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Nuclear Security Plan 2010-2013

Report by the Director General

Summary

- The 52nd General Conference commended the Director General and the Secretariat for the implementation of the Nuclear Security Plan for 2006–2009 and looked forward to their continued efforts, in particular in the development of the forthcoming Nuclear Security Plan for 2010–2013 (GC(52)/RES/10). This Plan has been produced in accordance with that resolution. Previously, the first concerted plan of action to protect against nuclear terrorism (GOV/2002/10) was approved in March 2002 by the Board of Governors, which also approved the creation of a voluntary funding mechanism, the Nuclear Security Fund (NSF). In September 2005, the Board approved the second: Nuclear Security Plan 2006–2009 (GOV/2005/50).

Recommended Action

- It is recommended that the Board of Governors:
 - a. approve the Nuclear Security Plan for 2010–2013;
 - b. approve the continuation of voluntary funding for the activities included in the Nuclear Security Plan for 2010–2013, without targets, and call upon all Member States to continue contributing on a voluntary basis to the Nuclear Security Fund; and
 - c. transmit the Plan to the General Conference with a recommendation that the Conference take note of the Nuclear Security Plan for 2010–2013 and call upon Member States to contribute to the Nuclear Security Fund.

Nuclear Security Plan 2010-2013

Report by the Director General

A. Introduction

1. The risk that nuclear or other radioactive material could be used in malicious acts remains high and is regarded as a serious threat to international peace and security¹. It is well recognized that the responsibility for nuclear security rests entirely with each State and that appropriate and effective national systems for nuclear security are vital in facilitating the peaceful use of nuclear energy and enhancing global efforts to combat nuclear terrorism.

2. The Agency has provided assistance to States and supported their national efforts to establish and improve nuclear security² since the early 1970s when it began providing ad hoc training in physical protection. In 1975, the Agency issued Recommendations for the Physical Protection of Nuclear Material³, which have subsequently been revised four times. In 1997, following reports of illicit trafficking of nuclear and other radioactive material, the Security of Material Programme was established. The Agency's first comprehensive plan of action to protect against nuclear terrorism⁴ was approved in March 2002 by the Board of Governors, which at that time also approved the creation of a voluntary funding mechanism, the Nuclear Security Fund (NSF), in order to help implement the Plan. In September 2005, the Board approved the Nuclear Security Plan for 2006–2009⁵. The 52nd regular session of the General Conference⁶ commended the Director General and the Secretariat for the implementation of the Nuclear Security Plan for 2006–2009 and looked forward to their continued efforts, in particular in the development of the forthcoming Nuclear Security Plan for 2010–2013. This Plan has been produced in accordance with that resolution.

¹ See resolution GC(52)/RES/10.

² Nuclear security: The prevention and detection of and response to theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities (working definition established by the fifth meeting of the Director General's Advisory Group on Nuclear Security (AdSec), 1–5 December 2003).

³ INFCIRC/225.

⁴ GOV/2002/10.

⁵ GOV/2005/50.

⁶ GC(52)/RES/10.

B. Objective

3. The objective of the Nuclear Security Plan for 2010–2013 is to contribute to global efforts to achieve worldwide, effective security wherever nuclear or other radioactive material is in use, storage and/or transport, and of associated facilities, by supporting States, upon request, in their efforts to establish and maintain effective nuclear security through assistance in capacity building, guidance, human resource development, sustainability and risk reduction. The objective is also to assist adherence to and implementation of nuclear security related international legal instruments; and to strengthen the international cooperation and coordination of assistance given through bilateral programmes and other international initiatives in a manner which also would contribute to enabling the safe, secure and peaceful use of nuclear energy and of such applications with radioactive substances.

4. The proposed Plan is consistent with the objective of the Agency's Medium Term Strategy 2006–2011, to "establish and achieve global acceptance of an agreed international framework for nuclear security and support its application"⁷.

C. Lessons Learned and Future Directions

5. This is the third Nuclear Security Plan to be proposed by the Agency. A report on the implementation of the first Plan is contained in GOV/2005/50. Reports on the implementation of the second Plan can be found in GOV/2006/46–GC(50)13, GOV/2007/43–GC(51)15 and GOV/2008/35–GC(52)12. A number of factors have been taken into account in drawing up the new Plan, in particular the lessons learned from the implementation of the previous Plans, the findings of the International Symposium on Nuclear Security, organized by the Agency from 30 March to 3 April 2009, and the international instruments relevant to nuclear security.

C.1. Lessons Learned

6. The main lessons learned that apply at the national level include the following:

- All States have responsibilities to establish appropriate systems to prevent, detect and respond to malicious acts involving nuclear or other radioactive material. Not doing so may create a weak link in global nuclear security;
- An effective nuclear security infrastructure requires a multidisciplinary approach with:
 - (i) legal and regulatory infrastructures with clearly defined responsibilities among different organizations and operators;
 - (ii) human resource development;
 - (iii) the establishment of procedures and coordination functions; and
 - (iv) technical support for national infrastructures, recognizing that nuclear security arrangements within nuclear facilities/locations are different from those to be applied outside such facilities/locations to protect civil society from nuclear security events involving radioactive substances;

⁷ GOV/2005/8, Goal B, Objective B3.

- Account should be taken of the synergies between safety, security and safeguards (see paragraph. 32) integrating, where appropriate, relevant features of the national legal and regulatory systems; and
 - A sustainable nuclear security culture is needed in the management of activities involving nuclear or other radioactive material. As a result, nuclear security would be an enabling factor in the broader use of nuclear energy.
7. Lessons learned that apply at the regional level include the following:
- Regional cooperation and coordination agreements facilitate regional approaches to nuclear security; and
 - Subregional interaction regarding border crossing points may offer valuable options for effective and efficient border control.
8. Lessons learned that apply at the international level include the following:
- The existence of terrorist networks that operate internationally and the potential global consequences of a nuclear security event require a global response;
 - This response must rest on a solid foundation of preparedness, appropriate sharing of knowledge, experience and coordination among States and international organizations based on a comprehensive set of established standards and guidance to provide common references; and
 - Vigilance must be maintained and security regarded as work in progress recognizing changing risk assessments.
9. Lessons learned that apply to the Agency's work include the following:
- Nuclear security is a long term effort and the Plan should adopt a long term perspective, identifying core activities while, at the same time, being kept under constant review to reflect changes in circumstances;
 - Priority should be given to the production of nuclear security guidance to assist States and to human resource development support;
 - Effective implementation of the Plan has to be based on systematic approaches using programmes designed to ensure sustainability of security improvements and to obtain strengthened capacities, building on regional and national infrastructures and capabilities; and
 - Strengthened coordination with other international organizations, initiatives and bilateral programmes is needed to avoid duplication of efforts or gaps.

C.2 International Symposium on Nuclear Security: 30 March to 3 April 2009

10. The Agency convened the International Symposium on Nuclear Security from 30 March to 3 April 2009 at the Agency's headquarters in Vienna. More than 500 participants from 76 countries and international organizations discussed nuclear security, its present status and directions for the future. The progress achieved during the past five to ten years was recognized, as was the general need to continue the work towards more effective nuclear security.

11. The symposium recognized the general need to achieve effective nuclear security and addressed the comprehensive layered approach to protection against terrorist or criminal use of nuclear or

radioactive material. It was recognized that the first line of defence (accounting, physical protection) must continue to be sustained with effective security at the facility, location or during transport. A second line of defence – to detect unauthorized movement of nuclear or radioactive material – was recognized as being of equal importance. Effective response systems in cases of theft or other nuclear security events were also recognized as being necessary for a comprehensive nuclear security system.

12. The findings of the symposium are available on the Agency's website⁸.

D. International Legal Instruments Relevant to the Nuclear Security Plan 2010–2013

13. The international legal framework for nuclear security embodies both binding and non-binding instruments adopted under both Agency and other auspices⁹. Among its nuclear security activities, the Agency facilitates adherence to and implementation of the legal framework by assisting States, upon request, in effectively implementing their obligations under the relevant international instruments.

14. A number of international instruments and initiatives make reference to the role of the Agency. In some cases, it is assigned specific responsibilities. The Agency has taken account of these instruments in drawing up this Plan.

15. The Convention on the Physical Protection of Nuclear Material (CPPNM), adopted under Agency auspices, is one of the 13 counter-terrorism instruments in force. The CPPNM is the only internationally legally binding undertaking in the area of physical protection of nuclear material used for peaceful purposes. In addition to physical protection, the CPPNM also deals with criminalization of certain offences and international cooperation. The 2005 Amendment to the CPPNM is also vitally important for nuclear security and, upon its entry into force, would have a major impact on reducing the vulnerability of States Parties to nuclear terrorism. The Amendment extends the physical protection measures of the CPPNM to nuclear facilities and material in peaceful domestic use, storage and transport. It also provides for expanded cooperation between and among States regarding rapid measures to locate and recover stolen or smuggled nuclear material, mitigate any radiological consequences of sabotage and prevent and combat related offences. The Amendment also confers a number of additional functions on the Agency, which were set out in GOV/2005/51 and approved by the Board of Governors.

16. Safeguards agreements and protocols, concluded between the Agency and States provide, inter alia, through state systems of accounting for and control of nuclear material, central contributions to preventing illicit trafficking and to deterring and detecting the diversion of nuclear material.

⁸ <http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=36576>

⁹ In addition to the primary legal instruments specifically addressed in Section D, the broader legal framework for nuclear security also includes the following legal instruments adopted under Agency auspices: the Convention on Nuclear Safety, as well as the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. The broader legal framework also includes the following legal instruments adopted under other auspices: the International Convention for the Suppression of Terrorist Bombings, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the regional Nuclear-Weapon-Free Zone Treaties as well as the 2005 Protocol to the IMO Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation and the 2005 Protocol to the IMO Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms located on the Continental Shelf.

17. Also adopted under Agency auspices, the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency provide an international response mechanism for rapid information exchange and a mutual assistance mechanism, respectively, with a view to minimizing the consequences of nuclear accidents or radiological emergencies and protecting life, property and the environment against the effects of radioactive releases. These Conventions provide a robust role for the Agency which it continues to carry out in accordance with the relevant resolutions of the General Conference and the Board of Governors.

18. The International Convention for the Suppression of Acts of Nuclear Terrorism, adopted under United Nations auspices, details offences relating to unlawful and intentional possession and use of radioactive material or a radioactive device, and use or damage of nuclear facilities and requires States Parties to adopt measures as necessary to criminalize these offences. The Convention also requires “States Parties to make every effort to adopt appropriate measures to ensure the protection of radioactive material, taking into account relevant recommendations and functions of the Agency”. The functions assigned to the Agency under this Convention were set out in GOV/2007/41. The Board approved the functions specifically assigned to the Agency and authorized the Director General to implement them subject to the availability of resources.

19. Adopted under Chapter VII of the UN Charter, Security Council resolutions 1373 (2001) and 1540 (2004) have been recognized by the Board of Governors as being an integral part of the international legal framework for nuclear security. Security Council resolution 1373 (2001), inter alia, calls upon all States to become parties as soon as possible to the relevant international conventions and protocols relating to terrorism, including the CPPNM, and “notes with concern the close connection between international terrorism ... and illegal movement of nuclear... and other potentially deadly materials...”. In this regard, the Security Council also emphasized “the need to enhance coordination of efforts on national, sub-regional, regional and international levels in order to strengthen a global response to this serious challenge and threat to international security”. Security Council resolution 1540 (2004) refers specifically to the CPPNM and to the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and sets out the obligations of States with respect to weapons of mass destruction and non-State actors. The measures imposed in the resolution mirror the structure and activities of the Agency’s Nuclear Security Plan including in respect of the required legal and regulatory infrastructure, physical protection measures, illicit trafficking, safeguards, accounting and control systems, and export and import controls. The Agency continues to assist States, upon request, in carrying out their obligations under Security Council resolutions 1373 (2001) and 1540 (2004).

20. Several non-binding instruments are also relevant for nuclear security¹⁰. INFCIRC/225/Rev.4 (Corr.)¹¹, on the “Physical Protection of Nuclear Material and Nuclear Facilities”, provides widely accepted recommendations for physical protection against unauthorized removal of nuclear material in use and storage, for physical protection against sabotage of nuclear facilities and of nuclear material during use and storage, and for physical protection of nuclear material during transport. While the recommended measures are not mandatory, they acquire a binding nature when and where they have been included as an obligation in international agreements concluded by States, including the IAEA

¹⁰ In addition to the non-binding instruments adopted under Agency auspices, the broader legal framework for nuclear security also includes the United Nations Global Counter-Terrorism Strategy (UN General Assembly Resolution 60/288) which, inter alia, sets out measures to build the capacity of States to prevent and combat terrorism. In that connection, the Strategy encourages the Agency to continue its efforts in helping States to build capacity to prevent terrorists from accessing nuclear or other radiological material, to ensure security at related facilities and to respond effectively in the event of an attack using such material.

¹¹ INFCIRC/225/Rev.4 (Corr.) is currently being updated. When finalized, INFCIRC/225/Rev.5 will also be an integral part of the IAEA Nuclear Security Series mentioned in Section E.

Project and Supply Agreements and the Revised Supplementary Agreements for the Provision of Technical Assistance by the IAEA. The Code of Conduct on the Safety and Security of Radioactive Sources is a non binding international instrument that provides guidance, through the development, harmonization and implementation of national policies, laws and regulations, and through the fostering of international cooperation, to: (i) prevent unauthorized access or damage to, and loss, theft or unauthorized transfer of, radioactive sources; and (ii) mitigate or minimize the radiological consequences of accidents or malicious acts involving a radioactive source. Also the non binding Guidance on the Import and Export of Radioactive Sources was developed to support the import and export provisions of the Code.

E. Programme Implementation

21. The Nuclear Security Plan 2010–2013 will employ the following methods and tools of programme implementation.

Nuclear Security Guidance

22. The Agency will bring together international experts and representatives from Member States to complete the development of a comprehensive set of guidance documents, published in the IAEA Nuclear Security Series, comprising publications on general principles and concepts supported by technical guidance designed to provide nuclear security benchmarks for States and for the Agency's activities and to assist States in enhancing nuclear security.

Legislative Assistance and Facilitation of Adherence to and Implementation of International Instruments

23. The Agency will, through its legislative assistance programme and its international teams of experts, assist States, upon request, with advice and services to facilitate adherence to international legal instruments and to support States in their efforts to adopt implementing legislation at the national level.

Nuclear Security Peer Reviews and Advisory Services

24. By convening teams of recognized international experts, the Agency will offer assistance to States, upon request, in their evaluation of existing nuclear security systems. Such services—including but not limited to the International Nuclear Security Advisory Service and the International Physical Protection Advisory Service missions—constitute a central tool for programme implementation. In the new Plan, these services will be offered in a more flexible manner, through a new modular International Nuclear Security Service. The new comprehensive service will be tailored to the needs of States and will adopt a flexible approach. In carrying out missions, the synergies between the regulatory aspects of safety, security and safeguards will be taken into account wherever possible, with due regard to confidentiality of information. Recommendations for improvements will be included in Integrated Nuclear Security Support Plans (INSSPs) to build a long term work plan tailored to individual States.

Sustainability Support

25. The Agency will integrate specific activities identified in the INSSPs to ensure sustainability of nuclear security improvements. Human resource development covering both training and academic educational programmes will be provided to address the range of national responsibilities. The Agency will also provide support to States who wish to develop nuclear security support centres. These are

national centres designed to facilitate human resource development and provide technical support services such as equipment calibration and maintenance at the national and regional levels.

Research and Development

26. The Agency's established mechanism to promote and facilitate research and development (R&D) will be used to ensure useful R&D work and the participation of States with an interest in the topic. Programme approaches, guidance and instrumentation depend on up to date development efforts. Coordinated research projects (CRPs) will be used as a vehicle for R&D. Through these CRPs, research contracts will be awarded to national laboratories and institutions for particular related tasks and the project results will be made available to States.

Integrated Nuclear Security Support Plans

27. Like previous Plans, the Nuclear Security Plan 2010–2013 is designed to respond, upon request, to the needs of States for assistance in national efforts to improve nuclear security. These needs are identified by bringing together results of evaluation missions, existing Agency information and through discussions between the State and the Agency. The main tool to assist and support an individual country is the INSSP, which delineates the major nuclear security actions to be implemented and serve as the basis for subsequent interaction with the State and, as agreed with the State, to generate resources for its implementation. Other parts of the Plan contain activities that are needed for infrastructure building in all countries; for example, information networks, nuclear security guidance, services and R&D. In addition, as described above, INSSPs will include specific activities ensuring the sustainability of nuclear security improvements.

Information Management and Collection

28. It has become increasingly clear that there is the need for an information platform comprising a series of databases, ultimately linked with one another to provide a network centric approach for both analytical and business management purposes. The Agency is in a central position at the international level to receive, process and make available to States — and to other international organizations — information that is useful for implementation of the Plan.

Cooperation and Networking

29. Other international and regional initiatives are directly relevant for the Agency by providing an important context through which the Agency can coordinate its programmes, establish priorities and, above all, gain support with the objective of improving nuclear security worldwide. The contributions made by these initiatives have been noted by Member States¹².

30. Within its role at the international level, the Agency will increase its efforts to establish and make available useful networks and coordination mechanisms in order to strengthen interaction and coordination with bilateral support programmes and other international organizations. The interactions will, in particular, seek closer relationships with industry and its representative bodies.

Risk Reduction

31. The Agency, through agreements with States may provide, upon request, assistance to: strengthen physical protection of existing facilities, to obtain effective accounting and registry of nuclear material through the development of State systems of accounting for and control of nuclear material (SSAC); establish analogous mechanisms for the accounting and registry of other radioactive material; establish

¹² pp(i) of GC(52)/RES/10.

effective border controls; and bring vulnerable radioactive material into safe and secure storage or disposal conditions, including through the return of material to the supplier State.

F. Four Elements of the Nuclear Security Programme

32. In the draft Programme and Budget 2010-2011 (GOV/2009/1), the Secretariat proposed a new structure for its nuclear security programme to respond to changes in the nuclear security situation since 2003, when the implementation of the first Plan started and in response to recommendations from external evaluations. This structure also reflects priorities identified by the Agency which are carried over to the current Plan. In implementing the Plan, full account will be taken of activities undertaken in the Agency's nuclear safety and safeguards programmes and the relevant synergies between safety, security and safeguards. When safety and safeguards activities also serve nuclear security purposes, additional funding will be provided from the NSF to accelerate their implementation. Activities will respect existing competencies throughout the Agency with a view to avoiding duplication and promoting both sustainability and the Agency's "one house" approach. Therefore, activities that are carried out in support of nuclear security will be implemented according to the existing Programme and Budget documents under the respective programmes.

33. States that are interested in the broader use of nuclear energy have requested guidance and assistance on the necessary infrastructure requirements. Increased attention will be given to the provision of advice and guidance relating to nuclear security for such nuclear energy programmes.

F.1. Needs Assessment, Information Collation and Analysis

F.1.1. Directions for the Four Year Period

34. The availability of correct and adequate information in programme implementation has become recognized as a key feature. In order to provide needs assessments, evaluations, analyses and feedback from the implementation of activities, an enhanced and more effective data platform is required, which will enable access to information from existing Agency information sources and databases as well as from other open sources. This work will be carried out strictly in accordance with the Agency's confidentiality regime¹³. Main directions for the Nuclear Security Plan 2010–2013 will be to expand the quality, completeness and accessibility of existing Agency internal databases to ensure useful input to the INSSP process. They will also use the information available in a more effective manner, with better analytical tools and methodologies. Equally, more effective information system should enable more effective coordination with bilateral programmes and interaction with international initiatives.

F.1.2. Objectives

- To develop and maintain a comprehensive information platform which effectively supports the implementation of the Nuclear Security Plan 2010–2013, an updated threat analysis and good understanding of global nuclear security needs; to assist in the prioritization of nuclear security improvements; and to facilitate international cooperation and coordination in meeting those needs.

¹³ GOV/2897 and GOV/2959.

F.1.3. Activities

- Interactive development of INSSPs;
- Maintenance and expansion of the Illicit Trafficking Database and other Agency databases, and bringing them into a coherent, comprehensive and secure nuclear security information platform;
- Collection, analysis and evaluation of nuclear security related information;
- Establishment of a secure portal and network for communication with Member States and other organizations;
- Development of a systematic programme of meetings between States requiring support and States and organizations providing support to coordinate activities;
- Enhancement of programme evaluation and monitoring;
- Enhanced use of feedback to improve programme implementation;
- Information dissemination and exchange with States and international organizations and related interaction;
- Reporting to the Agency's policy-making organs and to Member States; and
- Convening meetings of the Advisory Group on Nuclear Security (AdSec) for the purpose of facilitating timely advice to the Director General on nuclear security issues.

F.1.4. Performance Indicators

- Number of INSSPs agreed and implemented by States;
- Availability of effective data platform for nuclear security support to States;
- Establishment of a secure portal for communication with Member States and other organizations;
- Convening of a minimum of two coordination meetings a year with States and other international organizations;
- Evaluation and monitoring of programme results through annual surveys of training effectiveness and the establishment (subject to the availability of resources) of a regular programme of field visits to assess programme implementation;
- Timely submission of reports to the Agency's policy making organs and to Member States; and
- Convening one to two meetings of AdSec per year and issuance of relevant reports.

F.2. Contributing to the Enhancement of a Global Nuclear Security Framework

F.2.1. Directions for the Four Year Period

35. Significant progress has been made in enhancing adherence to and implementation of international legal instruments of relevance for nuclear security in States and also of relevance for the functions of the Agency (see Section D above). Within the period of the Nuclear Security Plan

2010–2013, a comprehensive set of guidance for the prevention and detection and response to nuclear security events will be made available to States, developed in an open, transparent and efficient process in which all Member States may participate. A joint task force established by AdSec and the Commission on Safety Standards (CSS) will discuss safety and security synergies and interfaces, and the feasibility of working towards the establishment of nuclear safety and security standards. Greater Member State involvement in the IAEA Nuclear Security Series will be provided through the establishment of a committee, open to senior experts from all Member States, which will provide advice on the development and, review revision of IAEA Nuclear Security Series publications. The implementation of the guidance should take into account the prevailing threat, further technological development and increased use of nuclear energy. Therefore, enhanced attention is needed to develop methodologies to support the implementation and maintenance of up to date guidance, through R&D and through feedback from the implementation of nuclear security in States.

F.2.2. Objectives

- To provide, by the end of the period covered by the Plan, a comprehensive set of nuclear security recommendations and guidance as part of the nuclear security framework which enjoys broad consensus, with priority being given to finalizing development of the document that will become INFCIRC/225.Rev.5;
- To facilitate adherence to and implementation of the international legal instruments relevant for nuclear security, including facilitating the entry into force of the 2005 Amendment to the CPPNM; and
- To obtain useful results of research and development programmes to provide effective, technically up to date guidance and to develop user-friendly instrumentation and other means to implement the nuclear security framework in an effective, yet flexible manner.

F.2.3. Activities

- Drafting documents and convening consultants and technical meetings leading to the publication of all of the IAEA Nuclear Security Series documents in all official languages of the Agency;
- Assisting States, upon request, that wish to adhere to and implement the international instruments;
- Completing and considering options for further broadening the participation in ongoing and new CRPs aimed at developing improved, user-friendly and effective radiation detection instrument, for risk methodology development and for nuclear forensics; and
- Identifying new CRPs for consequences and engineering for new plants.

F.2.4. Performance Indicators

- Agreement by the international community on the completeness and acceptability of documents, technical specification and methodologies produced under Agency auspices;
- Availability of R&D results that contribute to the process of establishing and revising nuclear security guidance and their application; and
- Increased adherence by States to international legal instruments relevant for nuclear security, including facilitating the entry into force of the 2005 Amendment to the CPPNM.

F.3. Providing Nuclear Security Services

F.3.1. Directions for the Four Year Period

36. The Agency's nuclear security services have been useful in assisting those States requesting the services in evaluating and improving their existing systems. These Agency services should be further developed, within the period of the Plan, to be useful for *all* States. States increasingly express the need for and value of having Agency services available to assist them in evaluating the measures taken to prevent, detect and respond to malicious acts involving nuclear or other radioactive material. During the period of the Plan, a flexible model for the nuclear security services will be finalized. The service will involve recognized experts within Member States and be designed to meet the needs, as requested, by an individual State. Internationally accepted Agency guidance and binding and non-binding international legal instruments of relevance to nuclear security provide the basis for the evaluation. The expert services should be complemented by self-assessment methodologies. The service should be designed so that communication of findings and the dissemination of best practices will be possible. It should be so designed that all States share a common understanding of the value provided by the service and that the standards met provide for confidence building among States.

37. Sustainable improvements in nuclear security will be underpinned by institutional capacity building, human resource development and education programmes. These programmes recognize that human resource development is critical for States to be able to implement nuclear security and cover a wide range of topics for different staff categories at different levels. Attention should be given to designing the programme in such a way that existing capacities at international, regional and national levels are considered. A comprehensive overall human resource development strategy, developed in close consultation with Member States, that runs from short term training to an education programme culminating in a Master of Science in nuclear security, should be made available during the period of the Plan. These activities will be complemented with activities aimed at supporting the availability of sufficient infrastructure capacities at the regional level as well as in an individual country.

38. Where States request such assistance, the Agency will provide assistance with the development of national legislation and regulatory frameworks required to implement international legal instruments.

F.3.2. Objectives

- To underpin a sustainable national nuclear security framework by facilitating implementation of that framework through the provision, at the request of States, of peer reviews and assessment missions to evaluate the status of existing nuclear security systems and applications and to provide recommendations to strengthen national systems and implementation at facilities or locations of international nuclear security guidance; and
- To assist States in capacity building and the development of the necessary human resources.

F.3.3. Activities

- Provision of modularized, globally accepted evaluation and peer review services for nuclear security;
- Provision of tailored advice and services for "newcomer" States;
- Provision of advice and services, upon request, to States to facilitate adherence to and implementation of international legal instruments and of support for States in their efforts to adopt implementing legislation at the national level;

- Provision of legislative assistance, upon request, to strengthen national legal and regulatory frameworks;
- Provision of technical advice to ensure coherent and effective implementation of assistance provided through the Agency, other UN system organizations and bilateral programmes to ensure effective nuclear security;
- Maintenance and development of a comprehensive human resource development programme, aimed at increasing self-sustained activities at regional and national levels;
- Provision of support to national educational and training programmes, including human resource development needs assessment and related methodologies; and
- Development and employment of innovative human resource delivery mechanisms for self-sustained training including through e-learning.

F.3.4. Performance Indicators

- Number of States benefiting from Agency evaluation and assessment services;
- Number of States receiving Agency legislative assistance;
- Number of States having a comprehensive human resource development programme;
- Availability, at the regional level, of academic educational programmes in nuclear security; and
- Number of training courses and number of individuals trained with Agency support.

F.4. Risk Reduction and Security Improvement

F.4.1. Direction for the Four Year Period

39. During the past decade, the international community has recognized a broader threat picture in which radioactive substances may be used in malicious acts including the construction of an improvised nuclear explosive device (IND) and a radiological dispersal device (RDD). The change in threat perception has prompted activities to raise security arrangements of material that were previously not considered to be a nuclear security risk. This is, inter alia, reflected in the strengthened international legal instruments which respond to increased awareness of the need for up to date security, including physical protection, accountancy and registry of nuclear material and of other radioactive material in production, use, storage and disposal and during transport, whether in nuclear facilities or in non-nuclear applications and for improved national import and export control systems. This heightened awareness contributes directions for the implementation of the Plan.

40. Within this element of the Plan, assistance will be given to States, upon request, to improve security of nuclear facilities, other locations where radioactive substances are used or stored, and during transport. The support will include, as required, the various contributions that are determined through evaluation to be necessary in the individual case.

41. Continued attention should be given to States that request assistance for efforts to reduce storage of high enriched uranium (HEU) and to minimize its use. The new Plan also includes activities that will facilitate the development of 'built-in' security for applications using radioactive substances, and the use of mobile hot cells or local immobilization in special circumstances.

42. Continued support should be given to enhance national nuclear security capacities for protecting people, property and the environment from nuclear security events involving nuclear or other radioactive material. Support for detecting such material and responding to such events should be given, upon request. Priority will be accorded to the development of national capacities for effective border control and to protect and respond to the risk of malicious acts at major public events.

43. In implementing risk reduction and security improvements, particular attention will be given to coordination of Agency activities with those of bilateral support programmes or other international organizations. The Agency will offer to take on a more active coordination role to contribute to the effective use of resources, e.g. by ensuring that investments which are made through bilateral programmes to address urgently needed measures and infrastructure support may be provided or facilitated through the Agency.

44. National nuclear security systems need to be backed up by nuclear security support centres. Such centres will act as a resource base and will provide or facilitate national training in a systematic manner, and also provide specific technical support required for effective use and maintenance of detection instruments and other nuclear security technical systems e.g. through the provision of calibration services.

F.4.2. Objectives

- To contribute to the improvement of global and national nuclear security through activities that would support, upon request, States in their efforts to reduce the risk that nuclear or other radioactive material in use, storage and/or transport could be used in malicious acts; and
- To assist States, upon request, to meet and implement their obligations under the international nuclear security relevant legal instruments.

F.4.3. Activities

- Provision of support, upon request, for technical and administrative improvements of systems for physical protection and for registry and accounting of material in use, storage or transport;
- Technical assistance to States, upon request, to establish effective border controls;
- Provision of support, upon request, for nuclear security arrangements at major public events;
- Support for national efforts to reduce storage of HEU and to minimize its use;
- Securing or returning to the original supplier, radioactive sources which are outside of regulatory control;
- Supporting the establishment by States of nuclear security support centres;
- Supporting the development of nuclear forensics capabilities and making such capacity available to all States;
- Regular coordination activities to ensure effective use of resources and coherent approaches; and
- Facilitation of specific technology development that would generate built-in security for radioactive sources and for nuclear technology in power generating systems.

F.4.4. Performance Indicators

- Number of facilities/locations/transportes for which security has been improved through implementation of Agency advice and assistance;
- Number of States in which the regulatory infrastructure or technical prevention measures have been established or improved;
- Number of States in which measures have been taken with Agency assistance towards having effective border control or in the nuclear security arrangements of public events and in support of law enforcement organizations;
- The establishment by States, with Agency support, of self sustaining nuclear security support centres;
- The further development and wider use, by the end of the Plan, of a commonly recognized system to establish inventory of radioactive sources;
- Number of national laboratories participating in the research, test and evaluation of equipment; and
- Number of States to which advanced analytical capabilities for identification and characterization of radioactive material in seizures is available.

G. Programme Management and Relationship with the 2010–2011 Programme and Budget

G.1. Programme Management and Resources

45. In developing the programme, full account has been taken of recommendations by the IAEA External Auditor and the recommendations of an External Panel under the auspices of the Agency.

46. The External Panel made a number of recommendations relating to the structure and management of the Office of Nuclear Security. In drawing up this Plan, action has been taken to implement these recommendations. Future management of the Office of Nuclear Security will also take account of the development of the new management tools within the Agency, in particular the new accounting standards.

47. In the draft Programme and Budget for 2010–2011, the subprogrammes contained in the Nuclear Security Programme are consistent with the elements of the Nuclear Security Plan 2010–2013. The implementation of activities under this Plan will be dependent on resources either from the Agency's regular budget or through the NSF. The break down of the total resources will depend on the level of the regular budget and on the extent of extrabudgetary contributions made, on a voluntary basis, to the NSF. Indicative information on resources required for the implementation of the Plan is given in the table below. Further details of the resource requirements will be provided to Member States in due course. Conditions placed by donors on the use of their voluntary contributions to the NSF may have an impact on programme delivery. The Agency will continue to work with donors to minimize conditions placed on contributions to the NSF so as to ensure that the Agency has maximum flexibility in the use of funds.

Resources Required for implementing the Nuclear Security Plan 2010–2013 (Regular Budget and NSF)	
Subprogramme	2010 Resource Requirement¹⁴
Needs Assessment, Information Collation and Analysis	€ 2,148,000
Contributing to the Establishment of a Global Nuclear Security Framework	€ 3,949,000
Providing Nuclear Security Services	€ 5,950,000
Risk Reduction and Security Improvement	€ 11,024,000
TOTAL	€ 23,071,000

¹⁴ Subject to adjustments to 2010 prices.