#### IAEA Board of Governors

#### Record of the 1250<sup>th</sup> Meeting GOV/OR.1250

Strengthening the Agency's activities related to nuclear science, technology and applications



### Board of Governors

GOV/OR.1250 Issued: October 2009

Restricted Distribution Original: English

For official use only

## Record of the 1250<sup>th</sup> Meeting

Held at Headquarters, Vienna, on Tuesday, 8 September 2009, at 10.10 a.m.

#### Contents

Item of the agenda <sup>1</sup>		Paragraphs
4	Nuclear security: Measures to protect against nuclear terrorism <i>(continued)</i>	1–105
	(a) Nuclear Security Report 2009 and review of the implementation of the Nuclear Security Plan 2006–2009	
	(b) Nuclear Security Plan 2010–2013	
5	Strengthening the Agency's activities related to nuclear science, technology and applications	106–182

<sup>&</sup>lt;sup>1</sup> GOV/2009/67.

#### Attendance

(The list below gives the name of the senior member of each delegation who attended the meeting, as well as that of any other member whose statement is summarized in this record.)

#### Ms FEROUKHI

Mr AINI Mr GALANXHI Mr KHELIFI Mr CURIA Mr POTTS Mr VALLIM GUERREIRO Mr SOULAMA Mr BARRETT Mr DONG Baotong Mr CODORNIU PUJALS Mr STACEY MORENO Mr FAWZY Ms RASI Mr MONDOLONI Mr LÜDEKING Ms AMOAH Mr ASHRAF Mr AQRAWI Mr COGAN Mr NAKANE Ms GREIČIUVIENĖ Mr ARSHAD Ms MOHAMED KHAIRULLAH Mr DÍAZ Ms MACMILLAN Ms RIVERA Mr NECULĂESCU Mr BERDENNIKOV Mr KARASEV Mr AL-TAIFI Mr MINTY Mr ROSELLÓ SERRA Mr MULTONE Mr FIDAN Mr SMITH

Mr DAVIES Mr BARROS OREIRO Chairperson (Algeria)

Afghanistan Albania Algeria Argentina Australia Brazil Burkina Faso Canada China Cuba Ecuador Egypt Finland France Germany Ghana India Iraq Ireland Japan Lithuania } Malaysia Mexico New Zealand Philippines Romania } **Russian Federation** Saudi Arabia South Africa Spain Switzerland Turkey United Kingdom of Great Britain and Northern Ireland United States of America

Uruguay

#### Attendance (continued)

Mr ELBARADEI	Director General
Mr BURKART	Deputy Director General, Department
	of Nuclear Sciences and Applications
Mr SOKOLOV	Deputy Director General, Department
	of Nuclear Energy
Mr TANIGUCHI	Deputy Director General, Department
	of Nuclear Safety and Security
Mr ANING	Secretary of the Board

#### **Representatives of the following Member States also attended the meeting:**

Angola, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Colombia, Côte d'Ivoire, Cyprus, Czech Republic, Denmark, El Salvador, Estonia, Holy See, Hungary, Indonesia, Islamic Republic of Iran, Italy, Republic of Korea, Libyan Arab Jamahiriya, Luxembourg, Malta, Morocco, Namibia, Nigeria, Norway, Pakistan, Panama, Peru, Poland, Singapore, Slovakia, Sudan, Sweden, Syrian Arab Republic, Tunisia, Ukraine, United Arab Emirates, Bolivarian Republic of Venezuela, and Yemen.

#### Abbreviations used in this record:

CPPNM	Convention on the Physical Protection of Nuclear Material
CRP	coordinated research project
FAO	Food and Agriculture Organization of the United Nations
G8	Group of Eight
GRULAC	Latin American and Caribbean Group
HEU	high-enriched uranium
imPACT	integrated missions of PACT
INDAG	International Nuclear Desalination Advisory Group
INIR	Integrated Nuclear Infrastructure Review
INIS	International Nuclear Information System
INPRO	International Project on Innovative Nuclear Reactors and Fuel Cycles
INSServ	International Nuclear Security Advisory Service
LEU	low-enriched uranium

#### Abbreviations used in this record (continued):

NGO	non-governmental organization
NPT Review Conference	Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons
РАСТ	Programme of Action for Cancer Therapy
РАНО	Pan American Health Organization
PATTEC	Pan African Tsetse and Trypanosomosis Eradication Campaign
Pelindaba Treaty	African Nuclear-Weapon-Free Zone Treaty
R&D	research and development
SIT	sterile insect technique
SQP	small quantities protocol
UNDP	United Nations Development Programme
WHO	World Health Organization

\* Speakers under Rule 50 of the Provisional Rules of Procedure are indicated by an asterisk.

## 4. Nuclear security: Measures to protect against nuclear terrorism (continued)

 (a) Nuclear Security Report 2009 and review of the implementation of the Nuclear Security Plan 2006–2009
(GOV/2009/53; Progress Report on Implementation of the Nuclear Security Plan 2006–

2009, available on GovAtom only)

(b) Nuclear Security Plan 2010–2013 (GOV/2009/54)

1. <u>Mr DAVIES</u> (United States of America) said that, in his first foreign policy address delivered abroad, President Obama had asserted that, despite the end of the Cold War, the risk of a nuclear attack had increased. Thousands of weapons built during the Cold War were still in existence, nuclear testing continued, black market trading abounded and the technology to build a nuclear bomb had spread. Those menacing circumstances called for a new spirit of international cooperation. Having listened to the spokesman for the Group of 77 and China, it was clear that there was a difference of views on that point. His country wished to deepen the dialogue on nuclear security issues in order to narrow those differences and would seek an early opportunity to do so.

2. As a premier international organization tasked with contributing to international peace and security, the Agency was key to collective efforts. It had made important initial of progress in that regard and must now seek to expand that progress.

3. The three documents before the Board — the Nuclear Security Report 2009, the Nuclear Security Plan 2010–2013 and the progress report on implementation of the Nuclear Security Plan 2006–2009 — provided an assessment of the most pressing international nuclear security issues and a blueprint for Agency and Member State activities to address them. The United States welcomed and took note of those reports which demonstrated that, while the Office of Nuclear Security was a relatively small component of the Secretariat, it had accomplished a great deal. It had added to the global nuclear security framework, contributing tangible products and internationally accepted guidance. The United States would continue to work with the Office of Nuclear Security to help the programme mature, improve its products, promote transparency and prioritize for the future.

4. While it was mindful of issues relating to confidentiality of information, his country nevertheless encouraged all Member States to share their nuclear security experience and expertise with others. Only through the development of a transparent and cooperative culture could the global nuclear security framework be strengthened.

5. A number of instruments of cooperation supported the Agency's work and ensured the steady enhancement of global security. Primary among them was the CPPNM and the 2005 amendment thereto. Another was the fifth revision of document INFCIRC/225, the Agency's recommendations document on the physical protection of nuclear material and nuclear facilities. He urged all Member States to join the CPPNM and adopt the amendment thereto, and to work together on finalizing the fifth revision of document INFCIRC/225 as a high priority by early 2010. He also urged Members States to participate fully in the Agency's illicit trafficking database, thereby contributing to the timely release of information on potential criminal and terrorist activities. He encouraged them to join the Global Initiative to Combat Nuclear Terrorism, as half had already done. The Global Threat Reduction

Initiative was another important instrument of cooperation that had provided expertise and resources to implement security upgrades at approximately 600 vulnerable buildings with high-priority nuclear and radiological material in 60 countries around the world. Some of those countries could now be considered good candidates for entering into long-term sustainability efforts, and the United States was working with the Office of Nuclear Security to implement a coordinated approach to long-term sustainability.

6. The July 2008 report of the Security Council Committee established pursuant to Security Council resolution 1540 (2004) specifically called on the Agency to assist States to meet fully the provisions of that resolution and subsequent ones. The United States urged the Secretariat to provide assistance to Member States in fulfilling their commitments, and it was prepared to help the Agency fulfil that role.

7. Perhaps one of the best examples of cooperation was the work being performed to clean up the spent fuel stored at the Vinča Institute of Nuclear Sciences. Serbia, the Russian Federation, the Czech Republic and the United States had contributed over US \$22 million to that effort, which was one of the largest projects the Agency had ever undertaken.

8. It was also a reminder that cooperation sometimes came down to resources. His country therefore welcomed the allocation to the Office of Nuclear Security of  $\in$ 3.1 million in Regular Budget funding in 2010. Since regularized funding could not make up for voluntary contributions, the United States asked other Member States to join it in contributing generously to the Nuclear Security Fund.

9. President Obama had set an ambitious goal of securing vulnerable nuclear material within four years. In so doing, he recognized the importance of cooperative efforts and viewed international organizations like the Agency as key to that effort. The Director General had been invited to the summit on nuclear security that President Obama was to host in March 2010 in Washington D.C., which was intended not to launch new initiatives or establish new coalitions but rather to enhance the profile of existing mechanisms and ensure their effectiveness.

10. Nuclear security was not about politics — it was about protecting each other from a threat that knew no boundaries. He invited all Agency Member States to embrace a spirit of cooperation and look to the concrete steps each could take to ensure mutual security. Whether by joining the Global Initiative to Combat Nuclear Terrorism, ratifying the CPPNM amendment or contributing to the Nuclear Security Fund, there was plenty of work for each country to do.

11. <u>Mr SMITH</u> (United Kingdom) drew attention to the policy document entitled *The Road to 2010* published by his Government in July 2009, which set out its commitments and priorities on all key issues on the non-proliferation agenda on which it would work with international partners through a time frame leading to the NPT Review Conference in May 2010. As was noted in that document, the international community should recognize nuclear security as a key element of the global nuclear non-proliferation framework. The United Kingdom welcomed the proposed increase in the nuclear security element of the Regular Budget and encouraged Member States to continue to make the necessary voluntary contributions to ensure full implementation of the Nuclear Security Plan 2006–2009. It supported the recommended action by the Board and noted that his country expected soon to ratify the amendment to the CPPNM.

12. The Nuclear Security Plan 2010–2013 offered a comprehensive, balanced portfolio of advice and assistance to help Member States improve nuclear security. The United Kingdom acknowledged and welcomed the progress made in developing performance-based indicators and encouraged Board members to propose revised or additional performance indicators as the plan was implemented, not least to reflect any changing circumstances. It strongly endorsed the need for early completion of the Nuclear Security Series of guidance documents. Those documents would help States meet their

international obligations and facilitate exchange of best practice, and high priority should be given to the production of recommendations on physical protection that would also serve as the fifth revision of document INFCIRC/225.

13. With those comments, his delegation took note of the Nuclear Security Report 2009 and lent its approval to the Nuclear Security Plan 2010–2013.

14. <u>Mr NECULĂESCU</u> (Romania), referring to paragraph 19 of the Nuclear Security Report 2009 concerning repatriation of HEU, said that the final shipments of HEU nuclear fuel from Romania had been completed in early July 2009. The material had been removed and returned to the Russian Federation by air, making it the first operation of its kind. In one shipment, spent fuel stored at the reactor in Măgurele had been returned; in the second shipment, fresh HEU from the reactor in Pitesti had also been shipped by air to the Russian Federation. The operation had been carried out under the Global Threat Reduction Initiative. Romania was the fourteenth country from which HEU had been repatriated. Furthermore, that operation had been the first authorized shipment of spent fuel by air and had demonstrated that air shipments were an option to be considered in repatriating spent fuel. He expressed appreciation to the Governments of the United States and the Russian Federation, and to the Agency, for their assistance and cooperation during the process. Romania's actions should help increase the level of nuclear security worldwide.

15. With those comments, his country supported the recommended actions in the Nuclear Security Report 2009 and the Nuclear Security Plan 2010–2013.

16. <u>Mr NAKANE</u> (Japan) said that nuclear terrorism continued to pose a serious threat to international peace and security. Japan supported the Agency's conclusion that both legally binding and non-legally binding international instruments were relevant for nuclear security. In the face of the so-called nuclear renaissance, where nuclear power and its applications were expanding, nuclear security was becoming all the more important. Japan was planning to hold a seminar in Tokyo on the strengthening of nuclear and radiological security along the lines of the seminar held in 2006.

17. Nuclear security should be viewed as a priority issue by the international community. Japan highly appreciated the Agency's Nuclear Security Plan 2010–2013, which had been developed in consultation with Member States, and it particularly appreciated the description of lessons learned from the implementation of previous plans. Although the new plan had been formulated based on those lessons learned, it would be useful if it also detailed how they correlated with the plan's four constituent elements. Japan appreciated the introduction of performance indicators and requested that the next nuclear security plan identify the areas in which further actions were necessary, based on the extent to which each indicator had been achieved and on lessons learned. Japan would continue to work together with other Member States in international efforts to enhance nuclear security.

18. With those comments, his country supported the Board's taking the actions recommended in documents GOV/2009/53 and 54.

19. <u>Ms AMOAH</u> (Ghana) said that, in view of the potential use of nuclear and other radioactive material for malicious purposes, Ghana appreciated the Agency's assistance and its efforts to build sustainable capacity in Member States for detecting and responding to nuclear security events. It supported adherence to both legally binding and non-binding international instruments relevant to nuclear security and welcomed the increase in the number of countries adhering to them.

20. Her country commended the Agency for the activities it had undertaken with a view to providing nuclear security guidance to Member States. It noted with satisfaction the Agency's recognition that the operation of an effective nuclear security system depended on the availability of

nuclear professionals, for which reason the Agency had held a number of training programmes at national and regional levels in such areas as emergency response and physical protection.

21. Worthy of note was the Agency's response to requests from Member States to establish a process for developing an integrated nuclear security plan, a process that was crucial as the first stage to developing nuclear security in any country.

22. Her country had been pleased to note the increase in the number of States that had joined the illicit trafficking database programme and were using it to report cases of theft of radioactive material. However, it was concerned at the rising number of cases of illegal possession, movement and attempted sale. It was also a source of worry that only 40% of radioactive material reported stolen or lost during the reporting period had been recovered. In the light of such high levels of theft and loss, it was important that Member States put in place more stringent control measures within agencies responsible for radioactive material in their countries. There was also a need to intensify public awareness of the dangers of radioactive material.

23. Ghana continued to host workshops on nuclear security, including physical protection and nuclear material accounting and control, that were organized in the African region. It was grateful to the Agency for supporting its efforts to make the training self-sustainable. Ghana had recently established a nuclear security support centre for organizing national and regional training courses. It was planning to run postgraduate programmes on nuclear security at the Graduate School of Nuclear and Allied Sciences at the University of Ghana.

24. The implementation of the Nuclear Security Plan 2006–2009 had been heavily dependent on extrabudgetary and voluntary contributions, some Member States assisting with equipment and the provision of cost-free experts. She commended those whose contributions ensured the plan's implementation.

25. With those observations, her country took note of documents GOV/2009/53 and 54 and endorsed the recommended actions.

26. <u>Mr MULTONE</u> (Switzerland) said that proper management of matters connected with security in general, and nuclear security in particular, was a national responsibility. Thus, nuclear security was not a statutory function and no review procedures had been included in the CPPNM. Exchange of experience in that field, as in others, was always useful. Switzerland had played an active part in developing the CPPNM and in the work leading to its recent amendment, which it had ratified over a year ago. It supported the Secretariat's call on States to take the necessary steps so that the amendment could enter into force. In providing a framework for collective deliberation, and for exchange of lessons learned and information, the Agency had an essential and unique role to play and could help expand effective protection of nuclear material throughout the world.

27. With those remarks, his country took note of the Nuclear Security Report 2009 and the Nuclear Security Plan 2010-2013 and endorsed their transmission to the General Conference.

28. <u>Mr CODORNIU PUJALS</u> (Cuba) endorsed the statement in paragraph 2 of the Nuclear Security Report 2009 that responsibility for nuclear security rested entirely with each State and that the Agency provided assistance, upon request, to States in that area. In February 2009, Cuba had requested an INSServ mission which had resulted in the proposal of an action plan to strengthen the security of practices involving high-risk radiation sources, and to institute border controls for radioactive material. His country had also recently hosted a regional training course for specialists from Cuba and other Latin American and Caribbean countries on detection of and response to criminal or unauthorized acts involving radioactive material. It was grateful for the Secretariat's contribution of equipment for border controls and strengthening of national capacity in that field. 29. With those comments, his country took note of the Nuclear Security Report 2009.

30. <u>Mr ROSELLÓ SERRA</u> (Spain) welcomed the three reports before the Board and stressed the need to continue with efforts to improve nuclear security, particularly in countries launching or expanding nuclear programmes, exploring synergies with related areas. He also welcomed the efforts to establish a global nuclear security framework and the success of the recent International Symposium on Nuclear Security held in Vienna. He called on the Agency to increase its efforts to establish and strengthen networks and coordination mechanisms with other international organizations and initiatives, such as the World Institute for Nuclear Security and the Global Initiative to Combat Nuclear Terrorism, with a view to developing a coordinated international plan to prevent and respond to acts of nuclear and radiological terrorism.

31. Emphasizing the importance of adherence to and strengthening of international legal instruments related to nuclear security, he said his country had acceded to all of them, including the amendment to the CPPNM. Spain encouraged Member States that had not yet ratified the CPPNM amendment to do so.

32. His country welcomed the progress made in elaborating and implementing non-binding documents such as the Code of Conduct on the Safety and Security of Radioactive Sources and the IAEA Nuclear Security Series of guides. The Agency should establish mechanisms for coordinating and harmonizing the criteria for the elaboration and approval of such guides and of the safety standards, thereby promoting synergies.

33. Detection of and response to cases of illicit trafficking was a priority. His country accordingly supported the programme on collection of data on illicit trafficking in nuclear or radioactive material.

34. Thus, there were many reasons why his country fully supported the Agency's activities in the field of nuclear security and had been progressively increasing its contributions to the Nuclear Security Fund, which had totalled  $\in$ 300 000 in 2008, in addition to no less significant contributions in kind through the participation of Spanish experts in the Agency's missions and activities in that field. Through the coordinated action of the European Union, his country also gave support to enhancing security in the Mediterranean and Latin America.

35. <u>Mr MINTY</u> (South Africa) commended the Agency on the implementation of the Nuclear Security Plan 2006–2009 and joined the consensus on approving the Nuclear Security Plan 2010–2013.

36. Recognizing the continuing threat of nuclear terrorism, South Africa held the view that legally binding instruments to combat nuclear terrorism remained valid and it had ratified the International Convention for the Suppression of Acts of Nuclear Terrorism. It shared worldwide concerns about the unabating threat of nuclear terrorism and reiterated its commitment to fulfil its obligations as a signatory of the Convention. The verifiable and irreversible elimination of nuclear weapons would inevitably prevent the use of such weapons, irrespective of whose hands they were in.

37. South Africa welcomed the adoption of a programme of work by the Conference on Disarmament which foresaw the establishment of a working group to negotiate a fissile material cut-off treaty. It looked forward to the swift commencement of deliberations on a non-discriminatory, multilateral and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other explosive devices and stood ready to advance that common objective.

38. It welcomed recent entry into force of the Pelindaba Treaty, which constituted another big step forward towards the common goal of a world without nuclear weapons. It was noteworthy that several nuclear-weapon States had signed the Protocols to the Pelindaba Treaty when it had been opened for

signature on 11 April 1996. It was to be hoped that those that still needed to deposit their instruments of ratification of the Protocols would do so as soon as possible.

39. While recognizing that nuclear security measures were the responsibility of each individual State, his country commended the Agency for the supportive activities it undertook at the request of Member States, and for the fundamental guidance it provided through the publication of the IAEA Nuclear Security Series. The Agency's guidelines and recommendations provided an invaluable basis for States to develop their national strategies and measures.

40. South Africa also appreciated the Agency's outstanding work in the area of nuclear security education and assistance. It would be drawing on the Agency's expertise with respect to nuclear security arrangements for the 2010 football World Cup in South Africa.

41. <u>Mr LÜDEKING</u> (Germany) said that a few speakers had stressed that nuclear security was the responsibility of States. That was undoubtedly true, but it in no way implied that nuclear security was of secondary importance for the work of the Agency. On the contrary, it was a core task. Both the Nuclear Security Report 2009 and the Nuclear Security Plan 2010–2013 testified not only to the Agency's impressive achievements in the field of nuclear security but also to the crucial role that it had been playing since the early 1970s to support national efforts to establish and improve nuclear security. The importance of that task had increased over the preceding few years in the face of the risk of terrorists gaining access to nuclear and other radioactive material.

42. Germany welcomed the growing support for legal instruments such as the CPPNM but noted with disappointment that, while there were 141 parties to that Convention, only 26 had as yet adhered to the amendment thereto. He called on all States to work for the early entry into force of the 2005 amendment and, in the meantime, to act in accordance with its objective and purpose.

43. The Board's discussion of binding and non-binding instruments should not detract from the need to try to achieve the highest nuclear security standards in all States. There was no reason not to observe and comply with non-legally binding commitments in virtually the same way as with legally binding commitments. All countries should not only endeavour to live up to their legally binding or politically binding obligations and commitments, but should also accept as common benchmarks the guidance and recommendations developed by the Agency in the field of nuclear security.

44. His country attached particular importance to the safety and security of radioactive sources, not least because of the risk of their being misused. Thus, it welcomed the fact that 95 countries had now declared their intention to implement the Code of Conduct on the Safety and Security of Radioactive Sources and it called on all Member States that had not yet notified the Agency of their intention to implement the Code to do so without delay. The Agency had longstanding experience in assisting States in their national efforts and Germany was committed to supporting those activities. It would be hosting comprehensive training activities in 2009 and had just decided to make a voluntary contribution of up to  $\notin 10$  million to the Agency up to 2012. A major share of that contribution was earmarked for support of projects aimed at securing vulnerable radioactive sources.

45. In conclusion, he expressed Germany's full support for the well structured and comprehensive approach presented in the Nuclear Security Plan 2010–2013. It was obviously based on the Agency's extensive experience and lived up to the need to take a long-term view, to give priority to assistance to States and to human resources development, to ensure sustainability, and to strengthen coordination with other international organizations, initiatives and bilateral programmes.

46. With those remarks, Germany supported the recommended actions in both the Nuclear Security Report 2009 and the Nuclear Security Plan 2010–2013.

47. <u>Mr MONDOLONI</u> (France) said that the Agency had a major role to play in helping to minimize the risk of nuclear or radioactive material being acquired and used for terrorist purposes. The international community should continue to marshal its forces to promote even greater protection of nuclear activities where necessary. France supported all initiatives aimed at strengthening control of nuclear material and radioactive sources and at enhancing capacities to detect illicit trafficking. It welcomed the Agency's recent efforts to strengthen international cooperation, or to provide countries with nuclear security assessments or advice at their request, with the assistance of international experts. In that connection, his country supported the Secretariat's plan to offer a new modular international nuclear security service that would provide advisory services on a more flexible basis in order to respond better to Member States' different needs. The resulting recommendations would form the basis for Integrated Nuclear Security Support Plans, which were an essential component of any security culture.

48. Responsibility for nuclear security lay with States, which should develop or strengthen national capacities to avert the threat of nuclear terrorism, detect illicit acts and respond to emergencies. The establishment of a structured document system through the publication of the IAEA Nuclear Security Series would give Member States access to recommendations and guidance on all relevant issues. France was actively contributing to that project and agreed that priority should be given to finalizing the document containing recommendations on the physical protection of nuclear installations and material (the future fifth revision of document INFCIRC/225). His country also supported the Agency's decision to establish a committee to oversee the production and improve the quality of Nuclear Security Series documents.

49. France would continue to support the Agency in its implementation of the Nuclear Security Plan 2010–2013. It approved the proposed priorities, especially those concerning physical protection, security of radioactive sources and improvement of means of detection — particularly during major public events — or means of intervention in the face of a threat involving nuclear or radioactive material, focusing on countries embarking on a nuclear programme for the first time.

50. The recent International Symposium on Nuclear Security had been very well attended and the high quality of the discussions had assisted the establishment of the priorities for the Nuclear Security Plan 2010–2013.

51. Accession to relevant international instruments, including the CPPNM and the amendment thereto, should also be encouraged. France recognized the importance of ensuring the early entry into force of the amendment to the CPPNM and would adhere to it as soon as it completed the review of its criminal legislation in the area of non-proliferation.

52. France welcomed the productive interaction between the Agency and the European Union, which was the main contributor to the Nuclear Security Fund, through joint action to finance activities for States in targeted geographical areas related to legislative and regulatory assistance, strengthening of control of nuclear material and enhancement of States' capacities to counter illicit trafficking.

53. France welcomed the increase in the Agency's budget for nuclear security in 2010 and endorsed the invitation to Member States to make financial or in-kind contributions to the Nuclear Security Fund. His country would continue to provide financial and technical assistance to the Agency, in particular through the practical arrangement between France and the Agency for cooperation and support in the area of nuclear security which had been renewed in March 2009. France had also made a contribution to the Nuclear Security Fund at the beginning of 2009.

54. With those comments, he took note of documents GOV/2009/53 and 54 and approved their transmission to the General Conference.

55. <u>Mr ASHRAF</u> (India) noted that the Agency had developed a basic set of nuclear security guidance documents within the framework of the Nuclear Security Plan 2006–2009 which could be used by all States in establishing their national nuclear security systems. Indian experts had actively participated in their development.

56. The new nuclear security plan took account of lessons learned from the implementation of previous plans. It clearly reflected the basic principles that Agency assistance would be provided on request and that the responsibility for security lay entirely with individual States.

57. India was concerned that the Secretariat continued to face difficulties in programme implementation because donors imposed conditions on the use of their voluntary contributions. The increased allocations for nuclear security in the Regular Budget to address staffing requirements should encourage donors to reconsider the conditions they imposed and allow the Agency maximum flexibility in the use of funds.

58. With those comments, he took note of documents GOV/2009/53 and 54 and endorsed the recommended action.

59. <u>Mr KHELIFI</u> (Algeria) said that, owing to their major impact on the safe use of nuclear energy, nuclear safety and security required constant vigilance. Algeria commended the Agency's role in promoting safety culture and the assistance it provided to States, on request, with the building of skills, strengthening of infrastructure for the physical protection of nuclear facilities and material, and regulation and control of radioactive sources. It noted with satisfaction the progress reported by the Agency in those areas, the valuable experience acquired by the nuclear industry from the operation of numerous reactors throughout the world, and the promising prospects for the development of increasingly safe reactors.

60. While his country appreciated the Agency's efforts to prevent malicious acts directed against nuclear facilities and material, including the risk of nuclear weapons and material falling into the hands of non-State actors, it drew attention to the risk of undue media publicity, which might incite terrorists to demonstrate their capacity to engage in such activities.

61. The Agency had made considerable headway in the nuclear security field since the adoption of the first nuclear security plan in 2003. In addition to voluntary contributions to the Nuclear Security Fund, some Regular Budget resources would be allocated in future to the nuclear security programme. He stressed that extrabudgetary resources provided should not be subject to conditions. Moreover, a balance should be maintained between the Agency's programmes, which were all equally important, especially in the face of budgetary constraints and the impact of the economic and financial crisis.

62. Algeria was making its own contribution to safety and security efforts, guided by the Agency's codes of conduct. It had ratified the amendment to the CPPNM and the International Convention for the Suppression of Acts of Nuclear Terrorism. During the decade of terrorism it had experienced, it had complied with its obligation to prevent nuclear material and radioactive sources used in the health sector and industry from falling into the hands of terrorists.

63. <u>Mr SHIM Yoon-Joe</u> (Republic of Korea)\* said that 2009 marked a turning point in the Agency's role in the field of nuclear security. The Nuclear Security Plan 2010–2013 was an important step forward. Drawing on the lessons learned from the previous plan, it was more sophisticated and established clearer objectives to meet rising expectations.

64. Nuclear terrorism was a real threat to international peace and security. The fact that no act of nuclear terrorism had yet occurred should not detract attention from the importance of constant endeavours to prevent one. As noted in the Nuclear Security Report 2009, 215 incidents had been reported to the illicit trafficking database programme and the rate of recovery of lost or stolen

radioactive material remained low. All actors concerned should therefore maintain and improve their cooperation, coordination and vigilance.

65. As the international community became more and more dependent on nuclear material to solve the problems of energy shortage or mitigate climate change, malicious users would have greater scope to acquire such material. His country therefore encouraged the Agency to continue to evaluate the relevant information and make an objective assessment of all the risks. The illicit trafficking database was a key tool for that purpose and it was to be hoped that more countries would participate in it.

66. Nuclear security-related activities were one of the Agency's core functions. Further synergies could be achieved between safety, security and safeguards at both national and international level. His country therefore supported the Agency's activities aimed at preventing, and detecting risks of nuclear terrorism, while providing assistance to requesting countries in parallel with safety and safeguards activities.

67. The role of prevention and detection could be shared to some extent with Member States or other international bodies such as the United Nations Office on Drugs and Crime, the International Civil Aviation Organization and Interpol. Yet the Agency might be best suited to provide assistance in those areas, given its unique qualifications for advising Member States on the need for a nuclear security framework. In that connection, he underlined the importance of continuing to strengthen regulatory infrastructures and human resources development at national level.

68. The Agency should also explore ways of ensuring greater synergy and avoiding unnecessary duplication at international level. It should continue its involvement in such initiatives as the G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction and the Global Initiative to Combat Nuclear Terrorism.

69. The Republic of Korea looked forward to the successful implementation of the Nuclear Security Plan 2010–2013. As a voluntary contributor to the Nuclear Security Fund and a strong supporter of related global initiatives, it would continue to cooperate closely with the Agency and other Member States to that end.

70. <u>Mr TANIGUCHI</u> (Deputy Director General for Nuclear Safety and Security) thanked Board members for their supportive comments, in particular the announcement by several countries of further generous contributions to the Nuclear Security Fund.

71. A number of members had raised questions regarding nuclear security risks. In that connection, he drew attention to expressions of serious concern by political leaders and senior officials regarding the high level of risk. In addition, a large number of cases of uncontrolled movements of radioactive material had been reported to the illicit trafficking database. The Nuclear Security Plan 2010–2013 made provision for increased analysis along the lines suggested by the Group of 77 and China.

72. The representative of Argentina had commented on the term 'nuclear security regime'. The Secretariat had been careful to avoid using that term in the two documents under discussion and to refer instead to the 'nuclear security framework', which comprised both legally binding and non-legally binding instruments adopted under Agency and other auspices and supported by Agency implementation guidance. That point was clearly stated in the new plan, which consistently identified instruments such as the Code of Conduct on the Safety and Security of Radioactive Sources as non-legally binding. The Secretariat never sought to convert non-binding instruments into binding instruments. It fully accepted that adherence to such instruments was entirely a matter for individual States to decide. On the other hand, he pointed out that, while the Secretariat paid particular attention to that issue, substantive high-level security and safety concerns were far more important than legal aspects.

73. The concept 'global nuclear safety and security regime' in safety documents covered global institutional and cooperative arrangements to promote synergy, consistency and complementarity of different instruments, tools, elements and activities. It thus covered not only legal instruments but also standards, services, knowledge networks, and technical and scientific support organizations.

74. A number of members had raised questions concerning the funding of the Nuclear Security Fund and had asked for a breakdown of expenditure. The estimated expenditure set out under each of the plan's four subprogrammes was based on estimated needs and reflected current expenditure patterns in 2008. Further details of anticipated expenditures were set out in the programme and budget documents. Nuclear security work would continue to be dependent on voluntary contributions to the Nuclear Security Fund. Even with an increase in the Regular Budget, the Fund would account for roughly 85 % of expenditure, as opposed to the current figure of more than 95 %. The plan would therefore continue to be heavily reliant on extrabudgetary contributions for its implementation, with the attendant risk that such reliance would impinge on the Agency's ability to plan properly and to respond to the priorities identified by Member States.

75. A number of comments had been made about the performance indicators set out in the plan. As he had made clear at the briefing given on 27 August 2009, the Secretariat would keep the indicators under review and continuously improve them in the course of implementation of the plan.

76. A number of comments had also been made on the legal basis for cooperation and coordination between the Agency and other initiatives. All such cooperation was undertaken in accordance with the mandate given by the Board and the General Conference. The Secretariat appreciated the positive comments regarding the Agency's role in coordinating bilateral and multilateral assistance and it stood ready to take on an enhanced coordination role in the field of nuclear security, subject to the receipt of a request from States.

77. <u>Mr CURIA</u> (Argentina) thanked the Deputy Director General for his response to the comments made but sought further clarification of some aspects of the nuclear security plan. For instance, in his introduction to agenda item 4 the Deputy Director General had stated that there was still a long way to go before the goals for global nuclear security were reached, and that the material and facilities that were subject to security considerations were much broader than initially thought. Moreover, the definition of nuclear security contained in footnote 2 to document GOV/2009/54 had, in his country's view, no sound legal basis since it was a working definition developed by the Director General's Advisory Group on Nuclear Security.

78. Certain points raised by the Group of 77 and China also still required clarification, such as the fact that risk reduction activities were expected to consume the largest portion of the resources required for implementing the Nuclear Security Plan 2010–2013. The Group had also requested an explanation of and empirical evidence to support the assumption that the risk that nuclear or other radioactive material could be used in malicious acts remained high. It had expressed the view that the Agency's resources should not be consumed by catering to initiatives that had been established by only a few countries or NGOs and, lastly, it had requested that the "other open sources" referred to in the plan should be clearly defined.

79. His own country had also raised the issue of a certain lack of connection with safety activities which might require revisions in the Nuclear Security Plan.

80. <u>The CHAIRPERSON</u>, summing up the discussion on agenda item 4(a), said that the Board had welcomed the annual report by the Director General on measures in the area of nuclear security.

81. Some suggestions had been made for improving the structure and content of the report.

82. Several members had commended the approach adopted by the Agency to the implementation of its nuclear security activities, including its Nuclear Security Plan 2006–2009, the results obtained and the approach of seeking synergies and coordination among all Agency departments.

83. Several members had welcomed the Agency's efforts to respond to the needs of Member States by establishing a process of developing Integrated Nuclear Security Support Plans.

84. Several members had expressed the view that the implementation of the proposed nuclear security activities should not interfere with the established priorities of the technical cooperation programme.

85. Several members had reiterated that nuclear security was not a core statutory function of the Agency.

86. Several members had emphasized that the primary responsibility for nuclear security measures and activities rested with Member States and that the role of the Agency was to offer assistance to that end. They had noted that adherence to Agency guidelines and recommendations aimed at enhancing security was voluntary. In particular, several members had emphasized that the Code of Conduct on the Safety and Security of Radioactive Sources should not be used to deny peaceful uses of nuclear energy or the export of such sources to developing countries.

87. Several members had referred to the global nuclear security initiatives involving the Agency. They had emphasized the importance of increased international coordination and assistance to strengthen global protection against nuclear terrorism and had underlined the Agency's key role in that regard, and also in helping States to develop and implement national and regional nuclear security frameworks.

88. Some members had expressed support for efforts to strengthen the relevant international instruments and had called on all States to become parties to the Convention on the Physical Protection of Nuclear Material and its amendment. Support had been expressed for an early and successful outcome to the process of revising document INFCIRC/225 within the IAEA Nuclear Security Series.

89. Several members had outlined their national and regional efforts in support of the Agency's nuclear security activities and had emphasized the importance of ensuring safety, security and safeguards when introducing or expanding a nuclear programme.

90. Support had been expressed for the training activities provided by the Agency to Member States in the field of nuclear security, including the Secretariat's intention to establish regional training centres.

91. A view had been expressed in support of using the Nuclear Security Fund as a funding source for efforts to minimize the use of high-enriched uranium in the civilian nuclear sector and to facilitate its conversion to low-enriched uranium.

92. Appreciation had been expressed for both financial and in-kind contributions to the Nuclear Security Fund and for the high implementation rate of projects. Several members had stressed the voluntary nature of contributions to nuclear security activities and had underlined that reliance on the Nuclear Security Fund had proved successful. Others had stated that funding for nuclear security activities should be included in the Regular Budget and had welcomed the inclusion of some of those activities in the 2010–2011 budget.

93. Some members had expressed concern about specific conditions imposed by States providing financial contributions to the Nuclear Security Fund.

94. She took it that the Board wished to: (a) take note of the Nuclear Security Report 2009; (b) transmit the report to the General Conference with a recommendation that Member States continue to contribute on a voluntary basis to the Nuclear Security Fund; (c) call upon States to adhere to the amendment to the Convention on the Physical Protection of Nuclear Material 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 entered 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 that purpose through participation in the Agency's nuclear security programme; and (d) encourage States to participate in the illicit trafficking database programme.

#### 95. <u>It was so decided</u>.

96. <u>The CHAIRPERSON</u>, summing up the discussion on agenda item 4(b), said that several members had expressed appreciation to the Secretariat for the preparation of the Nuclear Security Plan 2010–2013. Several members had expressed support for the Agency's nuclear security activities and the overall goal to assist Member States in improving their nuclear security.

97. Several members had welcomed the fact that, in implementing the plan, full account would be taken of activities undertaken in the Agency's nuclear safety and safeguards programmes and the relevant synergies between safety, security and safeguards.

98. One member had expressed the view that there was a need to examine carefully the way in which the Secretariat addressed nuclear security activities, including synergies between safety and security, and the associated risk regarding potential acts of nuclear terrorism.

99. Several members had welcomed the Agency's efforts to elaborate nuclear security guidance, in consultation with Member States, for publication in the IAEA Nuclear Security Series, and had noted that the aim of such guidance was to assist Member States in implementing their national nuclear security plans. Some members had stated that the Nuclear Security Series, when complete, would constitute comprehensive guidance and serve as a benchmark.

100. Some had emphasized that performance indicators in the Nuclear Security Plan should be subject to continuous improvement and that the plan itself should remain sufficiently flexible to accommodate major international shifts.

101. Several members had noted that the cost of implementing the new plan represented a considerable increase in resources. They had noted that the activities included in the plan would continue to be funded largely from extrabudgetary contributions made to the Nuclear Security Fund on a voluntary basis.

102. Several suggestions for improvements and requests for further clarification of the contents of the plan had been made.

103. The Board had taken note of the Secretariat's responses on some of the issues raised.

104. She took it that the Board wished to: (a) approve the Nuclear Security Plan 2010–2013; (b) approve the continuation of voluntary funding for the activities included in the Nuclear Security Plan 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 2010-2013 and call upon Member States to contribute to the Nuclear Security Fund.

105. It was so decided.

# 5. Strengthening the Agency's activities related to nuclear science, technology and applications

(GOV/2009/49 and Corr. 1)

106. <u>Mr BURKART</u> (Deputy Director General for Nuclear Sciences and Applications), introducing document GOV/2009/49 which had been drawn up pursuant to General Conference resolutions GC(51)/RES/14 and GC(52)RES/12, said that the report covered activities in three areas of nuclear applications: support for the African Union's Pan African Tsetse and Trypanosomosis Eradication Campaign (PATTEC); the Programme of Action for Cancer Therapy (PACT); and the use of isotope hydrology for water resources management.

107. The Agency had continued its significant cooperation with PATTEC to combat the tsetse fly in various areas in Africa. Three regional technical cooperation projects were ongoing, as well as national projects in seven countries. The Agency's support for Ethiopia's Southern Rift Valley Tsetse Eradication Project had been evaluated by the IAEA Office of Internal Oversight Services in the preceding year and, while recognizing good progress, the evaluation had identified key issues to be addressed before that project entered the operational phase. The Agency, along with key partners such as the FAO and the Programme Against African Trypanosomiasis, were working with Ethiopian governmental authorities to address those issues.

108. Agency-facilitated research included efforts to enhance the design of tsetse aerial release systems, in part by learning from successes in large-scale operational releases of fruit flies in Mexico and Central America. Testing carried out at the FAO/IAEA Agriculture and Biotechnology Laboratory in Seibersdorf had demonstrated that X-ray irradiators could serve as an effective alternative to irradiators containing large radioactive sources. That alternative technology posed no nuclear security risk and there were therefore fewer restrictions on both purchasing and shipment.

109. The report on PACT highlighted important developments and key achievements in the preceding two years.

110. One significant milestone had been the launching of the WHO-IAEA Joint Programme on Cancer Control, the overall objective of which was to strengthen the development and implementation of comprehensive national cancer control programmes, particularly for low- and middle-income countries. The initial focus was on the full implementation of PACT's Model Demonstration Sites which would soon be expanding from six countries to seven, although the demand for assistance was much greater. More than 65 countries had requested imPACT missions, which were an initial step to understanding the local dynamics of the cancer epidemic and a prerequisite for comprehensive action by the Agency and its partners. PACT had increased its efforts to mobilize resources for Member States, including through increased cooperation with the private sector, as well as facilitating resources from partner institutions and development banks. Looking to the future, PACT had demonstrated the effectiveness of the new approach which relied on concrete partnerships as well as the demand for services related to cancer control. A major challenge would be to respond to the ever-growing demands for support.

111. The report on the use of isotope hydrology for water resources management highlighted support for sustainable groundwater management, activities on the impact of climate change on water resources, and efforts to support human resources development. Following the publication of the *Atlas of Isotope Hydrology - Africa* in 2007, an atlas for the Asia and the Pacific region had been published in 2008. The report also described actions to provide easier access to isotope analysis, for example via the Agency's Isotope Hydrology Analytical Network which included 17 laboratories from 15 Member States. Collaboration was a major theme of the report: the Agency's growing partnership

with the UNDP and the Global Environment Facility (GEF) had been demonstrated by a joint project launched earlier in 2009 to assess groundwater in the Nile river basin system. Most of the work reported was related to increasing efforts to enhance water availability in Member States and, in that connection, it should be noted that the Agency, together with partners, was preparing a new initiative to increase local capacity for water resource assessments in Member States which it expected to launch in 2010.

112. <u>Mr SOKOLOV</u> (Deputy Director General for Nuclear Energy) said that document GOV/2009/49 also included reports summarizing Agency activities over the preceding year or two on potable water, innovation, small and medium-sized reactors, and infrastructure development. Annex 4 of the document summarized other important activities.

113. With regard to knowledge management, a specific report was requested on that subject every two years, the next one being due in 2010; but knowledge management and human resources, particularly for countries considering the introduction or expansion of nuclear power programmes, were themes that ran throughout the annexes to the document. Knowledge assist visits in the preceding year to Kazakhstan and Malaysia had provided assistance, education and advice on best practices and strategies in knowledge management. The annex on infrastructure described publications, training and assessment services on human resources development, and the role of the Agency's Education and Training Support Group in harmonizing the assistance offered from across the house.

114. Annex 4 provided a summary of what the Agency had done in the preceding year to play an active role in key deliberations on climate change and sustainable development. It also summarized activities driven by new interest in mining uranium, including in countries where it had not been mined before. Discussion often focused on those countries considering new nuclear power programmes and sometimes overlooked the associated increased interest in mining. The Agency had to respond to that interest as well, and help ensure that new mines incorporated new knowledge on technology development and best practices in order to ensure high efficiency and minimize safety and environmental impacts. On the subject of research reactors, Annex 4 summarized activities on research reactor coalitions, molybdenum-99 and repatriation of HEU.

115. Turning to INIR missions, he said that the first such mission had taken place in August 2009 and had reviewed the status of Jordan's infrastructure building. The review team, comprising Agency staff and external experts, had confirmed the significant progress Jordan had made in recent years. The Agency considered the mission to have been beneficial both to itself and to Jordan, enabling both to identify what gaps needed to be addressed in order to reach the expected milestones, and to focus efforts in order to fill those gaps. It had also been an important step in the development of the Agency's programme for newcomers and the organization had learned much which would improve its services for newcomers. Evaluating progress by INIR missions was an integral part of a responsible approach to nuclear power, and it was important for INIR missions to be seen as such and for their benefits to be recognized by Member States. The Agency was engaged in discussions with several other countries regarding possible INIR missions in late 2009 and early 2010 and would like to encourage newcomers to request INIR missions.

116. <u>Mr CURIA</u> (Argentina), speaking on behalf of the Group of 77 and China, said the Group continued to regard the development of nuclear technology as a high priority and it recognized the role played by peaceful applications of nuclear technology in the socio-economic uplift of developing countries. It therefore encouraged the Agency to continue to intensify its efforts in supporting them.

117. The Group appreciated the Agency's continuing partnership with PATTEC and its contributions to implementation of the PATTEC Plan of Action through regional and national technical cooperation projects. It welcomed the steps taken towards formalizing the collaborative framework in support of

PATTEC to strengthen the partnership between the Agency and the African Union Commission. It thanked the Agency for developing manuals and guidelines and for the technical support it had provided, as needed, to ongoing tsetse projects in a number of Member States, including its support in integrating the SIT in the Southern Rift Valley Tsetse Eradication Project. The Group welcomed the Agency's support in building Member States' capacity as regards the establishment of entomological baseline data, tsetse ecology and biology and relevant laboratory techniques. It also appreciated the coordinated CRPs carried out under the aegis of the Agency, with the collaboration of the FAO/IAEA Agriculture and Biotechnology Laboratory and international counterparts such as WHO and FAO, and with the help of several Member States' contributions. The Group also welcomed the training courses and consultants' meetings held in 2008 and 2009. It further noted with satisfaction the conclusions drawn by the FAO/IAEA Agriculture and Biotechnology Laboratory about the use of X-ray irradiators as an alternative to isotopic irradiators, but remained concerned that increasing difficulties and restrictions were still being experienced with the purchase and international transport of isotopic irradiators. The Group took note of the observations made by the external review, organized by the IAEA Office of Internal Oversight Services, of the Southern Rift Valley Tsetse Eradication Project and requested all concerned to address the issues identified during the review with respect to the initiation of phase 4.

118. With regard to isotope hydrology, the Group appreciated the Agency's efforts to raise awareness of its work and the role of isotope hydrology in water resources management. It commended the Agency on the introduction of new cost-effective instrumentation which used laser spectroscopy techniques for isotope analysis. The Group encouraged the Secretariat to give wider publicity to the instrument and make it available to other developing countries. It also noted the publication of atlases of isotope hydrology and noted with appreciation the Agency's contribution to the planning, development and sustained management of water resources through capacity building and human resources development in the area of isotope hydrology. Many of those programmes were being implemented in partnership with organizations such as the Global Environment Facility and UNDP and the Group encouraged the Agency to continue to develop new partnerships and increase collaboration with other United Nations organizations.

119. With respect to nuclear power applications, the Group noted the continued interest of Member States in considering the introduction of nuclear power in their energy mix, and concurred with the conclusion drawn during the International Ministerial Conference on Nuclear Energy in the 21st Century held in Beijing, China, in April 2009, that nuclear energy, as a proven, clean, safe and competitive technology, would make an increasing contribution to the sustainable development of humankind throughout the 21st century and beyond. The Group encouraged the Agency to play a central role in realizing that goal, especially in developing countries. It commended the work of the Secretariat to improve the performance of operating nuclear power plants through peer reviews, training, CRPs and the publication of technical guidance and reference documents. It also supported Agency activities in interested Member States in the areas of uranium exploration, mining and production, technology for long-term storage of spent fuel, waste management and the decommissioning of nuclear facilities.

120. The Group reiterated its concern regarding problems with the continuity of radioisotope supplies — in particular molybdenum-99 — for vital medical and industrial applications owing to unavailability of the few large ageing reactors used for isotope production. The Group welcomed the issue of the publication *Optimization of Research Reactor Availability and Reliability: Recommended Practices* (NP-T-S.4), which would help improve the performance of research reactors. It appreciated the timely introduction of a CRP on molybdenum-99 production from LEU and looked forward to its result. It also encouraged the Secretariat to assist Member States, especially developing countries, with the production of important radioisotopes like molybdenum-99 to ensure continuity of supply.

121. In the context of the production of potable water using nuclear reactors, the Group appreciated the efforts of INDAG — which had been renamed the Technical Working Group on Nuclear Desalination — in reviewing the activities and progress made at national, international and regional level. The Group supported all Agency activities in the area of non-power applications of nuclear energy, e.g. nuclear desalination and nuclear hydrogen production. It welcomed the release of the first version of a nuclear desalination toolkit and a new version of the Agency Desalination Economic Evaluation Program software, DEEP 3.2. The Group also noted the publication of a new IAEA Nuclear Energy Series document on the environmental impacts of nuclear desalination. The report provided preliminary guidelines for assessing environmental and socio-economic impacts as part of an integrated feasibility study of nuclear desalination. Those outcomes would provide Member States interested in nuclear desalination with valuable information and guidance on how to launch desalination programmes. The Group noted the implementation of activities and recommendations relating to nuclear desalination through national and bilateral projects worldwide and requested the Agency to continue informing Member States on the progress achieved in identifying potentially viable techniques.

122. The Group reiterated its support for the Agency's envisaged activities under INPRO and welcomed the continuous growth in the project's membership, including from developing countries. It welcomed the publication of the nine-volume user manual for the INPRO methodology (IAEA-TECDOC-1575) and noted that the methodology was available for use for nuclear energy system assessments in support of long-term planning and decision-making for nuclear power programmes at national, regional or global level, and that it was suitable both for countries with established nuclear programmes wishing to assess existing or future nuclear energy systems and for those wishing to embark on new programmes. The Group also noted with appreciation that the Agency offered a nuclear energy system assessment support package and that several Member States, including developing countries, had expressed interest in using it. It took note of the activities under the other substantive areas of the INPRO action plan for 2010–2011. It also noted with appreciation the Agency's role in fostering collaboration among Member States on selected innovative nuclear technologies and related R&D through technical working groups and CRPs.

123. The Group appreciated the work of the Agency in the area of small and medium-sized reactors. It noted the preparation of the reports on design features to achieve defence in depth for such reactors, and on approaches to assess their competitiveness, and the preparation of a publication on legal and institutional issues of transportable nuclear installations, and it looked forward to their publication. It also noted the CRPs that were being conducted among interested Member States on selected technology development and assessment topics.

124. Turning to infrastructure development for nuclear power, he said that the Group noted with appreciation the Agency's response to the increased interest on the part of Member States in the introduction of nuclear power, adopting an integrated approach to facilitate cross-departmental coordination, notably though the Nuclear Power Support Group. However, such restructuring should not be allowed to undermine the role of the Department of Technical Cooperation in project selection, approval and implementation. The Group noted the issue of the publication *Evaluation of the Status of National Nuclear Infrastructure Development* (NG-T-3.2), which was closely related to the publication *Milestones in the Development of a National Infrastructure for Nuclear Power* (NG-G-3.1). While recognizing their importance in providing useful guidance, the Group wished to reiterate that they should not be considered the only reference for Member States embarking on a nuclear power programme, and that they were not binding and should not be used to restrict technical cooperation activities or interfere in the technical work of the Secretariat.

125. Turning to PACT, he said that the Group remained seriously concerned at the growing threat to socio-economic development posed by cancer worldwide and at the suffering of cancer patients and

their families, particularly in developing countries. The Group further noted with concern that, according to WHO estimates, the number of global cancer deaths was likely to increase by 45% between 2007 and 2030, while new cases in the same period were expected to jump from 11.3 million to 15.5 million. The Group commended the Agency's sustained work in implementing PACT and its efforts to develop an Agency-wide strategy for implementation of that programme. PACT was a concrete embodiment of the peaceful use of nuclear technology for civilian and humanitarian purposes. The Group would once again be tabling a resolution on PACT at the 53rd regular session of the General Conference, and it would continue to do so in order to ensure that concrete and sustained action was pursued by the international community to address the problem adequately. The Group appreciated the contributions and pledges to PACT made by Member States and other entities and called on more Member States to provide similar funding support. It also welcomed the provision under Major Programme 2 of the Agency's programme and budget for 2010–2011 to cover a portion of PACT's required funding for management and programme support. However, PACT continued to rely heavily on extrabudgetary resources and donations. Public/private partnerships would continue to be key to enabling PACT to implement its programmes, and the Group urged Member States to consider allocating greater, sufficient and assured funding for PACT management and activities. While PACT's resource mobilization efforts had been commendable, there should be sufficient, assured and predictable funding for implementation of the programme, since it was a statutory activity of the Agency.

126. The Group welcomed the establishment of the WHO-IAEA Joint Programme on Cancer Control in March 2009 and looked forward to maximizing the benefits that might be derived from it, particularly in terms of accelerated programme delivery and enhanced resource mobilization potential, with the aim of creating a more coordinated approach to addressing the cancer crisis in developing countries. The Group also looked forward to efforts being made through the Joint Programme to enhance the six existing PACT Model Demonstration Sites and develop additional ones.

127. The Group noted with concern the decreasing number of qualified medical professionals in developing countries, since sustaining adequate cancer care capacity required a sufficient number of such trained professionals, along with facilities and equipment. It commended the continued efforts of the PACT Programme Office to facilitate training for health professionals working in cancer control in low- and middle-income countries. Human resources development was key to achieving sustainable and effective national cancer control programmes. The Group welcomed the launching, in 2008, of a Regional Cancer Training Network concept supported by a Virtual University for Cancer Control that aimed to train health professionals in all areas of cancer care, and it looked forward to the project's implementation.

128. The Group noted the continued progress made in the establishment of partnerships with Member States, other international organizations and private entities, and welcomed the development of Model PACT Practical Arrangements to formalize those collaborations. The Group urged the PACT Programme Office to utilize such partnerships in its efforts related to the development and use of cost-effective and reliable systems for radiation treatment of cancer patients, and to addressing human resources development requirements.

129. The Group noted with satisfaction that coordinated efforts had been made to carry out imPACT missions at the six PACT Model Demonstration Sites and in other countries, and it looked forward to similar missions being conducted to assist other countries with the development of integrated cancer control programmes and with increasing public awareness. The Group also welcomed the collaboration between PACT, the Department of Technical Cooperation and the Division of Human Health in developing two regional technical cooperation projects for Africa and Asia and the Pacific in the 2009–2011 cycle. Regional efforts could assist Member States in developing comprehensive national cancer control programmes that suited their requirements by facilitating knowledge sharing.

The Group looked forward to similar projects being developed in other regions. In conclusion, the Group urged the Director General and the Secretariat to continue to advocate and build support for PACT, and to allocate and mobilize resources for its implementation as one of the Agency's priorities. With those remarks, the Group took note of document GOV/2008/49.

130. <u>Mr FIGUEIREDO</u> (Angola), speaking on behalf of the African Group, said that the Group particularly appreciated the support provided by the Agency for both PATTEC and PACT.

131. The Group appreciated the continued high priority assigned by the Agency to agricultural development in Africa, including efforts to build capacity and develop techniques aimed at creating tsetse-free zones. In that connection, it appreciated the contributions provided by some Member States, and United Nations specialized agencies such as the FAO and WHO, and encouraged others to provide support. The Group appreciated the efforts made by the Agency and other United Nations organizations to develop manuals and technical guidelines in support of national and subregional PATTEC projects. It noted that one of the new technical cooperation projects was aimed at tackling transboundary tsetse infestation in Mozambique and South Africa. The Group also looked forward to the finalization of the agreement and modalities of cooperation between the African Union and the Agency.

132. The Group commended the Director General and Secretariat for the work they had done in advocating and building support for the implementation of PACT. It expressed appreciation for the contributions and pledges made by Member States, and for the continued collaboration and partnerships, such as the WHO-IAEA Joint Programme on Cancer Control. The Group also noted with appreciation that the Organization of European Cancer Institutes European Economic Interest Grouping had offered to make its institutions available for the training of PACT fellows.

133. The Group appreciated the support for the training of health professionals working in cancer control in low- and middle-income countries, but noted that cancer remained a major threat not only to human health but also to socio-economic development in the region. One of the critical limiting factors for the development of cancer care capacity in developing countries was education and training of staff in all areas of cancer care. In that connection, the Group urged Member States to make available more resources in order to increase the number of trained professionals and expand the facilities and tools that were a prerequisite for the education and training of radiotherapy professionals.

134. <u>Mr VALLIM GUERREIRO</u> (Brazil), speaking on behalf of GRULAC, stressed the contribution of nuclear energy to development and to improving quality of life, particularly in such areas as human health, agriculture, water resources management and power generation.

135. With regard to Annex 2 to document GOV/2009/49, GRULAC commended the Agency for its efforts to promote PACT, and in particular for building support for the programme and allocating and mobilizing resources for its implementation. It called on the Agency to continue strengthening and facilitating international partnerships with non-traditional donors, urged the PACT Programme Office to continue to seek non-traditional sources to support its activities, and encouraged Member States that had the requisite resources and infrastructure to step up their collaboration. It commended the efforts of the PACT Programme Office to raise awareness about the global burden of cancer in developing countries and welcomed the progress made with the PACT Model Demonstration Sites and imPACT missions, particularly in Latin America. That had been possible thanks to funding from a number of States.

136. GRULAC appreciated the contributions of national institutions to the fight against cancer, and the coordinated work with international organizations such as PAHO to design a subregional project on cancer prevention and integral cancer care in Central America and the Dominican Republic. It also

welcomed the entry into force on 12 March 2009 of the arrangements for the WHO-IAEA Joint Programme on Cancer Control.

137. With regard to Annex 3, GRULAC noted the launch of cooperation projects on the application of isotopic methods to management of water resources in countries in the region, allowing such resources and their availability to be assessed.

138. Turning to Annex 4, he said that GRULAC appreciated the Agency's efforts in connection with the renewed interest on the part of a number of Member States in using nuclear energy for power generation, and its efforts to preserve and improve nuclear knowledge.

139. The Group took note of the Agency's activities on the uranium production cycle and stressed the importance of the assistance provided to Member States in that area, in particular through the technical cooperation programme.

140. GRULAC supported the Agency's efforts to address the problem of shortfalls in radioisotopes for medical and industrial applications, particularly molybdenum-99, and encouraged it to assist Member States in the production of such radioisotopes to ensure continuity of supply.

141. With regard to Annex 5, GRULAC endorsed the Agency's work aimed at strengthening activities related to nuclear power applications and the development of innovative nuclear technologies, including the production of potable water using small and medium-sized reactors.

142. Turning to Annex 6, he highlighted the ongoing work under INPRO and stressed the importance of activities to foster collaboration on innovative nuclear technologies, and related R&D that contributed to the sustainability of nuclear energy.

143. With regard to Annex 7, GRULAC took note of the work carried out under the project on common technologies and issues for small and medium-sized reactors. It was regrettable that it had not been possible to attract further voluntary contributions for work in the area, as requested in resolution GC(51)/RES/14 B.2.

144. GRULAC noted with interest the various CRPs, in particular the one on development of methodologies for the assessment of passive safety system performance in advanced reactors in which eight research institutions had participated, including one from Argentina. It also noted several interesting studies prepared by the Secretariat in that field and looked forward to their publication.

145. The Group urged the Secretariat to continue providing assistance to developing countries interested in small and medium-sized reactors through exchange of information and through CRPs on selected topics for that reactor type.

146. Turning to Annex 8, he said that GRULAC appreciated the initiatives to assist Member States in evaluating the nuclear power option, which had involved the publication of information documents, the elaboration of CRPs, training events, the organization of symposia and training workshops, and the implementation of technical cooperation projects. In particular, it welcomed the new web database which was to be available by the end of 2009 and would provide in-depth and up-to-date technical information about the status of the various nuclear technology options that were available or under development worldwide, and which was aimed primarily at countries that were considering the introduction or expansion of nuclear power.

147. With those comments, he took note of document GOV/2009/49 and recommended its transmission to the General Conference.

148. <u>Mr SOULAMA</u> (Burkina Faso) stressed the importance that his country attached to the Agency's activities, which must be of benefit to all Member States, in particular the most underprivileged ones, and he welcomed the efforts made to mobilize resources to assist such countries.

149. Cooperation between Burkina Faso and the Agency was relatively new, but it had already had a positive impact, enabling his country to strengthen its structures for regulating the peaceful use of nuclear energy. In 2007, the Government had set up a body to promote the peaceful use of nuclear energy and a regulatory body. An awareness-raising seminar had been held for the Government, relevant State institutions and civil society to provide information on the important role that nuclear technology could play in the socio-economic life of the country, and on the safety and security measures which must accompany such development.

150. In February 2008, his Government had approved the modified SQP, thereby completing Burkina Faso's adherence to the Agency's safeguards system.

151. His country greatly appreciated the Agency's assistance in implementing its programme to strengthen national capacities in radiation protection within the framework of its CPF for 2007–2011, and in setting up and equipping the INIS centre. The Agency had also been involved in several regional projects focusing on energy, health, food and the environment.

152. Burkina Faso had been participating in a Model Project with Mali and the Agency on combating trypanosomosis using the SIT which had been enlarged and strengthened through PATTEC.

153. Like trypanosomosis, malaria seriously hampered the socio-economic development of sub-Saharan countries. The Agency's efforts to address the problem through technical and financial assistance were greatly appreciated. One project had enabled Burkina Faso to demonstrate that a dietary supplement of vitamin A and zinc could reduce the incidence of malaria by more than 30%, an important finding that had been publicized in the media. The project had been extended to include Mali, Ghana and Cameroon.

154. His country welcomed the Agency's firm commitment to combating cancer through PACT. The prospective partnership with the WHO would be of major importance for countries like his own, where cancer would soon constitute one of the prime causes of mortality.

155. Burkina Faso encouraged the Agency to continue its efforts to help meet the growing energy needs of developing countries through projects on planning of energy demand, taking into account capacity building. The assessment of potential energy sources in countries in western Africa showed that, by 2030, nuclear power would be the most credible option, alongside hydroelectric and solar power. That meant that those countries would need to start building strategic partnerships to realize that goal. The region had the third largest uranium reserves in the world.

156. His country was concerned about multilingualism in the Agency, particularly in workshops and other training events, which it would like to see offered in other official languages, taking into account the languages used in the countries concerned.

157. In conclusion, he said that Burkina Faso's efforts were focused on strengthening radiological safety and security, acquiring a better knowledge of groundwater, and improving air quality management in heavily populated areas. Agency assistance was vital to the country and he urged Member States to give the organization the resources it needed to carry out its work.

158. <u>Ms MOHAMED KHAIRULLAH</u> (Malaysia) encouraged the Agency to intensify its efforts to assist Member States, in particular developing countries, in building their technical capacity for the development of nuclear technology and application of nuclear techniques, in line with their national socio-economic development priorities, and expressed appreciation for the Agency's invaluable

support for her country's national technical cooperation projects relating to the application of nuclear techniques in medicine, in particular the establishment of a multi-purpose cyclotron facility and imaging therapy services; to the setting up of a laboratory for the application of radiation in nanotechnology; to radiation technologies, including non-destructive testing; and to capacity building for nuclear power planning.

159. Malaysia was considering the introduction of nuclear power as part of its energy mix and, for that reason, it welcomed the conclusion reached at the International Ministerial Conference on Nuclear Energy in the 21st Century held in Beijing earlier in the year that nuclear energy was a proven, clean, safe and competitive technology that would make an increasing contribution to the sustainable development of humankind throughout the 21st century and beyond. It appreciated the Agency's support for its energy assessment activities and human resource planning efforts and, in that connection, it thanked the Secretariat for the successful nuclear knowledge management mission — the first of its kind — which had been conducted in Malaysia in July.

160. With regard to activities under INPRO, Malaysia was eager to coordinate efforts with other members in the areas of information sharing, provision of expertise, and in-kind contributions. Its national experts had participated in several activities in the past and were ready to contribute further in the future.

161. Her country welcomed the publication of the guidance documents on *Evaluation of the Status of National Nuclear Infrastructure Development* (NG-T-3.2) and *Milestones in the Development of a National Infrastructure for Nuclear Power* (NG-G-3.1) and looked forward to further recommendations. While those documents were useful in providing guidance to Member States which were planning to embark on nuclear power programmes, the steps recommended therein should not be regarded as prerequisites for receiving technical cooperation from the Agency.

162. <u>Mr BARRETT</u> (Canada) said that the report contained in document GOV/2009/49, with its many technical annexes, was one of the best insights into the work the Agency did to fulfil its statutory objective to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world.

163. With regard to Annex 2 to the document, he congratulated the Agency on its work in building partnerships for PACT. The joint programme on cancer control established with the WHO was an excellent development that would enable the Agency to leverage its technical and scientific expertise to reach as many physicians and patients as possible. Canada encouraged the Agency to bring the joint programme to full operational status as soon as possible and to continue working on the many other partnerships, both scientific and resource-related, that the Agency had established in connection with PACT.

164. Turning to Annexes 4 and 8 on nuclear power-related activities, he noted the significant increase in requests from Member States relating to nuclear power programme development. The Secretariat had been faced with a threefold increase in nuclear power-related technical cooperation projects in 2009 and had been flexible enough to respond.

165. The Agency's important work to support scientific assessments of climate change was critical for the entire international community. Just as important for many Member States was the Agency's role in supporting nuclear power as it related to the reliable supply of baseload electricity without carbon emissions. His country urged the Secretariat to continue to inform discussions within the United Nations Framework Convention on Climate Change and the Commission on Sustainable Development. It looked forward to the scientific forum to be held in parallel with the General Conference which would address energy needs and supply while also considering environmental issues.

166. Canada also thanked the Secretariat for organizing the highly successful International Ministerial Conference on Nuclear Energy in the 21st Century hosted in Beijing by the Government of China. Canadian policymakers and technical experts had participated in that high-level event and his Government endorsed its conclusion that nuclear energy, as a proven, clean, safe and competitive technology, would make an increasing contribution to the sustainable development of humankind throughout the 21st century and beyond. His Government remained committed to nuclear power as a major contributor to Canada's domestic electricity supply.

167. His country recognized the Agency's leading role in supporting infrastructure development for nuclear power. The organization had already produced the very successful publication — *Milestones in the Development of a National Infrastructure for Nuclear Power* (NG-G-3.1), which had been followed earlier in the current year by its companion — *Evaluation of the Status of National Nuclear Infrastructure Development* (NG-T-3.2). That guide would enable Member States and Secretariat staff to assess progress towards national nuclear power programmes and would be especially helpful for the Agency's new INIR missions. Canada drafted an element of the annual applications resolution on the topic of nuclear power infrastructure development. It would work closely and constructively at the upcoming General Conference with all concerned to provide the Secretariat with the necessary guidance in that important field for the coming year.

168. <u>Mr CURIA</u> (Argentina), referring to Annex 2 of document GOV/2009/49, reiterated his country's offer to the Agency to make available its oncology facilities at the Mendoza School of Nuclear Medicine and at the Buenos Aires Nuclear Diagnosis Centre for PACT.

169. With regard to Annex 3, his country was pleased at the results of the recently concluded project on sustainable integrated management of the Guarani aquifer system, one of the world's main reserves of potable water. Argentine laboratories also participated in the Agency's Isotope Hydrology Analytical Network.

170. Turning to Annex 4, he noted that, thanks to the radioisotope production capacity for medical and industrial applications of its National Atomic Energy Commission, employing LEU targets, Argentina could not only meet its own molybdenum-99 needs but also partially met those of neighbouring countries.

171. With respect to Annex 5 and Annex 7, Argentina was vigorously pursuing its project to build a prototype of its 25 MW CAREM modular reactor, use of which for desalination had been studied, revealing promising potential for the production of potable water.

172. Finally, with regard to Annex 6, his country commended the Secretariat on the results obtained under INPRO and reiterated its support for the project.

173. <u>Mr DÍAZ</u> (Mexico), referring to Annex 1 of the report, said that Mexico had developed considerable capacity and experience in the control of pests using the SIT. Experience acquired in the packaging, transport and release of chilled adult flies could only be applied in the case of the tsetse fly.

174. With regard to Annex 2, Mexico had more than 60 years' experience in combating cancer and had prestigious institutions, such as the National Cancer Institute and the medical centres of the Mexican Social Security Institute and the State Employee Social Security and Services Institute, as well as a number of high-level private hospitals.

175. Through the Agency's Department of Technical Cooperation, Mexico received fellowship holders from developing countries for training at its oncology centres. Some of the aforementioned institutes could operate as regional centres of excellence for oncological training.

176. Turning to Annex 3, he noted that Mexico had been using isotope hydrology for water resources management for several years. A number of working groups had been set up on the topic, in particular a group at the Institute of Geophysics of the National Autonomous University of Mexico which was working in Guanajuato in close cooperation with the local authorities on an Agency technical cooperation project. The results of that project, which was not yet complete, were already being used to improve aquifer management, and water quality and availability for the population. Staff had received training under the project.

177. As was pointed out in paragraph 22 of Annex 3, Mexico was one of 15 Member States belonging to the Agency's Isotope Hydrology Analytical Network, which supported the analytical needs of technical cooperation projects and global isotope networks.

178. Referring to Annex 4, he pointed out that nuclear power was part of Mexico's energy mix and contributed 4% of electricity generated in the country. Mexico was eager to improve the performance of operating nuclear power plants and thus it was following with great interest, and participated in the Agency's activities in that area.

179. Mexico promoted regional cooperation to improve the use of small and medium-sized research reactors. In 2008 it had signed the agreement between the parties of the Caribbean research reactor coalition.

180. <u>Mr KARASEV</u> (Russian Federation) said that one of the priority areas in the Agency's work, based on its statutory functions, should be the promotion of the peaceful use of nuclear energy, including the provision of assistance to Member States with the development of nuclear power infrastructure and the development and implementation of innovative nuclear systems, as well as the preservation and strengthening of nuclear knowledge. His country noted the progress made under INPRO and it thanked the Agency for the publication of the first progress report on INPRO's work. INPRO continued to attract interest and new participants. The Russian Federation's commitment to providing long-term financial support for INPRO had contributed to the stability of the project and allowed longer-term planning of its work for the first time. His country noted with satisfaction the development of the INPRO action plan which had allowed activities on innovative nuclear technologies to be coordinated.

181. The Russian Federation supported Agency efforts to promote the development and implementation of safe, reliable, economically viable and proliferation-resistant small and medium-sized reactors, including for nuclear desalination and hydrogen production. That work, under a Regular Budget project on common technologies and issues for such reactors, was designed to facilitate the development of key enabling technologies and the resolution of key infrastructure issues for various types of innovative small and medium-sized reactors, and it complemented INPRO activities.

182. Creating conditions for the widespread use of nuclear energy in peaceful non-power applications, in particular in medicine, food and agriculture, environmental protection and water resources management, was an important aspect of the Agency's work. In that connection, the Russian Federation noted the contribution of the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture and advocated expanding cooperation between the Joint Division and Russia, inter alia through greater participation of Russian experts in technical meetings, CRPs and technical cooperation projects.

#### The meeting rose at 1 p.m.