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Nuclear Security Report 2010

Measures to Protect Against Nuclear Terrorism

Report by the Director General

Summary

- This report has been produced for the fifty-fourth regular session (2010) of the General Conference in response to resolution GC(53)/RES/11, in which the General Conference requested that the Director General submit an annual report on activities undertaken by the Agency in the area of nuclear security, highlighting significant accomplishments of the prior year and indicating programmatic goals and priorities for the year to come. This report covers the period July 2009–June 2010.

Recommended Action

- It is recommended that the Board of Governors:

  a. Take note of the Nuclear Security Report 2010;

  b. Transmit this Report to the General Conference with a recommendation that Member States continue to contribute on a voluntary basis to the Nuclear Security Fund;

  c. Note that, five years after the adoption of the Amendment to the Convention on the Physical Protection of Nuclear Material, only 41 out of the 143 Parties to the Convention have adhered to the Amendment;

  d. Call upon States to adhere to the Amendment and to promote its early entry into force; encourage all States to act in accordance with the object and purpose of the Amendment until such time as it enters into force; implement the legally binding and non-binding international nuclear security related instruments; invite States to make full use of the assistance available for this purpose through participation in the Agency's nuclear security programme; and

  e. Encourage all States to participate in the Illicit Trafficking Database programme.

Nuclear Security Report 2010

Measures to Protect Against Nuclear Terrorism

Report by the Director General

A. Introduction

1. This report has been produced for the fifty-fourth regular session (2010) of the General Conference in response to resolution GC(53)/RES/11 (2009), in which the General Conference requested that the Secretariat submit an annual report on activities undertaken by the Agency in the area of nuclear security, highlighting significant accomplishments of the prior year and indicating programmatic goals and priorities for the year to come.

2. Recognizing that responsibility for nuclear security rests entirely with each State, the Agency continues to provide assistance, upon request, to States in their national efforts. Developing and sustaining effective nuclear security requires a variety of measures. During the reporting period, the Agency continued to assist States' efforts to build and develop a sustainable nuclear security capacity by providing nuclear security guidance and helping States to establish comprehensive national nuclear security for protecting nuclear and other radioactive material, for detecting and responding to nuclear security events should such events occur, and for collecting and sharing relevant information, with due regard to the protection of confidential information.

3. International participation in data gathering and data sharing programmes through the Illicit Trafficking Database continued to increase and now involves the majority of the Agency's Member States. Participation in Agency training and educational programmes is widely sought, with nuclear security human resource development activities having reached thousands of individuals throughout the world; the physical protection of facilities with nuclear or other radioactive material was upgraded; nuclear and other radioactive material was removed to safe and secure storage or repatriated; the security of major public events against the threat of a malicious dispersal of radioactivity was enhanced; and capabilities for effective border control to guard against the illicit import and export of nuclear or other radioactive material were improved.

4. The importance of the IAEA nuclear security programme and the Agency's role in assisting national efforts continued to be recognized not only by the IAEA's policy making organs but were also acknowledged in a number of international fora, in particular the December 2009 International Conference on Effective Nuclear Regulatory Systems, the April 2010 Nuclear Security Summit and the May 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

B. The International Framework

B.1. Progress in universal application of nuclear security legal instruments

5. Adherence to the international legal instruments relevant to nuclear security has gradually increased. Between July 2009 and June 2010, two additional States became Parties to the Convention on the Physical Protection of Nuclear Material (CPPNM)[1], bringing the number of Parties to 143. This convention has the largest number of contracting parties amongst the legal instruments adopted under the auspices of the Agency. During the July 2009–June 2010 period, a further 15 States adhered to the 2005 Amendment to the CPPNM[2] — the largest number in any 12-month period to date — bringing the number of State Parties to 41. On a number of occasions, the Agency has highlighted the importance of bringing about the early entry into force of the CPPNM Amendment and of States acting in accordance with the Amendment's objective and purpose until such time as it enters into force. It is noted that it is now some five years since the adoption of the Amendment and that progress towards entry into force remains slow, despite the calls on the CPPNM Parties to take early steps to bring the Amendment into force.

6. The Code of Conduct on the Safety and Security of Radioactive Sources[3] is a non-binding international legal 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 legally non-binding, the Guidance on the Import and Export of Radioactive Sources was developed to support the implementation of the Code. As of 30 June 2010, 99 States had informed the Agency's Director General of their intention to implement the Code of Conduct, and 59 States their intention to implement the supplementary Guidance[4].

7. The International Convention for the Suppression of Acts of Nuclear Terrorism[5] gained 13 adherents during the reporting period, bringing the number of State Parties to 68 as of 30 June 2010.

8. A document has been completed in the Legal Series in which international legal instruments, binding and non-binding, with relevance for nuclear security are briefly described; the relevant obligations for States as well as responsibilities and functions that the Agency is expected to fulfil are summarized. This document aims at helping in the understanding of the legal basis for nuclear security, at the international level as well as at the national level, for the prevention of, detection of and response to nuclear security events.

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[1] http://www.iaea.org/Publications/Documents/Conventions/cppnm_status.pdf

[2] http://www.iaea.org/Publications/Documents/Conventions/cppnm_amend_status.pdf

[3] http://www.iaea.org/Publications/Documents/Treaties/codeconduct_status.pdf

[4] http://www.iaea.org/Publications/Documents/Treaties/codeconduct_status.pdf

[5] http://treaties.un.org/Pages/ViewDetailsIII.aspx?&src=TREATY&mtdsg_no=XVIII~15&chapter=18&Temp=mtdsg3&lang=en

C. Major Meetings and Coordination

Major Meetings

9. In December 2009, the second International Conference on Effective Nuclear Regulatory Systems, conducted by the Agency and hosted by South Africa, reviewed and assessed the effectiveness of regulatory systems for global nuclear safety and security and proposed future actions to further enhance it. A broad range of experts in the area of nuclear safety and security regulation, including national regulators, attended the conference. In his report[6], the President of the conference presented a large number of conclusions, noting, inter alia, that the Agency's safety standards and security guidance are important tools for States embarking on nuclear power programmes. The conference was attended by 250 participants from 54 States and eight international organizations.

10. The importance of nuclear security was emphasized by the Nuclear Security Summit, held in Washington, D.C. USA on 12–13 April 2010, which brought together leaders from 47 States. The Agency's Director General participated, as an observer, at the Summit and informed participants about the work being carried out by the Agency in the nuclear security area. The Communiqué[7], agreed by the Summit participants, recognized "the essential role of the IAEA in the international nuclear security framework".

11. The Final Document[8] of the May 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, which took place in New York, also recognized the importance of the highest possible standards of nuclear security. The Conference called upon all States parties to promote the sharing of best practices in the area of nuclear safety and security, including through dialogue with the nuclear industry and the private sector, as appropriate.

Coordination

12. In the period of this report, the Agency has cooperated extensively with the UN Counter Terrorism Implementation Task Force and the UN 1540 Committee. This cooperation has revealed limited knowledge within the UN system of the Agency activities and its mandates and functions under various international instruments in the nuclear security field. Further coordination will be particularly important to avoid duplication between Agency programmes and those under consideration by other entities, thus ensuring continued effectiveness of the Agency's nuclear security programme.

13. Cooperation and coordination has similarly been undertaken with other multilateral and bilateral nuclear security related initiatives as well as with non-governmental organisations, in particular the World Institute of Nuclear Security (WINS). The Agency and WINS have participated in meetings and, with the support of a Member State, are jointly developing a training course for facility managers.

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[6] http://www-pub.iaea.org/mtcd/meetings/PDFplus/2009/cn177/cn177_PresidentsReport.pdf

[7] http://www.whitehouse.gov/the-press-office/communiqu-washington-nuclear-security-summit

[8] http://www.un.org/ga/search/view_doc.asp?symbol=NPT/CONF.2010/50 (VOL.I)

D. Major Achievements

14. This progress report relates to the Nuclear Security Plan 2010–2011, with achievements in the second half of 2009 included. A summary of major achievements for each element of the Plan are reflected below.

D.1. Needs Assessment, Information Collation and Analysis

Illicit Trafficking Database Programme

15. The number of States that have decided to participate in the Agency's Illicit Trafficking Database (ITDB) programme continued to expand. Since 1 July 2009, three new States have joined the ITDB programme, bringing the total number of participants to 110, as of 30 June 2010.

16. From 1 July 2009 to 30 June 2010, States reported 222 incidents to the ITDB; 120 of these were reported to have occurred during this period and the remaining 102 were reports of prior incidents. Twenty-one of the incidents reported involved such activities as unauthorized possession and/or attempts to sell or smuggle nuclear material or radioactive sources. Sixty-one additional incidents involved the theft or loss of nuclear or other radioactive material; in 58% of those incidents, the material has not been reported as recovered.

17. One-hundred and forty reported incidents involved unauthorized activities without apparent relation to criminal activity. These included the detection of nuclear material or radioactive sources disposed of in unauthorized ways, the detection of radioactively contaminated material, the recovery of orphan sources and the discovery of nuclear material or radioactive sources in unauthorized or undeclared storage.

Integrated Nuclear Security Support Plans

18. The Nuclear Security Plan highlights the importance of Integrated Nuclear Security Support Plans (INSSPs) to consolidate the nuclear security needs of individual States into integrated plans for nuclear security improvements and assistance. INSSPs provide comprehensive work plans for States nuclear security efforts and enable the Agency, the State concerned and potential donors that could help finance the nuclear security projects, to coordinate their activities, optimize the use of resources and avoid duplication or gaps. In total, 52 INSSPs have been developed and are in various stages of finalization. Experience gained in the implementation of the INSSPs, indicates that the availability of resources is fundamental for achieving the projected results.

Nuclear Security Information Portal

19. The Agency's newly developed Nuclear Security Information Portal (NUSEC) will support nuclear security efforts worldwide by providing an interactive nuclear security knowledge-based environment to support nuclear security cooperation, to facilitate implementation of joint activities and share relevant information. NUSEC is presently being tested with a few States during a pilot trial period before being opened to all Member States and to relevant organizations later this year. NUSEC will provide up to date information on the Agency's activities related to nuclear security as well as current information on relevant multilateral and national activities, including conferences and workshops and the development of nuclear security training and education programmes. The portal will operate on a secure web based platform.

D.2. Enhancing the Global Nuclear Security Framework

IAEA Nuclear Security Series

20. The Agency is in the process of developing a comprehensive set of nuclear security guidance, in consultation with Member States, to be published in the Agency's Nuclear Security Series (NSS) of documents. The Agency also invited eight international organizations to participate in the process. This guidance helps States to establish, implement, maintain and sustain national nuclear security, comprising preventive measures at facilities, transports or other locations in which nuclear or other radioactive material is used, stored or transported, as well as measures to detect any unauthorized or criminal use of such material outside of such facilities or locations and respond effectively to any such event.

21. The Technical Guidance document entitled Educational Programme in Nuclear Security became the twelfth publication in the NSS. The document provides an overview of nuclear security as well as guidance for Master of Science and certificate programmes in nuclear security. It is intended for use by universities and other academic institutions in developing their own curricula in nuclear security, which can be tailored to the individual needs of a country or a region, or in expanding their academic programmes related to this subject.

22. The four "top-tier" documents of the NSS are now being finalized. These are the Fundamentals of a State's Nuclear Security Regime: Objectives and Essential Elements, as well as three Recommendations-level documents: Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Rev.5); Nuclear Security Recommendations on Radioactive Material and Associated Facilities; and Nuclear Security Recommendations on Nuclear and other Radioactive Material out of Regulatory Control. All of these documents have entered the final preparatory phase in which comments from Member States are solicited. The three Recommendations-level documents were sent to all Member States and other stakeholders on 13 April 2010 for comments by 11 August 2010 at the latest. The Secretariat anticipates finalizing all these documents in 2010.

23. Development of a number of "lower-tier" documents in the Nuclear Security Series continues.

Research and Development to Support Effective Nuclear Security

24. Effective nuclear security has to take account of the prevailing situation, technological development and expanding role of nuclear energy. In order to maintain the currency of the guidance provided in the Nuclear Security Series, the Agency undertakes research and development through Coordinated Research Projects (CRPs) involving institutions from Member States. Currently the Agency is running three nuclear security CRPs.

25. The CRP on the Development and Implementation of Instruments and Methods for Detection of Unauthorized Acts Involving Nuclear and other Radioactive Material began in 2008 and will run through 2011. As of June 2010, 14 research groups from 12 States were participating in this CRP.

26. The CRP on Application of Nuclear Forensics in Illicit Trafficking of Nuclear and other Radioactive Material, underway since 2008, is discussed in paragraph 52.

27. A CRP on the Development of Methodology for Risk Assessment and State Management of Nuclear Security Regime began in September 2009 and will run through 2012. This CRP aims to develop methodologies for identifying nuclear security risks across the entire potential nuclear fuel cycle and for self assessment within a State, as well as for informing and guiding a national Government and policymakers in managing effective and efficient nuclear security. The CRP will also develop specific guidance for applying these methodologies.

Nuclear Security Series Committee

28. In the Nuclear Security Report 2009 (GOV/2009/53-GC(53)/16), the establishment of a Nuclear Security Experts Committee to further enhance Member State involvement in the production of the IAEA Nuclear Security Series was foreseen. Since that report was produced, the Commission on Safety Standards (CSS) and the Advisory Group on Nuclear Security (AdSec) have initiated discussions on short-term measures to enhance interaction with Member States' representatives in the development of the Nuclear Security Series guidance documents and the long-term question of the feasibility of establishing a one series of Agency standards covering both safety and security. The Secretariat has decided to await the outcome of the discussion before deciding how to proceed.

D.3. Nuclear Security Services

Design Basis Threat

29. For proper response to threats to nuclear and other radioactive material and associated facilities and transports, it is essential to have a threat assessment at State level and an established Design Basis Threat (DBT) as the basis for the nuclear security system at a facility. Four national workshops on developing DBTs were implemented in the past year, bringing to 39 the total number conducted to date.

Nuclear Security Evaluation Missions

30. The Agency offers services to evaluate the effectiveness of nuclear security in States. Recognized experts from Member States participate in the mission teams. Twenty-one evaluation and advisory nuclear security missions were carried out between mid-2009 and mid-2010 using funding from the Nuclear Security Fund. Of these, one was an International Nuclear Security Advisory Service (INSServ) mission, six were International Physical Protection Advisory Service (IPPAS) missions, three were International State Systems of Accounting and Control Advisory Service (ISSAS) missions and 11 were review or advisory missions on regulatory infrastructure.

31. In 2010, the United Kingdom requested the Agency to conduct an IPPAS mission at the Sellafield Nuclear Reprocessing Facility. The Governments of France and the United States have recently declared their intention to formally request IPPAS missions. The Agency believes that such requests point the way to such missions becoming widely used as an important tool to build confidence both within the international community and the general public, in the effectiveness of national nuclear security systems.

Nuclear Security Training

32. Approximately 1600 people representing more than 100 States received nuclear security training. Sixty-two nuclear security training courses and workshops took place: 35 were in the area of prevention, including information and computer security, and 27 in the area of detection and response. Priority was given to training at the international and regional levels, with the delivery of 48 training events; 24 events were also convened for national audiences. At additional five events, training in the area of State Systems of Accounting for and Control of Nuclear Material implementation was provided.

33. Since the inauguration in May 2009 of new nuclear security training facilities at the Interdepartmental Special Training Centre (ISTC) in Obninsk in cooperation with the Russian Federation — which was the Agency's largest project to date in the area of physical protection human resource capacity building — the Agency has delivered five training courses at the facilities. Two courses included, for the first time, Western European audiences, in addition to participants from Central and Eastern European States and from the Commonwealth of Independent States. This

expansion reflects the need for the "hands-on", practical training which is essential for effective physical protection. The ISTC and the Agency have also jointly developed a pilot course as a practical introduction for pre-diploma students in university education, e.g. from the National Research Nuclear University "MEPhI" in Moscow, Sevastopol National University of Nuclear Energy and Technology and Tomsk Polytechnic University. Curricula for new Agency courses to be delivered at the ISTC are under development.

Nuclear Security Education

34. In 2008, the Agency established working contacts in the area of nuclear security education with the Tomsk Polytechnic University (TPU) in the Russian Federation. TPU launched an academic programme, in autumn 2009, entitled Nuclear Control and Regulation in Nuclear Security, which is based on an Agency guidance document and is accredited by the national competent authority of the Russian Federation. In 2010, the Agency's cooperation with TPU entered the second phase, under which a Master of Science programme in nuclear security will be established at the university.

35. The Agency continued to assist the Naif Arab University for Security Sciences (NAUSS) in Saudi Arabia in developing a nuclear security education programme. The first modules of an introductory course on nuclear security were delivered in autumn 2009. The Agency is preparing to provide NAUSS with further assistance, including nuclear security training for professors and instructors and assistance in establishing laboratories for practical nuclear security exercises.

36. As of June 2010, 48 engineers specializing in nuclear security had graduated from the Agency-supported education programme at the Sevastopol National University of Nuclear Energy and Technology (SNUNEI) in Ukraine, which was the Agency's earliest partner in establishing nuclear security education. An additional 18 students had received bachelor's degrees; most of these students are expected to matriculate to the engineering level of study. In the first half of the year, arrangements were made for a new phase of cooperation with SNUNEI. The Access Control Training Laboratory (ACTL) will be the fourth nuclear security training laboratory established at SNUNEI with the Agency's support. The ACTL will enable students to gain advanced skills in using instrumentation for detecting radioactive material and for personnel identification.

37. The technical guidance entitled "Educational Programme in Nuclear Security" mentioned earlier in this report provided major input to consultations conducted with experts from academia, international organizations and professional nuclear material management associations on ways to develop and exchange information on education programmes. As a result of this exchange, the Agency has established the International Nuclear Security Education Network (INSEN). Launched earlier this year, INSEN is a partnership between the Agency and universities, research institutions and other stakeholders to enhance global nuclear security by developing, sharing and promoting excellence in nuclear security education.

Legal and Legislative Assistance

38. The Agency further intensified its legislative assistance activities including the setting up of adequate legal and regulatory framework in the field of nuclear security. In particular, it organized five international and regional workshops. Further, the Agency provided country specific bilateral legislative assistance — essentially by means of written comments and advice in drafting national nuclear legislation — to 25 Member States. At the request of Member States, individual training was also provided to several individuals, notably through short term scientific visits organized at Agency Headquarters, as well as longer term fellowships, allowing individuals to gain further practical experience in nuclear law.

D.4. Risk Reduction

Physical Protection Upgrades

39. In cooperation with the host States, the Agency completed upgrades to the physical protection of three nuclear facilities. Upgrades were also completed at 14 locations, in six African States, housing other radioactive material. The Agency was in various stages of cooperating in upgrades to another nuclear facility in Africa and to 21 facilities housing other radioactive material in six States.

40. While revisiting sites at which it has provided physical protection upgrades, the Agency has recognized that sustainability of improvements in nuclear security has to be systematically addressed in a way which covers all aspects of a national infrastructure. The Agency is conducting a pilot project to develop a methodology on nuclear security sustainability and to apply that methodology in three States which have received past support for upgrades.

Remote Monitoring

41. The Agency continued to provide remote monitoring systems for States' use at facilities housing radioactive material, in order to facilitate timely notification of off-site national or local response forces in case of a nuclear security event. The Agency completed the installation of nine remote monitoring systems at medical, industrial and waste storage locations in five States, four of them located in Africa. This brought to 14 the number of remote monitoring systems deployed to date.

Securing Radioactive Sources

42. Between 1 July 2009 and 30 June 2010, 922 radioactive sources were secured in eight States. Most of the sources were of Category 3 or less and were recovered and moved to secure storage within the States. Thirty-six sources, of Categories 1 or 2 were repatriated to the Russian Federation. The mobile hot cell was utilized for recovery operations in Tanzania, where five Category 1 and 2 sources were recovered and moved to secure storage within the country, and in Uruguay, where 14 Category 1 and 2 sources were recovered and will be repatriated to the United States by the end of 2010.

HEU Repatriation

43. The Agency continued its longstanding involvement, upon request by States, in activities to reduce the vulnerability of high enriched uranium (HEU) to theft and unauthorized removal by supporting the repatriation of HEU research reactor fuel to the country of origin. The Agency was an implementing partner in the repatriation of approximately 30 kg of fresh HEU fuel and nearly 350 kg of spent fuel. Additionally, the Agency was involved, in an auxiliary capacity, in other HEU repatriation shipments from research reactors, involving a total of more than 80 kg of fresh fuel and nearly 60 kg of spent fuel. The Agency's assistance has included the provision of an increased level of support to States that have declared their wish to obtain support to remove HEU from their territories.

44. The project to transport spent nuclear fuel from Serbia to the Russian Federation was established in 2004 by the Agency. Major accomplishments during the last 12 months included achieving full funding of the project through extrabugetary contributions made various international donors. An important milestone was reached in May 2010, when the repackaging of the fuel (more than 8000 fuel elements) in preparation for shipment was completed. The fuel will be shipped before the end of 2010.

Establishing Effective Border Control

45. The Agency provided 16 States with 863 instruments for radiation detection. More than half were personal radiation detectors, or pagers, provided for use chiefly by border personnel, law enforcement and other front line officers. This equipment will enable States to establish effective border control. A total of 16 radiation portal monitors were provided to five States, four of which were located in Africa

and one in West Asia. Other equipment provided included 121 data transfer sets for the pagers, 52 handheld gamma spectrometers and 20 "backpack" portable radiation scanners. The Agency also supplied one State with suits, respiratory masks and radios for training and emergency response activities.

46. The Border Monitoring Working Group, established by the Agency has met regularly since 2006, to coordinate the selection of and work at various border crossings, the types of detection equipment and the arrangements for long-term technical sustainability. This coordination results in better use of the available resources in the selection of equipment suppliers and/or in the delivery of necessary training. In June 2010, a joint pilot course to 'train the trainers' in the use of radiation detection equipment, was conducted for an audience of Asian States. A second session of the course, for Anglophone African States, is planned for the third quarter of 2010. In addition, in a sustainability effort, a joint statement of work was established between the Agency and a bilateral program for a project to maintain and repair malfunctioning radiation detection system in one country.

Major Public Events

47. The Agency's methodology for strengthening nuclear security measures at major public events is designed to meet the unique nuclear security challenges presented at such public gatherings or high-level meetings by providing assistance in the form of information, detection equipment and the training of staff, in addition to facilitating peer based sharing of knowledge and expertise. In some cases, upgrades to the security of facilities may be required.

48. During the period under review, the Agency assisted Colombia in increasing the security of the 2010 IX South American Games in Medellín through the conduct of training for front line officers and the loan of more than 100 radiation detection instruments. Agency staff provided on-site technical assistance for the duration of the Games.

49. The Agency supported South Africa in its efforts to ensure the security of the 2010 FIFA World Cup. The Agency's assistance included information support on illicit trafficking, the provision of more than 250 pieces of equipment and seven training events covering a range of nuclear security issues.

50. The Agency began to implement a programme of assistance to Mexico for ensuring the nuclear security of the XVI Pan American Games, which will take place in Guadalajara and in four surrounding cities from 13 to 30 October 2011. Activities include; assessment of radiation monitoring capabilities at venues; the conduct of a field exercise; the supply of equipment and training.

51. The Agency also began an extensive programme of activities to support Poland and Ukraine to enhance nuclear security measures at the major public events associated with the 2012 UEFA European Football Championship, which is being hosted jointly by those States. The support to date has included awareness meetings on the need of nuclear security and the preparation of Joint Action Plans for each State. In April 2010, the Agency facilitated the provision to Ukraine of a Sophisticated On-Site Nuclide Identification vehicle, which will be used to enhance the country's nuclear security arrangements prior to the 2012 UEFA European Football Championship.

Nuclear Forensics

52. The Agency continued to expand its activities in nuclear forensics. In the course of the year, more than 110 experts from 10 States received training using the Agency's new curriculum on radiological crime scene management and nuclear forensics for law enforcement, emergency services, and radiation specialists. The Coordinated Research Project on Application of Nuclear Forensics in Illicit Trafficking of Nuclear and other Radioactive Material, in its second year, now benefits from the involvement of research institutes in six States and the European Commission. The Agency is also

leading an initiative to help Member States develop national libraries of nuclear forensic data and establish an international directory of this information to facilitate comparative analysis.

Nuclear Security Support Centres

53. Requests for Agency support in the area of human resource development and for technical and scientific support in nuclear security have significantly increased. The Agency developed the concept of Nuclear Security Support Centres (NSSCs) in order to effectively transfer ownership of nuclear security knowledge and related technical skills to States and to achieve long-term sustainability of States' nuclear security capabilities. NSSCs foster nuclear security culture and enhance coordination and collaboration among the nuclear security competent authorities while also supporting the development of a nuclear security network of experts.

54. To date, the Agency has supported seven States in their efforts to establish NSSCs. As of the end of 2009, NSSCs were operational in Ghana, Greece and Pakistan. NSSCs in Colombia, Malaysia, Morocco and the United Republic of Tanzania were in various stages of development. A number of participants at the Nuclear Security Summit announced their intention to work with the Agency to develop regional or national centres. In addition, the Secretariat is aware of other initiatives with similar aims. The Agency is in discussion with the relevant States to identify ways of coordinating activities and to avoid duplication of efforts.

D.5. Emergency Preparedness and Response

55. The Incident and Emergency Centre continues to establish and maintain effective and compatible national, regional and international capabilities and arrangements for preparedness, early warning, timely response to actual, potential or perceived nuclear or radiological incidents and emergencies — independent of whether the incident or emergency arises from an accident, negligence or a deliberate act — and for sharing official, technical and public information among Member States and relevant international organizations.

56. In March, the Agency hosted a workshop on "International Response and Mitigation of a Terrorist Attack using Nuclear and Radiological Weapons or Materials", to assist the UN Counter Terrorism Implementation Task Force to produce a report on how international organisations engage on the issue of a terrorist attack where chemical, biological, radiological or nuclear Weapons or materials were used, and the level of coordination among them. The workshop included a round table discussion on different scenarios and explored the various capabilities and experiences of entities and organizations with regard to nuclear/radiological dispersal events, particularly in the context of a terrorist attack. The workshop recognized the Agency's legal mandate and central role in responding to radiation emergencies as the main coordinating body for the development and implementation of the Joint Radiation Emergency Management Plan of the International Organisations (JPLAN). Lessons learnt from the Agency's role in dealing with nuclear/radiological events should benefit the development of similar arrangements for chemical and biological events.

E. Management Issues

E.1. Funding

57. Expenditure from the Nuclear Security Fund continued to increase, primarily because of important risk reduction projects that took place in the course of the year. The growth in expenditure

demonstrates the need for support in many Member States to establish effective nuclear security. However, the level of existing resources, constraints on their use and the cash flow situation are indicative of an unsustainable situation. In past reports, attention was drawn to the effects that conditions on use of contributions had on programme implementation (see for instance paragraph 25 of GOV/2009/53). In the course of the reporting period, programme implementation was again affected by a lack of available funding to respond to requests from States. In order to address the situation, activities were reviewed and priority given to implementation according to the availability of funding.

NSF Disbursements and Expenditures		
2002–2003	Disbursements	US $5 746 043
2004	Disbursements	US $7 662 548
2005	Disbursements	US $8 828 591
2006	Disbursements	US $15 451 894
2007	Disbursements	US $15 712 282
2008	Disbursements	US $19 181 128
2009	Disbursements	US $22 768 374
2010	Expenditure (Disbursements plus unliquidated obligations) as of 30 June 2010	US $16 914 184

58. In the period from 1 July 2009 to 30 June 2010, new pledges or contributions to the NSF were received or announced from Denmark, Finland, France, Ireland, Italy, Japan, the Republic of Korea, the Netherlands, Norway, Spain, Sweden, the United Kingdom and the United States of America. Details of earlier contributions are set out in previous reports and in Note X to the Agency's Accounts for 2009[9].

59. The 2010 regular budget for nuclear security was increased to €3 194 822 (at 2010 prices). By 30 June 2010, expenditure from the regular budget amounted to €1 955 968. Expenditure from the regular budget was made in accordance with the priorities set out in "The Agency's Programme and Budget for 2010–2011" (GC(53)/5).

E.2. AdSec

60. The Advisory Group on Nuclear Security (AdSec) continued to provide advice to the Director General. AdSec has met twice a year since 2002 and provides advice on a wide range of nuclear security matters. During the period covered by this report, AdSec provided recommendations and suggestions on the potential impacts of the high level of programme implementation and the impact on the programme caused by the unpredictable nature of funding for the Agency's nuclear security efforts.

[9] GOV/2010/20

F. Goals and Priorities for 2011

61. The Agency has received an increasing number of requests for assistance from States and expressions of interest in strengthening cooperation with the Agency to achieve effective nuclear security. In the coming year, implementation of the Nuclear Security Plan (NSP) 2010–2013 will continue in accordance with priorities set out in the Plan and directions given by the Board of Governors and General Conference. Within the framework of the NSP 2010–2013, the Agency will give priority to completing the planned Nuclear Security Series of documents, in particular the Fundamentals and Recommendations documents. For the completion of a basic set of nuclear security guidance documents, priority will be given to establishing an effective framework for all standards and guides developed and published by the Agency, including an effective approach to take into account synergies of and to deal with potential differences in implementation of safety standards and security guidance.

62. To further underpin sustainable nuclear security improvements in States, priority will be given to activities for capacity building within States and at the regional level. The Agency will explore new ways of programme delivery, with a higher degree of involvement of States or other international/related organizations. The new Nuclear Security (Information) Portal will provide a platform for interaction among dedicated nuclear security related work-groups; from States or from organizations. The establishment, in a wider group of States, of Nuclear Security Support Centres, will serve as a foundation for increased efficiency in delivering an effective human resource development programme, both at the national and at the regional levels. Through the establishment of standardized training materials, based on certified curricula and the education of trainers, a higher number of topical training courses and workshops can be provided in a regular manner with lesser involvement of the Agency. Priority will also be given to further development of e-learning tools, which have proven to be an effective complement to existing training programmes. The significant interest experienced in the establishment of the information network for university education will enable a wider dissemination of knowledge amongst young professionals with potential to contribute to new nuclear energy programmes.

63. Agency assessment services are useful both to identify needs for improvement and as a tool for confidence building among neighbours as well as with the general public. A roster of qualified experts may be required in order to facilitate a larger uptake of these services. In delivering the Agency's programme, attention will be given to maintaining the confidentiality of sensitive information, including for the related use of training materials.

64. The integration in the coming year of INSSPs with programme management software will enable better programme prioritisation and coordination of activities by the Agency and other programmes.

65. As stated in the Agency's Programme and Budget for 2010–2011, the programme will be delivered with an aim to focus on core activities. The increase in the regular budget for the nuclear security programme 2010–2011 will enable a strengthening of the staffing situation. However, around 85% of the total funding required for the implementation of the programme will continue to be dependent on extra-budgetary contributions and thus subject to the constraints including geographical distribution and types of activities that can be funded which have been mentioned in previous reports.

66. As noted in this report, nuclear security has received increased attention from the highest political level. In this regard it has been announced that a second nuclear security summit will take place in 2012 in the Republic of Korea. The Agency will continue to work with the UN and other international and bilateral initiatives to avoid duplication and overlap.