COMMISSION DECISION

on the Revised Strategy for Community Cooperation Programmes in the field of Nuclear Safety for the period 2010-2013
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THE EUROPEAN COMMISSION,

Having regard to the Treaty establishing the European Atomic Energy Community,

Having regard to Council Regulation (EURATOM) No 300/2007 of 19 February 2007 (hereinafter ‘the Regulation’), and in particular Articles 3 and 4 thereof,

Whereas:

(1) The Regulation sets out under Article 2 the criteria for the implementation of a nuclear safety cooperation programme in third countries for the period of 2007-2013.

(2) Article 3 of the Regulation sets out that Community assistance shall be implemented on the basis of multi-annual strategy papers and indicative programmes, and Article 4.2 stipulates that strategy papers shall be reviewed at mid-term or whenever necessary and may be revised.

(3) The programme for 2007-2009 is being implemented based on Commission Decision on the Nuclear Safety Strategy 2007-2013 for Community Cooperation Programmes and Indicative Programme 2007-2009 of 1 August 2007 (C(2007)3758). The strategy paper for the period 2010-2013 was revised on the basis of Article 4.2 of the Regulation to take into consideration the experience during the first period of implementation and the geographical coverage of the Community assistance under the Regulation.

(4) The measures provided for in this Decision are in accordance with the opinion of the Committee provided for under Article 19 (1) of the Regulation,

HAS ADOPTED THIS DECISION:

Article I

The Revised Strategy for Community Cooperation Programmes in the field of Nuclear Safety for the period 2010-2013 is hereby approved.

Article II

This Decision is addressed to the services of DG Budget, DG External Relations and DG EuropeAid of the European Commission.

Done at Brussels, 08.12.2009

For the Commission

[...]

Member of the Commission
ANNEX

MID-TERM Revision

of the

Strategy for Community Cooperation Programmes

in the field of Nuclear Safety

for the period 2010-2013
Revised Strategy
for Community Cooperation Programmes
in the field of Nuclear Safety
for the period 2010-2013

1. INTRODUCTION

This Revised Strategy represents the mid-term review in accordance with Article 4 point 2 of the Regulation establishing an Instrument for Nuclear Safety Cooperation (INSC)², which provides the strategic framework for Community assistance in the field of nuclear safety for the period of 2010-2013.

The Revised Strategy pursues the Instrument’s objective to support the promotion of a high level of nuclear safety, radiation protection and the application of efficient and effective safeguards of nuclear material in third countries in accordance with the nuclear safety and security policy of the European Union. This was laid down and further developed in a set of Council Conclusions and Communications of the Commission, in particular the Council conclusions on Nuclear Safety and Safe Management of Spent Fuel and Radioactive Waste of June 2004 and May 2007³.

Furthermore the Revised Strategy is in line with the Council Directive establishing a Community framework for the nuclear safety of nuclear installations⁴. The EU was the first major regional nuclear community to provide a binding legal framework on nuclear safety, and a model for the rest of the world. The Strategy for 2010-2013 aims at further projecting this framework for nuclear safety in the EU on the cooperation with third countries.

Assistance under the Instrument involves support for nuclear regulatory bodies and operators of nuclear facilities, support for safe transport, treatment and disposal of spent nuclear fuel and radioactive waste, support for development of decommissioning strategies, promotion of effective regulatory frameworks for proper accounting and control of fissile materials, prevention of accidents with radiological consequences, and promoting international cooperation, including in the framework of the relevant international organisations, notably the International Atomic Energy Agency (IAEA).

The review of the strategy was based on the European Commission’s Communication on addressing the international challenge of nuclear safety and security⁵ and subsequent discussions and conclusions of the Council as well as exploratory missions conducted on the ground during 2008 and 2009, in order to identify priority geographical areas for intervention.

³ 2798th ECONOMIC and FINANCIAL AFFAIRS Council meeting Brussels 8 May 2007
As foreseen in the original Strategy paper, this review takes also into account the experience during the first period of implementation and the extension of the scope in terms of geographical coverage. The emergence of new needs and developments related to the Instrument, resulting in particular from the current global revival of the nuclear power programmes, will be addressed.

In implementing its nuclear safety strategy in third countries, actions under the INSC need to be coordinated with organisations pursuing similar objectives, in particular the IAEA, as well as other international organisations, to avoid any duplication of efforts. The European Commission draws on the experience of competent authorities and organizations in the Member States in the fulfilment of its task, in order to make the best use of European expertise in the field of nuclear safety. The Community’s assistance will be based on a common understanding and a reciprocal agreement between the third country and the EU involving a formal commitment of the third country’s government.

This Revised Strategy will be implemented through successive multiannual indicative programmes for the periods 2010-2011 and 2012-2013 in compliance with Article 3 (4) of the Regulation. These programmes will also specify the indicative budgets and the geographical breakdown of EC assistance under the INSC for the periods concerned. The duration of the programming periods reflects the nature of nuclear safety assistance to third countries in the light of the evolving developments in this area. An indicative programme covering the remainder of the period (2010-2013) would most likely need to be revised due to the rapidly changing circumstances and developments in the nuclear field worldwide. This Revised Strategy may also be subject to further revision whenever necessary in the course of the remaining period, as provided for in Article 4(2) of the Regulation.

Taking into account the complementary nature of the INSC and the Instrument for Stability (IfS), an increased coordination with activities under the Instrument for Stability will be sought. This applies in particular to the Safety, Security and Safeguards (‘3S’) approaches currently under development, taking into account that the INSC focuses on the Safety and Safeguards while the IfS focuses on the Security aspects. Moreover, based on the complimentary nature of these fields, a number of actors – recipients as well as donors – are active both in the areas of safety and safeguards as well as security.

The financial reference amount for implementation of the Regulation over the period 2007 to 2013 is €524 million. The annual commitments are expected to be in the order of €70 million.

2. **EUROPEAN COMMISSION RESPONSE STRATEGY**

The geographical expansion of the European Commission’s intervention is subject to certain priority criteria. In its conclusions of 9 December 2008 on assistance to third countries in the field of nuclear safety and security, the Council considered that the granting of Community assistance should be based on fulfilment of certain criteria, including the following:

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6 In accordance with Article 18 of the INSC Regulation the Commission shall examine progress achieved in implementing the programme and report to the Council and the Parliament. However the experience so far with actions under the INSC is very limited.

- An interested third country should send the Commission a formal request, committing its Government, in order to obtain EU assistance in the field of nuclear safety and security;

- The geographical proximity to the EU is an important, but non-exclusive criterion;

- Third countries wishing to benefit from Community assistance should fully subscribe to the principles of non-proliferation; they should also be parties to the relevant conventions, within the framework of the IAEA, on nuclear safety and security or have taken steps demonstrating a firm undertaking to accede to them. Community assistance could be made conditional on accession or the completion of steps towards accession to the conventions;

- In the case of countries which wish to develop nuclear generating capacity, ...and for which the issue arises of intervention at the appropriate moment to ensure that a nuclear safety and security culture is fostered in parallel with the development of the nuclear generating programme, especially as regards strengthening the regulatory authorities and technical support organisations: the credibility of the nuclear power development programme and the drawing up a preliminary road map.

The cooperation and/or assistance envisaged in this Revised Strategy takes into account the criteria proposed by the Council. Furthermore, the Revised Strategy is in line with the Community's cooperation objectives, policy response and cooperation priority fields, based on an assessment of the situation with regard to nuclear safety in third countries. This includes an analysis of cooperation between other third countries and INSC beneficiaries and potential beneficiaries in the nuclear field.

2.1 Priority areas of support

During the period 1991 to 2006, the TACIS Nuclear Safety Programme was the main instrument of the European Union for improving the safety of nuclear installations in third countries, namely in the NIS. Since 2007, the Community assistance to third countries, no longer limited to the NIS, has been provided through the INSC.

The European Commission announced its intentions regarding the implementation of the INSC in its communication on addressing the international challenge of nuclear safety and security. The number of countries considering starting new nuclear power programmes or expanding existing programmes poses a considerable challenge in addition to the continuation of the assistance provided in the past.

In addressing this challenge, the nuclear safety programme concentrates on areas where the impact will mostly be felt with limited budgets, in particular the technical competence and independence of nuclear regulators, safety culture with regard to operational safety, safety analysis, modern methods of plant operation and maintenance, waste management projects and decommissioning plans. The expected result is the increased competence of both nuclear regulators and operators in meeting internationally recognised nuclear safety standards.

In beneficiary countries which have decided to initiate civil nuclear power programmes, the cooperation will be mainly directed at supporting regulatory bodies and their technical support organizations in developing the necessary regulatory frameworks and methodologies.

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8 Nuclear safety in central Europe was a major chapter in the EU enlargement process. Assistance to the countries concerned was provided by a parallel programme – PHARE.

and at supporting the safe management of nuclear material and radioactive waste (including existing waste).

Taking into account the worldwide developments and the challenges in the nuclear field, EC involvement should address mainly the following priority areas.

- **Support to nuclear regulators**
  Support will be provided through continuing cooperation with regulatory bodies and their technical support organisations. The support will be targeted towards the establishment/strengthening of the regulatory bodies in all their functions, it may include training programmes on nuclear safety as well as assisting with capacity building and, where appropriate, the improvement of the legal framework.

- **Support to nuclear operators**
  This is to be achieved through continuing cooperation with nuclear operators, mainly to increase operational safety. Support in this area includes training programmes on nuclear safety, on-site and external assistance programmes and capacity building.

- **Safety improvement in design, operation and maintenance of nuclear installations**
  To be achieved by drawing on, inter alia, the experience of the operators so that higher safety levels can be achieved for the licensed nuclear power plants and existing nuclear installations. Sustainable management of safety is to be ensured by developing adequate engineering capabilities or dealing with specific technical problems, such as ageing of materials.

- **Safety of nuclear material and radioactive waste management**
  Support in this area will aim to address problems posed by the decommissioning of nuclear installations not covered by commercial obligations, and problems related to the safe management of the radioactive waste of all types and of nuclear material, including environmental remediation of former uranium mines.

- **Accounting and control of fissile materials**
  Establishment of the necessary regulatory framework and methodologies for the implementation of nuclear safeguards, including for the proper accounting and control of fissile materials at state and operator level.

- **Off-site emergency preparedness**
  Establishment of effective arrangements for emergency planning, preparedness and response, civil protection and rehabilitation measures. Regional frameworks will be encouraged in regions where nuclear power programmes are being developed including, if appropriate, countries which do not plan to develop such programmes.

- **Participation in international funds**
  Support in this area will include contributions to the Chernobyl Funds, namely

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(a) an enrichment plant, nuclear fuel fabrication plant, nuclear power plant, reprocessing plant, research reactor facility, spent fuel storage facility; and
(b) storage facilities for radioactive waste that are on the same site and are directly related to nuclear installations listed under point (a).
the Chernobyl Shelter Fund and the Nuclear Safety Account, and other initiatives that may be decided on to meet the above priorities.

- **Measures to promote international cooperation**
  Support will be aimed at the development of nuclear safety culture and the required capacities and expertise at global level, as well as supporting the adherence of third countries to international Conventions and Treaties and the implementation of international codes, standards, instruments and mechanisms. Actions in this area will strengthen the use of current international activities or ‘contexts’ (the Global Nuclear Safety Regime, in IAEA terminology). Global and regional networking will be addressed. The programme will also provide for measures to promote international cooperation (including in the framework of relevant international organisations, notably IAEA) in the above fields. Collaboration with IAEA will take advantage of possible synergies and utilization of existing initiatives and structures, while avoiding, overlapping with or duplicating actions of the European Commission or the Member States for beneficiary countries in the field of nuclear safety.

Establishment and strengthening of regulatory bodies in countries which decided to develop nuclear generating capacity and have a credible nuclear power programme receive the highest priority. For newly established regulatory authorities particular attention should be devoted to training on nuclear safety, capacity building and the creation of a legislative framework. Staffing of regulators is sometimes problematic due to loss of experts who find employment with vendors and NPP operators as well as other industries; this makes training of new staff problematic and requiring attention.

Support to regulators is particularly effective as it allows making a significant impact on nuclear safety while using a limited amount of funding. Furthermore, the implementation measures are closely connected to those on Design Safety, which are oriented to both the regulatory bodies and their TSOs and frequently include support for licensing.

Support to NPP operators is the next priority area. Under Tacis it covered mostly technical improvement of NPPs (on-site assistance). Need for this expensive component is decreasing, as the main improvements have been achieved in countries with established nuclear power programmes, and the new projects are now oriented to improvement of safety culture and training.

The priority given to other areas of support will depend on the need and degree of urgency.

Assistance under the Instrument will be provided through implementation of concrete projects agreed between the beneficiaries and the European Commission in the above areas, according to the modalities stipulated in Article 8 of the Regulation. Co-financing by the beneficiaries is encouraged. The European Commission acts normally as the sole donor for the projects, with the exception of the contributions to the Chernobyl Shelter Fund and the Nuclear Safety Account, where the European Commission is the largest donor within the international donors’ community, and projects co-financed through the IAEA.

Interested third countries, when preparing and further elaborating requests in order to obtain EU assistance, should properly be informed about the nuclear safety and security policy of the European Union and ongoing actions and cooperation between Members States.

In order to avoid duplication of effort, information on past and on-going assistance programmes will be compiled and reviewed. The European Commission services will
coordinate their activities with the beneficiary countries, the major donor countries (in particular the members of the G8) and the IAEA and other relevant international actors.

2.2 Priority geographical areas

The framework for the current Revised Strategy for the period of 2010-2013 is based on the criteria set by the Council on 9 December 2008 for assisting third countries in the field of nuclear safety and security.

The geographical proximity to the EU is an important but non-exclusive criterion in prioritizing nuclear safety cooperation and assistance. The envisaged nuclear safety cooperation beyond the ENP region is fully reflecting the broader frameworks of cooperation between the EU and the respective countries, including in the nuclear field. The assistance envisaged in this Revised Strategy is based on the specific needs of these countries, reflecting the status of their civil nuclear programmes, their capacity to ensure internationally recognized standards of nuclear safety and security and the interest in cooperation with the EU under the INSC.

Therefore the priority geographical areas are as follows.

i) Countries of the former Soviet Union, which received assistance under the TACIS programme, will continue benefiting from the largest proportion of the allocated funds. Countries considering starting nuclear power programmes in the Southern part of the ENP and possibly Middle East regions are also considered for support.

ii) Countries with established nuclear power programmes in Latin America, which may benefit from EU nuclear safety culture while modernizing institutions and infrastructure and coming out from a period of relative lack of investment and isolation.

iii) Countries considering starting nuclear power programmes, particularly in South-East Asia, to ensure that nuclear safety and security culture is fostered in parallel with the development of the nuclear generating programme.

iv) Other third countries having established nuclear power programmes and expanding them in Asia, to help ensuring that safety culture remains a priority, as well as African countries (not included in i) above) may benefit from cooperation under the INSC.

The above EU priorities will be reflected in the respective Indicative Programmes. The actual implementation via Annual Action Programmes will have to take into account the absorption capacity of the beneficiary countries.

It is generally assumed that nuclear power is a global matter. But it is in European interest to give priority to its neighbourhood because it influences not only nuclear safety but also energy security of EU Member States. However, the role of the EU in promoting a framework for nuclear safety in other regions should not be underestimated.

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This Revised Strategy takes into account the recommendations of existing evaluations covering the assistance in the field of nuclear safety, such as the Evaluation of EC Support of partner countries in the area of energy\textsuperscript{12}. The European Commission has expanded its leading role in disseminating information on nuclear safety related issues, for example through the workshops organized with potential beneficiary countries. Dissemination of information concerning the assistance projects to the relevant parties is made through European Commission databases.

Further evaluations of the assistance provided in the previous periods are currently under preparation by DG AidCo, and the results will be reflected in future programming documents, as appropriate.

The future indicative programmes will follow the same logic for prioritizing geographical areas covered by the INSC.

Consultations will take place, as appropriate, to ensure coordination with the implementation of the Instrument for Stability.

- **Russian Federation**

Although the Russian Federation was one of the main NIS beneficiaries, it was not ready to conclude the Financing Agreements for the 2007 and 2008 Action Programmes. The new format for cooperation proposed by the Russian Federation, namely a reciprocal partnership, does not lend itself to financial cooperation under the INSC. Due to these developments, no cooperation involving EC financing for 2010-2011 is planned for the Russian Federation. However the situation could be reviewed if new developments occur within the timeframe of this Strategy.

- **ENP-East and Central Asia**

Under the next INSC programming period, cooperation is planned to continue with the ENP-East countries, mainly in the traditional areas of support such as assistance to regulators and operators. The safety of the nuclear installations designed in the former Soviet Union has been a matter of great concern to the Western world since the accident at the Chernobyl nuclear power plant in 1986. At its 1992 Summit in Munich, the G7 set up a programme of action to address the problem, the European Commission has been actively involved in these initiatives\textsuperscript{13}.

The major beneficiary country in this region will remain Ukraine, both through the projects managed directly by the European Commission and through the European Commission contribution to the Chernobyl Funds. In addition, and based on results of the European Commission-IAEA-Ukraine joint project on safety evaluation of Ukrainian nuclear power plants carried out in line with the Memorandum of Understanding on energy with Ukraine signed in 2005, specific support could be provided for upgrading the safety levels of these power plants under the future INSC programming periods.

\textsuperscript{12} http://ec.europa.eu/europeaid/how/evaluation/evaluation_reports/2008/1192_docs_en.htm

The European Commission allocated under the TACIS Nuclear Safety Programme some €1.3 billion for nuclear safety assistance to NIS over the period of 1991-2006, which made the TACIS Nuclear Safety Programme the largest and most important programme to assist in improving nuclear safety in the countries of the former Soviet Union.

\textsuperscript{13}
Future EC contributions to the Chernobyl Funds will be conditional upon the possibility of the European Commission to exert improved monitoring and control of the operations and their active follow-up, in line with the findings and recommendations of the Court of Auditors.

Continuation of support in the field of nuclear safety is envisaged for Belarus and Georgia, and for other countries in the Central Asia region which might require assistance in relation to remediation of the uranium mines and radioactive waste disposal, notably in the Ferghana valley region. However, taking into account the scope of the challenge posed by the later, EC assistance should be complementary to involvement of other stakeholders.

Assistance to the Armenian operator of the Medzamor nuclear power plant will be in line with the need to address the most urgent safety deficiencies, including in planning its decommissioning and the management of the relevant radioactive waste. The international community has been pressing Armenia to close down this plant as soon as practical, however the Armenian government has made closure of the plant conditional upon the construction of replacement capacity (a new nuclear plant envisaged to start by 2019 at the earliest). The European Commission assistance for the Medzamor nuclear power plant will be covered only during the programming period 2010-2011, however assistance to the regulator (ANRA) may continue, if necessary.

- **ENP-South and Middle East**

  Cooperation on nuclear safety is envisaged to continue with the countries of the ENP-South and possibly other Middle Eastern countries in the next programming periods, namely in the form of regulatory support projects with Egypt, Jordan and Morocco. The programme is planned to provide for a regional follow-up, possibly including nuclear safety assistance to the regulators in other countries in the region.

- **Latin America**

  The cooperation in the field of nuclear safety is envisaged for the Latin America region, namely for Brazil and Argentina, based on the needs identified for the regulators and operators, including capacity building, and for the development of waste management strategies. Support for nuclear safety in these countries is based on the EU-Brazil Joint Action Plan signed in December 2008, the Agreement for cooperation in the peaceful uses of nuclear energy between Euratom and Argentina concluded in 1996 and under the Terms of Reference for the European Commission-Argentina Energy Policy Dialogue endorsed in December 2008. Extension of assistance to other countries in this region could be considered if the criteria are met (see paragraph 2 above) and respective political context permits. Regional cooperation will be encouraged.

- **South-East Asia**

  EC assistance under the INSC in the following programming periods will also possibly cover the South-East Asia according to previous assessment of needs and cooperation possibilities. Vietnam, in particular, is envisaged as a beneficiary country, based on its needs concerning the regulatory authority and waste management strategy. Such cooperation is expected to be covered under the Partnership and Cooperation Agreement with the EU, currently under negotiation. Other countries in the region could be considered as beneficiaries, taking into account the political context and the level of preparedness and credibility of planned nuclear programmes. Moreover, in this evaluation, the time required for the development of a proper
safety culture should be considered. As mentioned in the Council conclusions referenced above, assistance to third countries in the field of nuclear safety and security should take place in parallel with the development of the nuclear generating programmes. On a regional basis, European Commission support to enhance the level of regional emergency preparedness and development of nuclear safety culture could be covered under the INSC, taking into account the existing structures (such as the Asian Nuclear Safety Network).

- **Other potential beneficiaries**

EC involvement in addressing nuclear safety challenges in other beneficiary countries in particular those undergoing or considering a rapid expansion of their nuclear power programmes, could be considered in the future programming periods. This applies in particular to potential assistance to India and China, whereas support may be envisaged to the respective nuclear regulatory authorities, including assistance for capacity building, and to the nuclear operators in these third countries. Scope of such assistance would reflect the extent of the respective nuclear power programmes. The political context with these countries will have to be taken into account before identification of concrete needs and cooperation possibilities are considered.