IAEA Board of Governors Record of the 1070th Meeting GOV/OR.1070

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Nuclear verification
(b) Implementation of the NPT safeguards agreement in the Islamic Republic of Iran: Report by the Director General



Board of Governors

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Record of the 1070th Meeting

Held at Headquarters, Vienna, on Wednesday, 18 June 2003, at 10.20 a.m.

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[*] GOV/2003/43.

03-04643 (LX)

Attendance

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

Ms. AL-MULLA	Chairperson (Kuwait)
Ms. KELLY	Argentina
Ms. STOKES	Australia
Mr. ABDENUR	Brazil
Mr. VAPIREV	Bulgaria
Mr. GANSORE	Burkina Faso
Ms. HALL	Canada
Mr. GONZÁLEZ ANINAT	Chile
Mr. ZHANG Yan)
Mr. CAO Shudong	China
Mr. SERRANO CADENA	Colombia
Mr. CARRERA DORAL	Cuba
Mr. VACEK	Czech Republic
Mr. CHRISTENSEN	Denmark
Mr. SHOUKRY SELIM	Egypt
Mr. THIEBAUD	France
Mr. HONSOWITZ	Germany
Mr. SREENIVASAN	India
Mr. SALEHI	Iran, Islamic Republic of
Mr. TAKASU	Japan
Ms. AL-KHALID	Kuwait
Mr. GULAM HANIFF	Malaysia
Mr. ZNIBER	Morocco
Mr. RAMAKER	Netherlands
Ms. BRIDGE	New Zealand
Mr. HALPHEN PÉREZ	Panama
Mr. GARCIA Mr. VALECA	Philippines Romania
Mr. BERDENNIKOV	Russian Federation
Mr. AL-ATHEL	Saudi Arabia
Mr. MINTY	South Africa
Mr. NÚÑEZ GARCÍA-SAÚCO	Spain
Mr. TAHA	Sudan
Mr. MAYOR	Switzerland
Mr. ŞAHİNBAŞ	Turkey
Mr. O'SHEA	United Kingdom of Great Britain
	and Northern Ireland
Mr. BRILL	United States of America
Mr. NOBLE	Office States of Afficiea
Mr. ELBARADEI	Director General
Mr. GOLDSCHMIDT	Deputy Director General,
M. ANDIG	Department of Safeguards
Mr. ANING	Secretary of the Board

Representatives of the following Member States attended the meeting:

Afghanistan, Albania, Angola, Armenia, Austria, Belgium, Bosnia and Herzegovina, Costa Rica, Estonia, Finland, Greece, Holy See, Hungary, Indonesia, Ireland, Israel, Italy, Jordan, Kazakhstan, Kenya, Republic of Korea, Lebanon, Libyan Arab Jamahiriya, Luxembourg, Malta, Mexico, Nigeria, Norway, Pakistan, Peru, Poland, Portugal, Slovakia, Slovenia, Sweden, Syrian Arab Republic, Thailand, Ukraine, Uruguay, Venezuela, Vietnam, Zimbabwe.

Abbreviations used in this record:

ABACC Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials

DPRK Democratic People's Republic of Korea

Euratom European Atomic Energy Community

HEU High-enriched uranium

ISO International Organization for Standardization

LWR Light-water reactor

NPT Review Review Conference of the Parties to the Treaty on the Non-Proliferation

Conference of Nuclear Weapons

SAGSI Standing Advisory Group on Safeguards Implementation

SIR Safeguards Implementation Report

SSAC State System of Accounting for and Control of Nuclear Material

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

6. Nuclear verification

- (a) The Safeguards Implementation Report for 2002 (continued) (GOV/2003/35 and Corr.1)
- 1. Mr. CAO Shudong (China) noted with satisfaction that the Agency had found no indication of the diversion of nuclear material placed under safeguards nor of the misuse of facilities, equipment or non-nuclear material placed under safeguards, and had found that nuclear material and other items placed under safeguards had remained in peaceful nuclear activities or were otherwise adequately accounted for in countries with safeguards agreements in force. The Agency had done a great deal of work in the safeguards area in 2002 and had achieved significant results. Notably, there had been an increase compared with the previous year in the attainment of all safeguards goals, demonstrating a further improvement in safeguards effectiveness. It had developed the conceptual framework for integrated safeguards and had begun its implementation in some countries. With the support of Member States, it had also developed new safeguards equipment and further strengthened training both for its own staff and for personnel from Member States.
- 2. However, China was deeply concerned at the excessive and increasing dependence of safeguards activities on extrabudgetary funding. It therefore believed that Regular Budget funding for safeguards activities should increase somewhat, as long as an appropriate balance was maintained. The Agency should also further optimize management, improve efficiency and reduce costs, so as to lighten the burden on Member States.
- 3. Although progress had been made in safeguards implementation in 2002, overall progress with the conclusion and entry into force of safeguards agreements and additional protocols was still below expectations. Some 23 States with significant nuclear activities had still not yet signed additional protocols. The Chinese Government fully recognized the importance of additional protocols and, on 28 March 2002, the additional protocol to the safeguards agreement between China and the Agency had formally entered into force. China had already submitted its initial reports, thus becoming the first nuclear-weapon State to have ratified and implemented the additional protocol. It appealed to all countries concerned, especially those with significant nuclear activities, to sign, ratify and implement a safeguards agreement and an additional protocol as soon as possible.
- 4. In conclusion, he took note of the Agency's Safeguards Implementation Report for 2002 and agreed to the release of the Executive Summary.
- 5. Mr. ABDENUR (Brazil) said that his country was pleased to note that nuclear material and other items declared and placed under safeguards had remained in peaceful nuclear activities or had been adequately accounted for, except in the case of one State, and that no indication had been found of the presence of undeclared nuclear material or activities in 13 States with additional protocols in force. The part 1 measures under Programme 93+2 had contributed significantly to strengthening the credibility of the assurances provided by comprehensive safeguards agreements. However, the 13 States with additional protocols in force where the Agency had not found any indication of the presence of undeclared nuclear material or activities had no extensive nuclear activities or advanced fuel cycle technologies. Thus, the Secretariat needed to acquire more experience with the implementation of additional protocol activities in States with a large number of, or more complex nuclear installations.

- 6. Brazil welcomed the Secretariat's initiative in revising the guidelines for State declarations and reporting under the additional protocol. In view of the complexity and sensitivity of the information to be provided, Member States should be consulted during the review process. Thanks to the efforts of the Secretariat to make the document as clear and understandable as possible, and the contribution of experts from Member States, it should be possible to overcome the difficulties described in paragraphs 175-178 of the SIR.
- 7. He congratulated the Secretariat on concluding its work on the conceptual framework for integrated safeguards and a model integrated safeguards approaches for several types of nuclear facilities. It should continue to give the highest priority to further development in that area.
- 8. Brazil attached great importance to co-operation between the Agency and ABACC. Significant progress had been achieved in that regard and co-ordination should be pursued as a permanent goal in order to avoid unnecessary duplication of effort and achieve cost-effectiveness in the application of safeguards in Brazil and Argentina.
- 9. The continuing delays in the receipt of submissions pursuant to additional protocols seemed to indicate the need for more training of SSACs. The downward trend in the average number of instances of complementary access per State was welcome, though the overall number was still high.
- 10. The Agency was to be commended on the improvements in safeguards implementation in 2002 as regards attainment of both the quantity and the timeliness components of the inspection goal. The increase in goal attainment for on-load reactors and enrichment plants had been significant, and the quantity component for unirradiated direct-use material had been fully attained for the first time ever.
- 11. There was still room to increase the cost-efficiency of safeguards, and thus maintain the system's effectiveness without increasing the budget. In that connection, the main body of the report did not contain substantive elements to support the statement made at the end of the final paragraph of the second section of the Executive Summary. The last five sentences of that paragraph should therefore be deleted from the text to be released. With those comments, he took note of the report and agreed to the release of the Executive Summary.
- 12. Mr. THIEBAUD (France) said that the excellent results obtained in safeguards implementation in 2002 should not be allowed to obscure the very serious difficulties the safeguards regime was facing.
- 13. The pace of accessions to the additional protocol remained low. Despite efforts to promote that instrument and the increasing number of protocols approved by the Board, the number of protocols which had been signed and had entered into force in 2002 represented a levelling off compared with 2001, clearly showing that efforts in that area needed to be pursued with determination. France had adopted a law ratifying its additional protocol in April 2003.
- 14. With regard to the financing of safeguards, the constantly growing quantity of material subject to safeguards, the work on the strengthening of safeguards, and the increasing impossibility of financing equipment expenditure from the Regular Budget were only three of several elements which were making it difficult for the Department to fulfil its mission. An increase in the Department's resources was therefore essential.
- 15. Turning to the details of the report, it was regrettable that it simply juxtaposed facility-level and State-level evaluations without indicating how those different activities complemented each other. Moreover, there were sometimes considerable delays in the submission of declarations pursuant to additional protocols, and all States should meet their obligations in that regard. Finally, the Secretariat should provide additional information on the two types of complementary access.
- 16. In conclusion, he took note of the report and agreed to the release of the Executive Summary.

- 17. Mr. O'SHEA (United Kingdom) said that only the combined implementation of comprehensive safeguards agreements and additional protocols could provide the basis for the Agency to make statements about the absence of undeclared nuclear material or activities. It was therefore important that that become the norm for safeguards. It should be self-evident that such truly comprehensive safeguards were particularly important for States with significant nuclear programmes which had, or were developing, enrichment or reprocessing capabilities.
- 18. The Secretariat had rightly emphasized that safeguards conclusions derived from much more than the quantified results of safeguards inspections. As the report stated, there had been a shift from a system focused primarily on quantitative verification of nuclear material at specific locations to a system which involved the assessment of both quantitative and qualitative information.
- 19. The Agency's achievement in improving upon previous record high levels of inspection goal attainment at facilities with declared material was commendable. Continued improvements in containment and surveillance had contributed to that, which no doubt would be taken into account in the further development of facility-specific approaches for strengthened and integrated safeguards. The United Kingdom also welcomed the Secretariat's review of safeguards approaches for conversion and enrichment facilities.
- 20. Information evaluation continued to suffer delays for want of adequate resources, yet it lay at the very heart of strengthened safeguards and of the Agency's ability to discover evidence of undeclared nuclear material or activities. Such delays would also hinder the transition to integrated safeguards and the savings that should bring.
- 21. In conclusion, he took note of the report and agreed to the release of the Executive Summary.
- 22. Mr. NOBLE (United States of America) commended the Secretariat on its efforts to implement and improve safeguards despite the constrained resources available to it.
- 23. Although the pace at which additional protocols were entering into force had picked up, progress was still below expectations. His country had provided the Agency with financial and in-kind assistance to promote broader adherence to the additional protocol and it encouraged other Member States to do likewise. The additional protocol was an important non-proliferation commitment that helped the Agency fulfil its key verification role, and its acceptance by Member States should not be linked to other issues. The United States urged all Member States which had not yet done so to sign and ratify an additional protocol without delays and conditions. The United States Congress would begin considering an additional protocol in July 2003.
- 24. By the end of 2002, 48 States party to the NPT had not yet met their obligations with respect to concluding a safeguards agreement. The Agency was to be commended on its outreach programme, and he encouraged other countries to meet what was an important obligation.
- 25. The Agency's safeguards obligations continued to grow, and the report noted that a shortfall in the Regular Budget would delay and hinder progress in implementing the strengthened safeguards system. That warning should be taken seriously by all Member States. The Agency's staff and resources were stretched to the limit. Moreover, the report pointed out that substantial resources were needed to replace ageing equipment, that the lack of resources had contributed to the Agency's inability to draw conclusions for 15 of the 28 States where the additional protocol was being implemented, and that a lack of staff had delayed completion of State evaluation reports. Each of those factors was critical to a strong safeguards system, and together they sent a warning signal that fiscal repairs were needed. Without Regular Budget increases like those sought by the Director General, the Agency would not be able to ensure that safeguards remained effective and credible.

- 26. He commended the Secretariat on the progress it had made in strengthening its capability to detect undeclared nuclear activities. Additional protocols were the principal means for that, but more attention should be given to existing opportunities under comprehensive safeguards agreements which might not be fully exploited, such as broader information evaluation and the use of special inspections. One important and long overdue step was that all relevant States had now accepted the new standard for early submission of design information.
- 27. Monitoring of transfers of spent fuel to storage took up a large and growing percentage of the Agency's inspection workload and represented an area where real efficiencies could be achieved if high priority were given to identifying and implementing novel approaches.
- 28. There had been welcome improvements in the area of inconclusive containment and surveillance results. The report indicated that maintaining continuity of knowledge was particularly important during reactor refuelling, and that increased redundancy and reliability were important contributors to improved performance. Using temporary surveillance alone during that period, as had been proposed under integrated safeguards, would reduce reliability and constitute a step backward. He therefore encouraged the Agency to take advantage of technical advances in the area of containment and surveillance. The United States would continue to provide assistance to that end.
- 29. His country had noted with satisfaction the continuing improvement in attainment of the quantity component of the inspection goal, and the improvement in attainment of the timeliness component. However, the treatment of the latter was too simplistic. Failure to meet the timeliness goal suggested that the Agency had no capability to detect diversion in a timely manner, yet in many cases the problem was a lowered detection probability. As use of random inspections increased, the Agency should consider viewing timely detection in terms of probabilities rather than in black and white terms.
- 30. The enhanced information in the report on additional protocol activities was welcome and he urged the Secretariat to continue to expand and clarify its reporting on activities relating to the absence of undeclared activities. That applied particularly to complementary access. The reduction in the number of instances of complementary access was puzzling. Further information on the numbers of such visits would be helpful in clarifying the Agency's strategy in applying complementary access. Reporting on integrated safeguards implementation and evaluation needed to be thorough so that Member States could gain a clearer understanding of where specific safeguards implementation problems lay.
- 31. In conclusion, he urged Board members to help ensure that the safeguards system had the resources it needed to do the increasingly important work requested of it. It was incumbent upon all to ensure that the Agency had the tools it required to do its work effectively and efficiently. The United States took note of the report and agreed to the release of the Executive Summary.
- 32. Mr. SHOUKRY SELIM (Egypt) noted with satisfaction that the Agency had found no indication of diversion of nuclear material placed under safeguards or of misuse of facilities, equipment or non-nuclear material placed under safeguards, except in the case of one State, and he urged the Agency to redouble its efforts to achieve progress in the universal application of the comprehensive safeguards system.
- 33. It was disappointing that, as of the end of 2002, 48 non-nuclear-weapon States party to the NPT had not yet brought into force comprehensive safeguards agreements. It was also cause for great concern that universal adherence to the NPT remained elusive, which cast doubt on the effectiveness of all efforts aimed at strengthening the non-proliferation regime, including those carried out by the Agency. In pressing for progress with respect to the additional protocol, it was important to remain focused on the need to achieve universality of comprehensive safeguards and universal adherence to the NPT in order not to consolidate a status quo that merely served to increase the risks of nuclear

proliferation. Egypt did not consider the conclusion of an additional protocol a legally binding commitment. It welcomed Cuba's decision to adhere to the NPT and to embark upon consultations with the Agency with a view to concluding a comprehensive safeguards agreement. He called on all States which were not party to the NPT to take the same positive step. In conclusion, he took note of the report.

- 34. Ms. BRIDGE (New Zealand) said that, unless adequate safeguards were in place, the Agency was not in a position to assure Member States that a State's nuclear activities were exclusively peaceful. The new verification standard was the additional protocol, in addition to the standard comprehensive safeguards agreement. There were still 46 States party to the NPT which did not even have safeguards agreements with the Agency, and only 35 States had brought additional protocols into force, which was a very disappointing state of affairs. Moreover, 23 States with significant nuclear activities had not signed additional protocols. She urged all Member States to sign comprehensive safeguards agreements and to conclude and implement additional protocols, especially those Member States which had advanced nuclear programmes. In conclusion, she took note of the report and agreed to the release of the Executive Summary.
- 35. Mr. MINTY (South Africa) said it was essential that the 48 non-nuclear-weapon States party to the NPT which had not yet signed safeguards agreements with the Agency do so as soon as possible in order to ensure the effective implementation of the Treaty.
- 36. His country had continued to play an active role in safeguards implementation. The additional protocol to its safeguard agreement with the Agency had entered into force in 2002. In June 2002, South Africa had hosted a regional seminar for African States, which had focused on capacity building with respect to safeguards agreements and additional protocols. Though implementation of the additional protocol would place an extra burden on South Africa, it felt that that was a price worth paying to strengthen the international disarmament and non-proliferation regime.
- 37. Referring to paragraph 199 of the SIR and activities at the Pelstone waste storage facility, he said that, although calibrations for certain drum sizes had not yet been completed and some technical problems with the drum scanner persisted at the facility, progress had been made and verification by the Agency of drums containing HEU-contaminated waste should soon commence. In order to improve physical security, a large number of waste drums had been relocated to a single storage facility where the drum scanner was located.
- 38. South Africa welcomed the increased co-operation with SSACs. Its own SSAC had acquired ISO 9001:2000 certification in view of the importance of quality management in its activities. In July 2003, the country would be hosting the first African regional SSAC training course. It would also soon hold an inaugural meeting to join the Member State support programme. In that connection, the Agency had proposed four tasks relating to the safeguards approach for the Pebble Bed Modular Reactor.
- 39. Ms. STOKES (Australia) noted with satisfaction that, in 2002, the Agency had been able to draw conclusions regarding the absence of undeclared nuclear material and activities for 13 of the 28 countries with both a comprehensive safeguards agreement and an additional protocol in force or being provisionally applied. Australia was one of those 13 States. It hoped that similar conclusions could be drawn for the other 15 in the near future. It also welcomed the provisional application of integrated safeguards in Norway. However, 48 non-nuclear-weapon States party to the NPT had still to bring into force a safeguards agreement.
- 40. In order to evaluate and report on the effectiveness of integrated safeguards, the Agency needed to develop appropriate methodology. Her country stood ready to assist the Agency in that connection. It also welcomed the increased reporting on additional protocols and integrated safeguards

implementation in the SIR, the use of footnotes to report on relevant developments after the reporting period, and the progress made in addressing the problem of prolonged non-attainment of inspection goal components. Further action was needed on the latter issue.

- 41. Four developments were of particular concern to Australia: the increasing reliance on extrabudgetary contributions to implement the safeguards programme, the substantial resources required to replace aging safeguards equipment, the delays in 2002 in pursuing important activities relevant to integrated safeguards, and the resulting delays in conducting the activities required to draw conclusions on the absence of undeclared nuclear material and activities.
- 42. It was essential that the Agency be given sufficient funding and resources to ensure that the safeguards system remained effective and credible. For its part, Australia was ready to meet its full share of the costs involved in achieving that.
- 43. The slow rate of conclusion of additional protocols was disappointing, but 70% of all non-nuclear-weapon States with significant nuclear activities had signed or ratified an additional protocol.
- 44. Mr. Chung-ha SUH (Republic of Korea)* noted with satisfaction that, with the one regrettable exception of the DPRK, the Secretariat had been able to conclude that nuclear material and other items placed under safeguards had remained in peaceful nuclear activities or were otherwise adequately accounted for. He also commended the Agency on the improvement in inspection goal attainment in 2002.
- 45. The Republic of Korea attached the utmost priority to maintaining the credibility of the Agency's safeguards system which was crucial to global security. It was essential that the system was properly funded. Furthermore, a comprehensive review of safeguards criteria should be carried out in order to ensure the effectiveness of the system as a whole.
- 46. The Agency should enhance co-operation with SSACs in order to optimize the use of available resources. The Memorandum of Understanding which the SSAC of the Republic of Korea had signed with the Agency on enhanced co-operation on LWRs had been fully implemented in 2002. The use of remote monitoring and unannounced interim inspections, as provided for in that instrument, had saved the Agency over 30 days of inspection work.
- 47. His country supported the Agency's efforts to complete the conceptual framework for integrated safeguards, which had been adopted by the Board in March 2002. Enhanced co-operation with the Agency on LWRs was likely to become the cornerstone of a future integrated safeguards system in the Republic of Korea.
- 48. The SIR identified three main problem areas: prolonged non-attainment of inspection goal components, non-verifiable spent fuel in shipping casks, and inconclusive containment and surveillance results. The Agency should take steps to strengthen the Member State support programmes in the relevant countries with a view to solving those problems.
- 49. Ms. ROSAS (Mexico)* noted with satisfaction that the Secretariat had concluded that nuclear material and other items placed under safeguards had remained in peaceful nuclear activities or were otherwise adequately accounted for in States where safeguards agreements were in force in 2002. However, it was regrettable that the Agency had been unable to verify that no material had been diverted in the DPRK. She further noted that the Secretariat had only been able to draw conclusions regarding the absence of undeclared material or activities for 13 of the 28 States with comprehensive safeguards agreements and additional protocols in force, and that the evaluations for drawing such a conclusion for the remaining 15 were in progress.

- 50. Section IV of the SIR indicated that, in many cases, additional protocol declarations had not been received by the Secretariat, or had been received too late to be reviewed during 2002. There had also been problems with the form in which the declarations had been submitted, as a result of which the Secretariat was still resolving certain questions and inconsistencies. Thus, the Secretariat should endeavour to make the relevant guidelines for States as clear and extensive as possible, and States should give greater attention to the information they supplied and to the degree of detail required under an additional protocol.
- 51. The Secretariat was continuing to experience problems in applying safeguards at some facilities. Thus, requests for complementary access had sometimes been delayed or denied. She urged Member States to co-operate fully with the Agency on the application of safeguards measures, complying fully with their agreements.
- 52. Section 2 of the Executive Summary stated that a shortfall in Regular Budget funds and the associated shortfall in human resources would delay progress in implementing strengthened safeguards, and how the Agency would not be in a position to ensure that the safeguards system would remain effective and, therefore, credible without an increase of US \$19.2 million for the verification programme. That was cause for extreme concern. However, it constituted only a partial view of what might be considered a credible safeguards system and did not accord enough importance to the efforts of the Agency and its Member States over the preceding ten years to make the safeguards system cost-effective and efficient. While it was important to continue examining the criteria and the way in which verification activities should be conducted with a view to continued improvement, there was no doubt that the safeguards system was credible. If its credibility was in any way in doubt, that was due to political issues which lay outside the Agency's control and were related to the political will of Member States to provide both the information and access required.
- 53. Referring to Fig. IV.1, she noted the progress that had been made in 2002 by comparison with the previous years with respect to the attainment of the quantity component of the inspection goal. However, that type of information did not provide indicators of the efficiency and effectiveness of the safeguards system. The fact that the attainment rate was lower for reprocessing and enrichment facilities than for other facility types was also of great concern.
- 54. With reference to problem areas, paragraphs 205-207 described cases where the quantity or timeliness components had not been attained because spent fuel had been loaded into shipping casks and stated that the problem of material being unavailable for verification might increase under certain circumstances. Effective measures should be taken to address that problem.
- 55. The Agency had spent \$12 656 993 on safeguards equipment in 2002. Section VI of the SIR should include a table giving information on purchases of safeguards equipment showing the amount spent by place of origin, like the Technical Co-operation Report for 2001.
- 56. Finally, regarding the distribution of the Agency's inspection effort, paragraph 115 of the SIR should also give the percentage of person-days inspection in States with a comprehensive safeguards agreement and an additional protocol.
- 57. Mr. GOLDSCHMIDT (Deputy Director General for Safeguards) thanked Member State representatives for their positive comments on the SIR for 2003. Responding to the points raised, he noted that any increase in inspection goal attainment was attributable to a significant extent to the cooperation of State and regional systems of accounting and control, and of operators.
- 58. Some concern had been expressed that additional protocol activities might have a detrimental effect on activities under comprehensive safeguards agreements. They were in fact complementary. The Agency's safeguards system now focused on States as a whole rather than on individual facilities

and the State evaluation report and review system was now implemented for countries both with and without additional protocols.

- 59. With regard to the sources of extrabudgetary funding for equipment procurement, at a rough estimate 89% came from the United States, 4% from Japan and between 1 and 2% from France, Germany, Canada and the United Kingdom, respectively.
- 60. The development of co-operation between the Secretariat and Euratom required input from both parties, but the Agency had been unable to hold even one high-level liaison committee meeting with Euratom over the preceding two years. He therefore urged the European Union Member States to encourage Euratom to co-operate.
- 61. With regard to the request to include more information on voluntary reporting in the SIR, while such information supported the analysis in the State evaluation report, no meaningful way of including it in the SIR had yet been found.
- 62. With respect to the request for a major programme review for safeguards, page 201 of document GC(45)/8 indicated that such a review was planned for 2003 and its main findings would be reported to the Board in 2004. Moreover, SAGSI would continue to advise the Director General on new safeguards concepts and approaches. It would be helpful if Member States could submit to the Secretariat, in time for their review before the SAGSI meeting in October, concrete written proposals on how current safeguards criteria and approaches could be modified to increase efficiency without diminishing effectiveness.
- 63. Referring to paragraph 91 and footnote 30 in document GOV/2003/35, he confirmed that no facilities in the Russian Federation had been designated for inspection in 2002. It was also true that material which had originally come from Iraq had been turned into fresh fuel and exported to a non-nuclear-weapon State where it was under safeguards.
- 64. Turning to the issue of how much information was needed to conclude that there were no undeclared nuclear material and activities in a country so that integrated safeguards could be implemented, and the concern that that process should not be delayed by small bureaucratic obstacles, he reassured Member States that such was not the case and that the Agency's conclusions were debated in the inter-departmental review committee to ensure they reflected a collective view. The outstanding issues to be resolved were categorized, as and when appropriate, as either absolutely necessary, highly recommended, or desirable but not indispensable, to ensure that implementation of integrated safeguards was not unduly delayed. The strengthening measures under comprehensive safeguards agreements had significantly improved the credibility of the Agency's conclusions, but without the additional protocol the Agency did not have a sufficient basis for drawing credible conclusions on the absence of undeclared nuclear material and activities in a country.
- 65. With regard to the cost-benefit ratio of safeguards measures, an extensive report on the issue had been published in 1995. Three of the six tasks in that report had been: a cost analysis of current safeguards implementation; an assessment of potential cost-saving measures; and improving the effectiveness and efficiency of the safeguards system through strengthening measures and increased co-operation with SSACs. On page 11 of document GOV/2001/14, the External Auditor had reported that "the Department of Safeguards has significantly improved its management processes during 2000, through a range of initiatives [including the introduction of] management tools such as: cost benefit analysis through training and the use of a template; and [conducting of] systematic cost benefit analysis prior to implementation of projects and/or equipment purchases". Those mechanisms were still being implemented and further developed.

- 66. The Secretariat could neither be praised nor blamed for the decrease in the number of instances of complementary access in 2002, since that figure depended on how many new countries had signed additional protocols. When matters reached the stage where questions and inconsistencies were being resolved, there was less need for complementary access. In 2002 complementary access had decreased by 20% in Japan, but a major increase should be expected in 2004 after the 15 additional protocols with European Union States came simultaneously into force.
- 67. With the help of several Member States' support programmes, the Department of Safeguards was actively evaluating new approaches for verifying the transfer of spent fuel to dry storage, including the use of new technologies and unannounced inspections in conjunction with the provision of additional operational information. The aim was to reduce the verification effort while maintaining effectiveness. That issue was one of the Department's priorities and SAGSI was involved.
- 68. Some Member States had expressed concern that goal attainment for reprocessing and enrichment facilities had decreased. That interpretation was inaccurate and he referred them to Table IV.1 in the SIR. Unfortunately, in the text goal attainment for conversion and fuel fabrication facilities had been combined with other types of facility, giving an incorrect impression. Goal attainment for sensitive facilities had in fact increased.
- 69. Finally, with regard to the percentage of person-days of inspection in countries with a comprehensive safeguards agreement and an additional protocol in force, it was unlikely that that information would be very useful as the figure would shift constantly with the number of countries ratifying an additional protocol.
- 70. <u>The CHAIRPERSON</u>, summing up the discussions said that the Board had noted the high quality of the report and had recognized the scope and quality of the work of the Department of Safeguards. Some suggestions had been made for further improving and clarifying the report, and a view had been expressed that the main body of the report did not contain substantive elements to support certain statements in the Executive Summary.
- 71. The Board had welcomed the conclusion that in 2002, with the exception of the DPRK, the nuclear material and other items placed under safeguards had remained in peaceful nuclear activities or were otherwise adequately accounted for. It had also welcomed the conclusion reached in respect of 13 States with comprehensive safeguards and additional protocols in force, or being applied provisionally, that all nuclear material in those States, or under their jurisdiction or control, had been placed under safeguards and had remained in peaceful nuclear activities or was otherwise adequately accounted for. With respect to the 15 other States with comprehensive safeguards agreements and additional protocols in force, the Board had noted that the Agency's evaluations for drawing such a conclusion were in progress.
- 72. States party to the NPT which had not yet done so had been urged to conclude safeguards agreements with the Agency. Concern had been expressed by many at the disappointingly slow progress with the conclusion and entry into force of additional protocols, and the view had been put forward that States party to safeguards agreements which had not yet done so, particularly those with significant nuclear activities, should conclude and bring into force additional protocols as soon as possible.
- 73. Several members had emphasized that the Agency's safeguards system could only provide credible assurances of non-diversion of nuclear material from peaceful activities, and of the absence of undeclared activities, in States with comprehensive safeguards agreements and additional protocols in force. Others had stressed the importance of the measures adopted in part 1 of Programme 93+2 for strengthening the credibility of the assurances provided by comprehensive safeguards agreements.

Another member had expressed the view that, while it attached importance to additional protocols, it considered that there was no legally binding commitment to conclude one.

- 74. The Agency's efforts to increase adherence to the additional protocol through the development of a revised action plan and other outreach activities had been welcomed, and the Agency had been encouraged to develop regionally focused measures within the action plan in order to achieve further progress before the 2005 NPT Review Conference.
- 75. Some members had expressed the view that achieving universality of the Agency's comprehensive safeguards system was important, and the Secretariat had been requested to keep Member States informed of its efforts in that regard. The view had been expressed that universal adherence to the NPT remained elusive, thereby casting doubt on the effectiveness of the measures aimed at strengthening the non-proliferation regime; and that achieving that objective and universality of comprehensive safeguards should remain a priority.
- 76. The Board had noted the improved results for goal attainment, despite the increase in the number of facilities and the amount of nuclear material under safeguards, as well as the financial constraints. The Secretariat had been urged to look at ways to improve goal attainment further, and to co-operate with the States concerned to solve existing problems.
- 77. Several members had expressed appreciation for the further development of new activities such as complementary access, environmental sampling, evaluation of information on States' nuclear-related activities, satellite imagery analysis and new surveillance systems. Regular evaluation of the effectiveness and efficiency of those activities, in consultation with Member States, had been encouraged.
- 78. It had been emphasized that the Department of Safeguards should have the necessary funding to maintain credible safeguards. Several members had expressed support for an increase in the Agency's safeguards budget. Others had emphasized that the strengthening of international safeguards was not only a question of financing but required a firm political commitment by all States.
- 79. Some had stressed the need for further efficiency, including cost-efficiency, in the Agency's safeguards work. The Board had noted the progress made in increasing the effectiveness and efficiency of the safeguards system.
- 80. Several members had proposed that a comprehensive review of safeguards approaches and criteria be carried out to ensure a more effective and efficient system of verification. It had been suggested that SAGSI could play a useful role in that review.
- 81. The implementation of integrated safeguards in Australia and Norway had been welcomed, and the Agency had been urged to do its utmost to introduce integrated safeguards as quickly as possible in States with significant nuclear activities so as to improve the efficiency of the system.
- 82. Several members had stressed that a rapid evolution of the implementation of integrated safeguards would allow inspections to be reduced and that cost neutrality was still a valid aim.
- 83. Several members had requested that the Agency develop further its co-operation with regional systems such as EURATOM and ABACC.
- 84. Concern had been expressed at the sharp increase in voluntary contributions in 2002, which was not conducive to a view of the safeguards system as beneficial to, and financed by all Member States, with its costs being borne by all members.

85. With those comments, she took it that the Board wished to take note of the Safeguards Implementation Report for 2002 and to authorize the release of the Executive Summary.

86. It was so agreed.

(b) Implementation of the NPT safeguards agreement in the Islamic Republic of Iran: Report by the Director General (GOV/2003/40)

- 87. Mr. GULAM HANIFF (Malaysia), speaking on behalf of the Non-Aligned Movement Chapter in Vienna, said that members of the Non-Aligned Movement were concerned at the growing tendency to resort to unilateralism and unilaterally imposed prescriptions. Multilateralism and multilaterally agreed solutions were the only sustainable path towards disarmament and international security. In that connection, the Movement welcomed the adoption of General Assembly Resolution A/RES/57/63 on promotion of multilateralism in the area of disarmament and non-proliferation. It fully recognized the Agency's role as an independent, intergovernmental, science and technology-based United Nations agency, providing a global focal point for nuclear co-operation. Thus, it associated itself with the statement made on behalf of the Group of 77 and China on the other agenda items discussed.
- 88. The Movement was in favour of the speedy establishment of a zone free of weapons of mass destruction in the Middle East, in accordance with the relevant resolutions of the United Nations Security Council and the General Assembly. It called upon all parties concerned to take urgent and practical steps to that end, and urged Israel promptly to place all its nuclear facilities under Agency comprehensive safeguards.
- 89. He noted with concern that undue restrictions on exports to developing countries of material, equipment and technology for peaceful purposes persisted. Non-proliferation concerns were best addressed through multilaterally negotiated, universal, comprehensive and non-discriminatory agreements.
- 90. The Movement welcomed the limited resumption of inspections in Iraq and looked forward to the Agency fully discharging its Security Council mandate in that country.
- 91. The SIR stated that the Secretariat had found no indication of the diversion of nuclear material placed under safeguards and had concluded that, with the exception of one non-Member State, nuclear material and other items placed under safeguards had remained in peaceful activities or were otherwise adequately accounted for. Paragraph 187 of the report indicated that, for facilities with one significant quantity or more of nuclear material, 34 facilities (10%) in 15 States had failed to attain fully the quantity component of the inspection goal, and 32 facilities (9%) in 15 States had failed to attain the timeliness component. That fact was of relevance to the item under discussion.
- 92. The Movement noted with concern that no developing Member State had been accepted into the Agency's network of analytical laboratories. The Agency should strive for wider geographical distribution and assist such countries to meet the qualification requirements.
- 93. He welcomed the Director General's recent visit to Iran and the subsequent signing of new Subsidiary Arrangements. He also welcomed Iran's constructive initiative in presenting its peaceful nuclear strategy to Member States through its Vice President in May 2003. Iran's decision to allow the Agency to inspect its nuclear facilities even before its official acceptance of the modified Subsidiary Arrangements was to be commended, as were the numerous confidence-building measures it had taken, even allowing visits by Agency officials to buildings unrelated to any nuclear facility. Moreover, after accepting the modified Subsidiary Arrangements, Iran had allowed six safeguards missions over the preceding three months.

- 94. The Non-Aligned Movement was of the opinion that the Director General's report contained in document GOV/2003/40 did not indicate non-compliance but a failure to report, similar to the cases referred to in paragraph 187 of the SIR. It encouraged both parties to pursue their consultations with a view to making progress in the implementation of safeguards at new facilities. In conclusion, he commended the Director General's efforts in that regard and welcomed Iran's announcement that the Government was considering signing an additional protocol, and its open invitation to developed Member States to participate and co-operate in its nuclear programme.
- 95. Mr. ALEXANDRIS (Greece)*, speaking on behalf of the European Union, the acceding countries, Cyprus, the Czech Republic, Estonia, Hungary, Lithuania, Latvia, Malta, Poland, Slovakia and Slovenia the associated countries Bulgaria, Romania and Turkey, and Norway, said it was regrettable that the extent of Iran's nuclear programme had not been made known earlier to the Agency and the international community. Though any State party to the NPT had the inalienable right, under Article IV thereof, to develop research, production and use of nuclear energy for peaceful purposes, any misuse of civilian nuclear programmes constituted a violation of a State's obligations under that Treaty. It was deeply regrettable that Iran had failed to meet its reporting obligations under its comprehensive safeguards agreement, and its obligations concerning inventory changes. It had also failed to declare facilities where material was stored and processed. The Director General should keep the Board regularly informed on a matter of such grave concern.
- 96. Iran had finally adhered to the new requirements for early provision of design information adopted by the Board in 1992 and had provided advance design information on the construction of new nuclear facilities. He urged the Iranian authorities to allow all necessary inspections and the collection of environmental samples in connection with its enrichment activities, as an earnest of its declared policy of full transparency. Compliance with international non-proliferation and disarmament regimes was of capital importance, and weapons of mass destruction were one of the issues of concern in the political dialogue between Iran and the European Union, the progress of which would affect their economic relations. Thus, it was in Iran's interests to abide by international norms on peace and security.
- 97. The European Union fully supported the Director General in his efforts to resolve outstanding issues with Iran rapidly and urged that country to address, in full co-operation of the Agency and in a detailed and substantiated manner, the questions which had been raised concerning its nuclear programme, and to take steps to ensure full transparency of that programme and so restore the international community's confidence. It also called on Iran to conclude and implement an additional protocol swiftly and unconditionally.
- 98. Mr. SALEHI (Islamic Republic of Iran) thanked the members of the Non-Aligned Movement for their solidarity and support. His country had not abandoned hope that the matter under discussion could be satisfactorily resolved.
- 99. The report contained in document GOV/2003/40 could have been more fair and balanced but, given the recent political rhetoric and the directives issued in certain influential capitals, it was perhaps the best that could be expected. However, there was room for hope that not all international organizations had opted for total submission.
- 100. It was not reassuring that a restricted report had been discussed on CNN on the day of its release, and he implored other Member States to be more vigilant about the unendorsed circulation of restricted reports in future so as not inadvertently to undermine the security interests and rights of other countries. Neither his country nor any Board decision had authorized the release of that report, as was required under Iran's safeguards agreement.

101. The central issue in the report related to 0.13 effective kilograms of natural uranium which Iran had imported in 1991 to test the various processes at its uranium conversion facility. That facility had been under safeguards ever since construction started, i.e. before Iran had accepted the modified Subsidiary Arrangements. Despite subtle differences in the interpretation of Articles 95 and 34 of the safeguards agreement, Iran had declared the material to the Agency and it was now under full safeguards. However, even if his country were to admit negligence in the delayed declaration of the material in question, which was in any case way below the Agency's inspection thresholds, the SIR for 2002 (document GOV/2003/35) reported several other essential failures. Thus, paragraph 187 stated that 34 facilities (10%) in 15 States had failed to attain fully the quantity component of the inspection goal, and 32 facilities (9%) in 15 States had failed to attain fully the timeliness component. Paragraph 198 indicated that the quantity component of the inspection goal had not been attained for several years at six facilities as the measures foreseen in safeguards approaches could not be implemented. Paragraph 205 stated that it had not been possible to attain the quantity or timeliness components of the inspection goal at six LWRs as spent fuel had been loaded into casks for shipment and had been unavailable for verification during inspections. He also asked whether the hundreds of kilograms of uranium-shielded ammunition that had been transferred into Iraq had been reported either by the latter country or the country of origin. Thus, hardly any Member State could claim to be impeccable. What was important was the willingness of Member States to rectify possible failures. If the aim was to solve problems rather than turning them into international issues with far-reaching repercussions, every effort should be made to avoid the practice of double standards.

102. Questioning the merit of the further enquiries about Iran's programme related to the use of heavy water mentioned in paragraph 34(d) of the report, he asked whether Member States were under any legal obligation to justify any of their peaceful nuclear activities. Was it not the inalienable right of all Member States to acquire peaceful nuclear technology within the framework of the NPT? Iran had fulfilled its obligations under the NPT. Its denunciation of the nuclear option as a matter of principle, and the fact that it had placed its peaceful nuclear facilities under comprehensive safeguards, bore witness to its commitment to a strong NPT. The acquisition, development and use of nuclear weapons were inhuman, immoral, illegal and against Iran's basic principles. Such weapons had no place in its defence doctrine. They neither enhanced its security nor helped rid the Middle East of weapons of mass destruction. However, all provisions of the NPT were of equal importance. Maintaining the balance of rights and obligations enshrined in the Treaty preserved its integrity, enhanced its credibility and promoted the NPT's universality and full implementation thereof. Iran knew that greater capability brought with it more responsibility. It was enforcing its national laws and regulations on the control of nuclear and radioactive material and equipment. Any constructive interaction with other parties in that connection, including the Nuclear Suppliers Group, was welcome.

103. Finally, confidence-building meant acknowledging signs of co-operation, recognizing sincere intentions and using the right language for dialogue. The language of force and threat was not conducive to achieving the common goal. His country was still giving positive consideration to the conclusion of an additional protocol. As a further instance of its policy of transparency, it would raise no objection to the report on the implementation of the NPT safeguards agreement being made public, for it had nothing to hide in any of its peaceful nuclear activities.

104. Mr. TAKASU (Japan) said that, while Japan shared the concerns about the number of failures by Iran to report nuclear material, facilities and activities, it had noted the indications in the report that Iran was currently making efforts to take corrective actions in co-operation with the Agency by providing the necessary access and information.

105. He called upon Iran to rectify the outstanding issues as soon as possible by co-operating constructively with the Agency's verification activities. The Iranian authorities should reply promptly and in a convincing manner to the open questions and should submit specific information on research

and development carried out prior to the establishment of Iran's enrichment capabilities, any operations involving the use of nuclear material in connection with its centrifuge enrichment development programme, its reasons for producing uranium metal and developing a laser programme, and the purpose of its programme related to the use of heavy water. Environmental samples were an essential tool to prove the Iranian statement that it had developed its enrichment capabilities and constructed facilities for enrichment without any testing involving the use of nuclear material. Japan was concerned at Iran's lack of co-operation in that regard and hoped that its stated policy of transparency would be translated into concrete co-operation with the Agency. Such co-operation would not only assist the Agency in verifying Iran's declaration, but would also help Iran prove the absence of undeclared nuclear activities and the peaceful nature of its nuclear activities.

106. Though States party to the NPT had an inalienable right to acquire nuclear technology for peaceful purposes, that right did confer obligations. Countries with extensive nuclear activities and advanced fuel cycle technologies had a greater responsibility than others in terms of verification. For its part, Japan was making every effort to enhance transparency and had been one of the first countries to conclude an additional protocol. The Agency's ability to provide credible assurances regarding the absence of undeclared nuclear activities was limited in countries with no additional protocol in force, and he therefore urged Iran to conclude and bring into force an additional protocol without conditions. Such a step would help to convince the international community of the peaceful nature of its nuclear activities.

- 107. In conclusion, he urged the Secretariat to continue its analysis and verification activities, with the full co-operation of Iran, in order to clarify promptly any outstanding questions. The Board should issue a clear message in support of those activities, and the Director General should keep the Board informed of the progress made.
- 108. Mr. VALECA (Romania) expressed concern at the failure of the Iranian authorities to provide the Agency with certain information as they were required to do under Iran's safeguards agreement. He called for increased co-operation and transparency in order to clarify the outstanding issues.
- 109. Romania's additional protocol had been in force since June 2000. That instrument had increased the transparency of his country's nuclear activities, and it was an appropriate tool to strengthen the safeguards regime and the Agency's verification activities. He encouraged Iran to conclude an additional protocol, which would enhance the Agency's ability to provide credible assurances of the peaceful nature of its nuclear programme.
- 110. <u>Ms. HALL</u> (Canada) said that, in view of the press coverage that the issue had attracted, she endorsed the suggestion of the representative of Iran that the report be made public.
- 111. The Director General's report had established a pattern of failure by Iran to declare information as required by its safeguards agreement. It showed that Iran had been carrying out undeclared nuclear activities using undeclared nuclear material in undeclared nuclear facilities. Iran had only admitted to previously undeclared material, activities and facilities when confronted with evidence from other quarters. Its apparent reluctance to engage the Agency on a more proactive basis was not consistent with its promises of transparency, or in the spirit of co-operation expected under its NPT safeguards agreement.
- 112. Canada was extremely concerned and it encouraged the Secretariat to pursue its inspection efforts, particularly with regard to the open questions identified in paragraph 34 of the report, and to report its findings when the Board next met, if not sooner. The results of the environmental samples taken at the pilot enrichment plant at Natanz and elsewhere, together with other findings from the Agency's ongoing work, would enable to Board to form judgements based on solid evidence.

- 113. It was regrettable that the Iranian authorities had again denied the Agency's request to take environmental samples at the Kalaye Electric Company in Tehran. She called on Iran to comply fully with its undertakings by granting the Agency access to whatever facility it wished. If Iran had nothing to hide, it had nothing to fear from full transparency at Kalaye and elsewhere.
- 114. Furthermore, she urged Iran not to introduce any nuclear material into the pilot centrifuge cascade facility at Natanz until the unanswered questions had been resolved, thereby demonstrating its good faith and allowing the correctness and completeness of the information provided on that facility to be determined.
- 115. The unconditional conclusion and implementation of an additional protocol was the only way for Iran to allay international concern over its nuclear programme. Only through the enhanced authorities provided by an additional protocol could the Agency provide the Board and the world with credible assurances that Iran no longer harboured undeclared nuclear material, activities and facilities.
- 116. Ms. AL-KHALID (Kuwait) expressed satisfaction at the content of the report which, while indicating patterns of failure on the part of Iran, also highlighted corrective measures that country was taking. She welcomed Iran's co-operation with the Agency and urged it to make every effort to resolve the outstanding issues and allay concerns about its nuclear activities. In that connection, she noted with satisfaction that, in February 2003, Iran had accepted modified Subsidiary Arrangements requiring it to inform the Agency of new nuclear facilities and of modifications to existing facilities as soon as a decision in that regard had been taken. Countries that had signed the NPT had a right to acquire nuclear technology, and the signing by Iran of an additional protocol would dispel any suspicions about the nature of its nuclear programme. Iran was a strategically placed country and had an important role to play in co-operating with other countries of the Middle East to promote peace and stability in the region. Kuwait appreciated Iran's efforts to comply with international agreements and treaties in order to ensure that the NPT regime was fully respected at the regional as well as the international level.
- 117. Mr. MAYOR (Switzerland) said his country shared the Agency's concerns about Iran's failures to meet its obligations under its safeguards agreement with respect to timely reporting. He commended the Director General's efforts to maintain the credibility of the safeguards system in Iran and welcomed the increased transparency on the part of Iran. It should continue its efforts in that direction and take all necessary steps to rectify past omissions. He also urged Iran to sign an additional protocol as soon as possible and called upon the Director General to keep the Board informed of developments.
- 118. Mr. ŞAHİNBAŞ (Turkey) said that there had been a number of failures and delays on the part of Iran in fulfilling its obligations under its safeguards agreement and in reporting in a timely manner all aspects of its nuclear programme. It was perhaps too early to draw final conclusions, but the situation merited careful attention for the sake of the safeguards and NPT regimes which were very much dependent on openness and transparency. The more advanced a State's nuclear programme was, the greater its responsibility. Thus, while Turkey appreciated the Agency's efforts to clarify the outstanding issues, Iran bore the primary responsibility for allaying the concerns of the international community. He encouraged that country to continue co-operating with the Agency, which was also in its own interests, and he called upon Iran to conclude and bring into force an additional protocol as soon as possible.
- 119. Mr. ZHANG Yan (China) said that, on the one hand, the report highlighted some safeguards issues that required clarification while, on the other, it indicated that Iran was taking corrective measures, such as allowing Agency inspectors to visit facilities and providing early design

information. Every effort should be made for the parties concerned to resolve the issues through dialogue, consultation, co-operation and co-ordination.

120. China had always supported the NPT's objectives and international co-operation on the peaceful uses of nuclear energy. Agency safeguards were an important barrier to nuclear proliferation and his country supported the Agency's efforts to strengthen the safeguards regime. Additional protocols were a useful tool for that purpose and China was the first nuclear-weapon State to have ratified an additional protocol and to have submitted the relevant reports to the Agency. It called on other countries, particularly those with significant nuclear programmes, to sign, ratify and implement additional protocols as soon as possible. Iran should also be encouraged to conclude an additional protocol, which would help allay the international community's concerns.

121. The meeting rose at 1.05 p.m.