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THIRTY-FIFTH (1991) REGULAR SESSION

RECORD OF THE THREE HUNDRED AND THIRTY-THIRD PLENARY MEETING

Held at the Neue Hofburg, Vienna,
on Monday, 16 September 1991 at 10.25 a.m.

Temporary President: Mr. VAJDA (Hungary)
President: Mr. SANTANA CARVALHO (Brazil)

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[*] GC(XXXV)/952, GC(XXXV)/952/Add.1 and CG(XXXV)/952/Add.2/Rev.1

8932e/831e
91-4582

Abbreviations used in this record

ASSET	Analysis of Safety Significant Events Team
EEC	European Economic Community
INSAG	International Nuclear Safety Advisory Group
IRS	Incident Reporting System
ITER	International Themonuclear Experimental Reactor
NEA	Nuclear Energy Agency of the OECD
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NUSS	Nuclear Safety Standards
OAU	Organization of African Unity
OECD	Organisation for Economic Co-operation and Development
OSART	Operational Safety Review Team
R&D	Research and Development
RADWASS	Radioactive Waste Safety Standards
RBMK	High-power channel-type reactor (Soviet Union)
START	Strategic Arms Reduction Treaty
TACF	Technical Assistance and Co-operation Fund
WWER	Water-cooled and -moderated reactor (Soviet Union)

OPENING OF THE SESSION

1. The TEMPORARY PRESIDENT declared the thirty-fifth 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 the Agency too had been affected by the upheavals of the previous year, and Member States had more numerous and more serious causes for concern than ever before. However, in conjunction with those difficulties there were also opportunities to be seized, and the Agency should be capable of focusing attention on both. Given the importance of those new problems for the future, the Agency would have to show patience, tolerance and determination to resolve them.

4. He also welcomed Estonia, Lithuania, Latvia and the Republic of Yemen, which were making applications for membership of the Agency. There was no doubt that their applications would be accepted, and that they would bring new vitality to the Agency, particularly during the present session of the General Conference. Indeed, the Agency would be assuming significant responsibilities in the years to come. Among other things it would have to absorb the impact of the sometimes dramatic events which had recently taken place, and face up to their consequences. To that end, it could establish the principle of maintaining a balance between affirmative action which would enable it to make good use of the opportunities offered by political events, and the constant need to consider the consequences of the action taken and to establish it on a firm foundation.

5. Among the tasks which the Secretariat and the Director General had accomplished since the last session of the General Conference, special mention should be made of the promotion of nuclear safety - including the International Conference on the Safety of Nuclear Power which had just taken place - and the activities assigned to the Agency by the Security Council in the resolutions adopted following the Gulf war.

ELECTION OF OFFICERS AND APPOINTMENT OF THE GENERAL COMMITTEE

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

7. Mr. PONCE CABALLERO (Bolivia), speaking on behalf of the Latin American and Caribbean Group, proposed Mr. Santana Carvalho (Brazil) as President of the thirty-fifth regular session of the General Conference. Mr. Santana Carvalho was President of the National Nuclear Energy Commission of Brazil and Governor for Brazil on the Agency's Board of Governors.

8. Mr. Santana Carvalho (Brazil) was elected President by acclamation.

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

Mr. Santana Carvalho (Brazil) took the Chair.

10. The PRESIDENT said he was deeply moved by his election as President of the thirty-fifth session of the General Conference. He would endeavour to ensure its success and, with the collaboration of all present, to work successfully through the extensive agenda.

11. The attention given by the media to the nuclear option for electricity generation had always been irregular. That was partly due to random events such as scientific and technological breakthroughs or nuclear accidents, but also to more perennial elements such as the availability and price of oil as well as environmental protection. That last factor, which had been one of the more serious public concerns in the past few years, played a decisive role in all aspects of planning and design of energy programmes.

12. The growing concern about environmental contamination caused by the use of fossil fuels for electricity generation had stimulated new interest in the nuclear alternative. However, there were still significant problems to be resolved, including those associated with the effects of radioactivity, particularly from radioactive waste. The Agency was the first to recognize the importance of those problems and to try to solve them, in view of their consequences for future generations. At the same time, if nuclear power was to be more widely accepted, work on the development of safer reactors would

also be required. Any breakthough in those two areas would have a decisive influence on public acceptance of nuclear power as a safe, reliable and environmentally appropriate alternative for electricity generation.

13. In some countries, the main benefits of nuclear energy came from the use of radioisotopes in areas such as medicine and health, hydrology, agriculture and stock-breeding. Those benefits were of interest to all countries, whether industrialized or not, as they favoured both development and the improvement of living conditions. It was in that context that he viewed the Agency's role in promoting nuclear energy.

14. The Agency's activities during 1990 displayed characteristic quality and seriousness, and the annual report presented them in a very attractive manner. Its listing of activities could be considered as an invitation to Member States to participate in as many areas as possible in the year to come, since the activities in question would undoubtedly maintain the same level of quality. If the Agency was to fulfil its mandate successfully, it should as far as possible provide access for specialists from developing countries to the courses, seminars, symposia and training activities which it promoted.

15. The international community also expected the Agency to disseminate as widely as possible the work it carried out in collaboration with countries advanced in nuclear safety and radiological protection. He noted with satisfaction that under item 11 of the agenda, the General Conference would be examining a series of initiatives which were of great interest to the international community as a whole. Their publication and a detailed explanation of their importance to the public could stimulate interest in using nuclear energy.

16. Concern about liability for nuclear damage was gradually leading to recognition of the need for a more effective international nuclear safety system. That was due, to a great extent, to the work of the group which was meeting to consider that question under the aegis of the Agency. It was important that the system established should be flexible in order to take account of differing national positions on the subject.

17. The contribution which the Agency was making to full implementation of the conventions on early notification and on mutual assistance through the technical services it provided to Member States was one example of how effective it could be in promoting nuclear power. The Agency had contributed to technical and scientific improvements in nuclear installation performance and to an improved exchange of information among Member States and between Member States and the Agency, all of which facilitated a rapid response that would lessen the effects of any incidents.

18. Such a positive scenario for international co-operation in the years to come was feasible, but it did not preclude the need for the Agency to continue its careful work on another part of the mandate entrusted to it by Member States, namely to verify that nuclear materials were not diverted from peaceful uses. Providing safeguards for the peaceful uses of nuclear energy throughout the world was a noble task which deserved the support of all Member States, the aims being to ensure that international co-operation was not unduly restricted but at the same time to promote mutual confidence and enhanced scientific and technological interchange.

19. In conclusion, he recalled that the Agency's role was essentially technical and should not be clouded by political controversy. Developments in international affairs had placed the Agency at a historic turning point, and it no longer seemed out of the question that still more ambitious goals might be attainable. The time was perhaps approaching when the moral and ethical implications of nuclear energy would have to be considered, something which could lead to the establishment of a universally applicable code of behaviour.

20. Mr. RIOBO (Chile) said that members of the Group of 77 were displeased by the lack of courtesy to which they had been subjected: indeed, they had not yet completed their own deliberations when those of the Conference had already begun. As they had been unable to attend the beginning of the session, they were naturally wondering what had occurred. He nevertheless congratulated Mr. Santana Carvalho on his election.

21. The PRESIDENT explained that even as matters were the session had begun approximately half an hour late to enable all groups to complete their work. Consideration of the provisional agenda was now about to begin. He

recalled that in accordance with Rules 34 and 40 of the Rules of Procedure, the General Conference had to elect eight Vice-Presidents, the Chairman of the Committee of the Whole, and five additional members of the General Committee. From consultations which had taken place, it appeared that all regional groups had already agreed on their candidates to serve on the General Committee. He therefore proposed, under Rule 34 of the Rules of Procedure, that the delegates of Cuba, Germany, Japan, Norway, the Syrian Arab Republic, Tunisia, the Union of Soviet Socialist Republics and the United States of America be elected as Vice-Presidents, Mr. Wilson (Australia) as Chairman of the Committee of the Whole and, under Rule 40, the delegates of Byelorussia, Canada, Egypt, Lebanon and the Netherlands as additional members of the General Committee.

22. The President's proposals were accepted.

APPLICATIONS FOR MEMBERSHIP OF THE AGENCY (GC(XXXV)/959, 973, 974 and 975)

23. The PRESIDENT announced that there would be a vote on the draft resolutions contained in documents GC(XXXV)/959, GC(XXXV)/973, GC(XXXV)/974 and GC(XXXV)/975 relating to applications for membership of the Agency from the Republics of Yemen, Lithuania, Estonia and Latvia, respectively.

24. The draft resolutions contained in documents GC(XXXV)/959, GC(XXXV)/973, GC(XXXV)/974 and GC(XXXV)/975 were adopted by acclamation.

25. The PRESIDENT welcomed the fact that an increasing number of countries were applying for membership of the Agency. On behalf of the General Conference, he extended a warm welcome to the four new Members, who would undoubtedly play a constructive role in the Agency.

MESSAGE FROM THE SECRETARY-GENERAL OF THE UNITED NATIONS

26. Mr. GIACOMELLI (Representative of the Secretary-General of the United Nations) said that he would take the opportunity, as Executive Director of the United Nations International Drug Control Programme, to draw a parallel between drugs and nuclear energy: used with discretion, both represented significant benefits for humanity; used in the opposite way, they could also be tools of mass destruction.

27. Conveying to the General Conference a message from the Secretary-General of the United Nations, he recalled that, since the last session of the Conference, the world had witnessed a rapid succession of dramatic events which could not fail to introduce a qualitatively different framework for international relations. The Cold War that had overshadowed the whole area of arms limitation and disarmament was a thing of the past. The experience gained from bilateral treaties on intermediate and shorter-range nuclear weapons and on strategic nuclear weapons, and from the milestone treaty on conventional forces in Europe, had moved the world into an era of growing recognition of the need for transparency and an effective system of verification as cornerstones in arms limitation and disarmament agreements.

28. The recent conflict in the Persian Gulf and its aftermath, while underscoring the interconnection between confidence-building measures on the one hand and security on the other, presented the international community with the challenge of finding effective means to halt the proliferation of nuclear and other weapons of mass destruction. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which had led a number of States to take initiatives and make declarations, and also the recent adoption by other States of regional measures of verification and transparency in support of pledges to renounce nuclear weapons, reflected a deepened understanding and concern for the implications of nuclear weapons proliferation, and the need to prevent it.

29. The violations by Iraq of its safeguards agreement with the Agency, and of its obligations under the Non-Proliferation Treaty, had also given prominence to the fundamental importance of ensuring a safeguards system in which States could have full confidence.

30. The role of the International Atomic Energy Agency in that regard was crucial. Not only did States have a need to be reassured that no clandestine nuclear weapons programmes were under way in other States in their own region or elsewhere, but such reassurance was also likely to be essential for continued co-operation in the peaceful use of nuclear technology - for energy production, pest control, crop improvement, medicine and hydrology, and for the related technology transfers.

31. The role of the Agency in promoting safety and sound management in the peaceful applications of nuclear technology had been fully recognized. The task was now to devise improved measures of verification which would build confidence and allay fears, safeguard peaceful applications and above all reliably detect non-compliance, wherever and whenever it occurred. That challenge should be met with vigour and with the necessary resources.

STATEMENT BY THE DIRECTOR GENERAL

32. The DIRECTOR GENERAL said that in the present fast-changing world international organizations had to be flexible and resilient to meet the changes facing their members. The Agency had demonstrated its capacity to deal effectively with nuclear questions needing international action.

33. For example, when it had been necessary to conduct an international professional examination of the causes of the Chernobyl accident in 1986, the Agency had met that need within months by holding a large accident review conference. Two major conventions, on early notification of nuclear accidents and on emergency assistance, had been drafted in record time and promptly adopted.

34. Over the past two years the Agency had been engaged in an international assessment of the radiological consequences of the accident and the Soviet responses to them. Together with several other organizations, the Agency had sent nearly 40 technical missions to the areas affected in order to obtain the data for scientifically based conclusions in those controversial matters. The conclusions had been submitted to open discussion at an international conference held in Vienna during the past summer.

35. Following the Chernobyl accident, it had become evident that the international nuclear safety activities existing at the time would have to be transformed into an international nuclear safety regime that could ensure a high level of nuclear safety everywhere. That had led the Agency to expand its safety-related programme, and nuclear safety policymakers had recently charted a new phase of that expansion at a conference held under the auspices of the Agency in Vienna.

36. Developments in Eastern and Central Europe, including the Soviet Union, had led to a strong interest in examining and upgrading nuclear power safety in that region. Through the WWER-440/230 project, the Agency was responding to that interest by focusing attention on the oldest type of reactor used there. He saw the Soviet Union's very recent suggestion that the safety of RBMK reactors should also be made the subject of an Agency project as evidence of the success of the WWER-440/230 project.

37. Worldwide concern about the environment and development, which would be manifested the following year at the United Nations Conference on the Environment and Development in Rio de Janeiro, had prompted the Agency to consider how its own activities met that concern. It had in fact become clear that a large number of the Agency's development co-operation programmes, especially in agriculture and industry, were of direct benefit not only to development but also to the environment. For instance, nuclear techniques often afforded the best means of monitoring the presence and concentration of various pollutants. The Monaco laboratory had built up an important database from its very considerable experience in monitoring pollution in the Persian Gulf and was currently playing an important role in the international efforts regarding the Gulf.

38. In order to provide relevant data for the growing international discussion about energy and the environment, the Agency, in co-operation with other organizations, had organized an objective comparative analysis of the health and environmental impacts of different ways of generating electricity. A scientific symposium had been held on that subject in Helsinki in May, and it was hoped that its conclusions would be noted during the negotiations on a framework convention on climate change and at the Rio de Janeiro conference by those dealing with the greenhouse effect and other environmental problems for which energy uses played an important role.

39. The Helsinki conclusions showed that nuclear power could help to reconcile the world's demand for more energy, especially electricity, with the need to protect the environment. It was, above all, the public perception of the risk of nuclear power which placed restraints on its wider use.

40. The Agency's work in Iraq was another example of its readiness to respond to new challenges. In April 1991, the Security Council had asked the Agency to carry out activities aimed at denying Iraq the capability to develop nuclear weapons. That request had confronted the Agency with completely new tasks. Although the burden of those tasks was substantial, the Agency had been able to perform them professionally and economically with a very small Agency Action Team directing and organizing inspections and with financial resources made available by the United Nations.

41. Following the uncovering and mapping of Iraq's uranium enrichment activities through Agency inspections and Iraqi declarations, the Agency was now faced with the challenge of strengthening its safeguards system. That a clandestine programme for uranium enrichment had not been spotted earlier by Agency safeguards was hardly surprising. It had not even been spotted by those with access to information obtained through satellites and intelligence activities. Nor was it surprising that the Agency's safeguards inspections, designed to detect a diversion of significant quantities of plutonium - of the order of a kilogram - at declared facilities, had not detected the undeclared separation of a few grams. The world, however, was less interested in explanations than in action to strengthen the detection capacity of the Agency through the application of full-scope safeguards. Such action was under way.

42. Those brief descriptions of action undertaken by the Agency would perhaps suffice to show that Member States possessed in the Agency a flexible and resourceful mechanism capable of responding to the changing challenges in the nuclear world. He felt bound to add that the only thing which did not appear to be flexible was the budget, which had, in real terms, remained static since 1985.

43. He went on to examine in greater detail the subject of non-proliferation and safeguards, and the Agency's work under Security Council resolutions 687 and 707.

44. At its regular session in 1990 the General Conference had taken a keen interest in the many innovative proposals which had emerged at the Fourth NPT Review Conference. Those proposals, and also other ideas which had been put forward after the revelations in Iraq, had been analysed in the Secretariat

and discussed by the Board during the past year. It was clear that the time was ripe for adjustment and change. The general picture of non-proliferation was by no means gloomy. The disappearance of the ideological struggle and arms race between East and West, the beginning of substantial reductions in the nuclear arsenals of the superpowers and the very substantial disarmament measures within Europe all combined to make the nuclear weapons option less relevant between the great powers. Armed conflicts between those powers seemed extremely implausible in the world that was emerging, and the response to Iraq's aggression against Kuwait showed that collective action could be forged within the United Nations. The new climate and the need to direct resources to development had already borne some fruit in the area of non-proliferation. In a momentous development, Argentina and Brazil were opening up their nuclear installations to each other and to comprehensive Agency safeguards, the details of which were being negotiated. The prospects of the Tlatelolco Treaty coming into force for all of Latin America and the Caribbean were thereby greatly improving.

45. For a number of years, concern had been expressed about South Africa's nuclear programme. The winds of change had now swept away much of apartheid's legal infrastructure, and on 10 July 1991 the South African Government had taken the step of adhering to NPT. Discussions which had taken place with the Agency before that decision was taken had led to a very rapid accord on the text of a standard NPT-type safeguards agreement, which had been approved by the Board of Governors the previous week. The agreement had been signed that very morning and had come into immediate effect. The first Agency inspectors would start going to South Africa in October. Some questions had been raised as to how the Agency could feel confident that South Africa's report on the initial inventory of nuclear material would be complete. Such questions arose each time a State with a substantial nuclear programme accepted full-scope safeguards. In response, the Agency would have to do what it could to ensure completeness. In the case in point, the Secretariat and South Africa were discussing a number of measures which could help provide evidence of the completeness of the initial inventory, notably an examination of the original production records of South Africa's enrichment plants.

46. Now that South Africa had become a party to NPT and opened up its nuclear installations to Agency inspection, there was room for some optimism that aspirations in Africa for a nuclear-weapon-free continent might be realized. Those aspirations had been discussed in Addis Ababa earlier in the year under UN and OAU auspices.

47. He could also report to the Conference that, after long negotiations between the Secretariat and the Democratic People's Republic of Korea, a standard NPT-type safeguards agreement had been finalized in July. It had been approved by the Board of Governors the previous week, and he had been authorized by the Board to sign it on behalf of the Agency. It would enter into force as soon as it had been signed and ratified by the Democratic People's Republic of Korea, which, it was hoped, would be soon. Even before the agreement entered into force the Agency was ready to receive any relevant information, such as the initial inventory of facilities and material. Receipt of such information would facilitate early full implementation of the agreement, in which there was widespread interest.

48. The declarations by the nuclear-weapon States France and China that they had decided, in principle, to adhere to NPT gave further impetus to non-proliferation efforts. If the current détente and co-operation between the nuclear-weapon States continued and further nuclear disarmament was achieved, it did not seem altogether unrealistic to hope for a universal non-proliferation regime by 1995. In that context it seemed appropriate to turn to the question of safeguards in the Middle East.

49. In resolution GC(XXXIV)/RES/526, adopted by the General Conference in 1990, the Director General had been requested "... to deploy further efforts in continuing the consultations with the States concerned in the Middle East area with a view to applying Agency safeguards to all nuclear installations in the area ... and to report ... to the Board of Governors and to the General Conference ...".

50. A great deal had happened in the Middle East since September 1990. Security Council resolution 687 had established a comprehensive regime for the inspection of nuclear activities in Iraq and entrusted the inspection task to the Agency. That resolution expressly referred to the goal of establishing a

zone free from weapons of mass destruction in the Middle East and identified the restrictions on nuclear activities in Iraq and the monitoring of compliance with those restrictions as steps towards that goal.

51. Furthermore, in the Middle East arms control initiative announced by President Bush in June 1991 a number of ideas had been advanced - as also in the initiatives by President Mitterrand and President Mubarak - for halting the spread of weapons of mass destruction, including nuclear weapons, in the Middle East. President Bush had declared among other things his continuing support for the creation of a nuclear-weapon-free zone in the region and had expressed the belief that the Agency could play an important role as a result of its past safeguards experience in the Middle East and its more recent experience in implementing Security Council resolution 687.

52. In any discussion of that question it should be kept in mind that safeguards presupposed arms limitation commitments which would have to be verified. Such commitments were a political matter, and most probably also a matter for negotiation between the interested parties. The Agency was not called upon to give advice in that regard. Nevertheless, it might not be premature for the Agency to examine verification concepts of various kinds. That was, in fact, what the Agency had tried to do, and it was worth drawing the Conference's attention to some of the essential points in that regard.

53. In the Middle East verification measures might need to be more intensive and wider in scope than existing Agency safeguards. Some mutual inspection measures might also need to be included in order to give the parties maximum confidence. Verification in the Middle East could not be limited to declared installations and material.

54. He had already expressed the view that mutual confidence, which was the aim of verification, might also emerge from co-operation. Nuclear research and development programmes, including fuel cycle centres, if any were planned in the region, might be established and operated by a joint organization, as had been done in Europe. He had also called attention to the fact that all cases in which nuclear installations had been the target of armed attacks had taken place in the Middle East, and that any arms control arrangements in that region would have to contain commitments against such attacks.

55. Although the Agency inspections in Iraq had been carried out pursuant to a Security Council resolution under Chapter VII of the UN Charter and were not special inspections under an NPT safeguards agreement, the lesson which had been learned in Iraq, where Agency inspections and subsequent Iraqi declarations had revealed an unknown major enrichment programme, was that, in order to make special inspections under full-scope safeguards effective, three conditions needed to be fulfilled.

56. Firstly, the inspectorate must have access to information from other sources besides the State in which the inspections were to be performed, notably from satellites and intelligence organizations. Without such information, inspectors would not know where to look. He saw no insuperable difficulty in establishing a special unit to receive and evaluate such information on a continuous basis in the Agency. The accuracy of the information would have to be checked before the Director General decided whether he was justified in setting in motion the procedures for a special inspection.

57. Secondly, the inspectorate must have the right of timely and unrestricted access to any location which, according to credible information, might be an undeclared nuclear installation or contain undeclared nuclear material. Although the right to perform special inspections was laid down in safeguards agreements, it had never beeen invoked for the purpose of inspecting undeclared locations.

58. Thirdly, the Agency might need to exercise its right of access to the Security Council if the State in question rejected a request for a special inspection. The case of Iraq demonstrated that intervention by the Security Council to enforce inspection was a distinct possibility. Awareness of that was likely to deter any State from failing in its duty under a full-scope safeguards agreement to declare all its nuclear facilities and material.

59. All that might sound relatively straightforward, but it required considerable discussion and elaboration in detail. He hoped, in view of the present strong interest Governments had in the matter, that the Agency would be able to put those ideas into effect before long. The type of case he had been describing was likely to occur very rarely, but by being prepared for it the Agency might help to prevent it from occurring at all.

60. To move to a world in which the non-proliferation regime attained, or was approaching universality, and yet to see confidence in full respect for that regime at the same time being eroded, would be completely unacceptable. It should also be kept in mind that any lack of confidence in the reliability of non-proliferation pledges and their verification would probably constitute an impediment to far-reaching nuclear disarmament. The inevitable conclusion was that the safeguards system must be made stronger as universal non-proliferation and nuclear disarmament drew nearer. Strengthening of the system was technically possible without incurring enormous costs, and the Agency had the potential for operating a strengthened system.

61. Turning to the Agency's activities under Security Council resolutions 687 and 707 and the lessons learnt from inspections in Iraq, he pointed out that, while the inspections ordered by the Security Council were not regular safeguards inspections, they did draw extensively on the Agency's safeguards techniques and expertise, requiring as they did the use of Agency instruments and seals and the services of many Agency inspectors. They also received extensive support from the Agency's Laboratory at Seibersdorf for the analysis of hundreds of samples.

62. The Board of Governors had come to the conclusion that a number of failures on the part of Iraq to report to the Agency under its NPT safeguards agreement constituted non-compliance with that agreement.

63. In fulfilling the mandate given to it by the Security Council in connection with nuclear activities in Iraq, the Agency was in part treading new ground. It was not only verifying peaceful uses of nuclear energy but also looking for any attempts to develop military applications. He did not think that task posed any greater difficulties than Agency inspections of sensitive installations such as enrichment or reprocessing plants. In Iraq, the Agency was not currently engaged in any promotion of the use of nuclear energy but rather in limiting its use to strictly defined purposes, and it was carrying out the task of removing, destroying or rendering harmless nuclear equipment and material that might be of use for weapons development. It was fortunate that, as far as Agency inspections had revealed to date, full industrial production had not been reached in a uranium enrichment programme for which no plausible peaceful purpose could be discerned.

64. The Agency's activities in nuclear safety and radiation protection had expanded very considerably over the last five years. It was unnecessary to make detailed comments on the major international enquiry into the radiological consequences of the Chernobyl accident, which he had mentioned in his introduction. Its conclusions were not accepted by everybody, but it was a source of professional satisfaction to the Agency that they were treated with respect and interest by the scientific community. The main criticism of that project concerned not what it had examined but what it had not examined, namely the health of people who had been evacuated from the affected regions and of those who had taken part in the clean-up operations. In both those respects the Agency must be ready to participate in any follow-up inquiry.

65. The Chernobyl inquiry had been an isolated action, but the Agency ought to be generally prepared to embark upon such actions without delay and, of course, with the consent of the Board of Governors. Another recent isolated action had been the convening in the summer of all parties interested in the acute safety problems of the Kozloduy nuclear power plant in Bulgaria.

66. The WWER-440/230 project, under which the examination of that reactor type in Czechoslovakia, Bulgaria and the Soviet Union was soon to be concluded, had been prompted by the determination of the Governments concerned to adapt to international standards and practices in nuclear safety. It was for those Governments to decide whether to backfit and upgrade, or to close, the nuclear plants found to be of an unacceptable standard. As there was a strong interest in other countries in the safety of those plants, however, it was natural that there should be international co-operation involving expert assessments, advice and assistance and that those activities should be co-ordinated under the Agency's auspices.

67. The International Conference on the Safety of Nuclear Power had concluded ten days previously in Vienna. Policy-makers in the field of nuclear safety from all over the world had participated. The Conference had been oriented towards action, which meant that its aim had been to agree on an agenda for nuclear safety work in the decade to come. The results of the Safety Conference, if endorsed by the General Conference, would provide a useful indication as to the types of work which Member Governments' policy-makers wanted the Agency to undertake.

68. Like INSAG, the Safety Conference had urged that the Agency aim primarily at strengthening the role of the national authorities responsible for nuclear safety. There were good reasons for that view: the Agency should not seek to become a supranational regulatory authority but rather should endeavour, through international action, to strengthen national regulatory organs. The many services offered by the Agency conformed with that concept and the Safety Conference, which had expressed strong support for those services, had invited the Agency's governing bodies to develop an even more vigorous overview process through an expansion of such services as the ASSET and OSART missions, and through other means.

69. The idea of working out a framework convention on nuclear safety had attracted the most attention. He felt sure that such a convention would be useful and viable, and hoped that the Agency's policy-making organs would consider the idea and decide on how best to foster it. The framework needed to contain only a commitment by the parties to a step-by-step strengthening of nuclear safety everywhere, including the safe disposal of nuclear waste. Specific obligations would be undertaken in protocols attached to that framework. A binding protocol embodying the basic nuclear safety principles worked out by INSAG might perhaps be included without much difficulty, as might, for example, a binding protocol on participation in the IRS. Consideration should also be given to the question whether the Code of Practice on the Transboundary Movement of Radioactive Waste, adopted by the General Conference the previous year, could be transformed into a binding instrument, as had been urged in several quarters.

70. A framework convention on nuclear safety to which a growing number of protocols with easy revision mechanisms were attached might give additional strength, stability and authority to the various principles and activities covered. It would also give greater visibility to the commitments entered into than did scattered guidelines and recommendations, however useful they might be.

71. Such an international nuclear safety regime should also regulate the question of responsibility in the event of accidents and ensure adequate compensation for injuries and damage that might result from them. It was generally agreed that the existing conventions should be further developed, and the Agency was actively engaged in that effort.

72. Since the 1990 session of the General Conference the Standing Committee on Nuclear Liability had made further progress. As to revision of the Vienna Convention, foreseen in the Convention itself and due to take place at a conference in Vienna, preliminary agreement had been reached on a number of draft amendments covering most points where a need for improvement had been recognized. They included expansion of the concept of nuclear damage to cover contamination of the environment, application of the Vienna Convention to military installations, extension of its geographic scope, and an increase in the financial limit imposed on the operator's liability. He expressed his deep appreciation to Ambassador van Gorkom of the Netherlands who, as Chairman, had contributed greatly to the constructive work accomplished in the Standing Committee.

73. There was sometimes a tendency in the environmental debate to write off nuclear power as a future source of energy without a thorough analysis of the health and environmental consequences of the different options available. As there was no intergovernmental organization that dealt with all sources of energy, the Agency, together with a number of other organizations, had carried out a major comparative study of the environmental and health effects of different energy systems for electricity generation. That study had been discussed at the Senior Expert Symposium held in Helsinki in May. Several important conclusions had been reached, including the following: the global demand for electricity services would continue to increase, subject only to constraints on economic growth; and improvements in efficiency could do much to reduce the environmental impact and should therefore be pursued vigorously. Such improvements would not, however, eliminate the need for new plants to meet growing demand; the most stringent global targets for reducing CO_2 emissions could not be met by the electricity sector in many countries without electricity service curtailments that were socially and economically unacceptable; nuclear power was the non-fossil energy source which stood the best chance of being deployed on a large scale and with costs competitive with fossil fuels for base-load generation; and under routine operating conditions, nuclear power and renewable energy systems tended to be in the lower range of health risk whereas energy systems based on coal and oil were in the higher range.

74. Those conclusions were significant and he thought it desirable to have a summary of the Helsinki Symposium documentation available at the United Nations Conference on the Environment and Development, due to take place in Rio de Janeiro in 1992.

75. The previous year, he had urged all Member States to support the programme involving the use of the sterile insect technique to eradicate the New World screwworm in Libya. The Agency, together with the Swedish International Development Authority and the Austrian Government, had been very active in that programme. The results were as follows: in 1990, 12 068 livestock had been found to be infested with the parasite in Libya; in 1991, only six cases had been recorded. Since 7 April 1991, not a single case had been found. There were thus good grounds for the optimistic forecast that before the end of 1991 the parasite would have been completely eradicated from North Africa.

76. Acid rain, resulting from sulphur dioxide and nitrogen oxides in flue gases from the burning of fossil fuels, such as coal, was damaging forests, lakes and farmland all over the world. Different techniques were being used to reduce emissions of such gases.

77. The Agency, in co-operation with the Polish Government, was implementing a promising project to develop radiation technology for removing sulphur dioxide and nitrogen oxides simultaneously and efficiently from flue gases by means of electron beams and transforming those gases into fertilizer. In April 1991, a pilot plant, the largest demonstration plant of its kind in the world, had been installed and started up at a thermal power plant in Warsaw, and successful operation was continuing. Approximately 90% of the sulphur dioxide and nitrogen oxides in flue gases could be removed by two 50 kW electron beam machines.

78. An extrabudgetary contribution from Japan for public information work had enabled the Division of Public Information to develop an enhanced programme to improve public understanding of a broad range of nuclear energy issues. It had been welcomed in a number of Member States, which had helped to stage a series of regional seminars designed mainly for journalists. Such seminars had already been held in India, Australia, Japan and Hungary, and further seminars were planned in Thailand and Egypt by the end of the year.

79. There was no doubt that the media had become more interested in the Agency's activities over the past six months, especially in its inspections in Iraq. The fact that the resources available for public information work were so limited naturally placed severe constraints on the Agency's ability to satisfy that interest.

80. An unusually active year had placed additional demands on already hard-working staff. After eight years of deteriorating salary conditions, the prospect of another freeze on Professional salaries was really unacceptable. The problems associated with Professional salaries were likely to grow if no solution could be found. They had already reduced the Agency's competitiveness in attracting candidates for jobs and might have a negative impact on the Agency's programme in the long term.

81. The Agency was again facing a serious cash crisis. He appealed to Member States who had not paid their 1991 assessed contributions to make their payments without further delay. He also appealed for pledges and payments to the TACF for 1991. By 31 August, the Agency had collected only US $19 million of the 1991 target of US $49 million - only $33.4 million of which had been pledged so far. Calculations indicated that, unless major payments to the Regular Budget were received, Agency operations might be able to continue only until the end of October, and then only if use were made of the Working Capital Fund and if unencumbered balances of extrabudgetary funds, including the TACF, were transferred to the administrative budget. He trusted that the policy-making organs would agree to such unavoidable emergency actions.

82. In 1990, the Board of Governors had requested the Secretariat to draw up a medium-term plan for the Agency covering the period 1993-1998. The plan in question was not meant to be a blueprint of what the Agency had to do in the period covered. The many unexpected developments of recent years demonstrated the need for flexibility, for readiness to meet new, unforeseen challenges. That meant, apart from anything else, that the Agency must have the financial means to act. The Medium-Term Plan should tell the Secretariat what to focus on in the light of identifiable longer-term trends in nuclear energy. It should lay down the strategy and priorities for the Agency to meet those challenges.

83. In view of the expected energy needs of a growing world population, there was a need to analyse data which would allow a systematic comparison of various options from the standpoint of their economics and their impact on health, the environment and the climate of the world. Provided nuclear power plants operated economically and without severe accidents, some countries might consider a significant expansion of nuclear power. Efforts would be needed in the medium term to reach consensus on nuclear safety principles and criteria for those future nuclear power plants, and to present some international standards. Wide international consensus in that sphere would help to obtain support for an increased reliance on nuclear power. The Agency should play a similar role in developing an international technical consensus on the acceptability of disposal methods for nuclear waste of all kinds.

84. In the non-power area, nuclear applications in food and agriculture, industry, human health and environmental protection should receive the most attention. In accordance with the wishes of co-operating countries, more emphasis needed to be placed on strengthening national nuclear safety, radiation protection and waste management capacities. Further success in the transfer of nuclear applications required not only well-thought-out strategies but also an increase in resources for technical co-operation over the medium term.

85. As legal commitments to non-proliferation approached universality and as nuclear disarmament progressed, there would be an increased need for assurance that those commitments were being respected. That assurance must come from an Agency with adequate capacity to examine facilities and material, whether declared or not.

86. A task not only for the medium term was to seek efficiency gains, to maintain an Agency which was swift and unbureaucratic, yet reliable and orderly. In that respect Members could help the Secretariat, not only by being demanding but also by refraining from demanding analyses and reports not strictly needed for decision-making or transparency. They could also help by encouraging professionals of the highest calibre in their countries to put themselves forward as candidates for posts in the Agency. But increased resources were also needed.

87. In conclusion, he thanked the Austrian Government and the City of Vienna, who were the excellent hosts of the Agency. At its June and September sessions, the Board of Governors had considered and approved applications for membership of the Agency from Estonia, Latvia, Lithuania and the Republic of Yemen. The Board had recommended approval by the General Conference of all four applications and the General Conference had just given its approval. Having grown up on the shores of the Baltic Sea, he was particularly happy that the Agency was the first organization in the United Nations family to welcome the three Baltic States as Members. The Agency was also fully aware that two of the world's largest nuclear power reactors were located in one of those States.

VOLUNTARY CONTRIBUTIONS TO THE TECHNICAL ASSISTANCE AND CO-OPERATION FUND FOR 1992

88. 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. The Indicative Planning Figure for 1992 had been set at $52.5 million, in accordance with an agreement reached in the Board of Governors in 1988 and subsequently reported to the General Conference. In the draft resolution relating to the TACF, which appeared in Annex IV to document GC(XXXV)/955, the Board of Governors recommended that figure as the target for voluntary contributions to the TACF for 1992.

89. Unfortunately, the past two or three years had witnessed a disturbing decline in pledges and contributions to the TACF. He hoped that that decline would be arrested and perhaps even reversed in 1992.

90. 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 that their Governments would be making to the TACF in 1992.

91. 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 be able to report that a considerable percentage of the 1992 target figure had already been pledged.

GENERAL DEBATE AND ANNUAL REPORT FOR 1990 (GC(XXXV)/953)

92. The PRESIDENT recalled that in 1989 the General Conference had adopted procedures for streamlining its working practices, some of which related to the conduct of the general debate. He also recalled that those procedures had been successfully applied during the past two years. With a view to making the most efficient use of the time available, he suggested that the General Conference authorize him, under Rule 50 of the Rules of Procedure, to limit the duration of statements made in the general debate to 15 minutes. He appealed to all delegations not to go beyond the time allotted.

93. It was so decided.

94. The PRESIDENT, requesting delegates' understanding and co-operation in the arrangement of the speakers' list and the order of speakers, said that the list had been opened in June but that the participation of ministers and other senior officials who were unable to spend the whole week in Vienna had made adjustments necessary. Additional adjustments might be required in order to meet all kinds of contingencies, but he was confident that the Secretariat would do its best to cope with conflicting demands and would consult delegations when finalizing the list of speakers. He assumed that the General Conference agreed with the suggestions made regarding the speakers' list for the general debate.

95. It was so decided.

96. Mr. AL-TAIFI (Saudi Arabia) congratulated the President on his election and wished every success to the Vice-Presidents, the Chairman of the Committee of the Whole and the other members of the General Committee. He also greeted the Director General of the Agency and all participants.

97. Ever since the Agency had been established, it had been working to spread the peaceful uses of nuclear energy throughout the world in order to promote the well-being and progress of all peoples and to strengthen international co-operation on nuclear safety and radiological protection, and it had zealously fulfilled the tasks assigned to it by its governing bodies. It had closely followed recent world events and upheavals, and had reacted to them within the terms of its mandate. In view of the successes it had achieved, it fully deserved the support and praise of all Member States.

98. In the past, the General Conference had on several occasions adopted resolutions requiring action to be taken pursuant to resolution 487(1981) of the Security Council, in which, in particular, Israel had been requested to submit all its nuclear installations without delay to the Agency's safeguards. The most recent had been resolution GC(XXXIV)/RES/526, in which the Director General was invited to continue consultations with the States concerned in the Middle East area with a view to applying Agency safeguards to all nuclear installations in the region without discrimination of any kind. However, Israel had responded by refusing to submit its nuclear installations to Agency control.

99. The Middle East, which in recent years had had to face the horrors of war and the dangers arising from the manufacture and accumulation of weapons of mass destruction of various kinds, nuclear, chemical and biological, was the region of the globe where a zone free of such weapons was most urgently required. The States of the region should seek to resolve their problems by peaceful means and not by war and destruction, and should devote their resources to the well-being of their populations.

100. His delegation wished once more to declare its preference for a ban on the proliferation of weapons of mass destruction in the Middle East and the establishment of a zone free from such weapons in that part of the world. It invited all States in the region to support that noble aim, and asked the international community and the Agency for assistance in attaining it.

101. All the Agency's Member States agreed on the importance of safeguards, but many believed that the financial burden was distributed unequally among States. Saudi Arabia was one of the States whose contribution to the safeguards budget was equal to the total amount paid by all States who were shielded, although several of the latter had a mean revenue equal to that of Saudi Arabia or had nuclear activities subject to safeguards. For that reason his delegation believed it essential that countries which had nuclear activities should make a greater contribution to expenses arising through the application of safeguards.

102. In addition, in view of recent developments on the international scene the safeguards system plainly needed to be re-evaluated in order to remedy its deficiencies and to strengthen its effectiveness, so that mankind could be confident that nuclear science was being used for peaceful purposes only.

103. His delegation welcomed the efforts undertaken by the Secretariat to establish a medium-term plan for the period 1993-1998. It had already expressed its support for that plan, which should provide a framework for considering the Agency's future activities with enough flexibility to allow for developments in the situation. His delegation hoped that the Agency would try to take into account the aspirations and needs of developing countries regarding the peaceful applications of nuclear energy, as population growth, which was particularly high in the developing regions, would lead to an increase in demand for food products, medical care and manufactured goods and, consequently, to an increased need for nuclear techniques, which it was hoped would contribute to improving the productivity of those countries.

104. Recent world events would inevitably have repercussions on the Agency. The Agency should perhaps make preparations for providing more services, which it was perfectly capable of doing without neglecting its activities with developing countries.

105. At its thirty-fourth regular session, the General Conference had considered an item entitled "Plan for producing potable water economically", and had adopted resolution GC(XXXIV)/RES/540, in which the Agency was requested to assess the costs of potable water production with nuclear desalination plants, and to compare them with the costs of desalination by other methods.

106. Saudi Arabia could scarcely be accused of exaggerating the importance of the issue. Indeed, the Middle East, which suffered from a chronic water shortage and had an annual population growth rate of 3%, was heading for catastrophe if it could not find additional water resources. The problem was exacerbated by the increasing pollution and salination of fresh water. His delegation accordingly felt duty bound to stress the need to preserve existing natural water resources for the benefit of future generations.

107. Many developing countries were placing great hopes in the numerous environmental and other advantages offered by nuclear applications for the economic desalination of sea water which, compared to other water resources, was abundant and relatively unpolluted.

108. From the environmental point of view, those applications would make it possible to preserve other water resources and to fight against desertification, global warming and the increasing releases of carbon dioxide into the atmosphere. From the economic point of view, they could reduce the cost of desalting water, just as they had brought down the cost of electric power generation in some countries.

109. The Saudi delegation, which had been contributing to the work on that problem for years, considered that the production of potable water should be a priority objective for the international organizations concerned. It therefore invited the Agency to include the nuclear desalination of sea water among its main programmes.

110. At its thirty-fourth regular session, the General Conference had considered the question of dumping of radioactive waste, and in particular international transactions involving nuclear wastes. It had then adopted various resolutions, the most recent being resolution GC(XXXIV)/RES/530 in which it had adopted a code of practice on the international transboundary movement of radioactive waste.

111. Although, owing to a lack of accurate data, there was no agreement on the exact number of used radioactive sources in the world, it appeared that the majority of such sources were in the developing countries and came from the developed countries. His country therefore hoped that the Agency would continue to advise developing countries on that serious problem and would help them to solve it.

112. His delegation was also very concerned at the Agency's current financial situation. As the Director General had mentioned, that situation was due to the fact that certain Member States were late in paying their assessed contributions, and it might lead to the adoption of measures which could harm the reputation and activities of the Agency. His country, which

had paid its contribution in full, appealed to all States which had not yet done so to pay their contributions as soon as possible. In that context, he wished to emphasize that the Agency should adhere to the principle of zero real growth when establishing its budgetary forecasts.

113. Certain issues, after being considered by the Board of Governors, had been regularly returning to the agenda of the General Conference for years without any consensus being reached. It was illogical that after so many years the Agency's governing bodies should have been unable to deal with those issues thoroughly and to resolve them. His delegation therefore hoped that the changes in the international situation would help the Agency to overcome the disagreements and difficulties which had hindered the settlement of those issues.

114. Mr. WATKINS (United States of America), having congratulated the President on his election and having welcomed the four new Members of the Agency, Estonia, Latvia, Lithuania and Yemen, read the following message from the President of the United States, Mr. Bush, to the General Conference:

> "For more than three decades, the International Atomic Energy Agency has been in the forefront of international efforts to stem the spread of nuclear weapons.
>
> "Since the end of the Gulf war, the IAEA has responded resourcefully to unprecedented challenges in fulfilling its responsibilities under United Nations Security Council resolution 687 to inspect, sequester and destroy Iraqi nuclear weapon-related capabilities, materials, and equipment. Agency efforts to date have shown that international concerns about Saddam Hussein's nuclear ambitions were well-founded. Indeed, for the first time ever the UN Security Council found that a Party had violated the Nuclear Non-Proliferation Treaty, on the basis of the Agency's conclusion that Iraq had breached its safeguards obligations. Continued vigilance will be required for a long time to come if we are to prevent resurrection of an Iraqi nuclear weapons programme.
>
> "The case of Iraq has highlighted the need to strengthen the Agency's safeguards system, and we hope the General Conference will advance this objective. That strengthening must begin with efforts to ensure that Agency safeguards are fully and promptly implemented. Success in these efforts is particularly important in North Korea today.
>
> "At the same time that Saddam Hussein had challenged the global norm against nuclear weapons proliferation, other nations have reinforced it. The United States welcomes the accession of Tanzania, Zambia and South Africa to the Nuclear Non-Proliferation Treaty, as well as the

commitments of France, the People's Republic of China and Zimbabwe to accede to the Treaty. We also look forward to the early conclusion of comprehensive safeguards agreements with Argentina and Brazil, as well as the full entry into force of the Treaty of Tlatelolco in all of Latin America.

"The dramatic events of the past year entail both challenges and opportunities for our non-proliferation efforts. The challenges are clear to all of us; the opportunities stem from the growing appreciation the world over for the need to address these challenges with renewed vigour. This will require building upon well-established foundations as well as considering new and imaginative ways to confront the problem. The Agency will continue to have a vital role to play in these efforts. On behalf of the people of the United States, I wish the Agency success in doing so in the years ahead."

115. He commended the Director General and the entire staff of the Agency for the extraordinary work they had accomplished in the past few months - tasks which had involved, among other things, implementing those parts of Security Council resolution 687 that related to the Iraqi nuclear programme. The determination they had shown in implementing Security Council resolution 707 also deserved praise. Working in frustrating and sometimes dangerous conditions, the Agency's inspectors had shown courage and determination in refusing to be deterred from reaching their objectives.

116. On behalf of the United States Government, he thanked all Agency staff members and volunteers from various countries who had directly or indirectly participated in that work. He was proud that the United States Department of Energy had been able to contribute by providing personnel, equipment and technology.

117. History recorded a few pivotal events in every century, and those of the twentieth would surely include the Bolshevik Revolution and the Second World War. He believed that the last two years had marked a third such turning point. Surely the long march of history had never before seen such rapid and breathtaking change in such a brief period, from the fall of the Berlin Wall, the collapse of the Iron Curtain in Eastern and Central Europe and the failure of the attempted coup in August in the Soviet Union itself, to the dismantling of apartheid in South Africa, and the concerted and rapid response of the international community to block Iraqi aggression and assert the rule of law. Events since 1989 had provided unprecedented opportunities to define the future in terms of personal freedom, political pluralism, market economies and international co-operation.

118. The Agency had also reached a turning point. Several States had joined the Non-Proliferation Treaty or announced their decision to do so, at a time when the situation created by Iraq had illustrated the need for new safeguards approaches. At the same time, the post-communist Governments of Eastern and Central Europe as well as the Soviet Union were grappling with problems of nuclear safety and placing new demands on the Agency and its Member States for technical assistance and information.

119. Those major trends and the opportunities they offered the Agency and the international community for building a more stable and mutually supportive world order deserved attention.

120. Progress had been made in expanding and strengthening the global non-proliferation system, thanks largely to the persistent efforts of the Agency. As President Bush had stated in his message, in the past year many countries had acceded to NPT. Others had announced their decision to do so, and yet another country had taken that decision in principle. Those actions clearly reflected international determination that proliferation should be halted and they confirmed the continued vitality of the Treaty.

121. Another important milestone was the recent bilateral agreement between Argentina and Brazil for the control of nuclear materials, and the decision taken by those countries to negotiate a full-scope safeguards agreement with the Agency. Those agreements would draw the two largest nations in South America, both with major nuclear programmes, into the global non-proliferation system and would assure the Agency's deeper involvement in that rapidly developing and vital region.

122. South Asia was another region where the dangers of nuclear proliferation required urgent attention. An important first step had already been taken with the conclusion by India and Pakistan of an agreement not to attack each other's nuclear facilities. His country would encourage the parties concerned to expand on that good beginning by developing broader regional non-proliferation arrangements.

123. Looking ahead, the new arms control initiative for the Middle East announced by President Bush in May could dramatically strengthen the non-proliferation system. That initiative, supported by all of the major suppliers of conventional arms to the region, relied on the work of the Agency and other institutions to prevent the proliferation of nuclear weapons in that critical region of the world.

124. Whether in the Middle East or elsewhere, the proliferation of nuclear weapons was a problem which threatened the security of all nations. As there was a strong international consensus against such proliferation, countries seeking to acquire nuclear weapons had unfortunately chosen to do so in secret and through subterfuge.

125. The clandestine programme set up by Iraq to develop nuclear weapons well illustrated the problem, and it was a serious challenge to the Agency's safeguards system. His country welcomed proposals to enhance safeguards against covert proliferation and would support the Agency in that vital effort.

126. The strengthening of safeguards required first of all the acknowledgement that they could only function properly after a safeguards agreement had been concluded with the country concerned. It was therefore essential that such agreements should be negotiated and implemented in a timely manner. Parties to NPT shared the common responsibility of ensuring that the safeguards required by Article III of the Treaty were put in place within the time limit set by that article.

127. Many Parties to NPT had pressed the Democratic People's Republic of Korea to comply with its Article III obligations. The United States welcomed the fact that a safeguards agreement with that country had just been approved by the Board of Governors, but that was just one step in a process which had to be continued. The agreement should be ratified and brought into force without delay.

128. The lessons from the Iraq affair should then be learnt: in future, States should permit the Agency to make full use of its powers. The standard safeguards agreement signed by Parties to NPT had long provided for special inspections of undeclared facilities, and States should now agree to allow the

Agency to exercise its full authority. For the vast majority of States, the fact of submitting to special inspection would reinforce confidence in their compliance with non-proliferation obligations and would strengthen international peaceful nuclear co-operation.

129. Finally, it seemed a particularly appropriate time to strengthen the Agency's safeguards system and the worldwide nuclear non-proliferation regime. In his message to the Agency, President Bush had stated that he supported that action. The Director General had also stated his commitment to develop enhanced safeguards capabilities.

130. The system should be strengthened in ways that would facilitate the early detection of undeclared nuclear activities. He urged all countries to endorse that action and to work with the Director General and the Board of Governors. He strongly advocated that procedures for the conduct of special inspections should be adopted as soon as possible. He also urged all NPT Parties who had not yet done so to conclude safeguards agreements as quickly as possible. South Africa's prompt negotiation of its safeguards agreement following its accession to NPT in July was an example which should be widely emulated. It was a major step in enhancing peace not only in Southern Africa but in the world as a whole.

131. Turning to a related matter, he acknowledged the special responsibilities of the nuclear-weapons States for reducing the potential risks of nuclear war. A turning point had been reached in Moscow in July when Presidents Bush and Gorbachev had signed the Strategic Arms Reduction Treaty (START). The Treaty was a significant achievement as it was the first-ever arms control agreement to actually reduce the number of strategic nuclear weapons deployed by each side.

132. Further arms control measures might also be expected soon in Europe, particularly in the area of short-range nuclear systems. Contrary to the opinion of some, arms control did not lead to changes in defence attitudes, but rather followed changing security perceptions, capturing them in formal agreements. As international security relationships evolved in a global climate of increasing openness and co-operation, further arms control measures might well be possible.

133. In such a climate, the nuclear weapon responsibilities of the United States Department of Energy would continue to shift towards closing production facilities and dismantling weapons. The Department of Energy was currently confronting serious waste disposal and clean-up problems at contaminated nuclear sites. As progress was made in developing advanced technologies to resolve those problems, his country would share its experience with the international community.

134. Although safeguards and proliferation issues had dominated public attention over the past year, nuclear reactor safety remained at the top of the international agenda for peaceful nuclear energy applications. Safety had to be a paramount concern throughout the entire life cycle of a reactor, from site selection to construction, operation and decommissioning. The results of work to identify generic safety problems and information relating to solutions should be widely shared. In that area the Agency had played and should continue to play a major role.

135. The emergence of personal freedom and political pluralism in Eastern and Central Europe and the Soviet Union was bringing increased public awareness of nuclear reactor safety issues. His country welcomed that development and was working with others, both through the Agency and directly, to improve the safety and operating practices of nuclear reactors in those areas.

136. In that context, substantial progress was being made with the bilateral United States/USSR initiative on operational safety. That joint initiative, which he had first proposed to representatives of the Soviet Union at the General Conference in 1989, had been established as part of the agreement between the United States and the USSR on scientific and technical co-operation in the field of peaceful nuclear energy applications. Its purpose was to share information with a view to improving operational safety in the nuclear facilities of both countries. In the context of that project, recommendations had already been made by three groups of experts and specific operational improvements had been developed for application in 1992 in a leading Soviet plant.

137. The United States was convinced that the safety lessons to be learned from such co-operation should be applied where possible to reactors currently in operation or under construction in other countries as the safety of reactors throughout the world was important for all nations. However, owing to their proximity, the United States Government was particularly concerned about the reactors nearing completion in Cuba. Cuba had access to technical assistance from the Agency, and his country would urge the Agency to spare no effort in the attempt to ensure that the reactors in question were built and eventually operated in accordance with internationally accepted nuclear safety standards.

138. In conclusion, he said that the international community was living through a time when the confluence of events gave it unparalleled opportunities to chart a new course for the coming century. It went without saying that that course should be charted on the basis of respect for human rights and the rule of law by a truly united international community working effectively through bilateral arrangements and international agencies such as the United Nations and the Agency.

139. No one knew exactly what the future held, but the committed efforts of the present generation would shape the world of the future. If one kept that clearly in mind, it would be understood that the Agency's two primary missions - the prevention of nuclear proliferation and the provision of technical assistance to promote the peaceful uses of nuclear energy - could only become more important in future years.

140. The Agency was facing a myriad of challenges, but each of them offered the opportunity of contributing to make the twenty-first century a time of international stability and co-operation and perhaps, ultimately, a time when nuclear technology would be used solely and exclusively for the health and betterment of all peoples in a safe world. He was fully confident that the Agency, under the able leadership of the Director General with the help of his talented and dedicated staff, would seize that opportunity.

141. Ms. SANTO (Japan) congratulated the President on his election and welcomed the four new Member States of the Agency: Estonia, Latvia, Lithuania and Yemen.

142. In view of recent world events concerning the peaceful uses of nuclear energy, Japan considered that the role of the Agency was becoming increasingly important with regard to non-proliferation of nuclear weapons and the enhancement of nuclear safety.

143. The Agency was facing a new challenge in connection with its non-proliferation responsibilities. Iraq's clandestine activities, with their possible link to the production of nuclear weapons, had been disclosed through on-site Agency inspections based on Security Council resolution 687. Since Iraq was a Party to NPT and had a full-scope safeguards agreement with the Agency, that violation undermined the NPT regime and betrayed the trust of Member States who adhered to their safeguards agreements and promoted the peaceful uses of nuclear energy. Iraq's violation should, therefore, be strongly condemned by the international community.

144. Considering the current international situation, that regrettable incident made it clear how important nuclear non-proliferation was. Moreover, as the Japanese Prime Minister, Mr. Kaifu, had stated at the United Nations Disarmament Conference held in Kyoto in June 1991, the effectiveness and credibility of the Agency's safeguards system should be enhanced. Japan considered it imperative to improve the system at the international level and wanted to put forward two proposals. First, there was a need for clarification of the measures and procedures for applying Agency inspections to nuclear materials in undeclared facilities, and in particular it would be important to examine the practical use of special inspections. Japan appreciated the Agency's positive stand, following the initiative of the Director General, on that point.

145. Secondly, the Agency's limited resources under the zero-real-growth budget would have to be put to the best use. The application of safeguards should become more flexible, taking into account the transparency of nuclear-related activities and the past performance of safeguards implementation in each Member State, to allow for redistribution of resources for inspection activities. At the same time it would be important to develop new safeguards techniques in order to implement safeguards in a more effective and efficient manner.

146. With regard to strengthening the NPT regime, Japan, which had always strictly limited its nuclear-related activities to peaceful purposes and had made the utmost effort to ensure non-proliferation, welcomed recent important improvements such as the signing of NPT by South Africa and by front-line African countries, as well as the significant progress towards adherence which France and China seemed to be making. France had in fact decided to adhere to NPT, and China's Prime Minister, Mr. Li Peng, had announced his country's intention to join on the occasion of the visit to China in August 1991 by Japan's Prime Minister, Mr. Toshiki Kaifu.

147. Once those two States became Parties to NPT, all five nuclear-weapon States would have joined the NPT regime, thus bringing it closer to universality. Japan therefore welcomed those developments as extremely significant steps. Furthermore, the joint statement made by Argentina and Brazil on their common nuclear policy constituted another significant step toward strengthening the non-proliferation regime, because it meant acceptance of full-scope Agency safeguards and created a political climate favourable to joining the Treaty of Tlatelolco.

148. Japan appealed once again to those Member States who were not parties to NPT, both nuclear-weapons and non-nuclear-weapons States, to accede to the Treaty as soon as possible.

149. From the point of view of maintaining the reliability of the NPT regime, it was regrettable that one State had failed to fulfil its obligation to accept full-scope Agency safeguards, although it had already signed NPT and was involved in considerable nuclear-related activities. That undermined mutual trust between Member States and severely reduced the prestige of NPT, to which a large number of countries were party. Japan urged the country concerned to conclude and fully implement a full-scope Agency safeguards agreement without any conditions.

150. With regard to the export of nuclear equipment and materials, Japan had made acceptance of full-scope Agency safeguards by recipient countries a condition for the granting of export licences and strongly urged other exporting countries to adopt a similar policy.

151. Application of safeguards to peaceful nuclear activities in nuclear-weapons States should be expanded gradually within the resources of the Agency in order to increase the universality of the NPT regime.

152. Japan hoped that during the NPT Extension Conference, scheduled for 1995, the Treaty would be made more comprehensive and its functions strengthened and extended towards the 21st century.

153. Japan, as a promoter of the strictly peaceful uses of nuclear energy, would continue to make every effort on behalf of non-proliferation and also to contribute to the maintenance and strengthening of a healthy international regime in the field of nuclear energy.

154. Since the Chernobyl accident, public awareness of the importance of international co-operation in nuclear safety had become especially acute. Recently, the international community had expressed some concern about the safety of nuclear power plants located in Central and Eastern Europe, and at the London Summit it had been recognized that safety evaluations and new safety measures should be initiated as a matter of urgency. Japan appreciated the immediate action the Agency had taken on that matter.

155. Some developing countries were promoting nuclear power programmes, in addition to the utilization of radiation and radioisotopes, to meet the predicted increase in energy demand, and Japan was doing as much as it could to help them. The technical co-operation which they received through the Agency was particularly valuable because of the Agency's vast experience in the field of safety. Japan, with its excellent record for the safety and reliability of its nuclear power plants, would continue to promote international co-operation by providing experts and accepting trainees under governmental and non-governmental schemes.

156. The use of nuclear energy in various forms - radioisotopes and radiation in such fields as agriculture, industry and medicine, and nuclear heat for electric power generation - played an important role in maintaining a high standard of living. Advances in nuclear medicine had saved the lives of many cancer patients. The application of nuclear energy in agricultural pest control, circumventing the use of chemicals, had resulted in the production of

safer foods. Japan therefore considered that the Agency's activities in research and isotopes were very important and would continue to provide maximum support for them.

157. It was the duty of the present generation to pass on an intact environment to future generations. At the London Summit, nuclear power generation had been considered an important means of solving global environmental problems, since it helped reduce emissions of gases which contributed to the greenhouse effect.

158. Nuclear energy accounted for approximately 17% of the world's gross electricity generation and Japan was interested in further promoting its utilization. Japan, like other countries, was developing its nuclear fuel cycle programme, thereby making nuclear energy an economical, stable and durable energy source. A fuel reprocessing programme was being implemented and the "Monju" fast breeder reactor was under construction.

159. Furthermore, research and development work on nuclear fusion, a potentially inexhaustible source of energy for mankind in the future, should be given every possible encouragement. The ITER project, started in 1988 under the auspices of the Agency and supported by the United States, the Soviet Union, the European Community and Japan, was a most impressive achievement in international co-operation. Japan would make every effort to contribute to the success of the engineering design phase, due to begin shortly.

160. Public support and understanding were absolutely imperative for the smooth progress of nuclear energy. The Agency played an extremely important role, quite apart from national efforts, in promoting public acceptance of nuclear energy. Japan fully supported the public relations activities currently being implemented by the Agency.

161. Since its foundation, the Agency had successfully accomplished its mission of promoting the peaceful uses of nuclear energy, and had contributed to the non-proliferation of nuclear weapons. The Agency and its Member States had reached a juncture where important decisions aimed at strengthening the non-proliferation regime and safeguards had to be made. Japan intended to play a positive role in confronting that new challenge, while continuing to

contribute to the Agency's important technical co-operation, nuclear safety and safeguards work.

162. Mr. PEREZ SIMARRO (Spain) felt sure that, under the able direction of its President, the General Conference would meet its declared objectives and the expectations of the Member States. He had found the Director General's opening statement particularly interesting as it usefully supplemented the information on the Agency's activities given in the 1990 Annual Report.

163. As far as nuclear power in Spain was concerned, its contribution to aggregate electricity production had risen to 36.7% in 1990. The average age of the nuclear installations was 7.2 years, one of the lowest in the OECD countries, and 79% of the installed capacity was less than 10 years old.

164. Production figures and availability of the Spanish nuclear power stations demonstrated the maturity of nuclear technology, a direct result of which had been the development of a major production industry to provide not only equipment and components but also engineering and other services for the operating plants.

165. The OSART missions to two Spanish plants had confirmed that their safety and operating conditions were satisfactory.

166. Recently, the Spanish Government had approved a new national energy programme outlining the country's energy policy for the period 1991-2000. The average annual increase in demand for electricity over the coming decade was estimated at 3.5%. Increased need would be met by rationalization of production, the development of renewable energy supplies and, above all, by the installation of coal- and gas-fired power plants. The plan anticipated a major increase in gas consumption, bearing in mind the need to protect the environment, and the exigencies of efficiency, cost and diversification.

167. Nevertheless, the proportion of gas in Spain's energy programme would still fall short of the European Community average. Given nuclear energy's significant contribution to electricity production and to the overall energy balance, the maintenance of optimal safety conditions and reliability in the plants was a priority, as was the implementation of cost-effective programmes.

168. Furthermore, Spain's nuclear fuel management policy was designed to bring about a substantial increase in the coverage of the first part of the fuel cycle from national resources: at present the relevant figure was 27%, but it was expected to rise to 48% by the end of the programme period, largely through increases in domestic yellow cake production to the point where it would satisfy 80% of Spain's uranium concentrate requirements.

169. With regard to the handling of low- and medium-level waste, Spain's strategy was to increase the capacity of its El Cabril installations to the point where they could accomodate all such material generated in the country up to the first decade of the coming century. The site selection programme for high-level radioactive waste repositories was to be continued.

170. Among the aims of the national energy programme were efficient utilization of available human resources and optimization of R&D activities with a view to improving safety margins in operating power plants and extending their useful lifetime; the quest for a permanent solution to the problem of high-level radioactive waste storage; development of the technology required for decommissioning of installations; and participation in the development of advanced reactor types which could help to meet the needs of future nuclear programmes, including such new nuclear power options as fusion.

171. The national energy programme also considered the role Spain could play in the context of international co-operation through its participation, as a member of various international organizations, in all initiatives aimed at harmonizing national nuclear standards and thereby ensuring minimum safety levels in all installations throughout the world.

172. The European energy charter project, seeking a co-operation agreement specifically in the field of nuclear energy, would help to strengthen collaboration with Eastern and Central European countries as well as the Soviet Union, the objective being to give them the international technical support they needed to attain the same safety level as Western countries in their power plants. Spain would increase aid to and co-operation with those countries by making its technological capabilities available to them.

173. He was pleased to note in his reading of the Annual Report that the Agency's nuclear safety and radiological protection activities were given high

priority. Assurance of the highest possible technical safety level and communication of that assurance were essential for public acceptance of nuclear energy. The signing of an agreement between Spain's Nuclear Safety Council and the Agency whereby technical staff were to be made available for Agency evaluation missions in other countries demonstrated Spain's commitment to that important objective.

174. His delegation praised the very positive outcome of the International Conference on Nuclear Power Safety and urged that its conclusions, providing as they did a specific schedule for preparing an international convention on nuclear safety and drafting safety criteria applicable to all the countries in the world, be approved by the General Conference.

175. The effectiveness of the Agency's initiatives to improve the operational safety of nuclear power plants all over the world deserved to be mentioned. Those initiatives should be pursued and intensified. In particular, Spain continued to support the work of the OSART and ASSET teams by making experts available. In 1990, an OSART follow-up mission had visited the Cofrentes nuclear power plant, and there had also been an ASSET workshop to investigate the Vandellos power plant incident which had taken place in October 1989, so that the international community had been able to profit from the lessons drawn from that experience. In addition, a training course on the utilization of ASSET methodology to analyse incidents had been organized.

176. The IRS, jointly run by the Agency and the NEA, remained a valuable instrument for passing on operating experience obtained in all the world's installations.

177. The NUSS codes, subject as they were to continual revision, were used as a reference point in Spain for formulating national regulations. INSAG activities were also worthy of mention.

178. With regard to other key elements in the future utilization of nuclear energy, such as radioactive waste management, Spain welcomed the Agency's initiative in setting up the new RADWASS programme, which would establish a coherent set of norms based on expert knowledge of radioactive waste and its behaviour accumulated over years of research.

179. Emphasis should also be laid on the Agency's activities in radiological protection and in the study of the radiological consequences of accidents, whereby the completion of the Chernobyl evaluation in keeping with the established programme deserved special mention. The report, notable for its meticulousness and its high technical level, was a highly valuable tool for anyone who wished to acquire a better understanding of the consequences of that accident.

180. The risk of serious accidents in nuclear installations for industrial and medical purposes had unfortunately been confirmed by events over the last few years. Monitoring of the safety of such installations needed to be strengthened, a policy Spain was in fact implementing. In 1990 several patients had been victims of an accident in a radiotherapy installation in Spain; a report on the incident drawn up by the Spanish regulatory authority had been sent to the Agency in the hope that it might help to improve the operation of that type of installation in the different countries of the world.

181. Technical assistance was another fundamentally important Agency activity. Having read with interest the Report on the Agency's Technical Co-operation Activities in 1990 presented by the Director General, he was happy to see that the Agency had succeeded in maintaining an increasing technical assistance budget despite budgetary restrictions. Spain continued to contribute to technical assistance activities by receiving fellows and visiting scientists, by organizing courses in Spain and by providing experts for Agency missions. The Spanish Government was ready to collaborate with the Agency and its Member States so that other countries could benefit from its technical capability.

182. Besides Spain's regular contributions, he recalled the serious efforts it was making to increase its extrabudgetary contributions on behalf of footnote-a/ projects as well as other extrabudgetary activities such as the WWER-440/230 reactor safety project. Subject to budgetary decisions yet to be taken, Spain intended to continue increasing that type of contribution considerably.

183. The past few months had been of particular significance for safeguards, another vital aspect of the Agency's work, because of the decisions taken by

certain Member countries and the outcome of the inspections carried out in Iraq.

184. Nuclear electricity, which represented 17% of all the electricity produced in the world, had become a major energy source. Nevertheless, operational safety, waste management, the decommissioning of nuclear facilities and control of the use of materials subject to safeguards raised problems which made nuclear energy the most controversial energy solution.

185. The future of nuclear power depended on the confidence it inspired in the public. That confidence could only be won if safe and reliable operation of installations were demonstrated over a long period of time all over the world. The Agency should continue its task of ensuring a maximum level of nuclear safety.

186. Mr. MAHMOUD (Yemen) congratulated the President on his election and thanked the Director General, the Board of Governors and all the delegations who had supported Yemen's application for membership of the Agency. Yemen was prepared to meet all the obligations that fell to it as a Member of the Agency and would support the Agency to the full in its efforts to apply the principles and achieve the goals of the United Nations, thereby enabling mankind to derive maximum benefit from the peaceful uses of nuclear energy. The Yemeni delegation wished the General Conference every success.

The meeting rose at 1 p.m.