

IAEA Board of Governors
Record of the 1136th Meeting
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Strengthening the Agency's activities related to nuclear science, technology, and applications

Nuclear verification
(a) strengthening safeguards implementation in States with small quantities protocols

Board of Governors

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Record of the 1136th Meeting

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¹ GOV/2005/70 (Corrected).

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. HALL		Chairperson (Canada)
Mr. BUTT		Vice-Chairman (Pakistan)
Ms. FEROUKHI		Algeria
Ms. CORTI		Argentina
Mr. BEVEN		Australia
Mr. NIEUWENHUYS		Belgium
Ms. RICHTER RIBEIRO MOURA		Brazil
Mr. PROUDFOOT		Canada
Mr. ZHANG Huazhu	}	China
Mr. LI Junjie		
Mr. MOREJÓN-ALMEIDA		Ecuador
Mr. CARON		France
Mr. HONSOWITZ	}	Germany
Mr. SANDTNER		
Mr. BEKOE		Ghana
Mr. RÓNAKY		Hungary
Mr. SHARMA	}	India
Mr. PATEL		
Mr. DE CEGLIE		Italy
Mr. AMANO		Japan
Mr. CHO Chang-Beom		Korea, Republic of
Mr. FUENTES		Mexico
Mr. PAANS		Netherlands
Mr. SAMBO		Nigeria
Mr. NAQVI		Pakistan
Mr. BELEVAN-McBRIDE		Peru
Mr. NIEWODNICZAŃSKI	}	Poland
Mr. BYLICA		
Ms. ARAÚJO		Portugal
Mr. KUCHINOV		Russian Federation
Ms. KONG		Singapore
Mr. MACHÁČ		Slovakia
Mr. WRIGHT		South Africa
Ms. WIJEWARDANE		Sri Lanka
Ms. MELIN		Sweden
Mr. DAOUAS		Tunisia
Mr. WRIGHT		United Kingdom of Great Britain and Northern Ireland
Mr. SCHULTE		United States of America
Ms. GARCÍA de PÉREZ		Venezuela, Bolivarian Republic of
Mr. NGUYEN TRUONG GIANG		Vietnam

Attendance (continued)

Mr. ELBARADEI

Mr. BURKART

Mr. SOKOLOV

Mr. ANING

Director General

Deputy Director General, Department
of Nuclear Sciences and Applications

Deputy Director General, Department
of Nuclear Energy

Secretary of the Board

Representatives of the following Member States attended the meeting:

Afghanistan, Angola, Austria, Azerbaijan, Bolivia, Bosnia and Herzegovina, Bulgaria, Chile, Cuba, Czech Republic, Denmark, Egypt, Estonia, Ethiopia, Finland, Holy See, Islamic Republic of Iran, Iraq, Ireland, Israel, Kazakhstan, Kuwait, Kyrgyzstan, Libyan Arab Jamahiriya, Liechtenstein, Luxembourg, Malaysia, Morocco, Namibia, New Zealand, Nicaragua, Philippines, Romania, Sudan, Switzerland, Syrian Arab Republic, Ukraine, United Arab Emirates, Zimbabwe.

Abbreviations used in this record:

CRP	coordinated research project
EFTA	European Free Trade Association
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environmental Facility
GIF	Generation IV International Forum
GRULAC	Latin American and Caribbean Group
INDAG	International Nuclear Desalination Advisory Group
INPRO	International Project on Innovative Nuclear Reactors and Fuel Cycles
NAM	Non-Aligned Movement
NEPAD	New Partnership for Africa's Development
OECD/NEA	Nuclear Energy Agency of the Organisation for Economic Cooperation and Development
PATTEC	Pan African Tsetse and Trypanosomosis Eradication Campaign
R&D	research and development
SAGNE	Standing Advisory Group on Nuclear Energy
SAGSI	Standing Advisory Group on Safeguards Implementation
SIT	sterile insect technique
SQP	small quantities protocol
SSAC	State system of accounting for and control of nuclear material
TECDOC	IAEA Technical Document
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
World Bank	International Bank for Reconstruction and Development

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

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

(GOV/2005/58 and Corr.1)

Mr. BUTT (Pakistan), Vice-Chairman, took the Chair.

1. Mr. BURKART (Deputy Director General for Nuclear Sciences and Applications), introducing document GOV/2005/58, said that it contained information on a wide range of activities relating to two topics of programmatic interest to nuclear sciences and applications, namely the use of isotope hydrology for water resources management and support provided to the African Union's PATTEC.
2. In the field of water resources management, action taken in collaboration with United Nations and other international organizations deserved particular attention. Water was a priority for the international community, and increasing the availability of water resources was an ambitious United Nations Millennium Development Goal aiming to halve by 2015 the proportion of people without sustainable access to safe drinking water and sanitation. The use of isotopic techniques in sustainable water resource management was increasingly recognized as an important — sometimes unique — tool, making the Agency a key player in both international and national programmes.
3. On the subject of the control of insect pests, he said that high-level support for PATTEC continued. An important development in the past year had been the Agency's reassessment of its role in combating the tsetse fly through the SIT. While the main focus in the near future would be on achieving success in Ethiopia, building on the results achieved on Zanzibar a few years previously, support to other African Member States would continue through the Agency's technical cooperation programme, enhanced cooperation with PATTEC as well as regular Agency programme research activities.
4. Mr. SOKOLOV (Deputy Director General for Nuclear Energy) said that Annexes 2 and 4 of document GOV/2005/58 described developments in desalination, small and medium-sized reactors and innovation. The work on desalination in his Department complemented that of the Department of Nuclear Sciences and Applications on isotope hydrology. Reiterating the importance of water in the Millennium Development Goals and global sustainable development targets, he said that desalination, small and medium-sized reactors and innovation must be considered in the broader context of rising expectations for nuclear power around the world, in particular in developing countries.
5. Many of the participants in the International Ministerial Conference on *Nuclear Power for the 21st Century*, held in Paris in 2005, had emphasized that the availability of energy — and access to it — were essential to human development, that nuclear power contributed to supply security, that nuclear power could make a valuable contribution through the production of potable water and hydrogen, and that the Agency had an essential role in facilitating the development and use of nuclear energy for peaceful purposes.
6. An important task for the Agency in fulfilling its objective "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world" was to find forward-looking, creative ways to assist aspiring countries in overcoming barriers to entry in the twenty-first century in terms of up-front capital needs, regulatory infrastructure needs, skill requirements and the full range of other infrastructure needs. That was the context in which work was starting on the 2006–2007 programme and budget cycle and planning for the 2008–2009 cycle.

7. Paragraph 7 of Annex 4 mentioned several applications of the INPRO methodology. Particularly noteworthy was the joint assessment being undertaken by six countries working together. Among the key issues to be discussed at the INPRO Steering Committee meeting in early December 2005 was moving ahead on the specifics of Phase 2, scheduled to start in 2006, which foresaw work in three directions: facilitation of joint R&D on selected innovative nuclear energy systems; facilitation of joint efforts on institutional and infrastructure oriented topics; and, further improvement of the INPRO methodology based on feedback from the innovative nuclear energy system assessments.

8. Mr. SHARMA (India), speaking on behalf of the Group of 77 and China, welcomed the efforts undertaken by the Agency since the 47th regular session of the General Conference with respect to widening the use of isotope techniques for water management and preservation. However, that growing interest, which was reflected in a significant increase in related technical cooperation projects in recent years, did not appear to be supported by adequate financial resources, which had decreased during the same period. Appropriate measures must be taken to ensure that there was no decrease in project implementation.

9. The Group commended the Agency on the partnership it had initiated with the World Bank and other relevant organizations to set up a global strategic vision for groundwater use and protection. Also, it welcomed the Agency's efforts to strengthen and consolidate training and expertise in all areas related to water resources, in particular the large number of training activities organized for developing Member States. It encouraged the Secretariat to sustain those efforts as well as to continue disseminating information and providing expertise and technical assistance in the field of water resources. The Group noted with satisfaction the implementation of national and regional projects relating to the sustainable management of groundwater resources and to improving the understanding of groundwater systems. It also welcomed the assistance provided by the Agency and other international bodies with regard to groundwater management and sustainability, and in identifying precipitation processes and the impact of climate change on water resources. Noting the initiation of several CRPs in that field, the Group encouraged the Agency to continue assisting developing countries in mastering the development and implementation of isotope applications to achieve the optimal use, management and preservation of water resources.

10. Continued and sustained efforts by the Agency to strengthen regional and international cooperation in addressing water shortages in developing countries through the nuclear desalination of sea water were paramount. In that connection, the various workshops, feasibility studies, seminars and training courses undertaken in the current biennium, coupled with coordinated cooperation of the Agency with Member States, would create a solid basis for effective and accurate project design and planning for nuclear desalination in specific regions. The Agency's outreach programme, including the provision of updated information on its website, would contribute to enhancing technology transfer and further improve nuclear desalination techniques. The development of more than 50 concepts and designs of innovative small and medium-sized reactors in over 15 industrialized and developing Member States was welcome. The Group encouraged the Secretariat to continue to facilitate further cooperation among States in desalination activities. Nuclear seawater desalination was crucial to the development of many coastal developing countries and priority should be given to strengthening international efforts to develop and apply such techniques.

11. The Group of 77 and China supported the Agency's efforts to assist African Member States in creating tsetse-free zones using the integrated SIT under PATTEC and welcomed the expansion of that initiative to not only other areas of concern, including mosquitoes, fruit flies, mud flies and locusts, but also other regions in the world. It urged the Secretariat to continue the experimental development of the SIT for malaria at its laboratory in Seibersdorf. Also, it was necessary to ensure that funds for such activities were assured, sufficient and predictable.

12. The Group reiterated its support for INPRO. In particular, it looked forward to: the publication of the first draft of the INPRO user manual by the end of 2005; the conclusion of INPRO assessments under Phase 1B; and, the initiation of Phase 2. Efforts should be made to enhance cooperation with other international efforts on innovative technology development, especially GIF.

13. The Group of 77 and China welcomed the Agency's efforts to enhance information exchange and cooperative research activities relating to advanced reactor designs incorporating several innovative, evolutionary and enhanced safety features through the application of lessons learned and the utilization of simplified systems. It noted that the latter approach was expected to lead to improved economics and a high level of safety.

14. The Group supported all new TECDOC and CRP activities relating to technical aspects of advanced nuclear reactor designs, in particular the planned CRP on supercritical water cooled reactors. These efforts should culminate in proliferation resistant, environment friendly, inherently safe and economically viable nuclear reactor systems. CRPs were also facilitating progress in the area of nuclear desalination. Similarly, the Group supported all development activities related to small and medium-sized reactors and SAGNE's recommendation to include a new project on nuclear hydrogen production.

15. Mr. FUENTES (Mexico), speaking on behalf of GRULAC, welcomed the Agency's efforts in areas that were fundamental to development, including water resources, health and agriculture. Those activities contributed to the implementation of the programmes adopted at the World Summit on Sustainable Development and the Millennium Summit and should be further pursued. Water resources management was crucial to human development and GRULAC therefore welcomed the partnership and joint project initiated by the Agency, the World Bank and other relevant international organizations aimed at developing a strategic vision for groundwater use and protection. He drew particular attention to completion of the regional project on the sustainable management of groundwater resources in Latin America and the Agency's support for the conclusion of a cooperation agreement between Ecuador and Peru on the management of an underground aquifer.

16. The Agency's efforts to cooperate with other international organizations and programmes in the field of groundwater management and its initiatives to improve understanding of the water cycle were commendable. The Agency provided vital support to research and capacity building in the field of isotope hydrology through the development of human resources and should endeavour to identify mechanisms to increase access to pertinent information. In that connection, GRULAC appreciated the publication in Spanish of the series entitled *Environmental Isotopes in the Hydrological Cycle*.

17. He underscored the importance of the Agency's support in finding a solution to the problem of potable water shortages, in particular through the nuclear desalination of sea water, and also its cooperation with other international organizations in that respect. Agency efforts to disseminate up-to-date information on the technology and on its current and future activities were also praiseworthy.

18. The support provided by the Agency to PATTEC through application of the SIT was vital. Cooperation with other international bodies was central to the success of the campaign and the Group urged the Agency to sustain its efforts in that regard.

19. The Agency played a fundamental role in R&D for the application of nuclear energy for peaceful purposes. Important Agency initiatives to that end included CRPs not only in the aforementioned areas but also for the development of innovative nuclear technology. Cooperation with other organizations and the broad dissemination of knowledge and experience with a view to promoting innovative technologies were essential.

20. Ms. MOHAMMED (Ethiopia)*, speaking on behalf of the African Group, welcomed the Agency's activities relating to the use of isotope hydrology for water resources management and exploration. Such activities should be intensified to address the existing knowledge gap in Africa concerning water cycles. The Agency could do more to implement the programmes adopted at the World Summit on Sustainable Development, held in Johannesburg in 2003. The Agency's continued participation in global water resources management forums was commendable and its input would be crucial to the success of the 4th World Water Forum to be held in Mexico City in 2006. The Agency had an important role to play in strengthening international efforts relating to the application of nuclear techniques.

21. It was regrettable that, while the number of isotope hydrology related Agency projects had increased in the past two years, the funding remained insufficient and had even decreased. The Group welcomed the Agency's continued cooperation with African Member States in the analysis of isotopes in water, as well as the symposia, workshops and training courses conducted in Africa to enhance national capacities in the area of isotope hydrology. Technology transfer was crucial in that regard and the African Group requested the Agency to continue to build and develop human resources.

22. The Agency's increased activities in the framework of the plan for producing potable water economically using small and medium-sized nuclear reactors, outlined in Annex 2, were commendable. However, financial resources for full implementation of the plan were lacking; allocations from the Regular Budget should be increased and she urged Member States to provide extrabudgetary resources. Nuclear desalination of sea water was crucial to the development of many coastal developing countries and priority should be given to strengthening international efforts in that field.

23. The Group was concerned that Africa continued to be on the periphery of the use of nuclear power. Per capita energy consumption in Africa was extremely low compared with industrialized countries, and the lack of access to power — including nuclear energy — was one of the main impediments to development. Africa required immediate support to develop new energy options, which would contribute to the achievement of the Millennium Development Goals. The Agency should thus step up its efforts to provide assistance and cooperation in that regard to African Member States.

24. The Group was pleased that the report mentioned the Agency's contribution to PATTEC through the use of the integrated SIT. Tsetse flies had a devastating effect on agriculture and human health in Africa and the Group requested the Agency to provide additional expertise, advice and guidance to the African Union to ensure the success of PATTEC and also to enhance partnership with the Programme Against African Trypanosomiasis (PAAT). She also called upon donors and other development partners to support PATTEC.

25. Successful application of the SIT to malaria, which was a major killer in Africa, would greatly contribute to the welfare of humanity. The African Group therefore called on the Agency to continue its laboratory and experimental development of that technique for malaria. It also reiterated its request for the Agency to continue exploring the feasibility of further expansion of the SIT to combat locusts.

26. Mr. AMANO (Japan) said that his country recognized the critical importance of water resources for sustainable development and human health and well-being. The Agency played a key role in promoting the peaceful uses of nuclear technology, in particular its non-power applications, to address a variety of global concerns. Equally important in that regard was cooperation among international, regional and national stakeholders, and he commended the Agency's ongoing efforts to build strategic partnerships with international and regional development organizations, national development authorities and non-governmental organizations. Its many activities, in particular in the areas of water

resources management and the eradication of the tsetse fly, were an integral part of global efforts towards sustainable development. The Agency, in cooperation with the Government of Japan, was currently developing a tsetse fly project in Ethiopia.

27. Activities carried out in the framework of INPRO and other international projects should be complementary so as to avoid any duplication of effort. In that connection, Japan appreciated the Agency's efforts to cooperate with GIF.

28. The development of fast breeder reactors was one of the pillars of Japanese energy policy and R&D activities were ongoing. Japan had hosted an international meeting on fast reactors in Tsuruga, which had been attended by a large number of international experts and yielded valuable results for the international nuclear community. Japan would continue its international cooperation to promote research in that field, in particular through the use of its Monju fast breeder reactor.

29. Mr. LI Junjie (China) said that promoting nuclear science, technology and applications was a key part of the Agency's mandate. China was pleased that, in response to relevant resolutions adopted at the 47th and 48th regular sessions of the General Conference, the Agency activities had resulted in considerable progress in that domain.

30. The Agency had organized a series of workshops and seminars on water resources management, thus facilitating the training of key technical experts in developing countries in the utilization of small and medium-sized reactors for the cost-effective production of potable water. In addition, it had published relevant documents, prepared by experts, to guide Member States in their efforts.

31. The Agency's provision of funding, technology and training to the relevant African countries under the tsetse fly eradication programme had had a positive impact in terms of both promoting the sustainable development of peaceful uses of nuclear energy and accommodating the development needs of developing countries. China appreciated what the Agency had been doing in that area and the results achieved, and would continue to provide support.

32. As world energy demand increased and resources depleted, the role and status of nuclear power in the context of sustainable economic development worldwide would be increasingly appreciated. Its potential contribution was being recognized by an increasing number of States, and more and more Member States were supporting the development of innovative technologies. Work under INPRO had been making sound progress: 23 Member States were participating and a methodology for assessing innovative nuclear reactors and fuel cycles had been published. China hoped that the Agency would expand those efforts and supported INPRO's continued inclusion in the Agency's Regular Budget.

33. Mr. SANDTNER (Germany), having commended the report and its annexes contained in document GOV/2005/58, said it was particularly interesting that the Agency intended to contribute to isotope investigations in the safety of dams. Germany fully supported the Agency cooperating with other organizations to develop a global strategic vision for groundwater use and protection, which was of steadily growing importance, and commended the Agency for its group training activities to strengthen capacity in Member States. Germany appreciated the Agency's support to Member States under the technical cooperation programme in consolidating the human resource base and maintaining qualified staff in isotope hydrology.

34. Germany hoped that the creation and subsequent expansion of tsetse free zones in Africa through application of the SIT in an integrated pest management strategy would be successful. There could be efficiency gains in that field through close cooperation with other international organizations and programmes.

35. Germany was closely following the development of the INPRO project and was particularly interested in safe nuclear reactors, the increase of proliferation resistance and the minimization of the

ecological impact of nuclear energy. His country hoped that INPRO would be making significant contributions in that regard.

36. Finally, he noted that the information on the Agency's various activities in all areas of nuclear science, technology and applications were very well presented on the Agency's website.

37. Mr. DE CEGLIE (Italy), noting that his country had always supported the Agency's involvement in the peaceful uses of nuclear energy, considered that the issues dealt with in the report were extremely relevant and innovative, and were capable of representing a source of development and progress for many countries. The subjects of all four annexes of the report were valid examples of the types of action which the Agency should be carrying out. In particular, Italy was looking forward to the development of non-electric applications of nuclear energy and strongly supported projects for nuclear hydrogen production.

38. Mr. SAMBO (Nigeria), commending the report contained in document GOV/2005/58, said that his country was currently constructing an isotope laboratory facility at the Centre for Energy Research and Training in Zaria and would soon be commissioning a multi-purpose gamma irradiator facility for use in the SIT. Both facilities would therefore be playing a role in addressing some of the issues raised in the report.

39. Mr. NIEWODNICZAŃSKI (Poland) said that with respect to all the activities covered in the report it was essential that international partners be found so as to create and implement a global strategic vision and for the purpose of co-funding. The Agency was becoming more and more active in that area, particularly with regard to capacity building in Member States in nuclear science and technology. The Agency's activities in analytical services, its technical cooperation programme, international conferences and symposia, and training were all worth supporting. Poland was a country where the introduction of nuclear power was currently under consideration, so it was watching very carefully the progress made in the development of innovative technology within the framework of both INPRO and GIF.

40. Mr PATEL (India) said that his country approved the initiation of two new CRPs aimed at an improved understanding of the water cycle. Also, it encouraged interaction with other international organizations leading to regional training courses and projects on the sustainable management of groundwater resources. Similarly, it welcomed and supported regional training courses, international symposia and group training activities aimed at building capacity in Member States on the use of nuclear and isotope techniques in hydrology.

41. Noting the growing interest of Member States in activities related to seawater desalination using nuclear energy, he said that India had an active programme in that area. It was keen to share its experience of operating and maintaining its new nuclear desalination demonstration plant with any interested Member States. India was also an active participant in INDAG and supported all the Agency's activities in knowledge preservation and dissemination in that area, including the maintenance of a dedicated website providing up-to-date information on the status of nuclear seawater desalination technology. It encouraged interaction between the Agency and other international organizations active in that area.

42. India was an active participant in and fully committed to INPRO, as well as being a member of its Steering Committee. It had noted with satisfaction that INPRO membership was continuing to grow and included international organizations. In view of its significant implications for the future, INPRO merited increased funding from the Agency's Regular Budget. India encouraged strengthened and synergetic cooperation with other international efforts in innovative nuclear technology, namely GIF. It fully supported the initiation of new CRPs on specific technical aspects related to innovative systems and the publication of associated TECDOCs. India approved and supported all activities

undertaken and/or planned in the area of small and medium-sized reactors without on-site fuelling, and concurred with SAGNE's recommendation to include a new project, starting in 2006, on nuclear hydrogen production in a subprogramme supporting non-electrical applications of nuclear power.

43. Mr. MACHÁČ (Slovakia) said there was no doubt that nuclear techniques represented an important aspect of the peaceful uses of nuclear energy, since in a number of areas their application did not require major financial investment and so could be applied in countries with few economic resources. That was valid in particular for the use of isotope hydrology for water resources and in application of the SIT for tsetse control and eradication. As the SIT required concerted action by all involved parties in order to increase its impact, Slovakia welcomed the Agency's initiative to cooperate with PATTEC. Slovakia had been actively involved in the SIT programme within the framework of an interregional project and was ready to make its expertise available to other Member States.

44. Slovakia was particularly interested in the information contained in Annex 4 of the report, since R&D with regard to innovative nuclear reactors and fuel cycles was of great potential in improving the safety features and economy of future reactor designs. It was important that such activities, for example in the area of hydrogen economy, be implemented in a concerted manner along with other international organizations such as the OECD/NEA.

45. Mr. NAQVI (Pakistan) expressed appreciation for the Agency's role in popularizing the effectiveness of isotope techniques for water resources development and management in Member States. His country had established top-class isotope hydrology laboratories with the benefit of the Agency's technical cooperation programme. Pakistan had made a significant contribution to the Agency's activities in isotope hydrology and ecology by sharing its experience and facilities with other developing countries and through the provision, among other things, of expert services, training and the extension of analytical facilities. Pakistan was also participating in a number of CRPs and transferring related technologies to end-users in the country. It strongly supported the Agency's programme in the field of isotope hydrology for groundwater resources development, as well as the management of the terrestrial and marine coastal environment. Pakistan wished to recommend the initiation of a programme on the development of technology for in-situ remediation of pollutants such as metals, organics and radionuclides in the soil and water environment.

46. Pakistan strongly supported INPRO, which was of special significance to the development interests of many Member States. It particularly appreciated the initiation of CRPs in that area, and considered that activities related to the design and development of small and medium-sized reactors were an encouraging and important step in the right direction. Pakistan would also be happy to participate in the planned new project on hydrogen production, as recommended by SAGNE.

47. Turning to the Agency's nuclear desalination programme, he said that his Government had approved the establishment of a nuclear desalination demonstration project coupled with the KANUPP nuclear power plant. The Agency was providing help in the safety evaluation of the project and in training manpower. Pakistan was looking forward to using the results of CRPs on the optimization of the coupling of nuclear reactors and desalination systems. It was also participating in the CRP on economic research and the assessment of selected desalination projects and case studies. Given public acceptance of the technology of large-scale dual-purpose nuclear power plants, the experience gained from the demonstration plant project would be used to establish large-scale thermal seawater desalination plants coupled with nuclear power plants planned for the future.

48. Mr. WRIGHT (United Kingdom) said that the availability of water would be one of the major natural resource issues in the coming decades. Even if the proper steps were taken globally to tackle the causes of climate change — and that itself was far from guaranteed — long-term visionary

approaches needed to be put in place immediately in order to ameliorate potential crises through water security which, if they were not successfully solved, would lead to greater conflict, poverty and polarization of the world's population.

49. The Agency was to be commended for entering into partnerships with other major actors, including the World Bank, the GEF, the United Nations and others. It was essential that better understanding of scientific issues, to which the Agency could make a unique contribution, be properly incorporated into political and economic priorities at national, cross-boundary and global levels. Noting that the amount of money spent on the important issue of the use of isotope hydrology for water resources management had declined while the number of projects supported had increased, he said the United Kingdom would welcome further details on the reasons behind the move to more, smaller projects. Consideration should be given to whether a smaller number of larger strategic projects might have greater impact. In that connection, the United Kingdom suggested that the Agency also undertake a review of the lessons learned from past projects with a view to increasing the effectiveness of future projects.

50. The United Kingdom fully concurred with the overarching goals of successful tsetse fly control and eradication. While the SIT was an important element of successful campaigns it could be expensive when compared with other methods and was not always the most effective method. It was encouraging to note that Annex 3 to the report took account of those points and specifically mentioned the use of integrated intervention strategies and research on aspects of tsetse control other than SIT. The United Kingdom would support greater integration and more research into better understanding of the interactions and optimum combinations of methods under different social and environmental conditions. Noting that the Annex also pointed to important improvements in animal performance in tsetse-cleared areas, he said that work should also be done on evaluating environmental impacts, the impacts on human populations, social impacts and the impact on sustainable livelihoods. Such accurate monitoring and evaluation was essential in order to underpin eradication in the most technically and economically effective manner.

51. Mr. SCHULTE (United States of America) said that his country was strongly committed to peaceful uses of nuclear energy and appreciated the Agency's important contribution in that area. Access to clean water was of daily importance to all the world's people, and the United States applauded the Agency's successful programmes in isotope hydrology. Also, his country supported the Agency's and the African Union's tsetse eradication campaign. It was important, and needed good and effective coordination in its management. The United States urged the Secretariat to ensure that both the Technical Cooperation and the Nuclear Science and Applications Departments worked together to ensure maximum effectiveness. The United States had recently provided a leading American expert to help with the tsetse programme and would continue to provide extrabudgetary support for both isotope hydrology and the SIT. He urged others to do likewise.

52. His Government regarded nuclear power as an important source of energy for both developed and developing countries. However, for nuclear energy to achieve its full potential without increasing the risk of weapons proliferation, advanced nuclear fuel cycles and next generation technologies had to be developed. The United States supported international research and development in those areas through bilateral cooperation and GIF. It welcomed the continued cooperation between GIF and INPRO.

53. In conclusion, he said his country remained the leading contributor to the Agency's technical cooperation projects promoting the peaceful uses of nuclear technology, which was a key mission of the Agency.

54. Mr. CARON (France) said that innovation in nuclear energy research within the framework of international cooperation was vital in developing a new generation of systems to meet the world's energy needs and to ensure sustainable socio-economic development. His country had followed with great interest the development of INPRO, and had participated also in GIF. France attached great importance to complementarity and coordination between the two.

55. France gave concrete support to the Agency's efforts to use the SIT to combat malaria in Africa. That technique was an excellent example of using nuclear technologies for the purposes of health, as well as to promote global economic development.

56. French experts participated in INDAG, and France had recently undertaken, with its Tunisian partners and under the Agency's aegis, an economic and technical evaluation study of seawater desalination coupled with high-temperature reactors.

57. Mr. CHO Chang-Beom (Republic of Korea) said that his Government attached great importance to the Agency's activities to promote the peaceful uses of nuclear energy. The advances made in the application of isotope techniques could help the general public better understand the virtues of nuclear energy.

58. Improving the availability of the world's water resources was an area of critical importance for development. Isotope hydrology applications were used for water resources and environmental management, in the development of geothermal resources, as well as the safety of the dams used for hydroelectric power. Furthermore, artificial tracers were useful for evaluating flow paths and flux for artificial recharge systems.

59. Nuclear technology, especially the use of nuclear energy for seawater desalination, also had an important role to play in solving the world's potable water shortage problem. He was pleased to report the progress being made on the Korean System-Integrated Modular Advanced Reactor (SMART) project. Work on the pilot plant, which would provide a comprehensive performance verification of the SMART reactor and desalination technology, was under way. The plant layout and compartment arrangement had been completed, major components such as the steam generator, main coolant pump and control element drive mechanism were being developed, performance and safety tests were in progress at the Korea Atomic Energy Research Institute (KAERI), the licensing documents required for construction of the pilot plant had been submitted to the regulatory body in June 2005 and construction was expected to commence in 2006. The Republic of Korea had been making efforts to share its experience with other Member States through bilateral and multilateral cooperation. It had hosted several training courses, had been conducting a joint research and feasibility study in cooperation with the Agency, and was prepared to further expand such cooperation with other interested Member States.

60. Greater attention should be paid to the development of innovative technologies in order to ensure the sustainable benefits of nuclear energy. Considerable progress had been made with regard to INPRO and he encouraged other Member States to take part in the project. The Republic of Korea had been satisfied with the outcomes of the case study it had conducted under Phase-1B of INPRO. He expressed confidence that the second part of Phase-1B would be fulfilled and that the project would remain an effective catalyst for forging international coordination in the peaceful uses of nuclear energy and R&D activities.

61. Mr. BEVEN (Australia) was pleased to take note of Annex 1 of document GOV/2005/58, describing the Agency's isotope hydrology activities. The use of isotopes to characterize water cycles in the ground and in the atmosphere provided unique and valuable information regarding fresh water resources. The Australian Nuclear Science and Technology Organisation (ANSTO) was working to increase awareness of the benefits of isotope hydrology for the management of water resources in

Australia, and welcomed the Secretariat's efforts "to bring isotope hydrology into the mainstream of national and international water resource related programmes". ANSTO was promoting the use of isotopic techniques to investigate residence time and recharge of groundwater, as well as catchment runoff and surface-groundwater interactions. Also, ANSTO was at the forefront of international efforts to evaluate water isotopes in global climate model and surface schemes and was an active participant in the CRPs described in paragraphs 12 and 13 of the Annex. The results, which were of obvious relevance to a country as dry as Australia, should also be of assistance to other Member States.

62. Australia was gratified that the document reported on successful partnerships with other international organizations concerned with water resources and encouraged the Agency to continue to maintain and develop partnerships with relevant national and international R&D organizations.

63. His delegation also took note of Annex 3 on the Agency's support for PATTEC, a campaign that had the potential to contribute to the creation of tsetse free zones. He encouraged the Agency to provide specific details on the tangible outcomes achieved.

64. Mr. KUCHINOV (Russian Federation) said that cooperation on the peaceful uses of nuclear energy and the exchange of nuclear technologies should remain priority activities for the Agency. As had been emphasized in the final statement of the International Ministerial Conference held in Paris in March 2005 on *Nuclear Power for the 21st Century*, nuclear technologies, including innovative technologies, had a valuable contribution to make to resolving such problems as protection of the environment and the production of potable water and new sustainable energy sources, including hydrogen.

65. He took note of the significant progress made under INPRO, which included establishing a methodology for assessing innovative nuclear power systems and fuel cycles. In December 2004, IAEA-TECDOC-1434, which contained changes to the methodology for the assessment of innovative nuclear reactors and fuel cycles, had been published. In addition to the development and assessment of the updated methodology, the project was engaged in the development of individual components enabling the foundations to be laid for the infrastructure of future innovative nuclear energy systems. He noted with satisfaction that the project had initiated the assessment of innovative nuclear power systems at the international and national levels.

66. The time had come to consider application of the INPRO methodology on a wider scale. The forthcoming Steering Committee meeting could discuss the possibility of organizing projects with respect to collaborative R&D for the future application of innovative systems of interest. INPRO was open to all countries interested in the development of nuclear energy for the benefit of civilization. Its membership currently stood at 23 and included countries which were also members of GIF. It was important to seek more actively points of complementarity between GIF and INPRO as everybody stood to gain from closer coordination between them.

67. Ms. FEROUKHI (Algeria) expressed satisfaction with the Agency's efforts to promote isotope techniques in developing countries in order to improve water resource management. She welcomed the projects and seminars organized at the national and regional level, including in Africa, for the implementation of CRPs and urged the Agency to make particular efforts in the 2007-2008 programming cycle to step up its assistance in that area through training, technical assistance and the provision of equipment.

68. Her delegation was interested in the plan for producing potable water economically using small and medium-sized nuclear reactors. As a country facing the challenge of scarce water resources, Algeria supported the Agency's efforts with regard to seawater desalination, in particular optimizing the coupling of nuclear reactors and conventional systems. She took note of the activities of INDAG, and asked for information on the follow-up to the recommendations of the External Evaluation Panel.

Also, she noted with interest the activities planned by the Agency for 2006–2007 with regard to small and medium-sized reactors, including the CRP on identification of relevant competitive technological options.

69. She commended the Agency's support for PATTEC and urged the Agency to consider application of the SIT for the control of locusts which, as the recent famine in Niger had shown, caused significant socio-economic damage. The Agency and the FAO should work together to find new ways of helping African countries to combat that scourge more effectively.

70. Her delegation supported INPRO and was interested in participating. She commended the progress under that project, in particular the validation of the INPRO methodology and the publication at the end of 2006 of the first INPRO user manual.

71. Mr. WRIGHT (South Africa) said that as a result of widespread drought and severe shortages of clean water on the Africa continent, South African placed a premium on water resource management. Consequently, the application of isotope techniques for environmental and water resource management was an important component of his country's research programmes. South African experts had been involved on the national and regional level, as well as in the Agency's work, to further the use of isotope hydrology. The Agency should continue to assist Member States in the development of human resources in that field. In that context, he noted with appreciation that two Agency regional training courses had been held in Africa in 2004.

72. With respect to the plan for producing potable water economically using small and medium-sized nuclear reactors, his delegation commended INDAG's efforts to exchange information and coordinate nuclear desalination projects. Nuclear desalination technology was expected to move to the top of the agenda of many developing countries, and that might result in an increased interest in small and medium-sized reactors. South Africa's pebble bed modular reactor (PBMR) was a design tailored to the requirements of African countries. He pointed out that, contrary to what was stated in paragraph C.18 of Annex 2, preparatory work had not started at the PBMR site. Commencement of any work prior to receiving the required approvals would be a violation of South African nuclear and environmental legislation. Only investigative work required for the environmental impact assessment and nuclear licensing applications had been undertaken. He requested that the report be amended accordingly.

73. South Africa was proud to report that, in cooperation with the African Development Bank and thanks to renewed efforts by African States, good results had been achieved in PATTEC. His delegation commended Regular Budget support from the Agency and welcomed implementation of the PATTEC plan of action. South African experts would continue to participate in workshops and training courses in application of the SIT with the wider aim of combating and eradicating poverty and underdevelopment in the framework of such world-wide development targets as the United Nations Millennium Development Goals and NEPAD.

74. Mr. BEKOE (Ghana) attached great importance to the Agency's nuclear science and technology activities and appreciated the progress made in utilizing isotope and nuclear techniques for groundwater development and management. The supply of clean water for domestic and agricultural purposes was a great problem faced by many African countries and Ghana had been delighted to learn that the Agency had entered into partnership with the UNDP, GEF and UNESCO to improve the groundwater management of the Nubian aquifer system.

75. He acknowledged with gratitude the technical cooperation assistance provided by the Agency through an on-going project in the use of isotope techniques for assessment of groundwater resources in the Densu River Basin, which would provide a reliable scientific and technical basis for groundwater resource exploration and the development and management of that river basin. To

address the perennial water shortage in northern regions of Ghana, his Government planned to establish an isotope hydrology laboratory to complement existing water resource strategies in the country. Agency assistance in securing funding for that project would be extremely useful.

76. The production of fresh water using nuclear seawater desalination plants was a laudable initiative. His delegation urged the Secretariat and Member States to continue efforts to develop a cheap and reliable technology for seawater desalination using small and medium-sized nuclear reactors.

77. His delegation appreciated the efforts being made by the Agency and other partners to create tsetse-free zones in Africa. Ghana was in the process of securing a loan from the African Development Bank for mass rearing and field activities. He urged the Agency to continue forging synergies with regional and international organizations in order to achieve significant success in the eradication of tsetse flies.

78. In conclusion, he noted with satisfaction the Agency's human capacity building programmes, which would undoubtedly ensure the sustainability of nuclear technology related projects.

79. Ms. CORTI (Argentina) said her country had a particular interest in the application of nuclear technology for producing potable water as Argentina had been working for several years on its own design for a small reactor (CAREM) that could be used for seawater desalination. Argentina was also interested in innovative nuclear technologies; as a member of INPRO it had provided cost-free experts and made an extrabudgetary contribution for 2005–2006. The Agency's work in those areas helped to keep open the nuclear option for the future. That option would depend on international collaborative research efforts, which her country fully supported.

80. Ms. RICHTER RIBEIRO MOURA (Brazil) also underlined the importance her country attached to the issues addressed in document GOV/2005/58.

81. Of particular importance to Brazil was the use of nuclear techniques in the management of the Guarany aquifer, one of the most important projects being developed in conjunction with the Agency and the World Bank, involving four countries of the region: Brazil, Argentina, Uruguay and Paraguay. It was an extraordinary example of using regional integration to manage a critical resource. The development of techniques in that field would help address the problems arising from the shortage of water in certain regions of Brazil.

82. Brazil was participating actively in INPRO. It took note with satisfaction of the conclusion of Phase 1 of the project and the establishment of the reference terms for Phase 2, which would allow work to continue in three directions: R&D, institutional infrastructure and methodology-oriented activities. In that regard, it was important for the Agency to increase cooperation with other international efforts targeted at innovative technology development, such as GIF.

83. Mr. SOKOLOV (Deputy Director General for Nuclear Energy) said that the feedback provided by members of the Board was invaluable and all comments would be taken into account by the Secretariat.

84. In response to the African Group's emphasis on the importance of expanding energy supply to meet growing global energy needs, he said he anticipated not only a growing interest in exploring and possibly initiating nuclear power programmes in Member States that did not yet have them but also a commensurate response on the part of the Agency to requests for assistance associated with the introduction of nuclear power. The matter of infrastructure development should be considered by the Secretariat in greater detail; given the diversity of needs and interests, it was impossible to provide a single recipe for all countries wishing to graduate to becoming users of nuclear power. That aspect

was being given consideration in the preparation of the programme and budget proposals for 2008-2009, and it was also hoped that it could be introduced into current activities.

85. He appreciated the support that had been expressed for INPRO and its coordination with GIF, particularly by those Member States which were members of both projects. A number of specific steps had been taken with GIF, one of which had been to convene a meeting between GIF and INPRO experts to develop joint understanding and complementarity and thereby avoid duplication.

86. Mr. BURKART (Deputy Director General for Nuclear Sciences and Applications) expressed appreciation for the constructive comments made during the discussions, in particular, the comments made on behalf of the Group of 77 and China regarding the adequate resourcing of activities relating to water resources and anti-malarial research. The long-term trend was upwards, with staffing levels in those areas expected to increase in the 2006–2007 cycle. With respect to water, he noted that links to food and agriculture activities were being strengthened. Since most of the water used by humankind was used in agriculture, efficient use in that area was the key to reducing the pressure on a finite resource. Also he noted that several delegations had referred to the need for increased cooperation with other international organizations. The Agency had become a key player with regard to water resources, and added value to many regional and national programmes.

87. While noting the comments made regarding the use of the SIT for the control of locusts, he recalled that, at a briefing given in July 2005, attention had been drawn to the limitations of the SIT, which could be used effectively only with settled insect populations. He said that the Agency had consulted with experts in FAO, and would remain open to any options should it be shown that nuclear techniques could play a viable role in locust suppression.

88. The CHAIRMAN, summing up the discussion, said that several members had commended the Agency for its efforts in implementing nuclear applications in different domains contributing to achieving sustainable development and meeting needs, especially in developing countries. They had encouraged the Secretariat to strengthen the approaches and efforts in many of those areas, such as projects related to potable water, improvement of nutrition standards and servicing immediate human needs.

89. Several members had noted with appreciation that the Agency had initiated partnerships with other relevant organizations to set up a global strategic vision for groundwater use and protection. The Agency had been requested to continue to build and develop human resources and provide technical assistance to Member States in the field of isotope hydrology.

90. Some members had expressed concern that resources for water management-related projects had decreased.

91. Several members had underscored the importance of the Agency's efforts to strengthen regional and international cooperation in addressing water shortages through nuclear desalination. They had commended the Agency's outreach programme, and further efforts in that regard had been encouraged. The Agency had been further requested to make use of lessons learned with a view to improving its activities in that regard.

92. Several members had noted with appreciation that the Agency activities, coordination and cooperation with Member States had resulted in the development of more than 50 concepts and designs of innovative small and medium-sized reactors.

93. The Agency's support of the PATTEC plan of action had been commended and the Agency had been called upon to continue its efforts to build the technical, strategic and financial partnerships for supporting the PATTEC project. Appreciation had been expressed for the progress made so far in the

expansion of the SIT initiative to malaria, and the Agency had been requested to explore the feasibility of further expansion to address other areas of concern, such as locust infestation.

94. With regard to INPRO, the need for appropriate linkages to national and international projects in that area had been emphasized, and support had been expressed for the cooperation between INPRO and GIF.

95. Several members had encouraged the increased participation of national and regional resource centres in the nuclear applications activities of the Agency and stronger programmes for training and education.

96. The Agency had been encouraged to continue to play a proactive role in the global forums relevant to nuclear technology and to raise the public profile of the Agency's activities and promote the dissemination of information on the role of nuclear technology. It had been emphasized that the Agency should work diligently to build and develop partnerships with other United Nations and international and bilateral organizations in order to increase the effectiveness of the role of nuclear techniques in sustainable development.

97. Several members had supported strengthening the CRP mechanism and its greater synergy with the technical cooperation programme, with a view to increasing transfer of technology to developing countries.

98. He took it that the Board wished to take note of the report contained in document GOV/2005/58 and authorize the Director General to submit the report to the General Conference at its forty-ninth regular session.

99. It was so decided.

6. Nuclear verification

(a) Strengthening safeguards implementation in States with small quantities protocols

Ms. Hall (Canada), Chairperson, resumed the Chair.

100. The CHAIRPERSON said that, at its June 2005 session, the Board had recognized that the SQP in its present form constituted a weakness in the safeguards system and that it needed to take a decision on means to resolve that important issue in a timely manner. Members would recall that she had requested the Ambassador of Poland, Mr. Bylica, to conduct open-ended informal consultations with a view to making a recommendation on a decision to the Board at the current session. Before opening the discussion, she asked the Ambassador of Poland to present his report on the consultations which he had conducted on the issue.

101. Mr. BYLICA (Poland) said that since the 2003 Safeguards Implementation Report the Secretariat had been drawing the attention of the Board of Governors to the fact that SQPs placed undue constraints on the Agency's verification authority because, in their current form, SQPs did not provide the Agency with the authority to receive facility design information at an early date, to determine the status of any nuclear facilities or to carry out verification activities in the field. Consequently, safeguards conclusions for many States for which SQPs had been approved (SQP States) were drawn primarily on the basis of the evaluation of information from sources other than the

State itself without the possibility of on-site verification as appropriate. Indeed, the Agency did not have the right to verify, if needed, whether a State qualified, or continued to qualify, for an SQP.

102. The Director General had raised that issue in the Board of Governors in February 2005 and submitted for the Board's consideration a report dated 13 May 2005, contained in document GOV/2005/33. In paragraphs 6 and 7 of the report, the Director General had proposed two possible solutions for addressing the weaknesses posed by SQPs. In essence the Board could either: decide that it would not authorize the conclusion of any new SQPs and call on each State for which an SQP had previously been approved by the Board to rescind such a protocol (option 1 or the rescission option); or approve a modification of the standardized text of the SQP that would correct the limitations mentioned in the report. The effect of the modifications would be to: (i) make an SQP unavailable to a State with a planned or existing facility; (ii) require States to provide initial reports on nuclear material and early design information; and (iii) provide for inspections (option 2 or the modification option).

103. While noting that the rescission option had certain advantages over the modification option, the report stated that both alternatives would provide the means necessary for the Agency to address the most important limitations placed on safeguards implementation by SQPs. The Director General had requested the Board to provide guidance to the Secretariat on how to proceed in addressing the issues identified in the May report.

104. In June 2005 the Board had discussed the issue once again and recognized that the SQP in its present form constituted a weakness in the safeguards system and that it must take a decision on means to resolve that important issue in a timely manner. The Board's conclusion also called on the Chair to continue open-ended consultations with a view to making a recommendation on a decision to the Board at its September meeting.

105. Initial opinions of members of the Board had been registered during the Board's deliberations. While a few States had voiced their preference for one or the other option, most had indicated that they were open to joining a consensus on either.

106. It became apparent, however that, to address concerns raised by some Member States, more information would be needed on the implications of both options, including the potential financial burden for both the Agency and SQP States.

107. That information had been provided at the seminar organized by the Secretariat on 1 September 2005, attended by representatives of more than 50 States.

108. The financial implications for the Secretariat had been described as negligible. The work of the Safeguards Department, it had been claimed, would be made easier by reliance on information provided by the State itself. The additional burden in terms of in-field verification had been estimated to constitute, in the case of option 2, an additional 300 calendar days over the next 3 years, or roughly 100 days a year, compared to 14 000 calendar days in the field in 2004 alone. It had been repeatedly stressed that that constituted a high-end estimate, as routine inspections were not envisaged under option 2.

109. A comparison of States' obligations under both options had clearly demonstrated that option 2 would add only an extremely limited burden for States with no nuclear material whatsoever, which — according to the Secretariat — constituted the majority of SQP States.

110. It had also been stressed a number of times by the Secretariat that further information, including cost estimates, could be forthcoming once the actual process of modifying the SQPs began, as the very nature of the problem consisted in the lack of information on SQP States.

111. The issue of SSACs had been raised at an early stage of the consultations. An SSAC was required of all States with comprehensive safeguards agreements in force. It was important to stress that SQPs in their present form did not suspend that requirement.

112. However, it was safe to assume that, in many SQP States, the SSACs were inoperational or even non-existent. That was to a certain extent understandable, because for years there had been very little material needed or reporting requirement justifying their existence. It had been repeatedly stressed during his consultations with Member States that assistance should be provided to many SQP States in order for them to meet even the modest reporting requirement envisaged under option 2. He had been assured by the Secretariat that that assistance was indeed available, even to non-Member States. That issue had been a topic of a separate presentation during the seminar on 1 September.

113. Since the seminar, it had become increasingly obvious that a consensus was emerging in favour of the second option, namely the modification option. Various opinions had been voiced, however, as to the urgency of the issue. Some Member States had noted that the Secretariat was not currently aware of any credible information to suggest that there were activities in an SQP State that would be of proliferation concern. Many Member States had, however, pointed to the relatively long time that would in all probability be needed for implementing a Board decision on either option and to the advisability of taking such a decision strictly on the grounds of the Secretariat's identification of a structural weakness in the system, rather than waiting for a country-specific problem to appear.

114. As many SQP States did not have diplomatic missions in Vienna and were not members of the Agency, it should be noted that all 90 States for which SQPs had been approved by the Board, regardless of whether they were in force or not, had been repeatedly briefed about the ongoing discussions and provided with the same information as Board members. Information had been provided and views sought by both the Secretariat and the Chair, including at the aforementioned seminar.

115. Some members of the Agency had indicated that that practice must also be continued at further stages of the decision-making and implementation process. At the same time, other Member States had underscored that that did not release Board members from the responsibility of acting on questions relating to safeguards on which the Secretariat requested timely guidance.

116. Based on the deliberations and consultations described above, he recommended that the Board adopt the modification option. For that purpose, the Board should, at a minimum: firstly, decide that SQPs should remain part of the Agency's safeguards system, subject to the modifications outlined in paragraph 7 of the Director General's report contained in document GOV/2005/33; secondly, decide that in future it would approve only texts for SQPs based on the revised standardized text as set out in Annex 3 of that report and subject to the modified criteria spelled out in paragraph 7 of the report; thirdly, authorize the Director General to conclude exchanges of letters with all SQP States giving effect to the revised standardized text and the modified criteria; and fourthly, call on the States concerned to conclude such exchanges of letters as soon as possible.

117. Such a decision would address the most serious limitations of the current SQPs, while imposing the least possible additional burden on both the Secretariat and the States concerned.

118. There would be no automaticity involved in such a decision in the sense that no State which currently had an SQP in force would 'lose' its SQP by virtue of the Board's decision alone. Instead, such a decision would set a modified higher standard for any new SQPs and authorize the Director General to begin a process of bringing the entire system into conformity with the new standard. That implementation process would probably take years, owing, among other factors, to internal legal procedures in the States concerned.

119. Some States had referred to the advisability of taking stock of the progress achieved in such a process, for example once a year, preferably at the June meetings of the Board. Some had also noted the benefit of SQP States sharing the lessons learned in the process.

120. The SQPs, introduced in their current form more than three decades ago, no longer fully met the requirements of a modern, effective, efficient and impartial safeguards system. At issue was the very credibility of the Agency's safeguards system and the Agency as a whole. The Agency was mandated to provide Member States with the assurances they needed in the current security environment. Those assurances, as the Director General had stressed on many occasions, could only be as good as the tools with which Member States equipped the Agency. In their present form, SQPs were an obsolete tool in need of modernization.

121. The day before, the Director General had urged the Board to come to a decision on that issue as early as possible and hopefully during the current session of the Board. He could only subscribe to the Director General's call.

122. Ms. HUSSAIN (Malaysia)* speaking on behalf of NAM, took note of the Director General's report contained in document GOV/2005/33 and of the fact that the Board had recognized that the SQP in its present form constituted a weakness in the safeguards system and that a decision on ways of resolving that important issue must be taken in a timely manner. She expressed appreciation to Ambassador Bylica for conducting open-ended consultations with Member States and for his report. She stressed the importance of taking into account the comments made and concerns raised by NAM Member States at the consultations held on 14 September 2005. NAM thanked the Secretariat for organizing the seminar on 1 September 2005 aimed at providing additional information on the implications of both options, including any possible financial burden on both the Agency and the Member States with SQPs in force.

123. Noting that the Agency had estimated that 300 calendar days in the field were required over the next three years in the 76 States with SQPs in force, NAM agreed that a careful study should be undertaken of the budgetary requirements, and a more precise budgetary figure should be provided to Member States, given the possible negative implications for many developing States about to commence de-shielding of the safeguards component of their assessed contribution to the Regular Budget. There should also be minimum impact on developing SQP States in implementing the proposed transformation nationally.

124. Whichever option was selected, NAM requested that the Agency assist SQP States in achieving a smooth transition by organizing comprehensive training programmes and providing technical assistance for capacity building.

125. Mr. FUENTES (Mexico), speaking on behalf of GRULAC, shared the view that the SQPs constituted a weakness in the safeguards system and that it was necessary to seek solutions to resolve the issue in a timely manner. GRULAC noted that at the September seminar the Secretariat had submitted a rough estimate indicating that approval of the modification option would result in an additional 300 calendar days of in-field verification over the next three years and therefore would not have any impact on the overall safeguards budget.

126. GRULAC could support a decision taken in that regard on the understanding that its implementation would not generate additional financial burdens for the Member States now or in the future. The Group, concerned that the safeguards budget in recent years had shown a tendency to grow, reiterated the need to maintain a balance among the Agency's statutory activities.

127. It was important for the Secretariat to assist SQP States in implementing the SSACs in order to ensure proper compliance with the new obligations which would stem from the modification of the SQPs.

128. Mr. WRIGHT (United Kingdom), taking the floor on behalf of the European Union, said the acceding countries Bulgaria and Romania, the candidate countries Croatia and Turkey, as well as the countries of the Stabilisation and Association Process and potential candidates Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, and Serbia and Montenegro and the EFTA countries Iceland, Liechtenstein and Norway, members of the European Economic Area, as well as Moldova and Ukraine, associated themselves with his statement.

129. The European Union expressed a preference for the second option set out in paragraph 7 of document GOV/2005/33, namely modification of the SQP. That option took better account of the specific situation of individual Member States. In particular, it would minimize the effect of the proposed changes for the great majority of the SQP States that had no nuclear material whatsoever, while at the same time building confidence in the Agency's safeguards conclusions for all.

130. The Board was now discussing the SQP for the third time. The Director General had provided clear proposals to address what he had identified as a weakness in the safeguards system. The day before, he had urged the Board to come to a decision on the issue as early as possible and hopefully during its current session. The European Union believed that it was important for the credibility of the safeguards system that the Agency address the issue now, take a decision at the current Board meeting and focus on the ensuing interactions between the SQP States and the Secretariat with a view to facilitating the internal process in each country.

131. Mr. AMANO (Japan) said that Japan fully shared the view that the SQP issue needed to be resolved as early as possible so that safeguards implementation activities could be further enhanced. His delegation continued to prefer the option of modifying the protocol rather than abolishing it because that would have less impact on SQP States while enhancing the effectiveness of safeguards. At the same time, it was important for the Secretariat to continue its efforts to meet the concerns of SQP Member States, especially the possibility of an extra financial burden. Furthermore, the modification must not result in an additional budget increase for the Agency.

132. It would be sensible to consult with SAGSI on the issue when the Secretariat carried out the detailed technical discussion on the modified SQP model text. Japan supported further efforts by the Secretariat to make agreements with the SQP States as soon as possible.

133. Mr. MOREJÓN-ALMEIDA (Ecuador) said that his delegation endorsed the Secretariat's analysis and the conclusion of the Chairperson at the June meeting of the Board of Governors that SQPs constituted a weakness in the safeguards system. Thus, it fully agreed on the need to find a solution as soon as possible.

134. His delegation acknowledged the efforts of the Ambassador of Poland during the bilateral consultation process and was grateful to the Secretariat for organizing the seminar on 1 September 2005. It had taken note of the information provided by the Secretariat to the effect that, based on a rough estimate, the safeguards budget would not be affected. However, he stressed the need to have precise estimates in the future on the Regular Budget implications for each State.

135. Finally, the Agency must continue to hold seminars on SSACs and to strengthen technical advisory assistance to SQP States on all aspects of the obligations arising from the application of safeguards.

136. Mr. BELEVAN-McBRIDE (Peru) said that, fortunately, neither the international community nor the Agency had had to confront a delicate situation resulting from an SQP. Nevertheless, his

delegation agreed that SQPs were a weakness in the safeguards system. The time had come for the Board of Governors to take specific measures to deal with potential problems.

137. Peru supported the second option, namely the modification option, set out in document GOV/2005/33, on the clear understanding that the Agency would be able to absorb any increase in expenditure that might arise from the application of additional verification measures without requiring further resources for Major Programme 4.

138. His delegation agreed with GRULAC and NAM on the need for the Secretariat to assist States that so required in negotiating and implementing the instruments which would replace the SQPs.

139. Ms. KONG (Singapore) said that, consistent with its position against nuclear proliferation and its support for a strengthened safeguards system, her delegation supported the modification option. That would provide the Secretariat with the necessary tools to address the limitations in the present SQP regime.

140. It was equally important, however, to ensure that States could properly implement their obligations under the modified SQP. The Secretariat had a key role to play in extending the necessary technical assistance, including capacity-building, to SQP States and also in ensuring better understanding of the implementation aspects of the modified SQP.

The meeting rose at 1 p.m.