IAEA Board of Governors

Record of the 1302nd Meeting GOV/OR.1302

Nuclear Verification: The conclusion of safeguards agreements and of additional protocols

The Safeguards Implementation Report for 2010



Board of Governors

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Record of the 1302nd Meeting

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¹ GOV/2011/36.

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.)

Mr PARVEZ		Chairman (Pakistan)	
Ms ECHAVARRIA		Argentina	
Mr POTTS		Australia	
Mr HAJIZADA		Azerbaijan	
Ms DE CARTIER		Belgium	
Mr VALLIM GUERREIRO		Brazil	
Mr GABCHE		Cameroon	
Mr BARRETT		Canada	
Mr BERGUÑO HURTADO		Chile	
Mr HUANG Wei)	CI.	
Mr LI Sen		China	
Ms DRÁBOVÁ		Czech Republic	
Mr BERNHARD		Denmark	
Mr ROSENBERG GUERRERO		Ecuador	
Mr MONDOLONI		France	
Mr LÜDEKING)		
Mr ZETTEL	}	Germany	
Mr ASHRAF		India	
Mr FARRUGGIA		Italy	
Mr NAKANE		Japan	
Mr QUEISI		Jordan	
Ms KIRAGU		Kenya	
Mr CHO Hyun		•	
Mr MOON Byung-Ryong	}	Korea, Republic of	
Mr HAMER		Netherlands	
Mr ILLO		Niger	
Mr ANWAR		Pakistan	
Ms CÁCERES ESCALANTE		Peru	
Mr COELHO		Portugal	
Mr BERDENNIKOV	}	Description Fortenedical	
Mr KARASEV	5	Russian Federation	
Ms TAN		Singapore	
Mr MINTY		South Africa	
Mr HACHANI		Tunisia	
Ms MYKOLAICHUK		Ukraine	
Mr ALKAABI		United Arab Emirates	
Ms LAVERY		United Kingdom of Great Britain and	
		Northern Ireland	
Mr SCHELAND		United States of America	
Mr YÁNEZ PILGRIM		Venezuela, Bolivarian Republic of	
Mr AMANO		Director General	
Mr CSERVENY		Secretary of the Board	

Representatives of the following Member States also attended the meeting:

Afghanistan, Albania, Algeria, Armenia, Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Colombia, Costa Rica, Croatia, Cuba, Cyprus, Egypt, Finland, Greece, Holy See, Hungary, Indonesia, Islamic Republic of Iran, Iraq, Ireland, Israel, Kuwait, Lebanon, Lithuania, Malaysia, Mexico, Morocco, Namibia, New Zealand, Norway, Philippines, Poland, Romania, Saudi Arabia, Slovakia, Slovenia, Spain, Sudan, Sweden, Switzerland, Syrian Arab Republic, Thailand, Turkey, Uruguay, Vietnam, Yemen.

Abbreviations used in this record:

ABACC Brazilian-Argentine Agency for Accounting and Control

of Nuclear Materials

ASEAN Association of Southeast Asian Nations

CTBTO Comprehensive Nuclear-Test-Ban Treaty Organization

EFTA European Free Trade Association

Euratom European Atomic Energy Community

G20 Group of Twenty

G8 Group of Eight

NAM Non-Aligned Movement

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

RSAC regional system of accounting for and control of nuclear

material

SAL Safeguards Analytical Laboratory

SIR Safeguards Implementation Report

SQP small quantities protocol

SSAC State system of accounting for and control of nuclear

material

WMO World Meteorological Organization

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

6. Issues related to the Fukushima Daiichi accident (continued) (GOV/INF/2011/8)

- 1. Ms MYKOLAICHUK (Ukraine) offered her country's condolences to the people and Government of Japan for the tragic loss of human life resulting from the 11 March earthquake and tsunami, and acknowledged the enormous efforts made by the Japanese staff to control the situation at the plant. It was a sad coincidence that the Fukushima accident had occurred around the time the world community was commemorating the twenty-fifth anniversary of the Chernobyl disaster. The accident in Japan had shifted the focus of the gathering held in Kiev in that connection from a summary of lessons learned and measures taken to mitigate the consequences of the accident in Chernobyl to the wider issue of nuclear safety and emergency response challenges in the light of situation at the Fukushima Daiichi plant.
- 2. Participants in the Kiev summit on the safe and innovative use of nuclear energy held in April 2011 had unanimously recognized the need to ensure an adequate level of nuclear safety as a key priority through all stages of nuclear energy production. The final declaration had reiterated that adherence to the highest standards of nuclear safety was an indispensable prerequisite for the use of nuclear energy.
- 3. The Chernobyl accident 25 years previously had triggered both a revision of international nuclear safety standards and the creation of various international instruments to ensure the highest level of nuclear, waste and radiation safety worldwide, as well as an emergency preparedness and response system. The Convention on Early Notification of a Nuclear Accident had been given a crucial role, and the Convention on Nuclear Safety and Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management had become important peer review mechanisms. In the light of the accident at the Fukushima Daiichi nuclear power plant, there was a need to review and update further both national and international regulations, arrangements and instruments in order to strengthen the nuclear safety regime and emergency response mechanisms.
- 4. Ukraine had given serious consideration to that issue at the meeting of the National Security and Defence Council in April 2011 and relevant decisions had been adopted and promulgated by Presidential Decree. Ukraine was conducting a targeted safety reassessment at all its nuclear power units in operation, was introducing measures to reinforce the independence of the national nuclear regulatory authority and was undertaking a comprehensive review of the national nuclear regulatory framework. It had also joined the European initiative on the performance of 'stress tests' and stood ready to participate in the relevant peer review process.
- 5. Her country supported the initiative of the Director General to convene a Ministerial Conference on Nuclear Safety in June and looked forward to receiving an initial assessment of the accident from the Agency international fact-finding expert mission to Japan. The Conference should identify the lessons to be learned and should launch a process of re-evaluation and enhancement of nuclear safety worldwide by further strengthening international response to nuclear accidents and emergencies. She commended Japan's announced intention to organize an international conference in 2012 on nuclear safety in cooperation with the Agency.
- 6. Mr ANWAR (Pakistan) commended the efforts made by the Director General and his staff in response to the accident at the Fukushima Daiichi nuclear power plant. The initiative by the Director General to convene a Ministerial Conference on Nuclear Safety was a timely move which

would provide essential political backing to the process of making an initial assessment. It would afford valuable insight into the circumstances of the accident and enable members to draw useful lessons to strengthen further the nuclear safety framework and emergency preparedness and response mechanisms. It would also help review the Agency's role in important areas.

- 7. As a country that operated nuclear power plants and planned to increase the share of nuclear energy in its energy mix, Pakistan had been following the developments in Japan with special interest. It attached the highest priority to nuclear safety, which was imperative for the sustainability and expansion of nuclear power. His country had already started revisiting the safety aspects of the nuclear power plants at Karachi and Chashma, with a special focus on site studies, safety systems, operator training, emergency power systems, off-site emergency preparedness plans and post-accident management. As fresh details emerged, additional measures would be taken.
- 8. Pakistan recognized that the primary responsibility for nuclear safety rested with States. However, nuclear accidents were a cross-border issue, as they could have regional or even global consequences. The highest level of cooperation was therefore required.
- 9. Mr ALKAABI (United Arab Emirates) extended his country's deep condolences to Japan for the loss of life resulting from the devastating earthquake and tsunami. The accident at the Fukushima Daiichi nuclear power plant had illustrated the importance of the Agency's role in nuclear safety. His country welcomed the efforts of the Director General and the timely action taken by the Agency in response to the accident. The lessons learned from Fukushima would contribute positively to strengthening the global nuclear safety regime. Certain areas should be given priority in that process.
- 10. As a first step, a comprehensive, transparent report should be prepared on the accident. He welcomed the fact that an Agency fact-finding mission had been sent to Japan to assess safety issues related to the accident, and he commended Japan for its support for the mission and its commitment to provide a comprehensive report on the accident. Such a report should contain a factual analysis of the events and follow modern practices in accident investigation.
- 11. Emphasis should also be placed in future on strengthening measures to prevent accidents. In particular, the Convention on Nuclear Safety, as the only binding instrument in the area of nuclear safety, should be strengthened. The Agency's Safety Fundamentals and Safety Requirements related to safety culture, regulatory independence, assessment and verification of safety could be used as a basis for possible amendments to the Convention. Adherence to and compliance with the Convention should be an international norm for countries with nuclear facilities. All countries with nuclear facilities that had not done so should adhere to the Convention at an early date.
- 12. With regard to strengthening measures to prevent future accidents, the Agency's safety standards and their application might also need be developed further. In particular, additional efforts and resources might be required to resolve controversial safety issues in the area of severe accidents, instrumentation and control and siting, inter alia. His country hoped that the Agency would be able to issue clear standards in a timely manner on those topics.
- 13. Emphasis should also be placed on strengthening the international emergency response support framework, which would entail strengthening relevant instruments in order to strengthen the role of the Agency in emergency response situations. Public communication was another essential element in emergency response and should be incorporated into the future work of the Agency.
- 14. Another proposed area of emphasis would be the improvement of safety criteria requirements related to siting, including with respect to seismicity. The Agency should develop specific mitigation guidance on events of low probability but with catastrophic consequences. That might require a revision of the safety standards for siting and design to include unexpected internal and external

catastrophic events. It might also be useful to develop specific mitigation guidance on organizational culture, human performance and safety management during catastrophic events leading to reactor core meltdown and spent fuel pool damage.

- 15. The Fukushima accident would undoubtedly have an impact on global nuclear safety measures. His country held to the view that nuclear energy would continue to play a major role in many countries, including the United Arab Emirates, in meeting current and future energy requirements. Nuclear safety was fundamental to the successful use of nuclear energy. Joint efforts within the framework of the Agency to strengthen safety measures further were vital for the sustainability of the global nuclear industry.
- 16. Finally, he commended the Director General for his timely initiative to organise a Ministerial Conference on Nuclear Safety to start the review process for lessons learned from Fukushima.
- 17. Mr MINTY (South Africa) expressed his country's deepest condolences to the Government and people of Japan. In witness of South Africa's solidarity, it had sent a rescue and recovery team to Japan to provide assistance. The team had witnessed first-hand the magnitude of the devastation, loss of life, pain and sorrow caused by the earthquake and tsunami. South Africa stood ready to continue its assistance in whatever manner possible.
- 18. He commended the Director General and the Secretariat on the report contained in document GOV/INF/2011/8 and noted the preliminary findings of and lessons drawn by the recent Agency international fact-finding expert mission, welcoming the Agency's efforts to keep Member States informed of the unfolding situation at the Fukushima plant.
- 19. The recent developments in Japan had prompted widespread concern about the safety of nuclear power plants worldwide and had even created panic and fear about the use of nuclear energy for power generation in some quarters. Clearly, there were many lessons to be learned from the Fukushima accident. Public confidence in the safety of peaceful uses of nuclear energy needed to be restored.
- 20. The accident had shown the importance of sharing information in an accurate, timely and transparent manner in order to prevent panic, so that decisions were taken on a rational basis. The Agency needed to be empowered to play its role under relevant conventions. It should draw on the relevant resources available in various multilateral forums to assist it in dealing with such accidents. In that regard, he commended the role of the Preparatory Commission for the CTBTO in applying its unique monitoring capabilities to provide accurate and timely information on the Fukushima nuclear accident. He also welcomed the Agency's cooperation with the WMO and FAO. Such concerted efforts could be enhanced to improve the Agency's capability to assess the situation and disseminate accurate information to the international community. There was also room for further coordination with United Nations system-wide plans for disaster management to strengthen the Agency's preparedness and response mechanism.
- 21. The nuclear accident in Japan, although brought about by unique environmental circumstances, demonstrated that there was no room for complacency about nuclear safety. It had also shown that current efforts to ensure the safe operation of nuclear power plants were not sufficient. More must be done to re-establish confidence in the safe operation of nuclear power plants.
- 22. The Agency's safety inspection mandate had been modified by the Board in the early 1970s, when the emphasis had been placed on the Agency playing an advisory role through safety missions, replacing the statutory concept of inspections. Since that time, there had been significant developments in the area of nuclear safety and South Africa attached great importance to the relevant legal instruments and the Agency's safety standards and guidelines. However, the current nuclear safety framework should not prevent an exploration of the expanded role of the Agency envisaged in

the Statute, as far as its role in the area of health and safety measures was concerned. The Board might wish to revisit the decision to abrogate the Agency's statutory right to conduct health and safety inspections in order to empower the Agency to play a leading role in the area of nuclear safety, emergency preparedness and response.

- 23. South Africa welcomed the initiative of the Director General to convene a Ministerial Conference on Nuclear Safety, and other initiatives such as the recent Kiev summit and relevant G8 and G20 meetings. It looked forward to the Conference, which it hoped would set new benchmarks for nuclear safety, thus ensuring that the Agency and Member States were better prepared should other accidents occur in the future. It was important to move away from the 'business as usual' approach and consider new measures to expand the role of the Agency with respect to nuclear safety. In view of the great danger nuclear accidents posed to society at large, adequate safety measures and supervision should be put in place to prevent future accidents. The issue would remain an important item on the Board's agenda.
- 24. Mr YÁNEZ PILGRIM (Bolivarian Republic of Venezuela) extended his country's condolences to the Government and people of Japan in connection with the terrible natural disasters of March 2011 which had left behind a wake of destruction and loss of human lives, and had triggered a nuclear accident of untold consequences. The international community had shown its solidarity after the tragedy. Venezuela had sent 19 tonnes of humanitarian aid to the regions most affected by the earthquake and tsunami and his Government stood ready to continue cooperating with Japan.
- 25. The accident had alerted the international community to the severe consequences of nuclear accidents. The Agency had a central role to play in evaluating the damage caused by the accident, and in identifying measures that needed to be taken to prevent similar accidents in the future and mitigate their consequences to the extent possible. Attention should focus on prior experience of nuclear accidents. It was important to draw on past and present experience to ensure the safety of the people affected.
- 26. His country supported the Director General's initiative to convene a Ministerial Conference on Nuclear Safety in order to give political backing to the Agency and strengthen cooperation with Member States in the area of nuclear safety enhancement.
- 27. Taking note of the information on the activities of the Agency international fact-finding expert mission conducted from 24 May to 2 June, he looked forward to the mission's final report.
- 28. <u>Ms YPARRAGUIRRE</u> (Philippines)* commended the continuing efforts of the international community to provide assistance to the people and Government of Japan as they dealt with the consequences of the Fukushima nuclear accident. The global community had praised and expressed admiration for the discipline, resilience and determination of the Japanese people in the face of that tragedy.
- 29. Her country welcomed the various initiatives of the Director General in connection with the accident at the Fukushima Daiichi nuclear power plant, in particular his visit to Japan from 17 to 19 March 2011, the coordination with other relevant international organizations, and the convening of the Ministerial Conference on Nuclear Safety in June 2011 which should launch a process to enhance nuclear safety worldwide and consider ways of further strengthening response to nuclear accidents and emergencies. Those initiatives helped emphasize the central role of the Agency in promoting international cooperation on nuclear safety.
- 30. While it appreciated the various activities organized by the Agency to keep Member States informed of developments, including the technical and press briefings and regular updates from the

Incident and Emergency Centre, her country would have appreciated a more integrated analysis of all available data that could help countries plan possible emergency protective measures.

- 31. The operation of the Incident and Emergency Centre following the accident had highlighted a number of important lessons to be learned, particularly with regard to coordination with contact points and other international organizations, the quality and nature of the information that should be provided to Member States, and the timely provision of verified information. The Philippines looked forward to discussions on those issues in the working session on emergency preparedness and response at the forthcoming Ministerial Conference.
- 32. Her country welcomed the organization of expert missions to Japan to validate the available data and provide advice and assistance on various technical issues. Taking note of the preliminary summary presented by the international fact-finding expert mission, her country looked forward to receiving a comprehensive report on that mission for consideration at the Ministerial Conference.
- 33. The Agency's resources had been overstretched in undertaking the above-mentioned activities, which underscored the importance of providing the Agency with the requisite political and financial support to enable it to fulfil its statutory safety mandate.
- 34. Taking note of various other global and regional nuclear safety initiatives, she expressed appreciation for all efforts aimed at promoting international and regional cooperation in that field. In April 2011, the Foreign Ministers of ASEAN and Japan had met in Jakarta following the nuclear accident. That event had demonstrated the solidarity between ASEAN member States and Japan in responding to natural disasters. ASEAN and Japan had underlined the need to strengthen existing disaster management cooperation, inter alia by sharing experience and lessons learned, ensuring prompt communication, facilitating timely support, conducting training and capacity-building programmes, and building on existing regional mechanisms for emergency preparedness and disaster management.
- 35. Mr HEISLER (Austria)* expressed his country's sincere condolences to Japan in connection with the unprecedented natural disaster of 11 March and the nuclear catastrophe in Fukushima. Member States must remain committed to applying the highest standards of nuclear safety, and draw conclusions and learn from the Fukushima nuclear accident. He thanked the Director General for his initiative to convene a Ministerial Conference on Nuclear Safety.
- 36. Several elements were critical to achieving higher nuclear safety standards worldwide. The Convention on Nuclear Safety must be strengthened, including through binding implementation of Agency safety standards and enhancement of the Agency's role in the field of nuclear safety. That goal could be achieved by verifying national nuclear safety regimes, including through on-site inspections of nuclear power installations both on the basis of random selection and in cases of specific concern. The mechanisms under the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the case of Nuclear Accident or Radiological Emergency, and the Agency's role under those mechanisms, also needed to be strengthened. His delegation had submitted a working paper to the Secretariat for consideration at the Ministerial Conference on Nuclear Safety.
- 37. Mr PUJA (Indonesia)* commended the Director General on his leadership of the Agency in dealing with the situation in Fukushima and assured him of Indonesia's full support. He expressed his country's heartfelt condolences to Japan for the catastrophic losses caused by the unprecedented natural disasters of March 2011. The tremendous courage shown by the Japanese emergency teams in getting the plant back under control deserved admiration and respect. Immediately following the disaster, Indonesia hat offered to dispatch its nuclear emergency response team to Fukushima if requested by the Japanese Government.

- 38. One of his country's experts on nuclear radiological protection and emergency response had been asked to join the international fact-finding expert mission to Fukushima. Indonesia was a country with significant nuclear activities which was continuously trying to enhance its capacity in nuclear emergency response, and the mission had been a great opportunity for the expert to work together and share experience with others and to learn from the Fukushima accident.
- 39. Lessons needed to be learned from the accident to ensure that similar accidents could be prevented in the future. His country was therefore pleased that the Board had accepted the proposal of the Group of 77 and China to include the item in the agenda, and it fully supported the Director General's initiative to convene a Ministerial Conference on Nuclear Safety later in June 2011. His delegation looked forward to working together with other Member States to ensure a tangible outcome from the Conference. His country also welcomed the initiative of the Government of Japan to convene an international conference on the issue in 2012, together with the Agency.
- 40. While strengthening the nuclear safety regime worldwide was of great importance, enhancing adherence to and compliance with that regime, especially the Agency's nuclear safety standards, was equally important. The future of nuclear safety worldwide depended, inter alia, on balanced emphasis being given by the international community to both aspects.
- 41. From a technical point of view, the Fukushima accident was deemed to be less catastrophic than the Chernobyl accident 25 years earlier. Unfortunately, its psychological impact on the international community was no less troubling, especially in countries that had been struggling for years to convince the public of the viability and safety of nuclear power. That situation was largely the result of conflicting information provided by different sources in the early days of the accident, exaggeration in press coverage and pseudo-scientific accounts in the accident reporting. In the information era, nuclear accidents could not be dealt with in same way as 25 years ago. Public information had become crucial and approaches needed to be adjusted to give due consideration to that factor.
- 42. The Fukushima accident had shown that the impact of a nuclear accident knew no territorial or institutional boundaries. Although Indonesia continued to believe in the central role of the Agency in nuclear safety and nuclear emergency response, it also believed that it would not be able to do the job alone. The Agency should strengthen its synergy and cooperation with other relevant international organizations, including through establishing a framework for cooperation which could serve as a standby arrangement with other international organizations in the event of a future accident.
- 43. The accident at Fukushima should be used as an opportunity to build momentum to enhance the role of the Agency in nuclear safety and emergency response worldwide. Such efforts should go hand in hand with increased availability of resources, especially financial resources, to enable the Agency to fulfil that role. While Member States should continue to provide financial support to the Agency's safety-related activities, the organization should also apply a more selective approach to allocating its budget in order to enhance availability of resources, taking care to remain within its statutory mandate.
- 44. Mr OTHMAN (Syrian Arab Republic)* expressed his country's condolences to the people of Japan.
- 45. The Fukushima Daiichi accident was a major national catastrophe. Japan's experts had a full command of the ways and means of mitigating its consequences, but the international community, and the Agency in particular, would have a major role to play. He thanked the Agency for its reports and technical briefings following the accident. Radiation measurements taken in Syria two weeks after the accident had revealed quantities of iodine-131, caesium-137 and caesium-134, which subsequent analysis had sourced to the Fukushima accident. Iodine-131 had entered the food chain, especially milk, but in concentrations too low to necessitate preventive measures.

- 46. Syria welcomed the holding later in the month of a Ministerial Conference on Nuclear Safety, which would provide an appropriate opportunity for Member States to review their national nuclear safety and security measures and consider the best ways of sparing the international community such calamities in the future. Syria also looked forward to the reports of the Agency's experts following their visit to Japan, and especially their conclusions as to ways such accidents could be prevented in future.
- 47. Mr POURMAND TEHRANI (Islamic Republic of Iran)* expressed his country's deepest condolences to and solidarity with the people of Japan.
- 48. Nuclear power would continue to be a viable source of energy because it did not have the negative effects on climate that other energy sources had. Some 440 nuclear power plants were producing about 16% of the electricity in over thirty countries. In the past fifty years, there had been three major nuclear power plant accidents. The application of safety standards was essential for safe operation of nuclear power plants, and learning lessons from accidents was instrumental in enhancing nuclear safety.
- 49. Under the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, both Japan and the Agency had the clear obligation to keep Member States continuously informed about developments, including the dimensions of any accidental release of radioactive material. The weak and slow reaction of the Secretariat, and specifically the Director General, to the Fukushima accident had been very disappointing. The Director General had been expected to obtain reliable information promptly from Japan, validate that information and transmit it to Member States. Not only had that simple and legitimate expectation not been fulfilled, but the technical staff of the Department of Nuclear Safety and Security had not been in a position, or had not been permitted to explain and answer technical questions during technical briefings. During the first week of technical briefings, the Director General himself had decided in some instances to answer technical questions while his scientific staff kept silent or merely gave information based on data. The Member States attending had received no more information than they were getting from the news media. That was cause for serious concern and should not be repeated.
- 50. It was understandable that the Japanese operators of the plant might be unable to manage the accident because of panic, but they had been in urgent need of technical advice from the Agency. However, the Director General had failed to establish promptly a team of eminent experts, nor had he speedily sent a team to help the Japanese operators prevent the situation from escalating. As a result, there had been a release of radioactivity over the whole world.
- 51. The Director General had not even sought information from the CTBTO concerning radioactive releases until representatives of Member States, including his own country and certain neighbours of Japan which were worried about contamination, had insisted that he do so. The world, and especially Japan's neighbours, had the right to receive prompt, reliable information regarding contamination which posed a health hazard to their peoples. Neither the Agency nor Japan had fully complied with their obligations under the two post-Chernobyl conventions, namely the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency.
- 52. Most of the information provided by the Secretariat in the majority of the technical briefings had been neither coherent nor well assessed after validation. The fact-finding mission had been subject to delay, as a result of which its report was not ready for timely utilization by Member States. The question remained open as to whether the Secretariat's conduct would have been the same had the accident occurred in other Member States.

- 53. Turning to the unreasonable approach in dealing with the accident and future measures, he said there was no doubt that, after the accident, a scientific and technical meeting should have been held with participants from the country concerned and top experts from all over the world to assess the lessons to be learned; then, a high-level political conference should have been convened to adopt a long-term strategy based on the technical findings. Unfortunately, Member States had been taken by surprise by the Director General's decision, without any consultation with Member States, to send out invitations to foreign ministers for a ministerial conference before a technical meeting had been held. In the case of the Chernobyl accident, the Agency had followed the logical approach of having a technical meeting with eminent experts and had then held a special session of the General Conference to adopt a road map for the future. The Secretariat needed to be reminded that it acted on the mandate of Member States.
- 54. He wished to place on record that the Director General and his Deputy Director General for Nuclear Safety and Security had not taken into serious consideration the need for a universal approach and collective endeavours on nuclear safety, which was a matter of global concern. On several occasions, the expert from Iran had been prevented from participating in the Agency's seminars or workshops on nuclear safety, including the international conference held in Japan before the Fukushima accident and the IAEA Technical Meeting on Newly Arising Threats in Cybersecurity of Nuclear Facilities held from 16 to 20 May 2011. In response to his delegation's inquiry, the Secretariat had claimed that the resolutions of the United Nations Security Council were the reason for depriving Iranian experts of the opportunity to participate in those meetings on nuclear safety. His delegation had reminded the Deputy Director General for Nuclear Safety and Security that the Security Council resolutions in question, which Iran believed lacked a legal basis, had in any event exempted nuclear safety.
- 55. After the terrible, unprecedented nuclear accident at Fukushima and its radiological impact, it was to be hoped that the Director General and his staff in the Department of Nuclear Safety and Security had noticed that nuclear accidents and transboundary releases of radioactive material did not respect international borders. Such incidents were a matter of concern to all Member States and so required collective measures in a cooperative approach without discrimination, and without any political intentions or politically motivated measures. Based on the concerns he had expressed and the lessons learned from the Fukushima accident, he felt sure that Member States would hold the Secretariat accountable for any negligence and carelessness in addressing the technical needs of Member States, specifically developing countries, related to nuclear safety. He invited all Member States to engage in closer collaboration to enhance nuclear safety, which should in turn facilitate the enhancement of peaceful uses of nuclear energy.
- 56. In conclusion, he expressed appreciation for the sincere and professional attempts undertaken by the Ambassador of Brazil to consult on and prepare for the Ministerial Conference.
- 57. Mr ABDUL RAHMAN (Malaysia)* expressed his country's deepest condolences to the victims of the unfortunate event on 11 March 2011, and its solidarity with the people and Government of Japan. The event had been unprecedented and Malaysia appreciated the tireless efforts of the Japanese authorities to mitigate and bring the situation under control. It also commended the Director General on the Agency's efforts to address the Fukushima nuclear accident, as well as the regular briefings provided for Member States.
- 58. The accident showed the importance of revisiting nuclear and radiation safety standards, and of the Agency assuming a coordinating role in such issues. He applauded the initiative of the Director General in calling for a Ministerial Conference on Nuclear Safety later in the month to learn the lessons from the Fukushima Daiichi accident, and expressed appreciation for the work of the Ambassador of Brazil in chairing the consultation meetings with Member States prior to it. Malaysia

would be participating in the Conference and also fully supported Japan's proposal to organize a nuclear safety conference in the latter half of 2012 in collaboration with the Agency.

- 59. Mr SHLOMA (Belarus)* expressed his country's sympathy and support for the Japanese people as they struggled to overcome the consequences both of natural disasters and the nuclear accidents that had occurred at the Fukushima Daiichi nuclear power plant. Belarus stood ready to share its first-hand experience and knowledge of dealing with the consequences of a nuclear catastrophe, based on its tragic history in connection with the Chernobyl accident, the aftermath of which had still not been overcome 25 years later. Belarus still needed international assistance, despite all it had done to deal with the consequences of Chernobyl. In that connection, he welcomed the outcomes of the international conference that had taken place in Kiev in April 2011 in commemoration of the 25th anniversary of the Chernobyl accident.
- 60. What Chernobyl had taught Belarus was that transparency, timely sharing of objective and reliable information with all interested partners, and coordinated efforts by the international community under the auspices of the Agency were indispensable building blocks in the process of dealing quickly and efficiently with nuclear disasters. In that connection, Belarus commended the efforts of the Japanese Government and people, and the quick reaction and hard work of the Agency, in particular its Incident and Emergency Centre, which deserved Member States' respect and recognition.
- 61. In considering the causes and lessons of the Fukushima accident, it should be borne in mind that the Chernobyl story was not over yet, and many issues might be seen from a different perspective if the two tragedies were compared.
- 62. <u>Ms PHETCHARATANA</u> (Thailand)* expressed her country's deepest condolences to the Government and people of Japan for the tragic loss of life and property as a result of the tsunami and nuclear power plant accident in March 2011. Since the day after the accident, Thailand had been extending assistance as best it could to help Japan recover from those disasters.
- 63. Her country welcomed the opportunity to exchange views on issues related to the Fukushima accident, in particular relevant national, regional and international measures to strengthen emergency preparedness and response capabilities and safety assessment capabilities, and it welcomed the sharing of information between governments, including through the Agency and relevant international organizations, on monitoring of fundamental safety functions at nuclear power plants, and radiation monitoring of the environment and food products. Thailand supported the role of the Agency in coordinating and disseminating information in that connection and it looked forward to receiving more detailed information and a comprehensive assessment of safety issues related to the accident in the near future.
- 64. She expressed appreciation for the Director General's initiative to convene a Ministerial Conference on Nuclear Safety, the preparatory process for which had been ably steered by the Ambassador of Brazil. The Conference was important and should contribute to the common goals of sharing preliminary findings and the lessons that needed to be learned from the accident, strengthening emergency preparedness and response, and launching the process of reviewing the global nuclear safety framework.
- 65. Emergency preparedness and response was a necessary element of a nuclear safety infrastructure and protecting people and the environment against risks. The importance of effective and efficient capacity building for safety regulation was another important element in ensuring that nuclear facilities and activities were safe and secure. Thailand strongly believed that cooperation on nuclear safety regulation at the regional and international levels must be strengthened. In that connection, it would be organizing an international conference on safety, security and safeguards in

nuclear energy in Bangkok on 1 and 2 September 2011, with the aim of providing an opportunity for exchange of information and experience among regulatory agencies in South East Asian countries with a view to increasing their potential for future regulatory interaction on nuclear safety, security and safeguards, and promoting networking among national regulatory agencies within the region and beyond. Thailand was seeking cooperation from the Agency to provide experts to speak at the conference on such topics as implementation of nuclear legislation for newcomers, technical competence in nuclear safety, and nuclear security and safeguards.

- 66. The successful promotion of the peaceful uses of nuclear energy, especially nuclear power, was linked to public acceptance. The dissemination of accurate knowledge and understanding of nuclear technology, including nuclear safety, was essential to address concerns and build public confidence. With that in mind, Thailand, in cooperation with the Agency, would be organizing a national seminar on nuclear science and technology for development in Bangkok on 29 July 2011 as part of public outreach activities to build confidence in nuclear energy safety. The aim was also to improve inter-agency coordination on nuclear emergency preparedness and response, and measures to address radioactive contamination in food and agriculture, and to work on an action plan for a nuclear emergency, systems for monitoring contamination in food and agriculture, and a strategy for agricultural remediation after a nuclear emergency.
- 67. The <u>CHAIRMAN</u>, summing up the debate, said that the Board had expressed its deep condolences and sympathy to the people and Government of Japan for the tragic loss of many thousands of lives and the immense destruction of property caused by the earthquake on 11 March 2011 and subsequent tsunami. The Board had also praised the people of Japan for their determination and had commended the employees of the stricken nuclear power plant who had worked with complete devotion to mitigate the consequences of the accident.
- 68. Several members had welcomed the various activities already undertaken by the Agency with regard to the Fukushima accident, as described in document GOV/INF/2011/8, and the Agency's continuing efforts to maintain interaction with the Japanese authorities, provide them with assistance and, to the extent possible, keep the global nuclear community informed of the events that were taking place at the plants and beyond.
- 69. Some members had also emphasized the importance of strengthening the global emergency response system in the aftermath of a nuclear accident, and had pointed out the need to develop capability to handle public information in the current era of rapid communication and networking.
- 70. Some members had noted that the Agency had been playing a very important role but had questioned whether it was able to do all that was required of it. They had encouraged the Agency to strengthen its cooperation with relevant international organizations in the area of emergency preparedness and response. Several members had noted that it was time for the Agency to consider expanding its interaction with relevant national bodies to enhance the operational and design safety of nuclear power plants, as well as safety standards in general. They had expressed their readiness to contribute actively to efforts aimed at strengthening the international framework on nuclear safety. Some members had been of the view that the Agency should enhance its role in providing safety oversight of existing facilities.
- 71. Several countries already operating nuclear power plants, or planning to build one, had indicated that they would want to continue to rely on nuclear power to meet their energy demands, but with enhanced emphasis on safety.
- 72. Several members had commended the Director General for his initiative in organizing the forthcoming Ministerial Conference on Nuclear Safety. They had taken note of the summary of the preliminary assessment by the Agency international fact-finding mission and had looked forward to

the early publication of the final report for consideration by the Ministerial Conference. Several members had indicated that, while they believed that some initial lessons could already be drawn, they looked forward to the Conference which should provide an opportunity to launch a systematic lessons-learned process for Member States and should suggest follow-up actions by the Agency. Several members had welcomed Japan's announcement that it intended to host an international conference on nuclear safety in the latter half of 2012 in cooperation with the Agency.

- 73. He took it that his summing-up was acceptable.
- 74. The Chairman's summing-up was accepted.
- 75. The <u>CHAIRMAN</u> took it that the Board agreed to the requests to make public the report contained in document GOV/INF/2011/8.
- 76. It was so decided.

7. Nuclear verification

- (a) The conclusion of safeguards agreements and of additional protocols (GOV/2011/33 and 34)
- 77. The <u>CHAIRMAN</u> noted that documents GOV/2011/33 and 34 contained a comprehensive safeguards agreement with the Republic of Guinea and an additional protocol thereto respectively.
- 78. Mr FAWZY (Egypt)*, speaking on behalf of NAM, said that NAM had taken note of the fact that the Republic of Guinea had decided to conclude a safeguards agreement in connection with the NPT and an additional protocol thereto.
- 79. Mr NAKANE (Japan) welcomed the conclusion by the Republic of Guinea of a comprehensive safeguards agreement, an SQP and an additional protocol.
- 80. Japan believed that the most realistic and effective way of strengthening Agency safeguards was through universalization of the additional protocol, and it was pleased that the number of countries which had concluded an additional protocol had increased steadily to reach 108.
- 81. His country also considered universalization of comprehensive safeguards agreements and promotion of the amendment to the SQP to be important. It paid tribute to the Secretariat for its untiring efforts in that connection.
- 82. The statement formulated during the second meeting of ten foreign ministers on nuclear disarmament and non-proliferation, held in Berlin on 30 April 2011, included concrete proposals regarding the universalization of Agency additional protocols. Bearing those proposals in mind, Japan would continue to make efforts geared towards universalization of the additional protocol, in close cooperation with other Member States and the Agency.
- 83. Mr MINTY (South Africa) said that, although the additional protocol was a voluntary measure, his country had consistently highlighted its importance in building confidence. The safeguards agreement with the Republic of Guinea and the additional protocol thereto further reinforced the Agency's central role in ensuring that activities in the field of atomic energy were for peaceful purposes only, and South Africa was pleased to note that the Government of the Republic of Guinea was joining the many other African countries which in recent years had fulfilled their commitments

under the NPT. His country joined the consensus in the Board to authorize the Director General to conclude with the Government of the Republic of Guinea and subsequently implement the safeguards agreement and additional protocol contained in documents GOV/2011/33 and 34.

- 84. Mr SCHELAND (United States of America) welcomed the decision by the Republic of Guinea to sign a comprehensive safeguards agreement and additional protocol. Those agreements were important steps towards full implementation of the obligations of State Parties to the NPT, and towards universalization of the additional protocol. A comprehensive safeguards agreement together with an additional protocol constituted the verification standard. Only through the implementation of both a comprehensive safeguards agreement and an additional protocol was the Director General in a position to draw conclusions about the absence of undeclared activities.
- 85. In that connection, the United States called on other States that had not yet fulfilled their obligation in that regard under the NPT to take steps to expedite the conclusion and entry into force of their comprehensive safeguards agreements. In addition, his country called upon those States that had not already done so to conclude and bring into force revised SQPs. His country hoped to work together with the Agency and with States that had additional protocols in force to increase the momentum to make a safeguards agreement together with an additional protocol an established norm in the nuclear non-proliferation regime.
- 86. Mr AIT SLIMANE (Morocco)* expressed support for the Agency's efforts to ensure that all countries were committed to the peaceful use of nuclear energy and reiterated the importance of providing the organization with all necessary means of fulfilling that function and strengthening the non-proliferation regime. It was important to close any loopholes which might threaten the Agency's credibility and its ability to fulfil its safeguards implementation responsibilities. Morocco had ratified its additional protocol, which had come into force on 21 April 2011, thus demonstrating its commitment to peace, nuclear security, non-proliferation and nuclear disarmament. The non-proliferation regime would remain fragile and would be unable to fulfil its aims as long as adherence to it was not universal and strengthened safeguards were not in place.
- 87. The <u>CHAIRMAN</u> took it that the Board wished to take the actions recommended in documents GOV/2011/33 and 34 and authorize the Director General to conclude and subsequently implement a safeguards agreement and an additional protocol with the Republic of Guinea.
- 88. It was so decided.

(b) The Safeguards Implementation Report for 2010 (GOV/2011/24)

- 89. The <u>CHAIRMAN</u> said that it was being recommended that the Board take note of the report contained in document GOV/2011/24, and that it authorize the release for wider publication of the Safeguards Statement for 2010, together with the Background to the Safeguards Statement and Summary.
- 90. Mr FAWZY (Egypt)*, speaking on behalf of NAM, reiterated NAM's principled positions on safeguards. The IAEA was the sole competent authority for verifying compliance with obligations under Member States' safeguards agreements and remained the most appropriate multilateral forum for addressing nuclear verification and safeguards issues. While NAM was fully aware of the importance of nuclear safeguards, it opposed any attempts that aimed to reverse the order of priorities of the Agency by giving primacy to safeguards considerations in a manner that led to restriction of the organization's promotional role. While recognizing that the purpose of safeguards activities was to verify the peaceful uses of nuclear material and guard against nuclear proliferation, NAM emphasized that the international community should make simultaneous efforts to achieve both nuclear

disarmament and nuclear non-proliferation. A clear distinction needed to be made between the legal obligations of Member States under their respective safeguards agreements and their voluntary undertakings, in order to ensure that the latter were not transformed into legal safeguards obligations. All Member States should respect the Agency's Statute. Nothing should be done to undermine the authority of the Agency in that regard. Any undue pressure or interference in the Agency's activities, especially its verification process, which could jeopardize its efficiency and credibility, should be avoided. Member States that had concerns regarding the implementation of safeguards agreements by other Member States should direct those concerns to the Agency along with supporting evidence and information so that the organization could consider them, investigate them, draw conclusions and decide on necessary actions in accordance with its Statute. NAM attached great importance to the SIR, which annually summarized the results of the Agency's verification activities. NAM underscored the fact that the SIR presented the Secretariat's assessment of implementation of safeguards agreements in Member States. The SIR should be designed and prepared in a manner that would allow the views of the Member States concerned to be reflected, in order to have a more factual, balanced and comprehensive report. Bearing in mind the need to protect safeguards confidential information, and the main responsibility the Agency bore in that regard, leakage of such information should be prevented by the Agency and, should it occur, the organization should take adequate corrective measures.

- 91. One of the objectives of the Medium Term Strategy 2012–2017 was to strengthen the effectiveness and improve the efficiency of Agency safeguards and other verification activities, and specifically that the Agency must remain ready to provide the international community with objective and independent verification of States' safeguards obligations, and assist, in accordance with its Statute, with verification tasks under nuclear disarmament or arms control agreements that it might be requested to carry out by the States party to such agreements.
- 92. NAM remained concerned by recurring leaks of safeguards confidential information which, in the absence of adequate corrective measures by the Agency, called into question the credibility of its regime for the protection of such information. It recalled that the Board had previously requested the Director General to continue to review and update the established procedures for the protection of safeguards confidential information and to inform the Board periodically on the implementation of the regime for the protection of such information. NAM noted the seriousness with which the Agency took the issue of information security and recalled the statement by the Secretariat in document 2010/Note 60 that the Agency was determined to minimize the risk of such occurrences, and its statement in document 2010/Note 47 that, regardless of the category of employment, all individuals employed by the Agency, including all cost-free experts, were required to conclude confidentiality undertakings upon commencing work with the Agency, and that access to safeguards confidential information was limited to staff members and only those cost-free experts who were employed under a Type A arrangement. NAM encouraged continued implementation of such measures.
- 93. NAM commended the efforts made by the Secretariat to present more details on the Agency verification activities carried out in each Member State, and to prepare a breakdown of the cost of safeguards implementation on a State-by-State basis. It called upon the Secretariat to continue to do so in future reports. It reiterated its request that future SIRs group States according to the type of safeguards agreement being implemented, as was the case when the SIR presented other statistics related to verification activities in Member States, such as the amount of significant quantities of nuclear material and the frequency of inspection visits. Given the ongoing budgetary constraints, it was imperative for the safeguards system to become not only effective, but also efficient. While there had been several attempts to strengthen the safeguards system and improve its effectiveness, much remained to be done, particularly in the area of integrated safeguards which continued to absorb a

major share of the cost of verification activities attributed to specific Member States, despite a significant reduction in inspection efforts in the field.

- 94. NAM shared the view expressed in the SIR that SSACs were fundamental to the effective and efficient implementation of safeguards and it noted with appreciation the actions taken by the Secretariat during 2010 to assist Member States in establishing and strengthening their SSACs. The Secretariat should continue its efforts in that regard.
- 95. Given the ongoing difficulties faced by the Secretariat in analysing environmental samples, NAM called upon the Agency once again to assist interested Member States, particularly developing countries, to develop capabilities in those technologies. That capacity-building measure might contribute to expanding the Agency's analytical capabilities and increase the number of qualified laboratories in the network of analytical laboratories, making for more efficient analysis of environmental samples.
- 96. Mr CSUDAY (Hungary)*, speaking on behalf of the European Union, the candidate countries Turkey, Croatia, Iceland, Montenegro and the former Yugoslav Republic of Macedonia, the countries of the Stabilisation and Association Process and potential candidates Albania, Bosnia and Herzegovina, and Serbia, the EFTA country Norway, member of the European Economic Area, as well as Ukraine and Moldova, said that the European Union strongly supported the efforts of the Agency to strengthen the effectiveness and improve the efficiency of its safeguards system. Through comprehensive safeguards agreements, the Agency was mandated to confirm that States' declarations were correct and complete, i.e., to confirm that all nuclear material in States remained in peaceful activities. The additional protocol provided the Agency with important supplementary tools which enabled it to provide credible assurances of the absence of undeclared nuclear material and activities. Only in States with comprehensive safeguards agreements that had brought the additional protocol into force was the Agency in a position to draw the broader conclusion that all nuclear material remained in peaceful activities. Universal adherence to both instruments would strengthen the non-proliferation regime and contribute to further enhancing security worldwide. An additional protocol together with a comprehensive safeguards agreement constituted the current verification standard to which all States should adhere as soon as possible.
- 97. Only when full implementation of a comprehensive safeguards agreement and an additional protocol had generated sufficient confidence that nuclear activities and use of nuclear material were purely for peaceful purposes could the broader safeguards conclusion be drawn by the Agency. That was a prerequisite for the introduction of integrated safeguards approaches, allowing safeguards measures to be applied in a less prescriptive and more customized manner, thus reducing the inspection burden and allowing for savings. United Nations Security Council resolution 1887 (2009) called upon all States to sign, ratify and implement an additional protocol. Furthermore, action 28 of the final document of the 2010 NPT Review Conference encouraged all State parties that had not yet done so to conclude and bring into force additional protocols as soon as possible.
- 98. In light of the Board's decision in 2005 that SQPs should remain part of the safeguards system and that their standardized text should be modified to reinforce Agency safeguards, the European Union was pleased that 35 States had revised SQPs in force and urged all States which had not yet amended or rescinded their SQPs to accelerate their efforts in that regard.
- 99. The European Union noted with satisfaction the steady progress reported in the 2010 SIR towards meeting all the aforementioned aims, in particular the entry into force in 2010 of comprehensive safeguards agreements in Andorra, Angola, Chad, Gabon and Rwanda, and the entry into force of additional protocols in Albania, Angola, Chad, the Dominican Republic, Gabon, Lesotho, the Philippines, Rwanda, Swaziland and the United Arab Emirates. A total of 108 out of the 175 States

in which safeguards were applied had already brought an additional protocol into force. The European Union welcomed the Board's decision on the conclusion of a comprehensive safeguards agreement and an additional protocol with the Republic of Guinea. Furthermore, it was pleased that the number of States in which the Agency had been able to draw the broader conclusion that all nuclear material remained in peaceful activities had risen to 57, thereby permitting the application of integrated safeguards in 48 States. Those were significant achievements on the part of the Secretariat and the States concerned, and the European Union looked forward to further progress over the coming year.

- 100. For the most part, the SIR continued to paint a very positive picture of the results of the Agency's verification and evaluation activities. That had been achieved through a high degree of cooperation between States' authorities and the Secretariat in the implementation of safeguards agreements, and through high levels of transparency concerning activities in Member States. Over the preceding four years, the Agency and Euratom had continued to develop their partnership arrangements in order to promote transparency and mutual confidence. The joint inspection of installations by Euratom and the Agency was an essential and efficient tool for applying safeguards in European Union countries, and for ensuring that European Union member States respected their international non-proliferation obligations.
- 101. The safeguards system needed to be made more efficient and effective, and the European Union was firmly committed to an adequately funded programme. All safeguards mechanisms needed to be fully deployed, and the priority should be to address the greatest proliferation threats. Integrated safeguards and a safeguards system that was fully information-driven needed to be implemented as soon as possible, and the Agency should make it clear what efficiency gains were expected and what gains had been realized.
- 102. The European Union welcomed the efforts by the Secretariat to present a more detailed and more transparent SIR to Member States. It encouraged further efforts to put the information in context and provide explanations as to how conclusions had been arrived at in cases where minor attainment failures had been identified. The Agency should make States aware of safeguards issues as they arose. To increase SIR transparency further, the European Union encouraged the inclusion of data on the performance of the Secretariat, for example on the timelines of 90(a) statements.
- 103. The European Union actively supported the Agency's safeguards system through its safeguards support programme, which was becoming one of the biggest support programmes in the field, and through the support programmes of some of its member States. It was currently examining whether that contribution could be increased. In addition, some European Union member States made substantial financial contributions.
- 104. The European Union recognized the need to strengthen the Agency's capability to provide credible and timely analyses of safeguards samples, and it firmly supported the modernization of the SAL in Seibersdorf. At the 2010 Nuclear Security Summit, it had announced its commitment to contribute €5 million towards modernizing the SAL. A number of European Union member States had also made substantial contributions. The European Union also supported the expansion of the network of analytical laboratories, was pleased that additional laboratories in several States were currently undergoing qualification, and encouraged the involvement of qualified laboratories in developing countries.
- 105. With those comments, the European Union supported the recommended action set forth in document GOV/2011/24.

- 106. Mr KARASEV (Russian Federation) underscored the Agency's important verification role in the nuclear non-proliferation regime and the need to improve it, including through universal application of the additional protocol. He noted the steady growth in the number of States where additional protocols had been brought into force. The international community needed to have complete confidence in the peaceful nature of the nuclear activities of States, and only the Agency had the authority to draw the necessary conclusions, which must be based on official and verified information; speculation on such issues was unacceptable.
- 107. It was cause for concern that some States party to the NPT still did not have comprehensive safeguards agreements in force. He called on those States to comply with their obligations under the NPT without delay. He also urged all States with SQPs in force which had not been amended to conform to the revised 2005 text to remedy that omission.
- 108. The work of the Secretariat to improve safeguards approaches, procedures and technologies was a key aspect of the Agency's verification function. The Russian Federation was cooperating actively with the Agency in that area, including through its safeguards support programme. It intended to expand its cooperation, in particular in the area of analysis of environmental samples. A new mass spectrometer would soon be commissioned at the Russian laboratory in the Agency's network of analytical laboratories.
- 109. His country welcomed the Secretariat's efforts to improve the efficiency of the safeguards system. It hoped that optimization of the structure of the Department of Safeguards would contribute to that goal. Information-driven safeguards approaches should help improve the efficiency of verification and make it more objective.
- 110. Mr BARRETT (Canada) noted that the vast majority of States with safeguards agreements also had an additional protocol in place, and that the Board had approved additional protocols to comprehensive safeguards agreements for 139 States, i.e. nearly 80% of all States with safeguards agreements. For the majority of States with both a comprehensive safeguards agreement and an additional protocol in force, the Agency had drawn the broad safeguards conclusion that all nuclear material remained in peaceful activities. Since 2005, Canada had been one of the States for which that conclusion had been drawn. Those were significant achievements on the part of the Secretariat and the States involved. A safeguards conclusion that all nuclear material remained in peaceful activities could only be drawn for a State with a comprehensive safeguards agreement and an additional protocol in force. In that situation, the Agency could provide assurances that there was no diversion of declared nuclear material from peaceful nuclear activities and no indication of undeclared nuclear material or activities in the State, whereas for States with a comprehensive safeguards agreement but no additional protocol the Agency's safeguards conclusions could only relate to the non-diversion of declared nuclear material from peaceful purposes.
- 111. The implementation of State-level integrated safeguards approaches had led to a reduction in the Agency's inspection effort in the field, reflecting a shift in the focus of safeguards implementation from verification of declared nuclear material to an information-driven system directed at the State's nuclear activities as a whole. Canada supported the Secretariat's ongoing efforts to refine the State-level concept for implementation and evaluation of safeguards. The State-level concept was the basis for a more focused and efficient safeguards system. His country was encouraged by comments made by the Deputy Director General for Safeguards at the November safeguards symposium regarding the need to move towards a truly State-level approach that was objective-driven, customized, and focused at the State level, one that was guided by objectives rather than procedures and concerned with outcomes rather than process.

- 112. One of the remaining challenges was how to report the Agency's annual conclusion in a manner that accurately reflected the State-level implementation results. As the Agency continued to develop reporting methods, Canada encouraged greater transparency and categorization of results. Without the proper context, the characterization of events in the SIR could be ambiguous and might in fact give an incomplete account of safeguards implementation in a State. His country hoped that, as the SIR evolved, it would include additional details on the nature of instances in which it had not been possible to meet safeguards objectives in facilities.
- 113. A safeguards conclusion reflected a high degree of cooperation between States and the Secretariat in the implementation of safeguards agreements, and high levels of transparency concerning activities in States. Cooperation and transparency must continue to be the hallmarks of safeguards implementation and evaluation, and of the relationship between the Secretariat and States with safeguards agreements in force.
- 114. The release of the entire SIR would be an important transparency measure, providing the international community with comprehensive, annual information on the implementation of safeguards. Nothing in the document, including the increased information provided on a State-by-State basis, should be considered confidential. His country thus agreed to authorize the release of the Safeguards Statement for 2010 and the Background to the Safeguards Statement and Summary. It looked forward to the day when the entire report could be made public.
- 115. Mr MOON Byung-Ryong (Republic of Korea) welcomed the inclusion of a State-by-State breakdown of verification activities in the SIR, which would contribute to the transparency of the Agency's safeguards activities.
- 116. His country appreciated and supported the Agency's efforts to promote the universalization of comprehensive safeguards agreements and additional protocols; both were essential to improving the efficiency of the Agency's safeguards system and strengthening its effectiveness. The additional protocol, in particular, was a key safeguards framework that helped the Agency draw a broader conclusion regarding nuclear activities at State level. All States that had not yet done so should take steps to conclude an additional protocol without delay. The Republic of Korea welcomed the reported increase in the number of countries where both comprehensive safeguards agreements and additional protocols were in force. That demonstrated the growing acceptance of the additional protocol as the universal safeguards framework. Only when a State had both a comprehensive safeguards agreement and an additional protocol in force was the Agency in a position to conclude that all nuclear material remained in peaceful activities. Since June 2008, Korea had been one of the countries for which that broader conclusion had been drawn. His country was pleased to note the Agency's positive evaluation that the Republic of Korea had fulfilled all its nuclear non-proliferation obligations and had exhibited transparency in all its nuclear activities.
- 117. In light of the global expansion of the peaceful uses of nuclear energy and the development of new types of nuclear technologies and facilities in many countries, his country welcomed the Agency's focus on the development of appropriate safeguards approaches, measures and equipment for newcomers and new nuclear technologies. Against that backdrop, the Republic of Korea strongly supported the Agency's efforts to strengthen the effectiveness and efficiency of safeguards through the implementation of integrated safeguards and enhancements in such areas as SSACs and RSACs. Close cooperation between SSACs, RSACs and the Agency was an important factor in the success of nuclear non-proliferation efforts.
- 118. His country also supported the Agency's efforts to enhance the capabilities of its safeguards analytical services and noted that the Department of Safeguards had completed the reorganization of its analytical services under one administration. In view of the ongoing strain on the capacity of the

network of analytical laboratories, his country hoped to contribute to the Agency's safeguards analytical capabilities by offering the services of one of its laboratories which was currently undergoing qualification.

- 119. With regard to new technologies, the Republic of Korea had cooperated in the development of a safeguards approach for pyroprocessing technology, an innovative proliferation-resistant recycling technique for spent fuel. It also attached great importance to the role of Member State safeguards support programmes, which were essential to meet the safeguards challenges of the future, and his Government would be providing the equivalent of US \$2.3 million in financial and in-kind support for those programmes in 2011.
- 120. Mr POTTS (Australia) said that the SIR was an accessible document that presented useful information in a usable format and provided Member States with valuable insight into the operation of the safeguards system and the problems that it faced. His country welcomed the inclusion in the report of more country-specific information and looked forward to the further development of that approach in future reports.
- 121. Australia also welcomed the approval of the long-term strategic plan for the Department of Safeguards, in particular the emphasis on ongoing development of the State-level concept which provided for objective-based and information-driven safeguards. The 2010 SIR shed useful light on the development of that concept. It was to be hoped that future reports would reflect those developments by including more contextual safeguards information, so that Member States could better understand the links between country-specific information and the Secretariat's overall conclusion for each State.
- 122. Mr ECHAVARRIA (Argentina), commending the high quality of the report, welcomed the information provided on the trend towards information-driven safeguards, the aim of which was to evaluate States and safeguard activities on the basis of all information available to the Secretariat and the use of innovative safeguards technologies, including those designed to detect clandestine activities. Argentina was carefully analysing the benefits to be gained from that new approach.
- 123. Safeguards must remain effective and efficient, objective, non-discriminatory and technically based, focusing on the verification of declarations made by States in good faith in compliance with their obligations. Safeguards should be efficient for the Agency, States and nuclear operators in the face of rising costs and limited resources. The approach to integrated safeguards should be reviewed with a view to reducing verification effort.
- 124. Argentina advocated an approach based on two-way cooperation involving increased cooperation between the Agency and Member States with a view, inter alia, to establishing and maintaining robust and effective State systems of accounting and control. Cooperation between the Agency and regional systems was equally important. The report mentioned only in passing the Agency's joint activities with ABACC, but dwelt at greater length on other systems. ABACC and the Agency carried out joint inspections, shared equipment and training, and developed agreed approaches. The regional system had been functioning for 20 years and was now mature. The Agency should take greater advantage of such systems and adjust the intensity of its verification efforts accordingly.
- 125. His country was successfully implementing short-notice random inspections at its fabrication plants. It was also willing for such inspections to be conducted at its natural uranium conversion plant.
- 126. With regard to the Safeguards Statement for 2010, Argentina noted that the number of countries with both comprehensive safeguards agreements and additional protocols for which the broader safeguards conclusion could not be drawn was still high. The provision of more detailed information

on the reasons and justification for reaching that conclusion would assist the Board in understanding the Secretariat's approach. Additional information on the Secretariat's activities aimed at securing more reliable assurances of the absence of undeclared nuclear material and activities would also be welcome

- 127. Argentina attached importance to the issue of diversity and geographical balance among staff engaged in safeguards implementation and evaluation activities. It urged the Secretariat to seek additional means of promoting an increase in qualified candidates from all countries and regions, especially developing countries.
- 128. Ms MYKOLAICHUK (Ukraine) said that safeguards played a vital role in ensuring nuclear non-proliferation and effective control over sensitive material and activities. It was crucially important for States to accept a comprehensive safeguards agreement and an additional protocol, so that the Agency could provide credible assurances of the non-diversion of declared nuclear material and the absence of undeclared nuclear material and activities. Her country welcomed the increase in the number of countries that had brought additional protocols into force and called on States that had not yet done so to follow suit as soon as possible. Universal adherence to both instruments would strengthen the non-proliferation regime and contribute to enhancing global security.
- 129. Ukraine strongly supported the Agency's efforts to strengthen the effectiveness and improve the efficiency of its safeguards system. It welcomed the approval of the long-term strategic plan for the Department of Safeguards and the successful outcome of the safeguards symposium held in November 2010. The development and introduction of the 'safeguards by design' concept would greatly assist in meeting future verification challenges.
- 130. Ukraine's comprehensive safeguards agreement and additional protocol had been in force since January 2006. The country's authorities had been working hard with the Agency in recent years to achieve the broader conclusion on implementation of the country's safeguards obligations. The SIR for 2010 had acknowledged those efforts. Her country greatly appreciated the Agency's assistance, especially in resolving problems and complications related to the Chernobyl nuclear power plant site and the Chernobyl safeguards project. Its cooperation with the Agency could serve as an example for other Member States. At a meeting in Kiev in May 2011, the Ukraine-IAEA high-level safeguards implementation review group had begun to discuss the introduction of a State-level integrated safeguards approach. Her country was determined to pursue that course.
- 131. <u>Ms DE CARTIER</u> (Belgium) said her country welcomed the application of integrated safeguards in its territory since 2010. It hoped that integrated safeguards would be implemented systematically in all Member States, allowing savings in human and financial resources.
- 132. The dismantling of the MOX fuel fabrication plant, Belgonucléaire, was ongoing. Belgium thanked the Agency for its support, particularly as regards the adaptation of safeguards.
- 133. While welcoming the Agency's transparent approach to safeguards implementation, her country called on the Secretariat to place the incidents mentioned in the report in their proper context, for instance by means of footnotes, in order to avoid confusion regarding their nature.
- 134. Belgium had been providing modest but continuous support for the Agency's safeguards activities since 1982 under its safeguards support programme, placing nuclear installations at the Agency's disposal, helping to train inspectors or providing specific nuclear expertise. It was continuing its efforts to get a laboratory for the analysis of nuclear samples qualified and hoped to contribute thereby to the extension of the network of analytical laboratories.
- 135. Mr ZETTEL (Germany) said that the Safeguards Statement for 2010 was well balanced and carefully formulated. However, in paragraph 1(a) thereof, his country would prefer a wording that

reflected Article 4.a of the additional protocol to be added: "and the Secretariat is assured of the absence of undeclared material and activities".

- 136. Germany saw the additional protocol as constituting the current safeguards norm and it encouraged all Member States to sign and implement it.
- 137. He expressed concern at the fact that 17 non-nuclear-weapon States party to the NPT had not yet brought safeguards agreements into force as required by Article III of the Treaty. Germany appealed to the States concerned to meet their political and legal obligations as soon as possible.
- 138. His country highly appreciated the Secretariat's efforts to implement the Board's 2005 decision on revision of the SQP and hoped that that process would be completed in the near future.
- 139. Germany attached great importance to the State-level concept. The further development and fine-tuning of that concept would allow the Secretariat to adopt a dynamic and flexible approach vis-à-vis Member States. It could also lead to valuable efficiency gains with overall cost-saving effects.
- 140. His country was a longstanding and active supporter of Member State safeguards support programmes. Its bilateral programme reflected its commitment to the Agency's work and the crucial importance that it attached to nuclear verification, with all its technical challenges and continued room for improvement.
- 141. Mr NAKANE (Japan) said that safeguards were an indispensable pillar of the non-proliferation regime. Efforts to enhance their efficiency and effectiveness were a prerequisite for the long-term sustainability of the safeguards system, and it was crucially important to ensure that the Agency was adequately resourced and mandated to maintain such efficiency and effectiveness.
- 142. Japan had remained in close consultation with the Agency since the major earthquake and tsunami and the accident at Fukushima Daiichi nuclear power plant, and it had provided relevant information to ensure proper implementation of its safeguards agreement at the site.
- 143. The international safeguards symposium held in 2010 had provided an opportunity for interaction among Member States, the Secretariat and other organizations on a wide range of topics related to the future of the safeguards regime. The vast majority of participants had been convinced of the importance of ensuring effective and efficient implementation of safeguards. Japan shared the view expressed by a representative of the Secretariat that the Agency needed to develop further its conceptual approach to safeguards implementation, moving from the traditional criteria-based approach to a State-specific approach that made better use of all information available to the Agency and would contribute to optimizing use of its resources.
- 144. His country attached importance, inter alia, to: cooperation with SSACs; 'safeguards by design'; enhancement of analytical capacity; and remote monitoring. It considered that a safeguards system that was 'fully information-driven' should include those elements, and it would proactively cooperate with the Agency to move the system in that direction.
- 145. Furthermore, Japan attached great importance to maintaining and strengthening the independent analytical capabilities of the Agency. It had contributed €4.5 million towards the purchase and installation of a large geometry secondary ion mass spectrometer (LG-SIMS) and €2 million towards the design of a new nuclear material laboratory. Japan was pleased to learn that the new clean laboratory at Seibersdorf was fully operational and had already analysed its first samples.
- 146. Finally, his country welcomed the conclusion that all declared nuclear material continued to be used in 2010 for peaceful activities and that there were no indications of undeclared nuclear material

and activities in 57 of the 99 States with both comprehensive safeguards agreements and additional protocols in force.

- 147. Mr LI Sen (China) welcomed the Agency's conclusion that in 57 States with both comprehensive safeguards agreements and additional protocols in force all nuclear material remained in peaceful activities, and that in 42 States in the same category all declared nuclear material remained in peaceful activities. It also welcomed the conclusion that in 68 States with comprehensive safeguards agreements in force but no additional protocol, declared nuclear material remained in peaceful activities.
- 148. He noted that the Agency had increased the effectiveness and efficiency of the safeguards regime in 2010 by promoting integrated safeguards, enhancing cooperation with State and regional systems of accounting and control, and developing more effective programmes, procedures and techniques. China highly appreciated the work accomplished by the Secretariat during the period covered by the report. In August 2010, for instance, the Department of Safeguards had completed its long-term strategic plan for 2012–2023 which addressed the conceptual framework, legal authority, technical capabilities and human and financial resources for Agency verification activities. In November 2010, the Agency had successfully convened a symposium on preparing for future verification challenges at which the Agency's strategic priorities had been thoroughly debated.
- 149. The 2010 NPT Review Conference had stressed that the Agency's safeguards system constituted an integral part of the nuclear non-proliferation regime and had urged all States to continue to ensure that the Agency received the political and technological support, and financial resources it required to fulfil its mandate under the Treaty.
- 150. China was pleased to note that, in 2010, there had been continuous progress in Member State safeguards support programmes, and further expansion of the network of analytical laboratories for processing of nuclear material and environmental samples. China had applied to join the network and the certification of relevant Chinese laboratories was nearing completion. His country would cooperate closely with the Agency to bring the procedure to a close as soon as possible so that China could contribute to enhancing the Agency's safeguards analytical capabilities.
- 151. In 2010 the number of countries with comprehensive safeguards agreements and revised SQPs in force had continued to rise. Universal implementation of comprehensive safeguards agreements and additional protocols was of the utmost importance for strengthening the safeguards system and his country called on States that had not yet done so, especially those with significant nuclear activities, to sign, ratify and implement those instruments as soon as possible.
- 152. Mr SCHELAND (United States of America) said that his country considered that a comprehensive safeguards agreement with an additional protocol constituted the appropriate standard for effective safeguards under the NPT. It welcomed the steady progress towards universal adoption of that standard.
- 153. For States without significant nuclear activities, the modified SQP was crucial for effective safeguards. Unfortunately, the SIR for 2010 recorded little progress in updating SQPs. The United States urged Member States that had not done so to take the necessary steps to bring their safeguards agreements in line with current standards.
- 154. He welcomed the progress made in SAL projects which were critical to the Agency's effectiveness, thanks to generous donations by a number of Member States. It was also gratifying that the clean laboratory extension project had been completed on schedule. Owing to the lack of Regular Budget funding for 2012, the United States had recently announced an additional contribution of €5 million to ensure that construction of the nuclear material laboratory could begin in autumn 2011,

and it looked forward to working with the Secretariat to ensure that the project, with the accompanying site infrastructure work, could meet its projected schedule and budget.

- 155. The new model for safeguards costs used in the SIR appeared to produce useful results. Despite the emphasis that had been placed on safeguards efficiency, it had been difficult to date to estimate the safeguards resources required to carry out specific safeguards activities. His country hoped that the Secretariat would continue to utilize and refine the cost model as a basis for estimating human resource requirements and setting priorities.
- 156. The United States welcomed the Agency's involvement in discussions concerning monitoring and inspections under the plutonium management and disposition agreement between the United States and the Russian Federation. The aim was to develop a verification agreement for the disposition of plutonium designated by the two countries as no longer required for defence purposes. The agreement, as amended in April 2010, committed each side to the disposition of no less than 34 metric tons of weapons-grade plutonium in the form of mixed oxide fuel to be burned in reactors. Existing nuclear arms reduction agreements had already led to the removal of plutonium from the United States and Russian defence programmes. The agreement detailed the goals, monitoring and other conditions to be met to ensure that disposition of the plutonium was transparent, irreversible and consistent with non-proliferation objectives.
- 157. It was worthy of note that the SIR was able to provide broader safeguards conclusions for nearly 60 States. Most of the safeguards effort under the NPT now fell under integrated safeguards and the State-level approach. The United States commended the Secretariat on its progress in further elaborating the State-level approach, including its continued efforts to move towards a safeguards system that was more information-driven. It also welcomed the Secretariat's continuing work to increase the transparency of the SIR by means of greater State-level reporting, and to assess safeguards effectiveness.
- 158. Mr MONDOLONI (France), noting that efforts to combat proliferation were crucial for global security, said that strengthening of the international non-proliferation regime was central to such efforts. Member States should give priority to supporting the Agency's vital role in that regime to ensure that the safeguards system remained fully effective and credible, a goal that called for the universalization and strengthening of safeguards. While progress was being made towards universalization, and the States that had taken steps in that direction during the preceding year were to be commended, much remained to be done. France urged States that had not yet done so to bring comprehensive safeguards agreements into force as soon as possible. Moreover, as noted in the report, the Agency was unable to provide credible assurances of the absence of undeclared nuclear material and activities unless the measures provided for in the Model Additional Protocol were implemented. To date, the vast majority of Member States, i.e. 135 countries, had signed an additional protocol and 108 had brought their protocol into force. France called on the remaining States to join them and urged all States that had not yet signed an additional protocol to do so as soon as possible. It also called on States that had not yet done so to take practical steps to bring their SQPs in line with the revised version approved by the Board in September 2005.
- 159. France was seriously concerned at the major threat to international peace and security posed by proliferation crises. Conduct that undermined the Agency's authority was unacceptable. The Agency should therefore fully mobilize the resources at its disposal and the States concerned should comply with all the obligations they had assumed.
- 160. His country welcomed the fact that integrated safeguards were now being implemented in 48 Member States, which were thus applying what France regarded as the verification standard

pursuant to Article III.(1) of the NPT, namely the implementation of a comprehensive safeguards agreement and an additional protocol.

- 161. France supported the Secretariat's efforts to enhance the Agency's analytical capabilities and expertise and would continue to seek extrabudgetary funding with its European Union partners for the modernization of the safeguards laboratory. While French laboratories already assisted the Agency in analysing nuclear material and environmental samples, an additional laboratory was being qualified to expand the network of analytical laboratories accredited by the Agency.
- 162. His country would also continue to assist the Agency through its safeguards support programme, which was one of the most substantial in terms of cash and in-kind contributions.

The meeting rose at 1 p.m.