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President: Mr. HAMZE (Lebanon)

Contents

Item of the agenda ¹		Paragraphs
8	General debate and Annual Report for 2006 (<i>continued</i>)	1–85
	Statements by the delegates of:	
	Norway	1–22
	Netherlands	23–35
	Belgium	36–45
	Malaysia	46–58
	Namibia	59–73
	Ukraine	74–85
–	Report of the Scientific Forum	86–91

¹ GC(51)/22.

Contents (continued)

Item of the agenda ¹	Paragraphs	
9	Election of members to the Board of Governors	92–109
–	Oral report by the Chairperson of the Committee of the Whole on the following items:	110–120
–	The Agency's accounts for 2006	116
–	The Agency's programme and budget for 2008–2009	117
–	Amendment to Article XIV.A of the Statute	118
–	Scale of assessment of Members' contributions towards the Regular Budget	119
–	Amendment to Article VI of the Statute	120
13	Appointment of the External Auditor	121–123
–	Restoration of voting rights	124–127
25	Examination of delegates' credentials	128–135
8	General debate and Annual Report for 2006 (<i>resumed</i>)	136–144
	Statement by the delegate of the:	136–144
	Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization	

Abbreviations used in this record:

ASEAN	Association of Southeast Asian Nations
CPF	Country Programme Framework
CPPNM	Convention on the Physical Protection of Nuclear Material
CTBT	Comprehensive Nuclear-Test-Ban Treaty
CTBTO	Comprehensive Nuclear-Test-Ban Treaty Organization
DPRK	Democratic People's Republic of Korea
Euratom	European Atomic Energy Community
HEU	high-enriched uranium
INPRO	International Project on Innovative Nuclear Reactors and Fuel Cycles
IPPAS	International Physical Protection Advisory Service
IRRS	Integrated Regulatory Review Service
ITER	International Thermonuclear Experimental Reactor
MESA	Middle East and South Asia
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NPT Review Conference	Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons
NWFZ	nuclear-weapon-free zone
OSART	Operational Safety Review Team
PACT	Programme of Action for Cancer Therapy
SEAP	South East Asia and the Pacific
TCF	Technical Cooperation Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

8. General debate and Annual Report for 2006 (continued) (GC(51)/5)

1. Mr. AAS (Norway) said that his country had just completed a two-year term as a member of the Board of Governors. It had remained committed to nuclear non-proliferation, supporting the Agency in addressing compliance matters, strengthening its capacities in the fields of nuclear security and safety and serving as a development partner, and it would continue to work closely with the Agency.
2. More than ever before, the international community needed a strong Agency in order to prevent the spread of nuclear weapons, to resolve outstanding proliferation concerns, to help ensure that nuclear safety and security did not suffer amid an expansion of nuclear power and to put nuclear applications to the service of sustainable development.
3. Norway, which continued to view the Agency in the context of the global non-proliferation regime, had been heartened by the recent renewal of interest in the long-term aim of achieving a world free of nuclear weapons. His country was not being naive; it realized that the path would be long and arduous. However, it welcomed the stronger emphasis now being placed on the urgency of a fresh commitment to nuclear disarmament within the framework of the international community's broader non-proliferation efforts.
4. The Seven-Nation Initiative on Nuclear Disarmament and Non-Proliferation had assembled a diverse network of governments that were seeking, pragmatically and cooperatively, to promote nuclear non-proliferation, nuclear disarmament and the peaceful uses of nuclear energy. Norway hoped that the Seven-Nation Initiative would help to build consensus on a wide-ranging agenda ahead of the 2010 NPT Review Conference.
5. The global disarmament agenda was contentious, but its outlines were clear: strengthening, and moving beyond, the moratoria on nuclear testing and the production of fissile materials; deeper and irreversible cuts in nuclear arsenals; the creation and strengthening of NWFZs; and genuine efforts to reduce the role of nuclear weapons in security policies. What had been lacking so far was general agreement that nuclear disarmament and nuclear non-proliferation both served the cause of reducing nuclear dangers. For good reason, the NPT was not an à la carte menu. Both nuclear disarmament and nuclear non-proliferation must be considered the responsibility of all States if the NPT-based regime was to be sustained over the long term — and the Agency must remain a key partner in upholding and strengthening that regime.
6. Safeguards were of enormous importance for the non-proliferation regime, confidence in which would depend on the international community's adapting them to the challenges of the twenty-first century. Consequently, Norway believed that a comprehensive safeguards agreement along with an additional protocol should constitute the verification standard. The Agency could conclude that all nuclear activities in a given country were exclusively for peaceful purposes only if there was an additional protocol in force for that country. The Model Additional Protocol had been adopted more than ten years previously, but nearly 100 countries had not yet concluded an additional protocol with the Agency. Norway would like to see them concluding one without delay. It was important to consider all means of increasing safeguards efficiency, including integrated safeguards, but effectiveness should not be sacrificed for efficiency. The full implementation of additional protocols was essential.

7. The Secretariat had made a number of proposals for strengthening safeguards which Norway hoped would be accepted by Member States in due course. It was clear to his country that the Agency needed better access to data, an improved laboratory network and a greater ability to carry out independent analyses.

8. The demand for energy and the desire for energy security were increasing, as was the concern about climate change, and the interest in nuclear power was now perhaps greater than at any time since the dawn of the nuclear age. However, an increasing interest in nuclear power meant greater challenges to the nuclear non-proliferation regime. Multilateral approaches to the nuclear fuel cycle might prove to be a way of reconciling energy needs with non-proliferation concerns. Also, the willingness of nuclear-weapon States to make surplus nuclear weapons material available for civilian use demonstrated how the promotion of peaceful applications of nuclear energy could complement nuclear disarmament efforts.

9. Without fresh initiatives and a readiness to enter into difficult compromises, there was a risk that the international community would founder, as it had three decades previously. The Secretariat and Member States needed to address the nuclear fuel cycle issue with greater urgency and to consider not only the question of nuclear fuel supply mechanisms but also ways of inducing countries to use such mechanisms.

10. The understandings between the Islamic Republic of Iran and the Agency on the modalities for the resolution of outstanding issues with regard to Iran's past nuclear activities represented a positive step. It would have been preferable if the Agency's work plan had provided for the resolution of issues in parallel rather than in sequence, but that work plan was the first one to provide for the resolution of all outstanding issues within an agreed time frame. Now it was crucial that Iran implement the work plan in a serious manner and as a matter of urgency.

11. Resolving the outstanding issues would be a major step towards a negotiated political solution, but Iran needed also to build confidence with regard to the scope and nature of its present nuclear activities. Among other things, it should ratify and bring into force the additional protocol to its safeguards agreement with the Agency, as it had been called on to do by the Security Council and the Board of Governors. In two unanimously adopted resolutions, the Security Council had called on Iran to suspend sensitive activities such as uranium enrichment and the construction of a heavy water reactor at Arak. Regrettably, Iran had not suspended those activities. Norway hoped that Iran would seize the opportunity now presented to it in order that a negotiated political solution might be achieved.

12. With regard to the DPRK, Norway welcomed the diplomatic breakthrough that had been achieved and was greatly encouraged by the fact that Agency inspectors had in July verified the shutdown of the Yongbyon nuclear facility. The prospect of a denuclearized Korean Peninsula was once again a reality. The DPRK should now move towards full dismantlement of its nuclear weapons programme under Agency supervision, return to the Agency and announce its intention to adhere to the NPT. That would open up new opportunities for international cooperation.

13. Following the attacks of 11 September 2001, it had become incumbent on all States to cooperate in combating international terrorism, and preventing acts of nuclear terrorism had rightly become a top global priority. There was a need for a wide variety of activities in the area of nuclear security, and the Agency had an important role to play in connection with many of them. First and foremost, however, States had to enact and enforce relevant domestic legislation.

14. The Secretariat was to be applauded for its efforts in helping States through, inter alia, the implementation of Integrated Nuclear Security Support Plans.

15. Norway, which would participate in the Global Initiative to Combat Nuclear Terrorism, had provided the United Nations Secretariat with funding for regional workshops held to promote the implementation of Security Council resolution 1540 (2004). Also, it had led efforts to minimize the use of HEU in the civilian sector.

16. In Norway, a start had been made on the process that would lead to the ratification by his country of the International Convention for the Suppression of Acts of Nuclear Terrorism and the amendment to the CPPNM adopted in July 2005.

17. Recently, it had been argued that the impact of radiological weapons could be more serious than previously estimated. That should induce all Member States to do more in order to protect fissile and radioactive materials, including giving full support to the relevant Agency programmes.

18. The likely expansion of the nuclear power sector made nuclear safety even more important than in the past, and the Agency should be at the centre of efforts to build an integrated nuclear safety and security regime. The challenges involved called for the allocation of adequate resources to nuclear safety. Firstly, States should implement the relevant conventions and codes of conduct. Secondly, instruments such as the Convention on Nuclear Safety should be refined. Thirdly, States should ensure the highest safety and security standards in the transportation of nuclear and radioactive materials. Fourthly, as incidents and accidents occurred despite all preventive efforts, every State should be prepared for emergencies.

19. There was also a need for an evolving international regime in the area of emergency preparedness, and Member States should ensure that the Agency's Incident and Emergency Centre was equipped to carry out its functions and that further progress was made in implementation of the International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies. Norway, which welcomed the progress made in the drafting of a code of conduct in the area of emergency preparedness and response, was committed to the work being done in that area.

20. Also, Member States should work with the Secretariat on the development of an international framework for protection of the environment from the harmful effects of ionizing radiation.

21. Agency technical cooperation was a means of ensuring that Member States could fully implement important standards in areas such as nuclear safety and security. Through its technical cooperation activities, the Agency was also a major development partner, facilitating the use of nuclear techniques in food and agriculture, water management, health and other key sectors and making a genuine contribution to achievement of the Millennium Development Goals. Norway would like to see the Agency continuing to take part in development related activities within the United Nations framework and nurturing partnerships with civil society through initiatives such as the Scientific Forum.

22. The Agency had served the international community well during the past 50 years, but the nuclear challenges of the next half-century might be more daunting than anything experienced so far. In his Government's view, those challenges — from managing a global renaissance of nuclear power to preventing nuclear terrorism — called for sustained international cooperation within the framework of a highly professional and efficient Agency. Norway pledged itself to the attainment of that goal.

23. Mr. DE VISSER (Netherlands) said that the NPT remained the essential foundation for the pursuit of nuclear disarmament. The international community must work together to ensure that treaties on weapons of mass destruction were not eroded from within. Times were challenging for the non-proliferation regime and existing disarmament and non-proliferation treaties were under pressure. The prospects for developing new international law to limit the threat of nuclear weapons seemed

limited, yet international tensions related to non-proliferation were rising, including difficulties with particular countries and growing worries about possible acts of nuclear terrorism.

24. The Netherlands hoped that further progress could be made with respect to a fissile material cut-off treaty, the CTBT, comprehensive safeguards agreements and the additional protocol. At the same time, more and more countries were legitimately claiming their inalienable rights under Article IV of the NPT and choosing the nuclear path. The Netherlands wished to support such countries and the Agency in that respect, and had therefore actively participated in and contributed to the discussions on multilateral nuclear approaches. As a host to a Urenco uranium enrichment plant, the Netherlands had experience in being bound by a multilateral treaty and stood ready to contribute further to discussions promoted by the Agency on the development of guarantee schemes and the multilateralization of nuclear fuel cycle activities.

25. The Netherlands was strongly committed to the early entry into force of the CTBT and was very disappointed that it had not yet come about. Ratifiers and States signatories would have to do their utmost to keep the CTBTO alive, to provide it with tangible support, and to allow for the completion of the international verification network.

26. The Netherlands favoured further strengthening of the Agency's comprehensive safeguards system and advocated its universal adoption and implementation. Comprehensive safeguards agreements and the additional protocol now constituted the verification standard, and the Netherlands urged all Member States to conclude them. The strengthening of safeguards was one thing, but the system lost credibility if non-compliance was not countered. To guarantee the integrity of the NPT and the Agency's inspection regime, the Netherlands favoured a strong policy against non-compliance, if necessary referring issues of determined non-compliance to the Security Council.

27. The Netherlands fully supported integrated safeguards and in 2006 had hosted a trilateral meeting with the Agency and the European Commission to try to develop modalities for short notice and unannounced inspections. The Netherlands hoped that the Agency would soon reach an understanding with Euratom in that respect.

28. Safeguards went hand in hand with nuclear security. The Nuclear Security Fund was pivotal to efforts to prevent proliferation and improve nuclear security and should be supported by all Member States, not just by a few donor countries. The Netherlands called on Member States to give tangible and unconditional support to that Fund. Experience had shown that conditionality could seriously hamper the implementation of programmes and projects. The Netherlands had been willing to donate generously and without conditions for several years, and was certainly willing to consider similar contributions in the future.

29. Measures to improve nuclear security were important, but would be more effective if complemented by adequate nuclear safety measures. The Netherlands strongly supported the various nuclear safety mechanisms and had joined the relevant conventions and codes of conduct. In that context, it was satisfying to see that the number of States party to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management and to the Convention on Nuclear Safety had grown.

30. There was general agreement that in the near future shortages of experienced nuclear safety staff would make it difficult to meet safety requirements. Commending the Agency on the excellent results obtained in 2006 by the IRRS, he announced that the Netherlands was considering requesting an IRRS in the near future. Before the end of 2007 a new IPPAS mission, addressing all his country's nuclear installations, would take place. He noted that the Netherlands had recently hosted two courses in the field of nuclear safety on behalf of the Agency, and follow-up courses were being prepared. In

June 2007, an international meeting of the network of regulators of countries with small nuclear programmes had also been hosted in the Netherlands.

31. The Agency could only carry out all of its tasks if it had adequate financial resources. The Netherlands strongly supported a balanced budget which enabled it to carry out its essential tasks. The Agency was being called upon to address a rapidly increasing number of complicated and multifaceted issues, and the Netherlands had noted with concern that some essential tasks had been postponed due to lack of adequate resources. The Secretariat should consult more actively with Member States in the budget drafting process in 2008 in order to reach timely consensus on the budget proposal for 2009. Furthermore, the Netherlands hoped that the Secretariat would present a transparent budget proposal for 2009 with clear priorities and unambiguous savings, so that there would be fewer essential activities that needed to be financed on an extrabudgetary basis.

32. The Netherlands expressed strong support for the Secretariat's efforts to bring about reforms in its administrative structures, as well as improving its project management, but felt that more could be done. Possibly with other Member States and in collaboration with the Secretariat, the Netherlands was giving serious consideration to the Secretariat's request for financial assistance in its efforts to make the Agency more efficient and effective.

33. The Netherlands was a strong supporter of the Agency's technical cooperation activities and had already pledged its full target share to the TCF for 2008. It hoped that Member States which had not already done so would pledge their share as soon as possible. Adequate and predictable resources were a prerequisite, and the Netherlands therefore welcomed the report by the Director General on possible options to make technical cooperation resources sufficient, assured and predictable. The Netherlands was optimistic about the advances the Agency was making in streamlining its technical cooperation programme and commended it on the improvements it had achieved in the implementation rate for 2006. The Netherlands hoped that further improvements would be reflected in a yet higher rate of implementation for 2007.

34. On the national energy front, the Netherlands was extending operation of the Borssele nuclear power plant by 20 years up to 2033. Also, its energy policy aimed to provide the country with one of the most sustainable supply systems in Europe by 2020 and ensure a substantial reduction of greenhouse gas emissions.

35. The Netherlands attached the utmost importance to the Agency's role in strengthening nuclear disarmament and non-proliferation, in guaranteeing the safety and security of nuclear energy and in advancing nuclear technology to the benefit of all. It would continue to support the Agency and its Director General in executing that vital role wherever it could.

36. Mr. NIEUWENHUYNS (Belgium) said that about 55% of Belgium's electricity was currently generated by nuclear energy. Legislation had been passed, however, requiring the shutdown of all nuclear power reactors after they had been in service for 40 years and the last reactors would be shut down in 2025. In view of the growing debate about how the shortfall in electricity production would be made up, the Energy Minister had asked a special commission to examine Belgium's future energy policy. The commission had sent its report to the Belgian authorities, which would draw their conclusions and duly inform the Agency.

37. There was nonetheless still a need for both State and private nuclear research and development, not only to maintain and improve the existing nuclear systems but also to develop new ones. Since the debate on the future of its nuclear industry was not closed for good, Belgium was continuing to contribute to the development of new nuclear systems, in particular the fourth generation reactors and fuel cycles. It had joined the Agency's INPRO activities and Belgium's nuclear research centre at Mol would contribute to joint projects under the aegis of that project.

38. National efforts focused on developing MYRRHA, an accelerator-driven subcritical reactor which it was hoped to turn into an international project. To that end, Belgium's nuclear research centre had presented MYRRHA to specialists from all countries during the General Conference.

39. Several Belgian organizations were working in the fusion field, in particular on the construction of ITER and were involved in the so-called broader approach, the agreement between Euratom and Japan to complement ITER.

40. Belgium was interested in the Agency's activities on possible new uses of nuclear energy for peaceful ends, in particular the options for assurances of nuclear fuel supply. Belgium welcomed the report published by the Agency in June 2007 in that regard and hoped that future discussions would lead to the development of a programme addressing all the key issues.

41. The safety of nuclear facilities was a top priority for Belgium. The findings of the OSART mission that had visited the Tihange nuclear power plant in May 2007 at the request of the Belgian authorities were encouraging and the priority given to safety and continuing improvements at all Belgian plants had been acknowledged. Officials at Tihange were preparing and implementing action plans in response to the experts' observations.

42. In the sphere of nuclear security, the national system for protecting nuclear facilities and materials was largely based upon the Agency's recommendations contained in INFCIRC/225/Rev.4.

43. The serious proliferation related matters concerning the DPRK and the Islamic Republic of Iran, which were on the agenda of the General Assembly and the Security Council, continued to pose threats to international peace and security. The international community was determined to find a diplomatic solution in the appropriate multilateral arenas and Belgium was confident that such a solution could be found.

44. Belgium welcomed the recent positive developments regarding the Agency's inspection of nuclear facilities in the DPRK. Belgium, which had always called for a swift return of Agency inspectors, considered they had a very important part to play in the complete and irreversible dismantling of the Yongbyon nuclear plant. It was clear that was a complex operation that would need funding. It was in everyone's interest that the investment be made as it would ultimately benefit peace and security on a denuclearized Korean Peninsula.

45. Belgium had always favoured an effective multilateral approach to the Iran issue. Verification in Iran was a major challenge for the Agency since that country had not always ensured the necessary transparency with regard to some of its nuclear activities. To restore confidence, Iran must comply with its comprehensive safeguards agreement and the additional protocol. It should cooperate fully with the Agency so that the latter could conclude that there were no undeclared nuclear materials or activities and confirm the exclusively peaceful nature of Iran's nuclear programme. All efforts to restore confidence and resolve outstanding issues were welcome, including the work plan that had recently been agreed upon between Iran and the Agency. Belgium hoped that the plan would bring positive results. In its resolutions, the Security Council had specified the measures that would enable international confidence to be restored. Iran should comply fully and swiftly with those resolutions so that the negotiations could be resumed.

46. Mr. MOHAMAD (Malaysia) observed that the 50th anniversary of the Agency almost coincided with the 50th anniversary of the independence of Malaysia. Also, it was 35 years since Malaysia, with the assistance of the Agency and a number of its Member States, had established its first nuclear research centre, now the Malaysian Nuclear Agency. Coincidentally, 2007 also marked the 25th anniversary of that centre's first major facility, a 1 MW(th) research reactor.

47. He emphasized his delegation's strong support for and confidence in the Director General and the Agency, which had an important role to play in preventing the misuse of nuclear energy for military purposes and in ensuring that nuclear energy for peaceful purposes was used in the safest possible way. The Agency should not be subject to undue pressure and interference in undertaking its mandates.

48. The Agency's two key roles, as an international development agency for the peaceful applications of nuclear energy and as the sole international nuclear safeguards verification agency, should be preserved and honoured. It was in the global interest that the peaceful nuclear energy development aspirations of developing Member States not be unduly construed as contributing to an increasing global risk of nuclear proliferation, nor did they merit undue scrutiny beyond what was called for under existing Agency rules and procedures. Such a move would undermine not only the integrity and effectiveness of the technical cooperation programme but also the balance among the three pillars of the Agency, which was the fundamental bargain underlying the NPT. There should be no attempt to undermine the legitimate, fundamental and inalienable rights of developing States Party to the NPT to have access to nuclear technology for peaceful purposes.

49. Malaysia welcomed the Agency initiative to establish, in October 2006, the Nuclear Power Support Group to support Member States considering introducing nuclear power. The fact that the dynamics of nuclear power policy varied from country to country needed to be taken into consideration in planning and executing the Group's activities in order for it to remain relevant. The Agency should base its support activities on a more comprehensive and accurate assessment of the needs of its Member States, especially developing Member States, in order to optimize the effectiveness and relevance of its programmes and the utilization of its limited resources. Nuclear non-proliferation was a major concern, but the incorporation of proliferation-resistant features in future nuclear power plants should not impose additional costs to Member States.

50. Malaysia was interested in the development of multilateral approaches to the nuclear fuel cycle, an area that was attracting broader international support. His delegation welcomed the Director General's assurance that the proposed creation of an actual or virtual reserve fuel bank of last resort, under Agency auspices, would operate on the basis of apolitical and non-discriminatory non-proliferation criteria. Malaysia reiterated that any such approach should not adversely affect the fundamental inalienable right of access to nuclear technology for peaceful purposes by means of the imposition of a mandatory permanent suspension of such a right as a precondition for participation or in any other way. On the other hand, a temporary voluntary waiver of such a right as a precondition — if it were effective only for the duration of the multilateral arrangement, subject to a continued assurance of supply of the relevant fuel cycle services and material and accompanied by appropriate guarantees, including guaranteed financial and other relevant compensation for failure of supply — could contribute to the larger objective of strengthening the non-proliferation regime.

51. Malaysia placed a high priority on combating terrorism and had established, in November 2002, the Southeast Asia Regional Centre for Counter-Terrorism (SEARCCT), which focused on training, capacity-building and public awareness programmes. Malaysia would also be establishing a national nuclear security training centre. His country welcomed the recent Agency initiative to establish regional nuclear security training centres and announced its readiness to host such a centre, which would complement Malaysia's existing centres and the networks it had developed within the region and beyond.

52. With a view to combating illicit trafficking in radiological and nuclear material, Malaysia had developed a national environmental and radiological sources portal monitoring system, which was being installed at all points of entry to and exit from the country. It had adopted the Agency's Code of

Conduct on the Safety and Security of Radioactive Sources and the Code of Conduct on the Safety of Research Reactors.

53. His delegation commended the Agency on its management of the technical cooperation programme and the implementation of relevant projects in Malaysia and the Asia Pacific region as a whole. It was important for all Member States, and particularly the NPT Member States, to ensure that the financial resources available to the TCF were sufficient, assured and predictable. All principal sources of funding should be explored to ensure an appropriate mix and guarantee of future financing of the Agency's technical cooperation activities, ensuring that the TCF remained the main vehicle for mobilizing technical cooperation. Any unpredictability in its funding would weaken one of the three pillars of the Agency and one half of the NPT bargain. Malaysia had consistently honoured its commitments by contributing to the Regular Budget and the TCF in full and on time. In that connection, Malaysia welcomed the Secretariat's study to determine the resources needed to fund the Agency's activities until the year 2020.

54. In the area of training, Malaysia planned to upgrade, with effect from June 2008, the postgraduate education course on radiation protection which it had been hosting. It was grateful for the continuing support for the course. Also, it appreciated the Agency's recognition of the Malaysian Nuclear Agency as an Agency collaborating centre for radiation processing of natural polymers.

55. Turning to nuclear verification, he welcomed the Agency's readiness to resume, as the security situation permitted, its mandate to provide assurance that all nuclear material in Iraq was accounted for and that all nuclear activities in that State were for peaceful purposes.

56. As regards the application of Agency safeguards in the DPRK, Malaysia, in line with other ASEAN countries, welcomed the DPRK's action in shutting down the nuclear facility at Yongbyon, which had been verified by Agency inspectors. Malaysia also welcomed the DPRK's announcement that it would implement its commitments to make a complete declaration of all nuclear programmes and to disable all nuclear facilities. Malaysia supported the six-party talks and welcomed the progress they had achieved. They should serve to promote sustainable peace and security in the region and help address the DPRK's important humanitarian needs.

57. Regarding the implementation of the NPT safeguards agreement in the Islamic Republic of Iran, Malaysia was pleased to note that Iran had provided further information and access to resolve long outstanding issues, such as the scope and nature of past plutonium experiments. Further, Malaysia welcomed the agreement between Iran and the Agency on a work plan to resolve all outstanding verification issues.

58. Malaysia remained convinced that the establishment of an NWFZ in the Middle East would enhance global and regional peace and security, strengthen the non-proliferation regime and contribute towards achieving the objective of nuclear disarmament. Such an NWFZ should be established promptly in accordance with Security Council resolution 487 (1981) and paragraph 14 of Security Council resolution 687 (1991), as well as relevant General Assembly resolutions adopted by consensus. Having played an important role in the establishment of the Southeast Asia NWFZ under the Bangkok Treaty, Malaysia viewed each NWFZ as a critical piece of a global jigsaw puzzle that would eventually form a nuclear-weapon-free world.

59. Mr. KAHUURE (Namibia), welcoming the new members of the Agency, said that the growing membership was testimony to the increasing relevance of nuclear technology to security and sustainable development.

60. In the past year, nuclear technology had continued to contribute substantially to his country's development efforts, particularly in the areas of agriculture, human health, hydrology and radiation

safety, and thus to attaining some of the national objectives as defined in Namibia's Vision 2030. Nuclear technology was expected to play an increasingly prominent role in the attainment of national development goals and international obligations would remain a priority.

61. The 2007 review of bilateral cooperation under Namibia's CPF came at an opportune time to coordinate Agency technical cooperation and national needs. Nuclear technology had many beneficial applications and could contribute immensely to Namibia's development. It was thus crucial that all sectors recognized the role of nuclear technology in sustainable development.

62. All three pillars of the Agency's mandate should be upheld in equal measure. That approach demonstrated the intrinsic worth of nuclear technology as a viable alternative and complementary tool for national socio-economic development. It would also enhance the positive, as opposed to the traditional negative, perception of nuclear technology worldwide.

63. Namibia sought Agency cooperation and support with regard to several issues identified in its third national development plan, which aimed at providing universal access to health services in order to improve the quality of life for all citizens. Namibia needed to address health issues related to diseases, the environment and social factors. Communicable diseases, especially HIV/AIDS, tuberculosis and malaria remained a major concern, with more than 1000 deaths per 100 000 population each year. The leading non-communicable causes of mortality included cancer, cardiovascular diseases and respiratory diseases. Although the budget of the Ministry of Health and Social Services accounted for 11% of public spending, it was insufficient to ensure adequate finances, infrastructure, materials, equipment and medicines to tackle those diseases. In recognition of the fact that nuclear technology could play an important role in addressing public health concerns, the Ministry of Health and Social Services had committed resources and engaged with the Agency in developing programmes that could improve the delivery of high-quality public health services. In that context, the Agency had assisted Namibia in establishing nuclear medicine services and radiation therapy programmes. That assistance should be expanded further to include collaboration in the area of molecular biology techniques for controlling malaria and tuberculosis. Efforts should also be made to improve the understanding of the link between the management of HIV/AIDS and nutrition.

64. Food security, access to basic commodities for all citizens and participation in the global marketplace were crucial to improving the quality of life in Namibia. In that connection, cooperation with the Agency in the agricultural and water sectors was particularly relevant. Namibia aimed at maintaining its current meat and livestock export capacity, while increasing access to export markets for all farmers north of the veterinary cordon fence. In so doing, it was important to ensure compliance with international standards and to build capacities for managing livestock diseases in the northern communal areas.

65. The Agency had made a positive contribution to Namibia's efforts to improve soil, water and nutrient management technologies with a view to increasing crop production. Also, the country was seeking to diversify and develop drought tolerant crops in order to enhance food security.

66. Nuclear technology was invaluable for water resource management. Agency support in that area had complemented national efforts. Agency efforts to assist Member States to become self-reliant in the field of isotope hydrology, including the recently published *Atlas of Isotope Hydrology for Africa*, were commendable.

67. One of the national priorities was to transform Namibia into an industrialized nation with sustainable economic growth, a high standard of living and access to vital services, including electricity supply. The challenge was to ensure the establishment and maintenance of an adequate and efficient infrastructure for the supply of energy both for private consumption and to support industrial development. At present, Namibia depended heavily on foreign energy supplies. Owing to increased

demand locally and in neighbouring countries, the security of supply could not be guaranteed. Various options for power generation were therefore being considered, including nuclear energy.

68. Given that the promotion of the peaceful uses of nuclear science and technology was part of the Agency's mandate, Namibia sought core engineering, technological and management support in the use of nuclear energy for electricity generation. In this connection, his delegation welcomed the Agency's recently published Milestones in the Development of a National Infrastructure for Nuclear Power Guide.

69. Although the exploitation of Namibia's natural resources — including its substantial uranium deposits — for the socio-economic benefit of the country was being encouraged, Namibia recognized the ecological and health implications of such activities. His Government therefore sought the expert advice of the Agency to create a policy and regulatory framework for the responsible exploitation of the country's natural resources. Namibia was pleased to host the forthcoming Technical Meeting on uranium exploration, mining, processing, mine and mill remediation and environmental issues, which was a welcome development that promoted regional integration.

70. Namibia was committed to its responsibility for the safety and security of radiation sources and nuclear and radioactive material at the national and international levels. It had worked tirelessly for the establishment of a relevant regulatory body, which would be established shortly, to help Namibia meet its national and international obligations.

71. With regard to the application of safeguards in the DPRK, his delegation welcomed the agreements reached between the heads of delegations at the sixth round of the six-party talks held in July 2007. His delegation further appreciated the verification by the Agency of the closure of five installations at the Yongbyon nuclear facility and the ongoing ad hoc monitoring and verification activities being carried out with the active participation of the DPRK. Namibia supported denuclearization of the Korean Peninsula through diplomacy and dialogue and viewed the Agency as the sole competent international authority for nuclear verification.

72. On the Iranian nuclear issue, his delegation supported the Agency's proposal for a double timeout, which provided for the suspension by Iran of its nuclear enrichment activities and the suspension of sanctions as a basis for renewed dialogue. The Agency's continued professional and impartial efforts to resolve the outstanding issues concerning Iran's nuclear programme were commendable and any undue pressure or interference with the Agency's activities that could jeopardize its efficiency and credibility must be rejected.

73. Namibia supported the establishment of an NWFZ in the Middle East and called on all parties concerned to take urgent and practical steps towards that goal, which had first been proposed by Iran in 1974.

74. Ms. MYKOLAYCHUK (Ukraine), having recalled that her country had been one of the founding members of the Agency and had voluntarily renounced what had been the world's third largest nuclear arsenal, said the peaceful use of nuclear energy was fundamental for the sustainable development of Ukraine's economy. Nuclear energy currently accounted for some 50% of the energy balance in Ukraine, and that share would continue to grow provided that there were sufficient national uranium resources.

75. Ukraine appreciated the Agency's efforts concerning the fuel cycle and new, safe reactors and supported activities under the INPRO and ITER projects, as well as the Generation IV International Forum. The standards and recommendations developed by the Agency provided the basis for relevant national regulations. Ukraine believed in the expansion of nuclear energy for peaceful purposes in a

safe and secure manner with a reduced risk of proliferation — a vision shared by the Global Nuclear Energy Partnership, which her country had recently joined.

76. Ukraine attached importance to the Agency's work in studying how energy demand was to be met. In that context, it welcomed the Director General's initiative on the creation of a non-discriminatory mechanism of nuclear fuel supply, since guaranteed fuel supply under the auspices of the Agency would significantly improve the energy independence of Member States, particularly the developing countries.

77. Ukraine, which had suffered the world's largest nuclear accident, paid particular attention to complying with effective safety standards. In general, safety performance indicators at Ukrainian nuclear power plants met relevant national and international requirements, as confirmed by OSART missions. Nevertheless, Ukraine was continuing to upgrade its approaches to nuclear power safety. The 1995 memorandum of understanding in the field of energy between Ukraine and the European Union provided for specific measures in that regard. Also, legislation in the field of nuclear energy use was being updated and the relevant institutional capabilities of the national regulatory authority were being strengthened.

78. Ukraine noted with satisfaction that nuclear security remained among the Agency's top priorities. The IPPAS missions helped raise the physical security of operating nuclear units and were of the utmost importance for updating applicable norms, including the development of comprehensive plans to support nuclear security. The results of relevant international projects in Ukraine, including cooperation with the Agency's Office of Nuclear Security, were valuable for the preparation of Ukraine's integrated nuclear security plan.

79. Ukraine appreciated the Agency's work on the prevention of illicit trafficking and the safe storage of nuclear and radioactive materials. It supported the illicit trafficking database, which it had joined in 1997, and called upon all Member States to engage more actively in the exchange of information through that database. Ukraine was undertaking a range of activities aimed at bringing the storage of radioactive materials into line with the basic principles of the Code of Conduct on the Safety and Security of Radioactive Sources. The State system of registration, accounting and control was functioning well, a State register of radioactive sources had been drawn up and a State programme for the safe storage of high-level spent radioactive sources had been adopted. In addition, legislative amendments aimed at the enforcement of export and import control, and strengthened security requirements for sources of ionizing radiation had been introduced. Ukraine urged all States to cooperate actively, including at the bilateral level, to ensure the security of radioactive sources. There should be a proper exchange of information between neighbouring countries regarding illicit trafficking in radioactive sources and the export and import of sources, in accordance with the Code of Conduct and the supplementary Guidance on the Import and Export of Radioactive Sources.

80. Her delegation commended the Agency's efforts to preserve nuclear knowledge, including the creation of nuclear databases and information systems, and the contribution the Agency's research activities made to the social and economic development of Member States. Also, Ukraine welcomed the Agency's role within the framework of PACT, especially its increasing cooperation with WHO and UNICEF in that regard.

81. The technical cooperation programme demonstrated the Agency's readiness to respond to Member States' needs in an adequate and urgent manner. She highlighted in particular the technical cooperation activities undertaken for Europe in the areas of nuclear safety, human health, nuclear science and radioactive waste management.

82. Mitigation of the consequences of the Chernobyl disaster and conversion of the Shelter into an environmentally safe structure remained priorities for Ukraine, with vast resources from the State

budget still being allocated to that end. Contracts had just been signed for the New Safe Confinement as well as an interim spent fuel storage facility and Ukraine was grateful to all the donors involved. Her country hoped that implementation of those contracts would help to overcome the consequences of the Chernobyl accident and called upon the Agency and all concerned to continue supporting that process.

83. In recent years, the Agency's role in the area of non-proliferation had grown steadily. The comprehensive safeguards system was an important tool to ensure the absence of undeclared nuclear activities and the non-diversion of nuclear material. Together with the additional protocol, the comprehensive safeguards agreement constituted the Agency's verification standard, and Ukraine encouraged all States that had not yet done so to sign, ratify and implement those instruments without delay. Promoting the universality of the safeguards system must be seen as a priority task of the Agency. Ukraine was grateful to the Agency for its assistance in connection with the implementation of its additional protocol. Ukraine's revised declaration under the additional protocol was currently under review by Agency experts.

84. Ukraine shared the concerns about new threats of nuclear terrorism and recognized the need for broader cooperation in that area. It welcomed the development of effective measures aimed at preventing terrorists acquiring nuclear and radiological weapons and their means of delivery within the framework of initiatives concerning the suppression of nuclear terrorism and other related international and regional programmes. It also welcomed the entry into force in July 2007 of the Convention for the Suppression of Acts of Nuclear Terrorism.

85. The proliferation of nuclear weapons remained a major political problem and a grave challenge to the international community. Thus, Ukraine attached high importance to the Agency's activities and pledged its support for the Agency in undertaking its demanding work.

– **Report of the Scientific Forum**

86. The PRESIDENT recalled that the theme of the Scientific Forum for 2007 had been "Global Challenges and the Development of Atomic Energy: The Next 25 Years". He invited the Chair of the Scientific Forum, Mr. Evans, to present the report.

87. Mr. EVANS (Chair of the Scientific Forum) presented the report, which is reproduced in the Annex.

88. The PRESIDENT thanked Mr. Evans for his most interesting report on the work and outcome of the Scientific Forum, and the Secretariat for its excellent preparation of the Scientific Forum.

89. Mr. AAS (Norway) congratulated Mr. Evans on his chairmanship of the Scientific Forum and welcomed its recommendations regarding the future role of the Agency. The Scientific Forum was an excellent tool to promote the Agency's partnership with civil society; other opportunities to exchange views with civil society and academia should also be explored between sessions of the General Conference. The Forum had addressed most of the major issues of importance to the Agency's Member States and had highlighted the major challenges to the non-proliferation regime. He hoped that the suggestions set forth by the Chair of the Scientific Forum would be duly considered by Member States and the Director General. It was particularly important to address the balance between non-proliferation, nuclear disarmament and peaceful uses, which was key in ensuring the positive outcome of the 2010 NPT Review Conference.

90. Mr. SCHULTE (United States of America), referring to the point made in the report of the Scientific Forum that disarmament efforts were conspicuously absent on behalf of the nuclear-weapon States, said that such a perception was a myth promoted in Vienna. The United States Secretary of Energy had, in his statement to the General Conference, noted that the United States and Russia had together committed to remove or eliminate roughly 870 metric tons of HEU from defence use, and 68 metric tons of weapons-grade plutonium. That was enough material to make more than 42 000 nuclear weapons. The United States continued to draw down its nuclear weapon stocks; by 2012, the United States nuclear stockpile would be half of the 2001 level — the lowest level since President Eisenhower had been in office. It had also nearly doubled the rate at which retired nuclear weapons were dismantled, and the United States was to remove an additional 9 metric tons of weapons-grade plutonium from its defence stocks. That material, which was sufficient for well over 1000 weapons, was to be processed for use as fuel in United States commercial nuclear reactors so that it could never again be used in weapons. Such action was indicative of “atoms for peace”.

91. Although impressed by the calibre of the discussion during the Scientific Forum and by the calibre of the participants, he was concerned that the content of the Scientific Forum had had more to do with political science than nuclear science. The Agency was a technical agency with a technical mandate only under the NPT.

9. Election of members to the Board of Governors (GC(51)/6 and 26)

92. The PRESIDENT recalled that in 1989 the General Conference had approved a procedure whereby, when there was agreement regarding the candidate or candidates from a particular area, no secret ballot would be held; balloting would take place only for those areas where no candidate had been agreed upon. That procedure considerably facilitated the rational use of the General Conference’s time. Accordingly, he proposed that Rule 79 of the Rules of Procedure of the General Conference, which provided that elections to the Board should be by secret ballot, be suspended in respect of those areas for which there was agreement.

93. It was so decided.

94. The PRESIDENT said he was happy to report that agreement had been reached in all area groups on their candidates for the vacancies to be filled. He expressed his sincere appreciation to all groups for their efforts to reach agreement, which had expedited the Conference’s work.

95. Drawing attention to document GC(51)/6, containing a list of the Agency Member States designated to serve on the Board from the end of the Conference’s current session until the end of the fifty-second (2008) regular session, he recalled that, under Rule 83 of the Rules of Procedure, he had to inform the General Conference of the elective places on the Board that had to be filled. To that end, document GC(51)/26 had been prepared; it indicated that the Conference had to elect eleven members of the Board from the seven categories listed.

96. He took it that the General Conference wished to elect Ecuador and Mexico to the two vacant seats for Latin America.

97. Ecuador and Mexico were duly elected.

98. The PRESIDENT took it that the General Conference wished to elect Ireland and Switzerland to the two vacant seats for Western Europe.

99. Ireland and Switzerland were duly elected.

100. The PRESIDENT took it that the General Conference wished to elect Albania and Lithuania to the two vacant seats for Eastern Europe.

101. Albania and Lithuania were duly elected.

102. The PRESIDENT took it that the General Conference wished to elect Algeria and Ghana to the two vacant seats for Africa.

103. Algeria and Ghana were duly elected.

104. The PRESIDENT took it that the General Conference wished to elect Iraq to the vacant seat for the Middle East and South Asia.

105. Iraq was duly elected.

106. The PRESIDENT took it that the General Conference wished to elect the Philippines to the vacant seat for the Far East.

107. The Philippines was duly elected.

108. The PRESIDENT took it that the General Conference wished to elect Saudi Arabia to the floating seat for Africa/MESA/SEAP, which it was the turn of a member from MESA to fill.

109. Saudi Arabia was duly elected.

– **Oral report by the Chairperson of the Committee of the Whole**

110. Ms. KAUPPI (Finland), Vice-Chairperson of the Committee of the Whole, presented the outcome of the Committee's deliberations on agenda items 10, 11, 12, 14 and 23.

111. Under item 10, "The Agency's accounts for 2006", the Committee recommended that the Conference adopt the draft resolution on page "i" of document GC(51)/13.

112. Under item 11, "The Agency's programme and budget for 2008-2009", the Committee recommended that the Conference approve a total Regular Budget appropriation for 2008 of €295 331 187 and, accordingly, that it adopt draft resolution "A. Regular Budget Appropriations for 2008", as set out in document GC(51)/2; that it approve a target for voluntary contributions to the TCF for 2008 of \$80 000 000 and, accordingly, adopt draft resolution "B. Technical Cooperation Fund Allocation for 2008", as set out in document GC(51)/2; and that it approve a level for the Working Capital Fund in 2008 of €15 210 000 and, accordingly, adopt draft resolution "C. The Working Capital Fund in 2008", as set out in document GC(51)/2.

113. Under item 12, "Amendment to Article XIV.A of the Statute", the Committee recommended that the Conference adopt the decision set out in document GC(51)/L.2.

114. Under item 14, “Scale of assessment of Members’ contributions towards the Regular Budget”, the Committee recommended that the Conference adopt the draft resolution on page 3 of document GC(51)/21.

115. Under item 23, “Amendment to Article VI of the Statute”, the Committee recommended that the Conference adopt the decision set out in document GC(51)/L.4.

The Agency’s accounts for 2006 (agenda item 10)

116. As recommended by the Committee of the Whole, the draft resolution on page “i” of document GC(51)/13 was adopted.

The Agency’s programme and budget for 2008-2009 (agenda item 11)

117. As recommended by the Committee of the Whole, draft resolutions A, B and C on pages 56 to 60 of document GC(51)/2 were adopted.

Amendment to Article XIV.A of the Statute (agenda item 12)

118. As recommended by the Committee of the Whole, the decision contained in document GC(51)/L.2 was adopted.

Scale of assessment of Members’ contributions towards the Regular Budget (agenda item 14)

119. As recommended by the Committee of the Whole, the draft resolution on page 3 of document GC(51)/21 was adopted.

Amendment to Article VI of the Statute (agenda item 23)

120. As recommended by the Committee of the Whole, the decision contained in document GC(51)/L.4 was adopted.

13. Appointment of the External Auditor (GC(51)/18)

121. The PRESIDENT said that the tenure of the Agency’s current External Auditor would end with the completion of the audit of the Agency’s accounts for the financial year 2007. It would therefore be necessary to appoint an External Auditor to audit the Agency’s accounts for 2008 and 2009.

122. At its June session², the Board of Governors had agreed to recommend to the General Conference the appointment of the Vice-President of the German Supreme Audit Institution as the External Auditor to audit the Agency’s accounts for the financial years 2008 and 2009. He took it that the Conference wished to follow the Board’s recommendation.

123. It was so decided.

² See document GOV/OR.1188, para. 137–8.

– **Restoration of voting rights**

(GC(51)/INF/8, 9 and 10)

124. The PRESIDENT noted that the General Committee had had before it three requests for the restoration of voting rights from the Republic of Moldova, Georgia and the Dominican Republic contained in documents GC(51)/INF/8, 9 and 10, respectively.

125. It had recommended that the right to vote of the Republic of Moldova, Georgia and the Dominican Republic be restored during the current session of the Conference and until the end of their respective payment plans, on the understanding that those States continued to meet the requirements of their payment plans and that the Secretariat would report annually on the status of those payment plans.

126. He took it that the Conference accepted the recommendation of the General Committee.

127. It was so decided.

25. Examination of delegates' credentials

(GC(51)/31)

128. The PRESIDENT said that the General Committee had met earlier in the day to examine the credentials of all delegates, as provided for in Rule 28 of the Rules of Procedure. Since that meeting the Secretariat had received credentials in due form for Bosnia and Herzegovina, Luxembourg, Pakistan, Spain and the United Arab Emirates. After discussion, the Committee had recommended the adoption by the Conference of the draft resolution contained in paragraph 7 of its report contained in document GC(51)/31, with the reservations and positions expressed in the report.

129. Ms. KHALIL (Egypt) said acceptance by Egypt of the report of the General Committee did not imply recognition of the occupation by Israel of any of the occupied Arab territories, including the Golan Heights and the Shebaa Farms.

130. Mr. BAIEDINEJAD (Islamic Republic of Iran) said that his delegation had reservations regarding the credentials of the Israeli delegation. Iran's acceptance of the General Committee's report in no way implied its acceptance of that regime.

131. Mr. KODAH (Jordan) said that Jordan's acceptance of the credentials submitted by the Israeli delegation should on no account be understood as covering any occupied Arab territories, in particular the Golan Heights and Jerusalem, but only the area within the borders as at 4 June 1967.

132. Mr. ZARKA (Israel) recalled that his delegation had already responded in writing with regard to the reservations of certain Arab delegations (document GC(51)/30). Referring to the comment of the Iranian delegate, he said that Israel was a State, not a regime.

133. Mr. KABALAN (Lebanon), endorsing the views expressed by Egypt and Jordan, said acceptance of the credentials of the Israeli delegation did not imply acceptance of its borders or of its regime.

134. The PRESIDENT took it that the General Conference was prepared to adopt the draft resolution contained in paragraph 7 of document GC(51)/31.

135. It was so decided.

8. General debate and Annual Report for 2006 (resumed) (GC(51)/5)

136. Mr. TÓTH (Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization) said that the Commission's activities were aimed at establishing a global verification regime to monitor compliance with the comprehensive ban on all nuclear test explosions, as well as the promotion of signatures and ratifications for the entry into force of the CTBT.

137. Earlier in the week, the fifth Conference on Facilitating the Entry into Force of the CTBT had taken place in Vienna, attended by representatives of the more than 100 States that had ratified and signed the Treaty. The Conference had adopted a final declaration by consensus calling on those States that had not yet done so to sign and ratify the Treaty without delay. Particular emphasis had been placed on those 10 States listed in Annex 2 to the Treaty whose ratification was required for it to enter into force. The Conference and its final declaration were further proof of the international community's commitment to establishing a universal and internationally and effectively verifiable CTBT as a major instrument in the field of nuclear disarmament and non-proliferation. It had now been signed by 177 States and ratified by 140.

138. The nuclear weapon test of 9 October 2006 claimed by the DPRK had undoubtedly been the most defining event for the Commission in recent years. It had been a test of the Organization and of its nascent verification regime, its technical capabilities and procedures. Although the yield of the explosion had been low, the event had been well recorded by the CTBT monitoring system. A total of 22 seismic stations globally had recorded and located the event with the precision required for a possible on-site inspection after the Treaty's entry into force. A radionuclide station in Canada, over 7500 kms away, had also provided important noble gas data. The monitoring system had functioned in a holistic and synergistic way enabling the Preparatory Commission to prove the value of the significant investment that had been made in the previous decade.

139. The event in the DPRK, although deeply regrettable, had served to validate the CTBT verification system and had refocused the attention of the international community on the relevance of the CTBT. It had also clearly underscored how much the international community supported the CTBT as a key disarmament and non-proliferation instrument.

140. Since October 2006, the Preparatory Commission had not remained idle. Nearly 80% of the 337 facilities of the International Monitoring System (IMS) had been installed. To date, 211 IMS stations met the Commission's stringent technical requirements, and the network of hydroacoustic stations was virtually complete.

141. Since March 2007, a new state-of-the-art operations centre was tracking the movement of verification data. Essential improvements had been made in processing methods and software concerning all four verification technologies. Particularly significant achievements had been made with respect to data analysis of radionuclide particulates and noble gases, as well as for atmospheric transport modelling. The new global communication infrastructure had been approved for installation with the first monitoring station already linked to it.

142. There were also important challenges to be met in the future. Many of the stations still to be installed were the most difficult ones, posing considerable technical, financial and political challenges. Further improvements in processing methods and software were required to meet the highest standards of data availability and timeliness, and station operations must be kept cost-efficient. Another challenging key event for the Commission would be the first ever integrated on-site inspection field exercise, due to take place in the autumn of 2008. It would constitute another step towards operational readiness.

143. The CTBT generated data and products in a truly multilateral fashion, with 89 countries hosting the facilities of the monitoring system. All countries, irrespective of their size or contribution, were entitled to receive all data and products in near real time. The Treaty's verification system was thus an example of transparent verification. He had been particularly pleased about the robust increase of interest in the benefits of the system, especially by less developed countries, and noted that there had been a 20% increase in users in national institutions in the previous two years. The system also provided a variety of potential and important civil and scientific applications, most notably the contribution to tsunami warning organizations. The system was the provider of the fastest seismic and acoustic data and enhanced the ability of tsunami warning centres to issue timely and reliable tsunami alerts.

144. Nuclear energy production and nuclear capacity were projected to increase significantly in the future, with increasing numbers of States attempting to master different segments of the nuclear fuel cycle. There might come a time when the decision between nuclear energy for peaceful or weapons purposes would be decided more on political and legal grounds rather than by technology. A nuclear test provided the final and irreversible proof as to the intentions of a State. The CTBT therefore provided the last and clearly visible barrier between the peaceful legitimate use and the misuse of nuclear technology. A CTBT in force was a logical and necessary element of a multilateral, credible and effective nuclear disarmament and non-proliferation system.

The meeting rose at 12.50 p.m.

**Report to the 51st Regular Session of the IAEA General Conference
from the 10th Scientific Forum
20 September 2007**

Forum Chair: Honorable Gareth Evans
President, International Crisis Group
Former Minister for Energy and Foreign Minister of Australia

Mr. President,

This year's Scientific Forum, with 250 specialist participants meeting in the margins of this General Conference in this 50th Anniversary year of the IAEA, was given the daunting task of exploring and reporting back to you on how the world's nuclear energy future might unfold over the next 25 years, and how in this context the Agency might best advance its mission of ensuring the peaceful, safe and secure use of that energy source.

As the Forum Chair, I was given the even more daunting task (thankfully with much helpful input from the very professional scientific staff of the Agency and the session moderators) of distilling for you, in terms that you will find both interesting and of some practical utility, the content of 25 excellent presentations, spread over two full days, and involving four major sessions on, respectively, the future of nuclear power in meeting the world's energy needs; new roles for nuclear technology in food, agriculture and health; meeting the challenge of safety and security in nuclear infrastructure; and – most challenging of all – holding the line against weapons breakout through effective safeguards and verification.

Bearing in mind the Director-General's comment in opening this Conference that 'the role of the Agency is not so much to predict the future as to plan and prepare for it', the focus of my report will be a little selective. Although this necessarily means giving less than deserved attention to a number of contributions that were rich and thought provoking – including, e.g., on the future of fusion research - I want to put the emphasis on those conclusions and recommendations emerging from the Forum discussion that have direct relevance for the role of the IAEA rather than the world at large. What does the Agency need to be doing, or planning, that it is not doing at the moment? And of what it is doing, what does it need to do more, better or differently?

To the extent that we came up with answers to these questions, they grew out of a number of what seemed to be commonly accepted starting points:

- First, the overall world demand for energy is going to grow dramatically over the next 25 years, probably by around 50 per cent or even more, with two-thirds of that increase occurring in developing countries.
- Second, pressure is going to grow for a very substantial part of that demand to be met by non-fossil fuels, and in particular by nuclear energy. It is just not sustainable for 80 per cent of the world's energy supply to come from fossil fuels, as is the case at the moment: rising oil prices, energy security concerns due to the geographic concentration of oil and gas reserves in the Gulf States and Russia, and of course global warming environmental concerns will all see to that.
- Third, there will be continuing strong demand to apply nuclear technology to the world's needs, and in particular developing countries' needs, in health, food, agriculture and industry. An important part of this story is not just the need for more readily available nuclear technology in its application to human and animal health, to agricultural crop

development and preservation, and to industrial uses: it is also the potential need in the longer term for massive additional amounts of energy for desalination plants to meet ever growing water shortages.

- Fourth, while there is thus a major opportunity for the rapid further development of nuclear energy, there is still a high level of uncertainty as to what extent that opportunity will actually be taken up over the next quarter century, for three main reasons: the huge capital cost of most nuclear infrastructure (which is a significant disincentive to developing countries, not least with the current World Bank policy of not investing in nuclear power); the acute shortage of trained human resources and the associated lack of regulatory and technical infrastructure (particularly again in many developing countries); and the political difficulty of making rapid advances given continuing public concern about safety, security and proliferation.
- Fifth, the pressure for nuclear weapons proliferation is not going to go away. It remains something of a miracle that the prediction widely made in the 1960s that there would by now be at least 20-30 nuclear weapon States has not been realized, and it cannot be assumed that this miracle can be sustained – particularly when the nuclear weapons States remain so conspicuously indifferent to their own obligation under Article VI of the NPT to take serious continuing steps toward nuclear disarmament.

Against this background, a variety of enhanced and in some cases new roles for the IAEA were identified in the presentations and subsequent exchanges. They can be grouped under four headings:

Making Nuclear Energy More Affordable and Deliverable

- The Agency has an important role to play in assisting its Member States, and particularly developing countries, in energy planning. As more States contemplate nuclear power, with all the immensely complex infrastructure that requires – in terms of legal and regulatory capability, educated and trained manpower, a stable electrical grid, access to financial and industrial resources, and development of an appropriate safety culture – that role can only increase, and more resources should be allocated accordingly.
- The Agency may have a useful role, with constructive third-party analysis of planning options, in assisting States in particular regions to collaborate in building and operating a nuclear power plant: some of the more technologically developed (and in some cases oil-poor) countries of the Middle East and South East Asia were mentioned as ones possibly interested in such an exercise.
- Financing the huge upfront capital cost of major nuclear power plants is a major burden for developing countries. While not having, or needing to have, any direct financing role, the Agency can play a useful technical support role in compiling information, assembling experts, working with international financial institutions such as the World Bank, and generally helping to communicate opportunities and options to interested Member States.
- The IAEA, together with established nuclear power countries, should continue to assist States in meeting the immense challenge of building the human resources needed to support nuclear power operations. Expanding the capacity of colleges, universities and nuclear research institutes for intensive training of nuclear specialists, assisting countries to send personnel abroad for training, and providing continuous education and on-the-job training activities within nuclear industry are all areas in which the Agency can play an enhanced role.
- On issues related to research and development of nuclear energy technology, there was a general view that the Agency should give policy support to efforts to close the fuel cycle to the extent that this can be done in ways that enhance the sustainability of nuclear

energy systems, decrease the amount of waste requiring management, and help to reduce rather than increase proliferation risks.

Making Nuclear Technology More Readily Available

- The IAEA should continue and if possible increase its activities on the transfer of technologies, training, capacity building and the more efficient use of nuclear and nuclear-related technologies in human health and agriculture, including normative support (e.g. guidelines) to national counterparts and other organisations (e.g. OIE, the World Organization for Animal Health).
- The IAEA should build on its existing outstanding collaboration with the FAO, and increase it with other international organisations such as the WHO, OIE, and UNIDO. Since sustainable agricultural development will only be achieved if market driven and profitable, it is also important for the Agency to broaden its collaborative network to more actively include the private sector.
- The Agency should use specific nuclear technologies and molecular biology knowledge to develop better diagnostic agents and tools - including the use of non-invasive stable isotopes for tracing - to prevent and control diseases and pests of importance in plants, animals and humans.
- Given the need for cancer to assume a higher priority on the global health agenda, and the role of the Agency's Programme on Action for Cancer Therapy (PACT) in this area, the Agency should continue and strengthen PACT and its ability to help its Member States raise funds, and plan and build national cancer control programmes with national guidelines adapted to local needs.
- Given that the role of radiotherapy will still be essential in cancer care over the next 25 years, the Agency should continue to assist its Member States in upgrading radiotherapy centers and training professionals. In this area, as in others, it should explore the potential of information technology for distance learning.

Responding to Nuclear Safety and Security Concerns

- The IAEA has a critical policy leadership role to play in building, for a future generation of new nuclear power plants, a robust safety and security global regime and the associated infrastructure that can guarantee long term attention to safety and security. Such a regime needs to be based on sharing state of the art scientific and technical knowledge, and operational information in areas such as nuclear facility decommissioning, waste management, and the transport of radioactive materials. The Agency should continue to be the focal point for this global regime by maintaining and perfecting its safety standards, encouraging compliance and helping to foster strong national regulatory structures.
- The IAEA also needs to be concerned with the current fleet of nuclear power plants some of which fall behind in safety performance either due to limited resources for upgrades, lack of awareness of the deficiencies, or simply because of complacency and a lack of proper safety culture. The chains of nuclear safety and security are no stronger than their weakest links and those who are lagging behind need to be given priority attention and help.
- The new generation of reactors that will be designed and constructed in the next 25 years will operate along with many of the current 438 operating reactors worldwide. The regulation of safety and security should not shy away from forcing shutdown of old (or indeed new) reactors in cases where this is ever considered necessary. It will be necessary

to keep under continuous review the safety of nuclear power plants and, as appropriate, upgrade safety culture, plant hardware, procedures and emergency preparedness plans.

- In this regard, the Agency should also plan to increase the frequency and scope of its international peer review missions of regulatory bodies and the safety performance of power plant and other nuclear facilities.
- Since technically sound and publicly acceptable waste management practices are essential the IAEA's work and assistance in this area will also continue to be indispensable, as will the construction and putting into operation by States of waste disposal facilities, in particular for spent fuel and high level waste.
- In the area of sealed radioactive sources, the IAEA could help States with: the proper identification of sources through the establishment in all countries of accurate up to date national records; the regaining of control over orphan sources; and, importantly, the development of associated security measures.
- Given that even with a stringent global safety regime there will be incidents and accidents, emergency preparedness plans will need to address such eventualities. The IAEA should enhance its role in coordinating international radiological and nuclear emergency planning, preparedness and response, helping States to prepare for and respond to emergencies through setting standards, developing binding international conventions, organising international peer reviews and further developing an international system of emergency preparedness.

Responding to Nuclear Weapons Proliferation Concerns

- The Agency's verification system does not exist in a vacuum. It is inextricably connected to, and is an indispensable component of, the wider arms control and non-proliferation regime. Disarmament and non-proliferation are two sides of the same coin. Therefore, the sustainable strengthening of nuclear verification must be accompanied by sustained cuts in nuclear arsenals and the implementation of further steps towards a nuclear weapon-free world.
- Given that public confidence in effective nuclear verification is likely to be a precondition for the significantly expanded use of nuclear energy, it is important that the IAEA continues to fulfil its verification responsibilities credibly by perfecting its safeguards system and applying it in an impartial and objective manner.
- IAEA verification will only be able to provide credible, impartial information to decision makers that would not otherwise be available, if its inspectors are provided adequate authority, are aided by all available information, backed by an effective compliance mechanism, and supported by international consensus.
- States with relevant non-proliferation undertakings should support the IAEA's work in this regard by bringing into force the safeguards agreements they have committed to and conclude Additional Protocols with the Agency in order to provide the IAEA with the required legal authority for its verification work. Only then will the IAEA have the basic tools it needs to draw safeguards conclusions about the absence of undeclared nuclear material and activities.
- In some cases, e.g. where there has been a pattern of less than cooperative past behaviour, there may well be a need to seek investigative authority going beyond the Additional Protocol.

- Lessons must also be drawn from the discovery of covert nuclear supply networks, and relevant information furnished to the IAEA to assist the Agency in drawing its safeguards conclusions. Supply-side controls offer some promise of raising the costs and risks of would-be illicit suppliers, and the Agency should explore ways to build agreement on controls of this nature which would not unnecessarily hinder the development of peaceful uses.
- The expansion of the use of nuclear energy will only be possible if the proliferation risk created by the further spread of sensitive nuclear technology such as enrichment and reprocessing is minimized. The Agency needs to continue its work in trying to build consensus on the establishment of an international fuel bank or the development of other acceptable international arrangements aimed at guaranteeing nuclear fuel supply and avoiding the need for the development at the national level of full fuel cycle capability with the inherent proliferation risks that poses.

Mr. President,

Throughout the deliberations of the Scientific Forum there was a strong sense that the matters we were discussing were at the cutting edge of the international public policy debate – with widespread current concerns about energy security, about the environmental impact of fossil fuels and renewed fears about a new surge of nuclear weapons proliferation making the whole constellation of issues about both the peaceful and non-peaceful uses of nuclear energy more alive and important than they have been for many years. There was a recurring hope evident in the presentations that policymakers would be willing to think hard about whether present policies and institutional structures and resources were really up to the multiple challenges the international community was now facing.

I discerned throughout our deliberations a great respect for the role and competence of the IAEA right across the range of its mandate, and great confidence in the organisation's leadership. I am sure that the Agency, with the support of its Member States, will justify that confidence by looking carefully at our conclusions and recommendations, and continue to work hard – in an international environment that is becoming ever more challenging – to maintain a reputation for professionalism and independence that is second to none in the family of international institutions.