sliding Shelter).

⁸⁴ Validation Interview with Commission services, November 2016.

⁸⁵ The present status of regulation, licensing and inspection practices and the resources at the NRA have to be in place to ensure proper mining actions, possibly considering in-situ leaching if considered as best practice for the location, along with the creation of a decommissioning fund to remediate the site after terminating the mining actions. The importance of ensuring the most environmentally-friendly mining practices is even more relevant as the uranium delivered to EU utilities originate to a large extent from these geographical regions. The 2015 annual report of the Euratom Supply Agency specifies main sources of uranium in relation to past, present, and potentially future partner countries: Russian Federation 26%, Kazakhstan 18%, Niger 13% and Uzbekistan 3%. The EU has an extensive legal and technological framework on the management of waste from extractive industries (Directive 2006/21/EC on the management of waste from extractive industries) with an extensive technological basis of reference documents on the best available techniques. In addition, the IAEA issued a Technical Report on Best Practices in Environmental Management of Uranium Mining (NF-T-1.2, IAEA, 2010). Hence the basis for coherence of the INSC-II actions on remediation of the legacy uranium mining site is substantial. Regional specific considerations need to be taken into account, as a best practice for an EU site may not apply to a site in the high-altitude mountains in Central Asia prone to landslides, seismic activity and high precipitation. Moreover sites in Africa require also customized measures.

⁸⁶ Preamble (19) states that “the Union and the Community continue to be served by a single institutional framework. It is therefore essential to ensure consistency between the external actions of both”.

⁸⁷ Finding supported by several interviews with Commission services, other EFIs evaluation teams and demonstrated in the intervention logic of other Instruments.

⁸⁸ EFI Survey, Part I (Section 7) – Coherence, Complementarity and Synergies.

⁸⁹ All remaining EFIs are either thematic (European Instrument for Democracy and Human Rights “EIDHR” and Partnership Instrument “PI”) or geographical (European Development Fund “EDF” and Instrument for Greenland “GL”) Instruments with no overlap with INSC.

⁹⁰ IcSP is an Instrument to support security initiatives (crisis response, crisis preparedness, conflict prevention) and peace-building activities in partner countries. It intends to provide a swift response in political conflicts, complement humanitarian relief and interventions when natural disasters occur, enhance the EU capacity for crisis preparedness, conflict prevention and peace building, and build capacity to address global and trans-regional security threats. The IcSP (2014-2020) replaces the Instrument for Stability (IfS), which had been created in 2007 as a follow up to an earlier Instrument entitled Rapid Reaction Mechanism. IcSP can provide short-term assistance, for example in countries where a crisis is unfolding, or long-term support to global and trans-regional threats.

⁹¹ A regional INSC project to ensure safe transport of nuclear waste from Tanzania through Malawi and Zambia to Namibia pursuant to the opening of a Tanzanian uranium mine is carried out jointly by INSC, for nuclear safety aspects, and IcSP, for security aspects (as part of a broader project that involves 10 countries with Centres of Excellence and national focal points). Synergies are reached and overlaps are avoided as the same Unit at the Commission manages both projects in the same regions that have been awarded to a single contractor (International Science and Technology Centre of Kazakhstan).

⁹² IPA II (2014-2020) provides assistance to countries directly in line to become members of the European Union (such as the former Yugoslav Republic of Macedonia and Turkey) and the Balkan countries (Albania, Serbia, Kosovo, Bosnia-Herzegovina and Montenegro). IPA is managed in a decentralized fashion. IPA II replaces IPA I (2007-2013), which replaced various pre-accession Instruments, PHARE, ISPA, SAPARD, CARDS, the Turkish pre-accession Instrument and post-accession assistance of 2004-2006 and 2007-2010 for new EU Member States.

⁹³ The ENI (2014-2020) is the funding Instrument for European Neighbourhood Policy, which covers cooperation with South Mediterranean countries (Algeria, Egypt, Lebanon, Libya, Jordan, Israel, Morocco, Syria, Tunisia, the occupied Palestinian territory and East neighbourhood countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine) either bilaterally or regionally (in this latter case also Russia is included). It aims to encourage democracy and human rights, sustainable development and the transition towards a market economy in neighbouring countries. The ENI is managed in a decentralized fashion. It replaces the European Neighbourhood and Partnership Instrument ("ENPI"), which operated from 2007 to 2013. ENPI itself replaced the MEDA (Euro-Med Partnership, TACIS (Eastern neighbours) and other financial Instruments.

⁹⁴ The DCI (2014-2020) covers approximately 47 developing countries in Latin America, South Asia, North and South East Asia, Central Asia, Middle East and South Africa, except the countries eligible for the Pre-Accession Instrument, in addition to two thematic programmes (global public good and challenges; and civil society organisations and local authorities) and a Pan-African programme. In Central Asia, the DCI promotes since 2007 sustainable development, stability and security in all 5 countries in Central Asia and encourages closer regional cooperation between them and with the EU, in line with the strategy for a new partnership with Central Asia (2007, reviewed in 2012). This strategy took EU-Central Asia cooperation, which began in 1991 with TACIS, to the next level. It sets up dialogue – at ministerial level – and cooperation in human rights, education, rule of law, energy, transport, environment and water, trade and economic relations and addressed shared threats and challenges.

⁹⁵ See for instance intra-ACP evaluation, assessing weak capacities of leadership on global issues.

⁹⁶ Minutes of G7 meetings and interview with EBRD staff.

⁹⁷ See Annex 6, section 3.

⁹⁸ Converging views from separate interviews with Commission and European External Action Service staff.

⁹⁹ See Annex 6, par. 3.10.

¹⁰⁰ See Annex 6, par. 3.7.

¹⁰¹ See Annex 6, par. 3.8.

¹⁰² (multinational and regional training and tutoring of experts of the National Regulatory Authorities and their Technical Support Organisations for developing and strengthening their regulatory and technical capabilities).

¹⁰³ Interview with Commission services.

¹⁰⁴ Interviews with EEAS.

¹⁰⁵ DEVCO's 2015 Management Plan.

¹⁰⁶ See Communication COM as well (2014) 263.

¹⁰⁷ Communication COM(2014) 263 final “A stronger role of the private sector in achieving inclusive and sustainable growth in developing countries” of 13 May 2014, p.15. “Through the EU Platform for Blending in External Cooperation, the Commission is working together with finance institutions on increasing the catalytic effect of blending in crowding in more private financing through greater use of financial instruments such as guarantees, equity and other risk-sharing instruments for infrastructure investments. In this context, the Commission is also exploring options to expand the scope of blending in new areas such as sustainable agriculture and social sectors, and to facilitate more projects with a strong impact on local private sector development like SME access to finance through the creation of dedicated private sector windows in regional blending facilities.”

¹⁰⁸ INSC-II Strategy 2014 – 2020, Commission Implementing Decision COM (2014)3763.

¹⁰⁹ INSC-II Multiannual Indicative Programme (MIP) (2014 – 2017), Commission Implementing Decision COM (2014)3764.

¹¹⁰ Final Evaluation INSC 2007-2013, Italtrend C&T, March 2014.

¹¹¹ Finding supported by several examples of financial leveraging and interviews with Commission and EBRD services.

¹¹² Minutes of G7 meetings and interview with EBRD staff.

¹¹³ The total costs for the Shelter Implementation Plan is 2.1 billion EUR, with the EU being the largest individual donor. The list comprises the EU (432 m EUR), US (330 m EUR), France (115 m EUR), Germany (106 m EUR), UK (90 m EUR), Japan (84 m EUR), Italy (74 m EUR), Russia (70 m EUR), Ukraine (64 m EUR), and other contributions managed by EBRD (498 m EUR).

¹¹⁴ Interviews with Commission and EBRD;

¹¹⁵ Energoatom contribution of 900 m hryvnias equivalent to some 40 m EUR; exchange rate decreased from 0.1 to 0.063 EUR / UAH; source: Energoatom, Case Study.

¹¹⁶ See Annex 6, par. 3.7.

¹¹⁷ See Annex 6, par. 3.8