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RECORD OF THE THREE HUNDRED AND FORTY-THIRD PLENARY MEETING

Held at the Austria Center Vienna
on Monday, 21 September 1992, at 10.45 a.m.

Temporary President: Mr. SANTANA CARVALHO (Brazil)
President: Mr. ADEKANYE (Nigeria)

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[*] GC(XXXVI)/1001.

The composition of delegations attending the session is given in document GC(XXXVI)/INF/313/Rev.2.

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Abbreviations used in this record

ASSET	Analysis of Safety Significant Events Team
CANDU	Canada deuterium-uranium [reactor]
CEC	Commission of the European Communities
DPRK	Democratic People's Republic of Korea
FAO	Food and Agriculture Organization of the United Nations
FCCC	Framework Convention on Climate Change
IAEA	International Atomic Energy Agency
ICGFI	International Consultative Group on Food Irradiation
INES	International Nuclear Event Scale
ITER	International Thermonuclear Experimental Reactor
NEA	Nuclear Energy Agency (of OECD)
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NUSSAG	Nuclear Safety Standards Advisory Group
OSART	Operational Safety Review Team
RADWASS	Radioactive Waste Safety Standards
RBMK	High-power channel-type reactor (Soviet Union)
RCA	Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (for Asia and the Pacific)
SAGSI	Standing Advisory Group on Safeguards Implementation
TACF	Technical Assistance and Co-operation Fund
WHO	World Health Organization

OPENING OF THE SESSION

1. The TEMPORARY PRESIDENT declared the thirty-sixth regular session of the General Conference open.

2. In accordance with Rule 48 of the Rules of Procedure, he invited the delegates to observe one minute of silence dedicated to prayer or meditation.

All present rose and stood in silence for one minute.

3. The TEMPORARY PRESIDENT, after welcoming all the participants, said that in the past twelve months international events at the political, economic and geographical levels had had repercussions for the Agency, one of which was the welcome acquisition of new Members as a result of developments in Eastern Europe. Such changes brought important new challenges and responsibilities for the Agency.

4. In the field of safeguards, the Agency's role had been under review as a consequence of recent international developments, and various new measures were under consideration. The Director General and the Secretariat had made commendable efforts in the past year to render safeguards more effective, efficient and credible. At the same time, the major methodological and technological developments that had been taking place in safeguards during recent years seemed to warrant a thorough review of the entire safeguards system.

5. Still on the subject of safeguards, various agreements signed with the Agency showed that some progress had been made towards enhancing international confidence with regard to the nuclear fuel cycle. The recent developments involving Argentina, Brazil and the Agency and the successful completion of the process of amending the Treaty of Tlatelolco were welcome and important steps towards the Treaty's entry into force in the near future and the creation of a nuclear-weapon-free zone in Latin America.

6. As far as nuclear safety was concerned, serious measures had been necessary in the past year to improve safety levels at certain types of nuclear installations, and the need for some kind of international safety convention was now more evident than ever before.

7. Finally, the Agency's present financial situation was a source of concern to all its Member States and another instance of the Agency's

vulnerability to the effects of international events. He urged Member States to co-operate among themselves and with the Secretariat in seeking a speedy solution to those problems, taking due account of the financial situation of many Member States.

ELECTION OF OFFICERS AND APPOINTMENT OF THE GENERAL COMMITTEE

8. The TEMPORARY PRESIDENT invited nominations for the office of President of the Conference.

9. Mr. LAMAMRA (Algeria), speaking on behalf of the African Group, proposed Mr. Adekanye (Nigeria) as President of the thirty-sixth regular session of the General Conference. Mr. Adekanye occupied an eminent position in the international organizations in Vienna as Resident Representative of Nigeria and Chairman of the Group of 77.

10. Mr. Adekanye (Nigeria) was elected President by acclamation.

11. The TEMPORARY PRESIDENT, on his own behalf and on behalf of all the delegates, congratulated Mr. Adekanye on his election and wished him every success.

Mr. Adekanye (Nigeria) took the Chair.

12. The PRESIDENT said that he appreciated the honour done to himself and his country by his election as President of the thirty-sixth session of the General Conference and the expression of confidence which it represented in his country's role in the Agency's work. He also wished to express his gratitude to Mr. Santana Carvalho, the outgoing President, under whose guidance the Agency had accomplished a great deal. He looked forward to presiding over a fruitful session, which he trusted would be marked by a spirit of co-operation.

13. He recalled that under Rules 34 and 40 of the Rules of Procedure, the Conference had to elect eight Vice-Presidents, the Chairman of the Committee of the Whole and five additional members of the General Committee. Since one group had yet to agree on its candidates to serve on the General Committee, he suggested proceeding with the election of the candidates whose names were already known and deferring the election of the other member of the Committee

until the regional group in question had completed its consultations. He therefore proposed that, under Rule 34 of the Rules of Procedure, the delegates of Bangladesh, Belgium, Czechoslovakia, the Republic of Korea, New Zealand, the Russian Federation and the United States of America be elected as Vice-Presidents and Mr. Fahmy El-Saidi (Egypt) as Chairman of the Committee of the Whole and that, under Rule 40, the delegates of Spain, Qatar, Ukraine and the United Kingdom be elected as additional members of the General Committee.

14. The President's proposals were accepted.

POINT OF ORDER REGARDING THE PARTICIPATION OF THE FEDERAL REPUBLIC OF YUGOSLAVIA (SERBIA AND MONTENEGRO)

15. Mr. WALKER (United Kingdom), taking the floor on a point of order, said that the European Community and its member States had given long and careful thought to the position of the Federal Republic of Yugoslavia (Serbia and Montenegro) in international organizations, including the United Nations. During the latter part of the 46th session of the General Assembly, the member States of the European Community had repeatedly stated that they did not accept the automatic continuity of the Federal Republic of Yugoslavia in international organizations, including the United Nations.

16. It was clear that the Federal Republic of Yugoslavia did not have any right to claim the seat of the former Socialist Federal Republic of Yugoslavia. Its position in that regard was no different from that of other components of the former Socialist Federal Republic of Yugoslavia.

17. Under those circumstances it was anomalous and unacceptable that representatives of the Federal Republic of Yugoslavia should continue to participate in the work of international organizations, including United Nations bodies. The European Community and its Member States were pressing for early action by the appropriate organs of the United Nations in accordance with the Charter. They welcomed the Security Council resolution adopted on 19 September which, inter alia, recommended to the General Assembly that the Federal Republic of Yugoslavia should apply for membership in the United Nations and that it should not participate in the work of the General Assembly.

18. Mr. SELIN (United States of America) said that his Government had asked him to read out the following statement:

"We call your attention to Security Council resolution 757 of 30 May 1992, which noted: 'The claim by the Federal Republic of Yugoslavia (Serbia and Montenegro) to continue automatically the membership of the former Socialist Federal Republic of Yugoslavia in the United Nations has not been generally accepted'.

"The United States firmly believes that the Socialist Federal Republic of Yugoslavia no longer exists. Furthermore, we do not consider Serbia-Montenegro to be the continuation of, or sole successor to, the Socialist Federal Republic of Yugoslavia.

"Accordingly, the position of the United States is that Serbia-Montenegro is not entitled to assume, either as member or observer, the seat of the former Socialist Federal Republic of Yugoslavia in international organizations, including this organization.

"The United States also believes that this issue needs to be resolved first in the United Nations Security Council and General Assembly and that this body should be guided by their disposition of the issue."

19. Mr. CSERVENY (Hungary) said that the declaration by the People's Republic of Serbia and the Republic of Montenegro of 27 April 1992 had raised questions concerning the continuity of Yugoslavia's membership in international organizations and conferences, including the IAEA. His country had never accepted the idea that Serbia and Montenegro should automatically continue the membership of the former Socialist Federal Republic of Yugoslavia in international organizations and conferences, including the IAEA. It had become increasingly clear that the Federal Republic of Yugoslavia could not rightfully claim to be the legal successor of the former Socialist Federal Republic of Yugoslavia in the United Nations or in other international organizations. It was essential that the same conditions be applied to all countries which had formed part of the Socialist Federal Republic of Yugoslavia. He associated himself with the views which had been expressed by the representative of the United Kingdom on behalf of the Member States of the European Community and welcomed the Security Council resolution of 19 September, which, inter alia, recommended to the General Assembly that the Federal Republic of Yugoslavia should apply for membership in the United Nations and that it should not participate in the work of the General Assembly. Hungary would do its utmost, in accordance with the Charter, to put the recommendations of the Security Council into practice as soon as possible.

20. Mr. WILSON (Australia) said that Australia had not accepted the claim of the Federal Republic of Yugoslavia that it continued the

international personality of the former Socialist Federal Republic of Yugoslavia. It therefore reserved its position with regard to the status of the Federal Republic of Yugoslavia and issues relating to representation by the Federal Republic of Yugoslavia in international organizations. It was the view of the Australian Government that those essentially political questions should be decided in the United Nations Security Council and General Assembly rather than in the specialized agencies or other bodies such as the IAEA.

21. Mr. GLEISSNER (Austria) endorsed the views which had been expressed by earlier speakers.

22. Mr. AAMODT (Norway), speaking on behalf of the delegations of Denmark, Iceland, Finland, Sweden and Norway, said that the Governments of those States did not recognize the Federal Republic of Yugoslavia as the successor State to the former Socialist Federal Republic of Yugoslavia. He therefore considered that the presence of the delegation in question at the current series of meetings should not be allowed to prejudice future decisions, pending a final decision in the United Nations.

23. Mr. VETTOVAGLIA (Switzerland) associated himself with the views which had been expressed by the representative of the United Kingdom on behalf of the Member States of the European Community, and stressed that the presence of the representative of the Federal Republic of Yugoslavia at the current series of meetings should in no way be viewed as setting a precedent.

24. Ms. DJURICKOVIC-TUVIC (Yugoslavia) said her delegation deeply regretted that the issue of its participation and status had been raised at the General Conference, particularly in view of the universal nature of the Agency and its objectives. The General Conference was clearly not the right place for a discussion of political problems, especially since those problems were currently under discussion at the United Nations General Assembly. The issue of the Federal Republic of Yugoslavia's membership in international organizations should not be taken up before its status in the United Nations had been resolved.

25. While the Federal Republic of Yugoslavia would continue to exercise all the rights conferred upon and all the obligations assumed by the Socialist Federal Republic of Yugoslavia in international relations, including its

membership in international organizations, it had never claimed to be the sole legal successor to the former Socialist Federal Republic of Yugoslavia. On the contrary, it had expressed its readiness to discuss succession issues and all other relevant matters on an equal footing with all the others concerned at the International Conference on the former Yugoslavia which was currently taking place. It had also reaffirmed its total commitment to the decisions taken at the London stage of the International Conference on the former Yugoslavia, in particular that all outstanding issues should be resolved by peaceful means, on the basis of existing borders, and through a process of urgent and continuing negotiations. The exclusion of the Federal Republic of Yugoslavia from the Agency and other international organizations could be detrimental to the peace negotiations in progress. On the other hand, any final decision on the membership of the Federal Republic of Yugoslavia in the United Nations and other international organizations should not be allowed to prejudice eventual solutions to the overall crisis in the former Socialist Federal Republic of Yugoslavia. The Federal Republic of Yugoslavia was, moreover, not attempting to hinder the inclusion of newly formed States in the United Nations and other international organizations.

26. The PRESIDENT said that the question of the participation of the Federal Republic of Yugoslavia (Serbia and Montenegro) in the United Nations and other international organizations had been discussed towards the end of the preceding week in the Security Council of the United Nations. The Security Council had been reported as having made a recommendation to the General Assembly, but it seemed that the General Assembly had not yet taken a final decision as to whether the Federal Republic of Yugoslavia could continue the membership of the former Socialist Federal Republic of Yugoslavia in the United Nations or not. In those circumstances, he suggested that no decision should be taken with regard to the representation of Yugoslavia in the Agency until the General Assembly had taken a decision. In the meantime, it was understood that the participation of the Federal Republic of Yugoslavia (Serbia and Montenegro) in the activities of the Conference and of any other organ of the Agency should be viewed as being without prejudice to the final disposition of the issue.

APPLICATIONS FOR MEMBERSHIP OF THE AGENCY (GC(XXXVI)/1002, 1003 and 1025)

27. The PRESIDENT informed delegates that there were three applications for membership before the General Conference, which had been submitted by the Republic of Croatia (document GC(XXXVI)/1002), the Republic of Slovenia (document GC(XXXVI)/1003), and the Republic of Uzbekistan (document GC(XXXVI)/1025). The applications had been endorsed by the Board, which had also submitted draft resolutions dealing with each of those cases for adoption by the General Conference.

28. He assumed that the Conference wished to adopt the three draft resolutions in question.

29. It was so decided.

30. Mr. BRNELIC (Croatia) said that it was a great pleasure and honour to be able to thank all those present, on behalf of the Republic of Croatia, for accepting Croatia as a Member State of the International Atomic Energy Agency. President Tudjman, on the occasion of Croatia joining the United Nations family, had stated that Croatia assumed all the international obligations and would honour all the treaties which it had inherited from the former Socialist Federal Republic of Yugoslavia and its predecessors.

31. Although his country's history dated back a thousand years, Croatia was still a young State. Nevertheless, it had capable and experienced experts who had been closely involved in the work of the International Atomic Energy Agency, were no strangers to its activities and procedures, and were ready to serve the Agency again. With the accession of the Republic of Croatia, the Agency would gain a useful and professional associate committed to the aims and objectives of the organization.

32. Mr. GUTIERREZ-LEYTON (Chile) noted that he had specifically requested the floor earlier in order to lend his support to the applications of Slovenia and Croatia for membership of the Agency, and he was surprised that he had not been invited to speak. Chile was particularly pleased that Croatia and Slovenia had been accepted into the Agency and he expressed his firm support for that decision.

33. Mr. BOH (Slovenia) said that it was a great honour and a privilege to address the General Conference on behalf of the Republic of Slovenia, and

he thanked the Board and the Secretariat for the confidence they had shown in endorsing Slovenia's application for membership of the Agency. Slovenia's acceptance as a full member of the Agency was the culmination of a year of endeavour.

34. Slovenia would strive to meet fully its obligations under the Agency's Statute, and intended to contribute in important ways to the IAEA's activities in the field of nuclear safety.

35. In conclusion, he extended his sincere thanks to the representative of Chile for his support, and welcomed the Republic of Croatia and the Republic of Uzbekistan as fellow new Members of the Agency.

MESSAGE FROM THE SECRETARY-GENERAL OF THE UNITED NATIONS

36. Mr. GIACOMELLI (Representative of the Secretary-General of the United Nations) conveyed the Secretary-General's congratulations to the Agency on its thirty-fifth anniversary and his particular regret at not being able to address the Conference personally at a time when collaboration between the United Nations and the Agency had been acquiring ever greater importance.

37. The United Nations and the Agency had, through their highly effective co-operation, done commendable work in the aftermath of the conflict in the Persian Gulf. The Secretary-General had been briefed regularly by the Director General of the Agency and Ambassador Ekeus, Chairman of the Special Commission on Iraq, on all questions related to the implementation of Security Council resolutions 687, 707 and 715.

38. The universal condemnation of Iraq for violating the safeguards agreements that it had entered into freely, and the steadfastness with which the Security Council had demanded access to and full information on nuclear facilities in Iraq should be enough to deter any other countries which might be contemplating similar clandestine programmes. The Board's efforts to strengthen the Agency's ability to detect and gain access to any such undeclared activities thus merited serious attention. The significant reduction of nuclear arsenals by the United States and the Russian Federation and the comprehensive safeguards agreements with the Agency recently concluded by several States engaged in significant nuclear activities augured well for the success of the NPT Review Conference in 1995.

39. The Agency's mission to help ensure the safety of nuclear power plants had received wide international attention during the past year. Countries operating plants with safety shortcomings were anxious - as were their neighbours - that the Agency should provide the necessary technical analysis and advice and that remedial safety measures with multinational or bilateral financing should be taken as a result.

40. The Rio Conference on Environment and Development had underlined the need for further international co-operation to strengthen the Agency's work in the areas of nuclear safety and radioactive waste management. The Secretary-General understood that the second meeting of the group of experts on a binding international nuclear safety convention was to be held in October and that a consensus was emerging on the so-called "safety fundamentals" and review mechanisms.

41. During the past two years there had been close collaboration between the United Nations Co-ordinator and the Agency to mitigate the consequences of the Chernobyl accident in pursuance of General Assembly and ECOSOC resolutions. The application in the affected republics of the innovative technique developed by the Agency and FAO to reduce caesium levels substantially in milk and meat had been funded by the Chernobyl Trust Fund established by the United Nations. A careful screening of other practical and worthwhile projects that could improve everyday life for people in the affected areas was currently being undertaken by an inter-agency task force. In addition, the Agency's impressive multisectoral technical co-operation programme, encompassing projects all over the world in areas such as food preservation and environmental protection, were making unique contributions to the welfare of mankind.

42. As the Rio Conference had also emphasized, the security and well-being of peoples throughout the world needed to be preserved not only against weapons proliferation and nuclear disasters but also through the development of a sound integrated approach to the formidable challenges presented to the world by problems of energy, the environment, health, agriculture and development. The Agency had much to contribute to attaining those important objectives. As the United Nations geared itself to meeting its responsibilities in the last decade of the 20th century, the Secretary-General looked

forward to even closer collaboration with the Agency and wished the Conference every success in its deliberations.

VOLUNTARY CONTRIBUTIONS TO THE TECHNICAL ASSISTANCE AND CO-OPERATION FUND FOR 1993

43. The PRESIDENT said that the Agency's policy-making bodies had, since 1982, followed the practice of recommending indicative planning figures to be used in fixing annual targets for voluntary contributions to the TACF. In June the Board had reached agreement on increases in the targets for voluntary contributions to the TACF from the 1992 level of US \$52.5 million to \$55.5 million in 1993, \$58.5 million in 1994 and \$61.5 million in 1995. Accordingly, in the draft resolution relating to the TACF - contained in Annex IV to document GC(XXXVI)/1006 - the Board recommended the figure of \$55.5 million as the target for voluntary contributions to the TACF for 1993.

44. Early pledging of voluntary contributions was of considerable help to the Secretariat in planning technical assistance programmes. He therefore urged all delegations that were in a position to do so, but had not done so as yet, to notify the Secretariat during the current session of the voluntary contributions which their Governments would be making to the TACF in 1993. It was equally important, if the Secretariat was to be able to carry out the planned programme effectively, that all Member States should make good their pledges, in full and in a timely manner, and that every effort should be made to avoid a further decline in pledges and payments.

45. He would report at the end of the session, under a later agenda item, on the voluntary contributions which had been pledged up to that time, and was confident that he would then be in a position to report favourably on the percentage of the 1993 target figure already pledged.

STATEMENT BY THE DIRECTOR GENERAL

46. The DIRECTOR GENERAL said that 1992 marked the fiftieth anniversary of controlled nuclear fission and the thirty-fifth anniversary of the Agency. The sustained, controlled chain reaction mastered by Enrico Fermi had been an experiment that had changed the world, creating both a new source of energy and a new source of destruction. Ever since, mankind had had to

face the dual challenge of the atom - how to preclude its military use and how to exploit its peaceful potential safety. The Agency had been assigned a major role by its member governments in respect of both those challenges.

47. The two-pronged "Atoms for Peace" approach, whereby access to nuclear technology for peaceful purposes was offered and undertakings regarding exclusively peaceful use were required simultaneously, had been chosen early. Now the commitment to limit the use of fission to exclusively peaceful purposes was stronger and more widespread than ever, and for the first time there was hope that both a universal commitment to non-proliferation and drastic nuclear disarmament might come about. The creation of the Agency in 1957 had been an integral part of the efforts to realize the Atoms for Peace policy and to meet the dual challenge of the atom.

48. The Agency's role of "promoting" nuclear energy - for under the Statute it was called upon "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world" - was sometimes criticized. It had been suggested that any legitimate transfers of technology could be handled by other United Nations bodies and that the Agency's activities could be confined to what were termed "regulatory" functions - specifically, nuclear safety and safeguards. He was of the opinion, however, that such surgery on the functions of the Agency would be unwise. The Agency had been established to serve all its Members, and many of them saw its greatest value precisely in "promotional" activities, notably in the transfer of technology. Indeed, discussions and resolutions of the General Conference demonstrated convincingly that support for the Agency rested on the maintenance of an appropriate balance of activities.

49. That was not to suggest that the status quo should be regarded as sacred or immutable. After 35 years of operation it was by no means unreasonable to examine whether the Agency's range of programmes responded to present priority interests of Members. If necessary, adjustments could be made to meet new circumstances. An international organization was a living thing that had to adapt to meet the challenges of a changing world. It was easy to see that the last 12 months had brought many changes which had had an impact on the Agency and might require appropriate responses through the

Agency. The agreements on rapid reduction of the nuclear arsenals of the United States and Russia and the withdrawal of tactical nuclear weapons were helping to promote horizontal non-proliferation. However, as security problems between the declared nuclear-weapon States receded, regional security problems - including nuclear-related ones - were continuing and needed to be dealt with. The revelations of Agency inspections in Iraq under Security Council resolution 687 had prompted not only a decision by the Council about the neutralization of a clandestine nuclear weapons development programme but also new thinking and action about safeguards verification.

50. The emergence on the territory of the former Soviet Union of a number of States that were already in the process of joining or were about to join NPT as non-nuclear-weapon States was drastically enlarging the scope of non-proliferation, and hence the obligations of the Agency in respect of safeguards. The formation of new States, combined with changes in their political and economic systems, was leading to the recognition of urgent nuclear safety problems which had to be confronted. In that sphere, too, the Agency and Member governments were facing new challenges. Cases of trafficking in nuclear material were also placing new demands on the alertness of the Agency.

51. The list of changes affecting the Agency's work could be made very long, and he would only add the problems of the environment and development which had been the subject of the global summit meeting in Rio de Janeiro in June 1992. The outcome of that meeting was, in some areas, directly relevant to the Agency's own work; those areas were highlighted in document GC(XXXVI)/INF/310, in particular the question of defining the scope for nuclear power and nuclear applications to contribute to the twin goals of development and environmental protection.

52. The Agency had shown itself to be a viable and versatile instrument: that had been demonstrated at the time of the energy crisis, the Chernobyl crisis, the continuing environmental crisis and the Iraqi crisis. It was vital that the Agency should be prepared for new challenges and that it should not be paralysed by financial crisis.

53. The Medium-Term Plan had been an attempt to look systematically at the Agency's work and to define priorities for the 1993-98 period. Even during that period new and unexpected problems and challenges would undoubtedly arise and would have to be tackled. There were a number of areas which governments might wish to examine in particular. One was nuclear safety, already the subject of searching discussion, although important questions remained to be considered. How extensive should a network of binding rules be? What should be the scope of the international safety convention? How much use should be made of review services like OSARTs and ASSETs, and what effect were they intended to have?

54. The safe disposal of radioactive waste in the crust of the earth whence the uranium had originated was another question, one naturally of interest to present and future generations. Should that interest be reflected in binding international minimum standards? Should there be an international register of all disposal sites, at least for high-level waste, in order to create one focal point for gathering information about the location of all such sites?

55. The use made of nuclear materials recovered from dismantled weapons was a matter of interest not only to weapon States. The entire international community might wish to feel confident - through international verification - about the peaceful use or storage of such material. Was that a role which the Agency should be asked to fulfil? Stocks of plutonium were bound to increase, both from the dismantling of weapons and from the reprocessing of spent nuclear fuel. Should new international measures be taken to ensure and verify the peaceful use or storage of that material? Should "international plutonium storage" again appear on the agenda? In a world where nuclear disarmament was accelerating and non-proliferation was making further gains, did governments wish to examine the question of verified restrictions on the production of weapons-usable material?

56. The general debate which was about to begin offered governments an opportunity to discuss whether issues and activities such as those he had mentioned should be taken up - and, likewise, whether some other activities should be phased out. As an introduction to those deliberations he proposed to summarize a few of the Agency's activities, beginning with the

organization's engagement in the transfer of nuclear technology and know-how, a subject to which many Member States attributed great importance.

57. A general precondition for any responsible transfer of nuclear technology was that it should be attended by adequate safety, proper radiation protection and proper waste management arrangements. Those were not pro forma requirements, but statutory conditions that the Agency had to take seriously in order to reduce the risk of radiological accidents to a minimum. In fact, nearly 20 per cent of the Agency's present technical co-operation programmes were devoted to radiation protection and safety. In addition, expert missions were sent to check conditions on the spot.

58. Human resource development remained a major aim of the technical co-operation programme and a necessity for technology transfer. That was particularly true in countries where nuclear technology was still in the early stages. At present particularly great emphasis was being placed on human resource development in African Member States, where a training survey was under way.

59. A significant level of nuclear technology had been successfully introduced into industries in Asian countries. A Regional Co-operation Agreement (RCA) project on industrial applications had helped convince emerging industries that applied nuclear technology could bring industrial and commercial advances. As a result of that project, investments of US \$190 million had been generated, of which no less than US \$150 million had been provided through the private sector.

60. Irradiation of medical equipment for sterilization was already widely practised. The Board of Governors had, in the course of its session the previous week, endorsed a Draft Action Plan on "Assistance to Developing Countries in Introducing Commercial Food Irradiation", suggested by India. As work progressed, full co-operation with FAO and WHO and the International Consultative Group on Food Irradiation (ICGFI) would be sought.

61. There was increasing interest in Agency assistance with the use of nuclear techniques for environmental monitoring purposes, an area where the IAEA had much experience and capability. It was in fact the only body in the

UN family to have a Marine Environment Laboratory, the services of which were subject to increasing demand. The Laboratory had been instrumental in monitoring the environmental situation in the Persian Gulf after the armed conflict and was now participating in a Norwegian-Russian investigation in the Barents and Kara Seas. The Agency was very grateful to the host authorities in Monaco for offering the Laboratory an excellent new home, which would further enhance its usefulness and capacity.

62. A further point worth mentioning was the increased assistance the Agency was giving to Member States in Eastern Europe which operated WWER-type reactors. It was a familiar fact that that particularly valuable assistance was aimed at upgrading safety in plant management and in radioactive waste management.

63. The financial health of the Agency's Technical Assistance and Co-operation Fund (TACF) was crucial to many of the activities he had mentioned. The total value of the technical co-operation programme delivered in 1991 had amounted to US \$43 million; in fact, it had doubled in the last decade. Now that the targets for voluntary contributions to the TACF had been agreed upon for the next three years, he urged every Member State to help meet the collective political commitment by paying its full share in a timely fashion.

64. There were also programmes for the transfer of technology which lay partly or wholly outside the technical co-operation framework and which were of direct importance to Members in the developing world. An example was the successful screwworm eradication campaign in Libya, which had been financed by extrabudgetary contributions. It had been calculated that the benefit-to-cost ratio for that project had been 50 to 1. Another example was the project examining the use of nuclear reactors for the desalination of water. All those subjects aroused very substantial interest among governments. The increasing shortages of fresh water in many areas, not least on the Southern and Eastern shores of the Mediterranean, meant that attention would continue to be directed at desalination by nuclear power.

65. The global summit in Rio de Janeiro in June 1992 had been about the environment and development. There was no doubt that development would require the use of more energy, especially in developing countries. That inevitably created a dilemma in that increased use of fossil fuels, the main contemporary energy source, was incompatible with the apparent need to reduce emissions of CO₂ and other greenhouse gases. Although the aim of the Framework Convention on Climate Change (FCCC) was to stabilize greenhouse gas concentrations in the atmosphere at a level such as to forestall dangerous interference with the world's climate, no agreement had been reached on how that was to be done, nor had any targets been adopted concerning CO₂ or other greenhouse gas emissions. There was, however, a growing awareness that energy conservation and the exploitation of CO₂-free renewable sources would not suffice to meet growing energy requirements. There was also increasing awareness that nuclear energy, though not a panacea, was one of the few options at the world's disposal for expanding energy production without significantly increasing CO₂ emissions. Nuclear power, alone, could not solve the CO₂ problem, but the CO₂ problem could not be solved without nuclear power.

66. The nuclear option therefore remained important for the future. In saying that he was by no means underestimating the desirable contribution that could be made to the energy situation by conservation, and by solar, geothermal, wind and biomass energy sources. None of the renewable sources of energy, however, was likely to make a real and substantial contribution for several decades. The choice, particularly for large, new base-load needs, would continue to be between fossil fuels and nuclear. The outcome of that choice was not obvious. It depended upon the actions of many people, governments and organizations, notably in relation to operational safety, and safe waste disposal, as well as on guarantees against the development of nuclear weapons.

67. Although nuclear safety had always been a part of the Agency's mandate, its programme in that area had grown sharply because so many of the actions which its Member States saw as necessary were international in scope or character.

68. "How safe is safe enough?" was not a technical question but a political one, to which the public responded through movements, political parties and representative governments, and the answers to it were influenced by perceived experience and feelings, by opinion-makers and by political debate. The technical data which expert bodies could contribute were by no means irrelevant to that process, but they were only a part of the input.

69. There was, in fact, no single answer: it varied from country to country and from time to time, but if one were to venture to state some common line it would probably be that the level of nuclear safety must be such that no significant radiological releases into the biosphere took place. Whenever a release occurred, appeared to occur or nearly occurred, nuclear activities as a whole were termed not safe enough and calls came for freezes and the phasing out of nuclear power.

70. Those engaged in nuclear work might often feel that that was an unduly harsh and somewhat irrational reaction. In particular, they might feel that, in comparison with other productive human activities, the exploitation of nuclear energy was required to have excessively high safety standards.

71. Comparisons were not irrelevant to the process through which the public and political institutions responded to the question, "How safe is safe enough?". It was the Agency's duty to present them, just as it was its duty to provide factual data about nuclear incidents and about the risks of nuclear power and waste disposal. The International Nuclear Event Scale (INES), to mention one example, had been a successful tool for presenting facts. It was important to be aware however that, as matters stood, the public was much less tolerant about the effect on health of exposure to radiation than of coal mine accidents, the bursting of hydroelectric dams, the explosion of gas cisterns or the burning of fossil fuels. The public response to the question, "How safe is safe enough?" - whatever one might think of it - must form the point of departure for those in a position to improve the level of safety.

72. Achieving the goal of a higher level of safety was facilitated by certain factors and made more difficult by others. One positive element was that safety was never static: there was a constant process of learning and

adjusting. The exchange of nuclear experience between operators and between countries was a very wide-ranging activity that resulted in greater knowledge and improved safety.

73. Achieving higher safety levels was complicated by the fact that the public was inclined to base its judgement of nuclear safety on worldwide performance. Thus, the weakest performance - wherever it was - affected that judgement. That was really the driving force behind the accelerated efforts over the past decade to move on from an international exchange of safety experience and compilations and codes of good practice to what was termed an "international nuclear safety culture" from which no country or nuclear activity would be exempt. That was most clearly illustrated in the efforts currently being deployed in Eastern and Central Europe to improve nuclear safety and bring it into line with international standards. However, the increasing demand for minimum safety norms binding for all had to be reconciled with the diversity of national legal systems and local conditions. Even more important, there was a need to ensure that national authorities remained fully responsible for safety.

74. A new approach, currently evolving, was the framing of a nuclear safety convention containing norms which would become binding upon States which adhered to it. The norms might develop through subsequent reviews and additions. The main obligations currently being considered were based in large measure on the principles contained in a recently produced document called "NUSSAG Safety Fundamentals". Should the current momentum of preparatory work be maintained, which he hoped would be the case, the convention might conceivably be ready by the time of the next General Conference.

75. Another part of the response to the demand for more effective international measures which would lay the groundwork for an international safety culture lay in the various safety-related international expert reviews and peer reviews which were increasingly performed through the IAEA. Such missions - whether OSARTs, ASSETs or others - had proved to be valuable in verifying whether nuclear authorities and facilities were living up to high international safety standards or whether they needed to be advised and

assisted on how to do so. A question which had not yet been answered was whether there should be some commitment to accept international review and advisory teams periodically or otherwise. The current system of visits upon invitation and against payment had the merit that visits were not requested as a matter of bureaucratic routine, but only if the service was felt to be needed and useful. A drawback was that there was no guarantee that those installations which perhaps most urgently needed an infusion of advice would actually be visited. He took it, however, that in practice no Member State would decline an advisory mission when one was suggested and good reasons were given for it.

76. A comprehensive and complex effort was currently under way in connection with the safety of power reactors of all types in the former Soviet Union and in Eastern and Central Europe. Awareness had grown, in those countries and outside them, that the reactors themselves and the manner in which they were operated had certain deficiencies.

77. Judgements had to be made as to how much backfitting would be economical and when and at what stage the phasing out of some reactors might be feasible. The question of phasing out was not an easy one. It seemed clear that no more plants of the RBMK type would be built, but it was not equally clear how long that reactor model would remain in operation - with added safety features.

78. While many industrialized countries were keenly interested in mounting an assistance effort, it was important not to ignore the fact that the best expertise on, and the most thorough knowledge of, the nuclear power plants in question was to be found in the countries which had designed and operated them. The effort must be one of co-operation in the common interest, with due recognition of the economically precarious situation.

79. The international effort was being launched largely outside the mechanisms for intergovernmental co-operation which the IAEA offered. There was, above all, co-operation between Russia and other Eastern and Central European countries on the one side and individual or groups of industrialized countries on the other. The chief mechanism created for co-ordination was the

so-called Group of 24, assisted by a Secretariat located in the CEC. The IAEA was invited to participate in that work with technical advice. It also made available its own assistance to the Eastern and Central European countries, which was largely financed by extrabudgetary contributions and which aimed, for instance, at carrying out a safety review of the RBMK reactor. Part of the Agency's contribution to the diagnostic phase would be in the form of expert missions to individual reactor plants.

80. There were two items closely related to the subject of nuclear safety which he wished to report on, if only briefly, before moving on to other topics: those were liability and physical protection.

81. Efforts to strengthen the nuclear liability regime had made concrete progress. The Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention, adopted in 1988, had entered into force on 27 April 1992 with ten Member States party to it. That meant an improvement in the international liability regime, since the two basic conventions existing in the field of civil liability were in effect combined into one expanded regime.

82. The work of the Standing Committee on Nuclear Liability had also progressed. In the context of the revision of the Vienna Convention, a number of draft amendments had been provisionally agreed upon, covering many questions in relation to which a need for improvement had been recognized. As far as the time schedule for future work was concerned, he noted the view of the Standing Committee that efforts to achieve consensus should be intensified so that a revision conference could be convened in the near future.

83. During the week following the General Conference, a conference would be held on the Convention on the Physical Protection of Nuclear Material, the aim being to review not only its implementation but also its adequacy. It was hoped that, as a result of the review conference, more States would take action to become parties to the Convention.

84. The question, "How safe is safe enough?" also applied to safety of nuclear waste. Again the answer was political rather than technical, and it was the public that decided in the last instance. In a way the problem was

more difficult than that of safety in nuclear power plants, because, while in the latter tangible improvements could be achieved, especially in some geographical areas, technical experts would generally maintain that the solutions currently available for the long-term disposal of high-level radioactive waste were fully adequate and that it was public resistance to the use of almost any site for waste disposal that was the major problem.

85. Information, explanations, patience, selection of appropriate sites, construction of proper installations for nuclear waste disposal and their responsible use over a period of time were likely to promote public confidence and acceptance - as had, in fact, been seen in the case of some installations for low- and intermediate-level waste.

86. There were, however, some things that could and should be done. In individual States, any past disposal of nuclear waste which had not been carried out with due respect for appropriate safety rules should be cleaned up. That applied in particular to nuclear waste from military activities in nuclear-weapon States. For the present-day public and for succeeding generations, it did not really matter whether waste resulted from military or peaceful nuclear activities.

87. A case in point was the dumping of radioactive materials, including reactor cores, in the Barents and Kara Seas. A Russian-Norwegian investigation with the participation of the IAEA's Monaco Laboratory had been looking into that matter. The IAEA having been designated by the London Dumping Convention as the competent international technical authority with regard to the dumping of radioactive wastes at sea, IAEA involvement in that fact-finding mission had been both appropriate and necessary.

88. At the international level, the establishment of safety standards for radioactive waste disposal and international expert missions to promote the implementation of such norms would be a helpful way of reassuring the public that that area, too, belonged firmly in the realm of the international safety culture.

89. The Agency's main action in that area so far had been to develop the Radioactive Waste Safety Standards - RADWASS - programme, which provided

Member States with a comprehensive series of internationally agreed documents to complement, or form the basis for, national standards and criteria. Good progress had been made since work on the RADWASS programme had started in 1991. The first Safety Guides and Safety Practices produced under the programme had been or would be submitted for publication in 1992. Furthermore, the Safety Fundamentals document and four Safety Standards were to be submitted to Member States in 1993 for review and approval. RADWASS would continue to be the main focal point for the Agency's waste management efforts, and Phase I of the programme was scheduled to be completed by the end of 1994.

90. In the waste disposal field, as in the field of operational safety, the best international approach was probably to offer advisory and/or peer review services rather than supervision. They did not impinge on the authority and responsibility of national institutions but might help to strengthen their hand.

91. The revelation through IAEA inspection that Iraq, a party to the NPT and to a full-scope safeguards agreement, had been engaged in a major, secret programme to enrich uranium and to design a nuclear weapon, and that it had disregarded the safeguards agreement with the Agency by successfully withholding information which should have been declared, had prompted the Agency to make serious efforts to strengthen the safeguards system.

92. Under Security Council resolutions 687, 707 and 715 (1991), the IAEA had been given three substantial assignments: the charting of Iraq's present and past nuclear activities; the removal, destruction or rendering harmless, as appropriate, of materials, equipment and facilities used by Iraq in activities prohibited under resolution 687; and the preparation and implementation of a long-term monitoring plan to verify Iraq's compliance with the requirements of the relevant Security Council resolutions.

93. Fourteen IAEA on-site inspections had been conducted in Iraq since May 1991, with the assistance and co-operation of the Special Commission of the United Nations. More than 2700 inspection days had been carried out. Sixty-five sites had been inspected, most of them several times, and hundreds of various samples, collected by the Agency's inspectors in Iraq, had been

analysed by the Laboratory in Seibersdorf. The picture emerging was that of a widely based, well funded, multipronged approach to the production of highly enriched uranium, combined with a parallel programme to assess requirements and make preparations for designing and manufacturing a nuclear weapon. The comprehensive project had been kept secret.

94. The process of removal, destruction or rendering harmless of Iraqi nuclear-weapon capabilities under resolution 687 had started in October 1991 and had continued throughout recent months. On 11 October 1991, the Security Council had adopted resolution 715, approving, inter alia, the plan submitted by the Agency for future monitoring activities. In June 1992, the Iraqi authorities had provided the Agency with what they considered to be a full, final and complete description of their nuclear programme and had promised to update and complete a detailed list of facilities and equipment related to that programme. The list would be of use to the Agency in completing its preparations for the full implementation of the long-term plan.

95. The Agency's work under the three parts of the Security Council mandate was thus continuing. Through the inspections and the arduous work done by the Action Team under the skilled and diligent leadership of Professor Zifferero, a relatively consistent picture of Iraq's clandestine nuclear programme was being developed. Details of varying degrees of importance, such as full information about procurement and technical expert assistance, were still missing, however, and it was to be hoped that they, too, would emerge.

96. The degree of Iraqi co-operation had varied from zero or worse to helpful information and co-operation in the destruction of important facilities. It was sad but true that, while credibility took time to develop, it could be lost overnight. Although much information given by Iraq had proved correct and useful, it could not be relied upon without independent verification. Even though diminishing amounts of new data were being generated through inspections and the Iraqi counterparts asserted that no more would be found, the possibility could not be excluded that some new information would prompt further investigative inspections side by side with the Agency's long-term monitoring, with the aim of giving the fullest possible guarantees that no clandestine nuclear activities would be revived.

97. The safeguards system had been designed to provide assurances that nuclear material and installations subject to safeguards were used exclusively for peaceful purposes and were fully accounted for. Such assurances had important consequences for relations between States at the regional and global levels as well as for nuclear trade.

98. All States party to the safeguards system had agreed to co-operate with and be open to the Agency in a number of specific areas. Through such institutionalized transparency, the Agency was to be enabled to verify the exclusively peaceful use of programmes, installations and material subject to safeguards. The case of Iraq had demonstrated that nuclear activities which should have been declared but had in fact been kept secret could go undetected by the safeguards system in its existing form. It had been concluded that the Agency needed other sources of information, notably in the event that information required from a State was withheld, and that in certain circumstances it might need to perform special inspections at non-declared sites.

99. He was pleased to report that, over the past year, the Board had taken several steps to strengthen the information basis of the safeguards system and had affirmed the Agency's right to conduct special inspections under the terms of comprehensive safeguards agreements. Should a Member State having such an agreement deny such a request, the Director General could submit the matter to the Board. If the Board so resolved, the matter could go to the Security Council. The Board had also decided that the requirement in safeguards agreements to provide design information on nuclear facilities "as early as possible" included the requirement that preliminary information be provided as soon as a decision had been taken to construct a new facility or to modify an existing one.

100. The Board had also considered the question of establishing a universal reporting system on the export and import of nuclear material and equipment and of certain non-nuclear items, and it would continue its examination of that question. For the time being, it had indicated that States which were in a position to do so could start reporting to the Agency on such items on a voluntary basis. The Secretariat had informed all Member States of that decision and was in the process of setting up the system.

101. States were, of course, free to practice greater nuclear transparency than expressly required under safeguards agreements. The agreements established a minimum, not a maximum, and it might well be in the interest of many States to practice a much greater degree of openness about their nuclear programmes. In the past year he had received with appreciation commitments by several States to open any site and any installation to Agency visits, regardless of whether the sites and installations were covered by safeguards. In some instances the Agency had made use of such commitments. They were of high value for confidence building - provided that they were fully accepted in practice.

102. He wished to conclude his comments on the safeguards system by reporting that efforts were under way to make safeguards not only more effective, but also more cost-effective. It was by no means a new idea. Over the past few years the Secretariat had been able to cut safeguards costs significantly. Some new savings had been achieved in 1992 and had had an impact on the draft budget for 1993. Others had been actively discussed and would be the subject of close examination by outside experts in SAGSI - the Standing Advisory Group on Safeguards Implementation.

103. Two important new safeguards agreements were now being implemented. The Secretariat had carried out a total of 77 inspections of South African facilities and locations outside declared facilities. There was an inherent difficulty in verifying the completeness of an original inventory in a country where a substantial nuclear programme had been going on for some time. It required much effort by the inspectors and much openness and co-operation by the inspected party - extending beyond declared facilities and current records. Even so, as the Agency must report what it had actually seen and verified, it was hard, even in the best of cases, to come to any better conclusion than that, after intense analysis and inspection, no evidence had been found suggesting that the original inventory was not complete. That conclusion could be found in paragraph 31 of the report on South Africa in document GOV/2609.

104. Only a few months had passed since, on 4 May 1992, the Democratic People's Republic of Korea had submitted its initial report on nuclear

material subject to safeguards; but there, too, much verification work had already been done through three ad hoc inspections, with the third finishing only a week and a half ago. Like South Africa, the Democratic People's Republic of Korea had offered the Agency some original operating records and had invited Agency officials to visit any place or facility, regardless of whether they were on the original inventory. That commitment was helpful and was being made use of.

105. The past twelve months had seen significant advances in the non-proliferation field. Two nuclear-weapon States - China and France - had adhered to the NPT, which now counted all five recognized nuclear-weapon States as parties. Through the agreement between Argentina and Brazil on a joint accounting and control system and a full-scope safeguards agreement with the IAEA, the prospects for bringing the Tlatelolco Treaty fully into force had increased greatly. Recently, a number of amendments to the Treaty had been unanimously adopted at a conference in Mexico. Those amendments reinforced the role of the IAEA. It was to be hoped that the Treaty, with the amendments, could come fully into force for all countries in the region at an early date.

106. As to safeguards in the Middle East, General Conference resolution GC(XXXV)/RES/571 had requested the Director General "to take such measures as are necessary to facilitate the early application of full-scope Agency safeguards to all nuclear activities in the Middle East, and in particular to prepare a model agreement taking into account the views of the States in the region, as a necessary step towards the creation of a nuclear-weapon-free zone". As could be seen from the report in document GC(XXXVI)/1019, he had continued his consultations with the States of the region, and he intended to intensify those efforts. The report also contained an inventory of undertakings that could be incorporated in a nuclear-weapon-free zone in the Middle East and a number of verification modalities that could be applied. He intended to seek the views of the States of the region on them. A model safeguards agreement could be drafted when the States concerned had formed views on the substantive obligations that were to be verified. Since many modalities could be contemplated and the Agency's experience was extensive, it

could offer seminars in which interested States could benefit from its wide experience in the area.

107. In 1995 the extension of the NPT was to be considered. If present trends in nuclear disarmament and non-proliferation commitments continued, the outlook would be for a successful conference. The IAEA was prepared to undertake such preparatory analytical work as governments requested. A strengthened safeguards regime and effective channels for the transfer of nuclear techniques were contributions that the Agency must offer. An extension of the Treaty must be coupled with increased confidence that observance of the commitments entered into was being reliably verified.

108. He wished to conclude his statement with some comments on the Agency's financial situation and the budget.

109. With considerable difficulty, the Board of Governors had reached a consensus in June on a draft budget. Modest increases in the areas of safeguards and nuclear safety had been largely offset by reductions in other programmes, in particular nuclear power and the fuel cycle. The modest growth in the Agency's Regular Budget in real terms amounted to US \$1.5 million, or just 0.8%, for 1993.

110. The increase in the Agency's Regular Budget, however small, was welcome, but would be of almost purely theoretical interest if the shortfalls in Member States' contributions were to continue. Prolonged shortfalls in payments by major contributors inevitably had a negative impact on the Agency's ability to implement its approved programme. During the past year, the Agency had had first-hand experience of the disruptive effect on its programmes that ensued when a major contributor was forced to suspend payments.

111. At the most recent session of the Board of Governors, the Governor from the Russian Federation had announced a plan to resume payments to the Agency. Several other members had announced that arrears had been paid, or had made commitments to do so. Those were very welcome developments, for they would allow the Agency to address itself vigorously to the important challenges facing it. He therefore wished to conclude by reiterating his plea to all Member States to pay their contributions in a timely fashion.

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112. Mr. TANIGAWA (Japan), having warmly welcomed Croatia, Slovenia and Uzbekistan as Members of the Agency, urged them to accede to the NPT and conclude comprehensive safeguards agreements with the Agency as soon as possible.

113. Japan had always attached importance to the NPT, which it regarded as the pillar of the international nuclear non-proliferation system, and strongly supported the idea of extending the NPT for as long a period as possible at the NPT Extension Conference scheduled for 1995. The agreement concluded in June between the United States and the Russian Federation to decrease their strategic nuclear weapons further was a welcome development and would create favourable conditions for the NPT Extension Conference. Japan hoped that other nuclear-weapon States would also promote further reduction of nuclear armaments. While welcoming the fact that a number of States had acceded to the NPT during the past two years and that Ukraine, Belarus and Kazakhstan were expected to complete procedures to join the NPT as non-nuclear-weapon States in the near future, his Government urged all countries that had not yet done so, to accede to the NPT as soon as possible.

114. The Agency's inspections in Iraq related to the implementation of Security Council resolution 687 had revealed a broad range of activities associated with the development of nuclear weapons. Japan fully supported the Agency's inspection activities and called upon the Government of Iraq to reveal the entire scope of its nuclear weapons programme and to renounce its capability for developing nuclear weapons.

115. With regard to the Democratic People's Republic of Korea (DPRK), Japan welcomed the fact that a safeguards agreement between the DPRK and the Agency had finally entered into force in April 1992 and that ad hoc inspections had been carried out after submission of the initial report and design information. However, Japan remained concerned at the possible development of nuclear weapons by the DPRK and urged that country to implement the comprehensive safeguards agreement, unconditionally and completely, at an early stage. It also requested it to implement the Joint Declaration on the Denuclearization of the Korean Peninsula.

116. With the disclosure of Iraq's non-compliance with its safeguards obligations, the strengthening of the IAEA safeguards system had become a matter of urgency. The need for special inspections of undeclared facilities and for the early submission of design information had been reconfirmed or agreed upon by the Board. Those actions would further enhance the effectiveness and reliability of the safeguards system.

117. The next task was to establish a universal reporting system for the export and import of nuclear material, non-nuclear material and certain types of equipment. It was important for all countries to submit such reports and Japan basically agreed with the purport of the proposal made by the Agency's Secretariat. However, a number of problems related to the implementation of such a reporting system had been raised at Board meetings and further examination of those points was required.

118. As the number of facilities subject to safeguards increased, it was important to streamline safeguards as an integral part of improving and strengthening the safeguards system. Given the Agency's critical financial state, Member States should make every effort to reduce the costs, whilst maintaining the effectiveness of the safeguards system. Japan had made specific proposals at the meetings of the Board in June for further streamlining measures, taking into account factors such as the transparency of nuclear activities of countries which had already accepted safeguards, the effectiveness of national safeguards systems and the vigorous development and use of equipment. It was also important to extend the application of safeguards to facilities for peaceful uses in nuclear-weapon States and the Agency should gradually implement steps in that direction, within the limits of its human and financial resources.

119. There was considerable concern about the safety of nuclear power plants of Soviet design built to old standards. The Agency had already taken steps to evaluate and upgrade the safety of such plants. With regard to the nuclear safety convention which was currently being prepared by the Agency, his country would like to see agreement on it as soon as possible. Japan had extended its technical and financial co-operation in past years and had provided special funds for the Agency's safety evaluation activities. It had

already announced its intention to make available \$25 million for bilateral co-operation in that area and was planning to establish a centre for operational safety technology of nuclear power plants and a system for detecting abnormal operating conditions. Nevertheless, nuclear safety remained primarily the responsibility of the countries in which the nuclear power plants were situated and all countries concerned should do their part to improve the safety of their own nuclear power plants.

120. The rapid progress in nuclear disarmament in recent years was a positive step towards international peace and stability. However, during the course of dismantling nuclear warheads in the former Soviet Union, considerable amounts of nuclear material would be generated and measures for international co-operation in the area of the management and peaceful uses of such material would have to be prepared. The Agency had an important role to play in that area and, for its part, Japan would make available the knowledge and experience it had gained through many years of the peaceful uses of nuclear energy.

121. Japan attached great importance to the recycling of nuclear fuel and was steadily promoting programmes for the construction of a reprocessing facility and a fast breeder reactor. The plutonium separated from the reprocessing of its spent fuel by overseas firms was due to be shipped back in the autumn. Japan would take various physical protection measures to ensure the security of that nuclear material during transport. In promoting its nuclear fuel recycling plan, Japan not only took maximum care to ensure the strictest control of the nuclear material involved, but had also adopted the principle of not possessing more plutonium than was necessary and, in promoting its recycling plan, also took into account the balance of supply and demand of plutonium. With regard to the disposal of high-level radioactive wastes, a plan had been drawn up in August 1992 and an organization to implement that disposal work would be established around the year 2000, after which designated disposal sites would be selected.

122. Turning to research and development on nuclear fusion, which was expected to be the ultimate energy source for mankind, he expressed his country's satisfaction at the agreement signed in July 1992 regarding the

engineering design activities of the International Thermonuclear Experimental Reactor Programme, (ITER), which was being promoted by Japan, the United States, the EC and the Russian Federation.

123. In conclusion, while making every effort to contribute to solving the urgent task facing the Agency, Japan did not intend to neglect research and development and the promotion of technical co-operation and would continue to support the activities of the RCA and other similar types of regional co-operation agreement.

124. Mr. LEE (Canada) said that even though Canada possessed significant and diverse energy resources, its Government had concluded in 1990 that the CANDU nuclear power option was vital to the country's energy and environmental interests, and had even gone so far as to assure the financing of its research and development programme for seven years. Of the four major factors which had influenced its decision: economics, security and diversity of energy supply, environment, and industrial benefits, the environmental issue had been particularly important, and due consideration had been paid to the worldwide effects of burning large amounts of fossil fuels, particularly coal, to generate electricity.

125. It was gratifying to note that other Governments had reached similar conclusions with regard to the part to be played by the CANDU reactor in their own energy mix, most recently the Republic of Korea, which had decided to construct a second CANDU-600 unit in 1990 and had just committed itself to building a further two units on the same site.

126. The benefits of nuclear techniques in other areas were undisputed, particularly in health, agriculture, industry and environmental protection. The IAEA was performing an essential service in that regard as demonstrated by the work of the Department of Research and Isotopes and the Seibersdorf Laboratory.

127. The problems associated with nuclear power, however, could not be underestimated, one of the most difficult encountered by many Member States being public acceptance. It was therefore essential that sound information on all the relevant issues should be made widely available. To that end the

Canadian Government had encouraged its nuclear industry to conduct a vigorous public education programme and the industry had responded well.

128. Public concern tended to focus on the three main areas of safety, waste disposal and the non-proliferation of nuclear weapons. The Agency was already making a vital contribution in each of those areas. Canada for its part had developed considerable expertise in those fields which reinforced and complemented the work of the Agency. Furthermore, the advances made in those areas would greatly contribute to resolving the problem of public acceptance as they became more widely known and understood.

129. Since the Chernobyl accident, national and international activity in the field of nuclear safety had intensified. The Agency's role in that process was important both as a clearing house and repository for the exchange of information and in facilitating the development of an international safety convention applicable to all types of nuclear reactors. Canada intended to make every effort to contribute to the successful completion of that convention.

130. Significant advances had been made in nuclear safety at the national level. Recent measures taken in Canada included increased government support for research, increased support for the regulation of nuclear activities with emphasis on power reactors, and close collaboration with other countries to ensure the safety of the CANDU reactors. Canada was also helping to alleviate the problem of the safety of reactors in Eastern Europe and the former Soviet Union; it had recently made a \$30 million commitment to make its nuclear expertise available to those countries to reduce the risk of nuclear accidents with RBMK-type reactors, a programme which was to be co-ordinated with the work carried out by international organizations such as the IAEA and the EC.

131. In the area of radioactive waste disposal, Canada had participated at the technical and public levels in the three major sub-areas of high-level, low-level and uranium mine waste management. High-level waste in the form of used fuel was currently stored safely and economically at reactor sites, and while there was no technical urgency to proceed with final disposal of used fuel, the Canadian Government had initiated a formal environment assessment

and review of the concept of deep geological disposal in hard crystalline rock, which was being extensively researched in Canada. It had also adopted a new approach to the siting of disposal facilities for some of the low-level wastes currently in storage, by relying on the voluntary participation of interested communities. In addition, formal public review processes had again been set up to review the management of uranium wastes and examine proposals for opening new uranium mines and decommissioning old ones.

132. Canada had actively co-operated with the IAEA in those areas and strongly recommended that the Agency continue its efforts in co-operation with other national and international agencies to provide guidance on radioactive waste management.

133. The Agency's activities in the uranium area dated back to the mid-sixties, mostly in close collaboration with the Nuclear Energy Agency (NEA) in Paris with the broad participation of Member States. In that area, the best-known activity had undoubtedly been the NEA/IAEA red book exercise, a comprehensive assessment of world uranium resources, production and demand, to which Canada had always given high priority, the more so now with the entry of the former Soviet Union into the international uranium market. If that work was to be successful, co-operation between the NEA and the IAEA in the uranium area should be continued and enhanced. In due course, the two Agencies might even reconsider the idea of reconstituting the NEA uranium group as a formal joint group, as it had been prior to 1985. The Agency should strongly support such activities.

134. The Agency's most important work, however, was in world security. The Agency's safeguards system was a vital pillar in the maintenance of world peace and stability, particularly in the international community's efforts to control and, it was to be hoped, reverse the proliferation of nuclear weapons. Those safeguards were an essential prerequisite to international co-operation and world trade in nuclear technology, materials and equipment.

135. The Canadian Prime Minister had recently highlighted the Agency's role in support of the non-proliferation regime. In order to prevent "nuclear cheating", the Agency's mandate should be strengthened and Member States

should provide the resources needed for that purpose. Canada was prepared to support efforts to make the IAEA safeguards system more effective, and to consider expanding the safeguards regime to include the modality of inspections "in any country, at any time," and looked forward to seeing proposals along those lines as a result of the Agency's review of the safeguards system later in the year. The Board of Governors should be in a position to review the preliminary results of that study at its next session. Further study and research would undoubtedly uncover ways of improving efficiency and reducing expenditure; any scheme that would enable the Agency to conserve resources for use in strengthening its ability to expose non-compliance with treaty obligations would be of particular interest. Canada was prepared to help the Agency with any relevant study and research insofar as its resources allowed.

136. Canada also supported recent proposals to strengthen the safeguards system, including the suggestion that Member States should report more extensively on nuclear exports to enable an early warning system to be established. It was also willing to participate in such a system provided the system was universal and could be seen to yield non-profit benefits.

137. Canada also believed that the Agency could assist in solving the problem of vertical proliferation, particularly with respect to nuclear material transferred from the military to the civilian sector, as the result of reducing nuclear-weapons stockpiles.

138. The Agency had responded constructively and responsibly to the challenges of safety, waste disposal and non-proliferation, and had made the best use of its limited resources. Canada was committed to strengthening its own programmes in those fields and, in so doing, contributing to the viability and effectiveness of the Agency's efforts.

The meeting rose at 1.15 p.m.