



GC(XXXIV)/OR.328 27 February 1991

GENERAL Distr.

Original: ENGLISH and

FRENCH

THIRTY-FOURTH (1990) REGULAR SESSION

RECORD OF THE THREE HUNDRED AND TWENTY-EIGHTH PLENARY MEETING

Held at the Austria Center Vienna on Wednesday, 19 September 1990, at 3.10 p.m.

<u>President:</u> Mr. VAJDA (Hungary)
Iater: Mr. ZHOU (China)

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^[*] GC(XXXIV)/939.

GENERAL DEBATE AND ANNUAL REPORT FOR 1989 (GC(XXXIV)/915) (continued)

- 1. Mr. AMMAR (Tunisia) said that the Annual Report for 1989 reflected the successful efforts of the Secretariat and Member States to reinforce international co-operation in the field of peaceful nuclear applications.
- 2. He welcomed the increase in the volume of Agency co-operation with Tunisia, which covered a number of areas such as nuclear power planning, radiological protection, food and agriculture, animal production and industrial applications. The results of that co-operation included the establishment of a nuclear agriculture laboratory, the introduction of advanced techniques for non-destructive assay in industry and an expansion of activities at the National Radiation Protection Centre. Tunisia, which was soon to acquire a research reactor, wished to further expand its co-operation with the Agency and would be requesting assistance in the form of equipment, expert services, training and fellowships.
- 3. He welcomed the increase in both the quality and quantity of technical assistance to Africa and hoped that that positive trend would continue in future years. Tunisia had been the first signatory to the African Regional Co-operation Agreement (AFRA), which had come into force in April 1990 and would complement and strengthen current arrangements for co-operation between the Agency and African Member States.
- 4. Tunisia had hosted various regional scientific meetings in the past year, including a workshop on radiological protection and a co-ordination meeting for the Maghreb countries, which had been followed by a workshop to train technicians in medfly control.
- 5. The Arab Maghreb Union also offered new opportunities for sub-regional co-operation which was a valuable complement to co-operation with the Agency.
- 6. The economical production of potable water was an urgent issue, not only for the Maghreb sub-region, but for the African continent as a whole, which suffered from a serious shortage of potable water. The use of nuclear reactors for the desalination of sea water would be of great benefit to agriculture, an area vital to sustainable development in the African countries.

- 7. Assistance was urgently required to deal with the New World Screwworm, which had continued to spread in Libya and posed a serious threat, not only to the region, but to the Mediterranean basin and the African continent as a whole. The Agency was continuing its substantial efforts to eradicate the pest, in close co-operation with other specialized agencies, especially FAO.
- 8. The Agency's activities in promoting nuclear applications and nuclear power were of vital importance to the majority of developing countries, whose needs must be taken into account. It was essential for the Agency to maintain a proper balance between its promotional and regulatory activities.
- 9. Tunisia, which had always supported the Agency's Statute and objectives, had signed the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1970 and had ratified a safeguards agreement in February 1990. It had also signed the conventions on early notification and emergency assistance, which had come into force in June 1988. Tunisia's continued strict observance of the regulations governing peaceful nuclear applications reflected a concern to work towards peace, stability and international security.
- 10. On 3 September 1990, Tunisia had established a single body the National Commission for the Peaceful Application of Nuclear Technology to be responsible for co-ordinating all peaceful nuclear applications. The Commission was expected to give new impetus to the use of nuclear techniques in various fields of development.
- 11. His country welcomed the draft Code of Practice on the International Transboundary Movement of Radioactive Waste which had been submitted to the Conference for approval, but felt that it should be accompanied by binding measures that would strengthen international co-operation in the field of nuclear safety.
- 12. Tunisia continued to pay close attention to the changes taking place in South Africa and to the actions taken to put an end to the unjust and anachronistic apartheid system. South Africa was still refusing to comply with the Agency's resolutions, and his country therefore wished to associate itself with the draft resolution submitted by the African Group concerning South Africa's nuclear capabilities.

- 13. The nuclear capability of, and threat posed by, Israel remained a cause of concern to the international community. That country had failed to respond to the repeated calls of the United Nations Security Council and the Agency's General Conference for it to accede to NPT and to submit all its nuclear facilities to Agency safeguards. In that connection, it was very important for the Director General to continue his consultations with all the States concerned in the Middle East, where it was hoped that sincere efforts to achieve peace would lead to a settlement of the Palestinian question. The longer it took to begin real peace negotiations, the greater the risk of the situation in the Middle East becoming explosive and out of control.
- Mr. CHIKELU (Nigeria), reviewing the events of the past year of Agency activities, welcomed the organizational changes which had taken place in the Departments of Technical Co-operation and Safeguards, the introduction of a two-year programming cycle for technical co-operation activities, the conclusion of the African Regional Co-operative Agreement (AFRA) and the establishment of the International Radioactive Waste Management Advisory Committee. Delegates at the 44th session of the United Nations General Assembly had indicated their broad support for the Agency, its safeguards system, technical co-operation programme and its work in the field of nuclear safety.
- 15. His delegation attached great importance to the training courses and seminars held by the Agency and appreciated the enormous contribution made by training to nuclear development in Africa, particularly in the area of maintenance. It hoped that more places would be offered to Africans to train in the operation, servicing and maintenance of X-ray analytical equipment at the Seibersdorf Laboratory. The Agency's activities in the field of nuclear applications in food and agriculture, mining, water resources, medicine and industry were particularly useful and the nuclear applications areas in the Agency's programme and budget for 1991 were well conceived and responded to the essential needs of developing countries. Since nuclear applications provided the most tangible benefits of membership of the Agency to the majority of developing countries, his delegation welcomed the fact that Regular Budget resources allocated to that area by the Agency would continue

to increase. His delegation also hoped that the African Regional Co-operative Agreement, which had been established at the previous General Conference, would receive the necessary support from donor countries in order to enable it to contribute to Africa's progress in nuclear science and technology.

- Agency, particularly as the Agency was at present in its sixth year of zero real growth. It was regrettable that expenditure in the programme and budget for 1991 and 1992 had been limited to an increase of only 0.2%. A Regular Budget based on zero real growth could not respond effectively to the growing and changing needs of Member States and therefore it was time to have some modest real growth. Nigeria would also welcome a substantial increase in the extrabudgetary resources for footnote-a/ projects. While Nigeria was grateful to the United States of America and the United Kingdom, which had continued to make such resources available, it would appreciate additional support to enable it to complete the Biological Insect Control Project (BICOT) aimed at the eradication of the tsetse fly in Nigeria.
- 17. Although his delegation was encouraged by the consensus reached by the informal working group on the financing of safeguards, the issue of long-term funding of technical assistance remained unresolved. While the indicative planning figure approach was useful, efforts should be made to find a more predictable and assured means of financing technical assistance. His delegation would also like to see a reasonable balance in the financial resources allocated to safeguards and technical assistance, although that desire in no way detracted from the importance his delegation attached to safeguards.
- 18. His delegation fully supported the steps being taken by the Agency to promote the highest levels of nuclear safety and radiological protection and welcomed the convening of a conference in 1991 on nuclear safety. It was also impressed by the activities of the RAPAT missions in strengthening the radiological protection infrastructures of developing countries, as well as the increased activities of the Waste Management Programme (WAMAP) in helping developing Member States to plan and implement national radioactive waste

management programmes. The draft Code of Practice on the International Transboundary Movement of Radioactive Waste, contained in document GC(XXXIV)/920, was very useful in serving as a guide for governments to ensure that no radioactive waste was exported to any country that lacked the technical or administrative capacity to manage and dispose of such wastes safely. It was a useful mechanism for controlling international transboundary movement of radioactive waste pending the elaboration of a convention.

- 19. Another issue of concern to his delegation was the amendment of Article VI.A.2 of the Statute. It was a matter of regret that the gross under-representation of the regions of Africa and the Middle East and South Asia had been on the Conference's agenda for the past decade with no solution in sight. The Agency should intensify its efforts to find an equitable solution to the problems of under-representation of the two regions. His delegation had also been giving considerable attention to the amendment of Article VI as a whole. While it wished to emphasize the independent nature of the proposed amendment of Article VI.A.2, it was prepared to consider a formula that would be fair and equitable to all parties concerned.
- 20. As his delegation had informed the Conference the previous year, an energy commission had been established in Nigeria to co-ordinate national energy policy and to chart the course of energy development and utilization in the country. The issue of sustainable development and the impact of energy sources on the environment were being reviewed and all options, including nuclear energy, considered.
- 21. The issue of South Africa's nuclear capability remained a matter of grave concern to his delegation. The resolution adopted by the General Conference in 1989 had strongly condemned South Africa for its persistent refusal to comply with successive resolutions of the United Nations General Assembly and the Agency's General Conference. That General Conference had also resolved to consider and take a decision at the present session on the 1987 recommendation of the Board of Governors calling for the suspension of South Africa from the exercise of the privileges and rights of membership of the Agency. There had been high expectations that South Africa would join the

Treaty on the Non-Proliferation of Nuclear Weapons (NPT) before the present session of the General Conference and that the racist régime would take irreversible steps towards the complete abolition of racial discrimination and accord political rights to all its citizens. Those expectations had not been realized. The South African authorities should, as a matter of urgency, take the necessary steps to dismantle apartheid and submit all South Africa's nuclear facilities to full-scope safeguards. While his delegation did not want to discourage the process of change, pressure on South Africa had to be maintained until the international community was convinced that the full abolition of apartheid was no longer in doubt. His delegation therefore urged every delegation to join it in sending a clear, strong message to South Africa when the relevant agenda item was considered.

- 22. Mr. LOUHANAPESSY (Indonesia) pointed out that many aspects relevant to the Agency's activities, such as the role of the Agency in international co-operation on the peaceful uses of nuclear energy and various aspects of non-proliferation, including Agency safeguards, had been extensively discussed at the recently concluded Fourth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). His delegation again urged the nuclear-weapon States to respect the commitments made under NPT and to put an end to the nuclear arms race.
- 23. As a party to NPT, Indonesia attached great importance to the Agency's safeguards system, which had served to prevent the horizontal proliferation of nuclear weapons, and supported the idea of full-scope safeguards. In 1989 Indonesia had accepted a modified version of the designation of safeguards inspectors in order to facilitate the execution of inspection missions. Furthermore, the Indonesian Government had recently decided to take part in the IAEA safeguards support programme and was ready to welcome Agency experts to utilize facilities in Indonesia for the further development of safeguards.
- 24. The Fourth NPT Review Conference had also called upon the Agency to take appropriate steps to increase technical assistance funds in order to ensure the implementation of the maximum number of technically sound projects. In addition, the Conference had encouraged greater support for regional co-operative arrangements.

- 25. Indonesia had made significant progress in the development and utilization of nuclear energy and had derived considerable benefit from the scientific and technical information provided by the Agency and from its technical assistance, particularly in the form of expertise, equipment, software and fellowships. Indonesia was currently applying nuclear science and technology in the fields of agriculture, food preservation, health and industry.
- 26. While 75% of the world's population lived in developing countries, more than 75% of the world's primary energy resources were being consumed in developed countries. It was therefore obvious that the growth of the world's population and the decrease in energy resources, particularly non-renewable ones, had a particular impact on developing countries.
- 27. Although Indonesia had a variety of primary energy resources, its oil reserves, which constituted a very significant proportion of those resources, were being depleted and, with the present level of technology, it would be environmentally irresponsible to rely on coal. Indonesia had therefore adopted a policy for the domestic conservation of oil and the development of renewable energy resources such as geothermal resources. In view of the uncertainty of oil exploration, Indonesia was also forced to turn to nuclear power although it was fully aware of the obstacles faced, especially by the developing countries, in introducing nuclear power, such as the availability of an adequate infrastructure, public acceptance of nuclear power and financial difficulties.
- 28. In that connection, Indonesia had hosted a seminar on the financing of nuclear power projects in developing countries, which had been attended by more than 100 experts from 17 countries representing governments, electric companies, financing institutes and nuclear suppliers. The meeting had turned out to be a successful forum for the exchange of information on various approaches to the financing of large electricity projects, including nuclear power projects. His delegation hoped that the papers presented at the seminar, together with a record of the discussions, would be published in a technical document in order to disseminate the information. In view of the importance of nuclear safety for nuclear power programmes, his delegation

welcomed the establishment of the Chernobyl Centre and the increased research on nuclear power plant safety and the implications of accidents at such plants.

- 29. In the area of nuclear applications, his delegation was proud to report that since the end of 1989 Indonesia had brought into operation a number of new facilities at its science and technology centre at Serpong. Its radioisotope centre, including a cyclotron, had recently been put into operation and was currently meeting Indonesia's domestic radioisotope needs. Indonesia hoped that at a later stage the centre could help to meet regional needs as well. Indonesia's new experimental nuclear fuel facility and the nuclear engineering centre, also located at the Serpong complex, were geared towards providing support for its nuclear power programme through the development of nuclear power reactor fuel and design and engineering support activities. Another research centre, situated near Jakarta, was currently developing the industrial applications of radioisotopes and radiation, such as the vulcanization of rubber, treatment of wood, and irradiation of food.
- 30. With regard to the revision of Article VI of the Statute, his delegation hoped that a balanced geographical representation could be achieved. His delegation welcomed the recommendation to re-establish the working group and hoped that it would make rapid progress. His delegation also welcomed the Board's recent decision to provide every opportunity for Member States to participate fully in the deliberations of the Board's Committees.
- Mr. LORENZINI CORREA (Chile), stressing the growing importance of nuclear safety and the need to develop it further, said that Chile had been implementing the necessary measures to ensure that adequate safety levels were maintained on its territory. In 1989 it had published a report entitled "Environmental radioactivity in Chile during 1988" containing data from a large number of samples taken at 18 sampling stations, and showing that the background radiation had remained normal. It had also initiated a National Radioecology Programme to study the incidence of environmental anomalies affecting the radiation dose received by the public.

- 32. The Agency's concern for the environment was commendable, but he urged the international community to act upon that concern in a manner which would not hamper the development of the least developed countries. Access to clean technologies and the financial support necessary to apply them were the logical means of achieving a just balance between environmental and developmental concerns.
- 33. It was to be hoped that the meetings of the group set up to consider liability for nuclear damage would lead to a revision of the Vienna Convention, since a redefinition of the corresponding guidelines in the interests of enhanced safety through clearer and more accessible information was a prerequisite for the increased use of nuclear energy.
- 34. Also essential were the Agency's safeguards activities, which formed an integral part of the non-proliferation regime and which Chile fully supported.
- 35. The very valuable technical assistance provided by the Agency to Chile had been channelled into the agricultural, industrial and mining sectors in the interests of enhancing the country's export capacity, as well as into the health sector.
- 36. In the field of mining, Chile had been working on improving heap leaching techniques and other processes used in the production of copper and other elements.
- 37. With regard to agriculture, it was applying nuclear techniques with a view to making more rational and effective use of fertilizers. It had conducted studies on fruit and vegetables with the aim of using irradiation for quarantine purposes, and it had decided to set up in the current year a plant for the production of sterile insects as part of the effort to keep the country free of the Mediterranean fruit fly and to combat isolated outbreaks in the north of the country. Systematic studies were also being carried out on animal reproduction and health in the interests of increasing the production of domestic livestock and indigenous species.
- 38. In medicine, Chile had continued to acquire modern imaging units for use in diagnosis and had developed the ability to prepare and label reagents for in vitro diagnosis. That in turn had led to the development of new radiopharmaceuticals for specific treatments and diagnoses.

- 39. Chile was now producing 90% of its own requirements in terms of radioisotopes for use in medicine and as tracers for hydrological, industrial and mining studies.
- 40. Also important was its work in the field of nuclear analytical techniques, especially those of high sensitivity used in the analysis of trace elements and in the maintenance and repair of nuclear instrumentation both areas being important to problem-solving in the biomedical, mining and environmental fields.
- 41. With regard to its research reactors, Chile had through its own resources effected the modifications necessary to ensure that they served their purpose in a manner that was both safe and reliable. In particular, it had succeeded at one such reactor in converting the core from high to medium enrichment, thereby acquiring experience which could be of great value to other countries with similar reactors.
- 42. In the field of co-operation, the ARCAL programme, in which Chile played an active part including the hosting of various international courses and workshops, contributed significantly to the development of technical co-operation in the nuclear field among participating Latin American States. Also, where bilateral relations were concerned, Chile and Argentina had recently agreed to improve their mutual arrangements for co-operation in the peaceful uses of nuclear energy.
- 43. There were, however, certain problem areas in the Agency's work which remained to be resolved, and on which his delegation had already expressed its views at various meetings of the Board and the General Conference. For example, the Agency still needed to achieve an effective and lasting balance between its safeguards activities and its equally necessary promotional activities, the financing for both of which should be assured through clear and stable procedures. To that end, the efficiency of safeguards activities needed to be enhanced, while in the case of technical assistance it was necessary to ensure that a lack of funding did not result in cutbacks on programmes which in the long run would benefit the entire international

community. In that connection, he was pleased to announce that Chile would for 1991, as in previous years, be making a voluntary contribution to the Technical Assistance and Co-operation Fund.

- 44. As to the falling rate of implementation of the technical assistance programme, the Secretariat should revise the whole modus operandi of the Department of Technical Co-operation, as well as the Agency's financial and administrative regulations, which were no longer adequate for the purpose of administering the programme.
- 45. In conclusion, the common desire to further develop the uses of nuclear energy for peaceful purposes was an important element in bringing countries closer together, and Chile fully supported the Agency in its valuable work to that end.
- 46. <u>Mr. STEPANENKO</u> (Byelorussian Soviet Socialist Republic) welcomed the recent positive changes in international relations which had created a climate where there was a growing tendency to reduce weapons arsenals and improve trust and multilateral co-operation between States, and commended the Agency on another successful year in 1989.
- 47. The Fourth NPT Review Conference had shown that the principles of NPT were widely accepted and had become an integral part of international law. Its importance was evidenced by the fact that more States adhered to that Treaty than to any other international agreement on arms limitation. Agency played a worthy role in that area via its safeguards system, which effectively and reliably prevented diversion of nuclear materials from peaceful applications to the production of nuclear weaponry. Those monitoring activities were being implemented without any infringement of the sovereign rights of States or hindrance to the development of their peaceful nuclear activities and international co-operation in that area. Once again in 1989 the Agency had detected no diversions of nuclear material. In view of the limited resources available to it, it would be sensible if the Agency were to concentrate its efforts on monitoring activities covering the more important stages of the nuclear fuel cycle. He informed the Conference that, pursuant

to the bitter experience of the Chernobyl accident, the Supreme Soviet of the Byelorussian Republic in its declaration of sovereignty had recently announced its intention to turn the area into a nuclear-free zone.

- 48. Byelorussia supported unconditionally the Agency's important activities in the area of technical assistance and, despite the difficulties it was experiencing after the Chernobyl nuclear power plant accident, it regularly paid its voluntary contributions to the Technical Assistance and Co-operation Fund (TACF) in full. Byelorussia was grateful to the Agency for the help it had given with the Chernobyl accident both under the technical assistance programme and in other ways. The Agency was currently playing an active part in the organization and co-ordination of an international project on the radiation consequences of the Chernobyl accident, and an evaluation of the effectiveness of the measures taken in contaminated areas to protect public health; that work should provide additional information on the situation and point to possible additional measures which might help alleviate the consequences. The results of the current investigative mission might also encourage greater involvement on the part of the Agency and other parties in such areas as health monitoring for persons exposed to radiation, monitoring of the environment, etc. The insufficient measures of the preceding four years had had negative consequences on the health of children in particular, and had engendered economic difficulties and general social and psychological tension. The Republic had been declared a national ecological disaster area. Although the Agency's technical assistance programme was oriented on the whole towards helping the developing countries, in view of the extreme situation he urged the Agency to grant Byelorussia special help.
- 49. The whole question of nuclear power had been undergoing a re-evaluation during the preceding few years as a result of the Chernobyl accident in particular. There was widespread concern over the safety of nuclear power, disposal of waste from nuclear power plants, and the possibility of accidents. The Agency should play a leading role in solving the problems of nuclear energy and its social acceptability. It should participate actively in discussions of world energy and ecological problems, notably at the United Nations Conference on Environment and Development to take place in 1992.

Agency involvement in the environmental issue as it related to the safe use of nuclear power and the disposal of nuclear power plant waste was one of the best ways of restoring public confidence in nuclear power.

Mr. Zhou (China) took the Chair.

- Mr. SAN MARTIN CARO (Peru) stressed the continued importance of diplomacy in the present post-cold war era. Despite the rapprochement between the superpowers, it was clear from the present regional crisis that the threat of military conflict had not been eliminated. His country would continue to pursue its peaceful vocation notwithstanding its own serious difficulties and supported any international action aimed at limiting increases in military nuclear capabilities or promoting the peaceful uses of nuclear energy.
- 51. He noted the difficulty of the task before the Fourth NPT Review Conference and emphasized the need to bear in mind the progress made in almost all the issues tackled, despite the wide divergence of views on one item. The Conference's consolidated working document referred to the outstanding role played by Agency safeguards in building up confidence and thus promoting the safety of the entire international community, thereby providing a crucial tool in endeavours to limit the proliferation of nuclear weapons. The Review Conference also reaffirmed the importance of nuclear-weapon-free zones based on regulations established by the States of the region concerned in accordance with their own requirements.
- 52. Other subjects which had stimulated useful discussions were the efficacy of the safeguards system as a means of ensuring the use of nuclear energy for peaceful purposes, the introduction of a new type of inspection which the Agency might carry out and the introduction of possible new criteria and legal categories with a view to convening a conference on attacks on nuclear installations.
- 53. The Agency had an important role in universalizing the safeguards system and applying coherent and consistent policies. His country was therefore deeply concerned that many countries had not yet concluded safeguards agreements with the Agency and urged them to do so.

- 54. Technical co-operation could also be regarded as a weapon in the cause of peace, since it alleviated the social and economic imbalances which generated conflict. The developing countries therefore had every justification to pursue their efforts to attain a balance in the Agency's budget between safeguards and technical co-operation and to find formulas ensuring adequate and secure resources for the TACF. In that connection, he urged those States that were able to do so to pledge contributions to the TACF. Furthermore, technical assistance activities should be geared to the requirements, realities and development programmes of the recipient States, thus ensuring the optimum use of the resources available.
- 55. His country wished to express its gratitude to the Secretariat for its efforts in implementing major projects in Peru. His delegation was also pleased with the progress of the ARCAL (Regional Co-operative Arrangements for Latin America) programme, which should aim at achieving greater integration of the Latin American countries in general and the Andean area in particular. Problems such as health, agriculture and food were considered regional rather than national. The Agency had fully appreciated the need for the Latin American countries to utilize their resources to their mutual advantage and to develop common projects, as demonstrated by its negotiations with the United Nations Development Programme (UNDP) aimed at introducing into the latter's plan of action important projects such as those for the improvement of irrigation and fertilization methods and the boosting of food exports through the use of irradiation techniques.
- 56. With regard to legal and institutional matters, he wished to highlight the Secretariat's efforts in studying, evaluating and adopting measures to strengthen international co-operation in the field of nuclear safety and radiation protection. The various relevant international agreements were aimed not only at ensuring the safe use of nuclear energy, but also at providing for international action in the event of nuclear accidents or emergencies. Peru had taken an active part in the working group established by the Board to consider international liability for nuclear damage, which had made considerable progress. The standing committee which succeeded the working group now faced the challenge of developing up-to-date and

satisfactory mechanisms in relation to civil liability. In the light of the desires expressed by various States that had not yet signed the Vienna Convention, his country was in favour of convening a conference to revise the Convention in the hope that its revision would attract wider adherence.

- Mr. ALETA (Philippines) said that although the Fourth NPT Review Conference had discussed new ways of reinforcing and strengthening the Treaty to enable it to fulfil its objectives, divergent positions continued to present obstacles. However, one thing which the Conference had agreed on was the Agency's critical role in the attainment of the NPT's goals.
- 58. The Agency's safeguards system had contributed significantly to building international confidence by helping to prevent the proliferation of nuclear weapons and other nuclear explosive devices and his delegation welcomed the voluntary offer agreement between China and the Agency which entered into force in 1989. Since the Safeguards Implementation Report was a very important document, which could help to increase confidence in safeguards, his delegation hoped that it would ultimately be given wider circulation. The Secretariat's efforts towards improving efficiency in the use of safeguards resources should be continued in the light of the growing demands for safeguards activities and the current policy of a zero-real-growth Any increase in the Agency's Regular Budget should ensure that there budget. was a balance between safeguards activities and promotional activities. the Working Group on the Financing of Safeguards, in which the Philippines had participated actively, the Philippines had maintained the view that Member States which owned, possessed or operated facilities should be primarily responsible for the financing of safeguards.
- 59. Since May, 1986, when his Government had halted the 620 MW PWR project in the Bataan Peninsula, the Philippine nuclear power programme had been at a standstill. The activities now being pursued in the nuclear field were applications of radioisotopes and radiation in agriculture, biology and medicine, industry and research. The current five-year nuclear science and technology programme, up to the year 1993, covered four major areas: radiation protection and nuclear safety, radiation technology and engineering,

radioisotopes and nuclear techniques applications and special projects, including manpower development, infrastructure development and upgrading of existing facilities.

- The assistance provided by the Agency to the Philippines covered a wide range of activities, including the application of isotopes and radiation in medicine and agriculture. In 1989, the Agency had provided support for the establishment of a pilot-scale irradiation facility, which was currently being used for studies of food irradiation and the sterilization of medical products and tissue grafts. Assistance for the repair of the 3 MW reactor was also being provided by the Agency. In addition, the Philippines had been participating in 13 of the 18 regional projects being undertaken under the Regional Co-operative Agreement for Asia and the Pacific (RCA). It was heartening to note that that agreement had paved the way for other regional co-operation agreements in Latin America and in Africa.
- 61. His delegation hoped that the organizational change in the Department of Technical Co-operation and the adoption of a two-year programming cycle for its activities would lead to greater efficiency and enhanced programme quality and delivery. Notwithstanding the continued growth of the Technical Assistance and Co-operation Fund and the substantial increase in extrabulgetary contributions, the question of the financing of technical assistance was a matter on which the Agency should focus greater attention, since it was important to have a more secure source of financing.
- 62. Two major international developments had prompted renewed interest in nuclear energy as the most viable source of energy in the future. One was the environmental concern about the greenhouse effect and global warming resulting from the use of fossil fuels and the other was the concern, created by international conflicts, about the stability of oil supplies at affordable prices. The current crisis in the Gulf had led the Philippines to consider other energy alternatives, including nuclear power, in order to reduce its dependence on oil.
- 63. Safety remained the primary consideration when reviewing the nuclear power option. The Agency's refforts to strengthen international co-operation on in nuclear safety and radiological protection would provide added confidence;

- if the Philippines decided to resume its nuclear power programme. His delegation welcomed the Agency's expanded safety programme focusing on the design and construction of nuclear power plants with improved safety features, nuclear waste management systems, assistance in the preparation of nuclear safety regulations and in the establishment of authorities responsible for their supervision, its various safety missions as well as its initiatives to promote wider acceptance of nuclear safety standards. However, his delegation was convinced that an enlightened public information campaign could play a crucial role in increasing public confidence in nuclear power.
- 64. Nuclear safety and radiation protection legislation and regulations in his country generally conformed with the standards and guidelines set by the NUSS Codes. The Gôiania incident had prompted the Philippines to establish a list of all radiation sources held by licensed users. That had led to the discovery of some missing sealed sources and action had been taken to recover them.
- 65. The Philippines attached great importance to the management of the radioactive wastes resulting from its increased utilization of nuclear techniques. A mission had visited the Philippines under the Waste Management Advisory Programme and the recommendations of the mission were being reviewed. In that connection, the National Atomic Energy Authority had relaunched its search for a suitable site in the Philippines for a radioactive waste repository. His delegation had expressed some reservations about the Code of Practice on the International Transboundary Movement of Radioactive Waste, because it believed that an internationally binding instrument would be a more satisfactory way of meeting the concerns of developing countries. It continued to maintain that position and therefore considered the Code, in its present form, as only an initial step towards that ultimate objective.
- 66. With regard to Article VI of the Statute, his delegation maintained its view that the Board, in designating its members, should unequivocally state which criteria mentioned in Article VI.A were applied.
- 67. Finally, with reference to the rule and policy on the appointment of the Director General, resolutions had been adopted by the General Conference in 1981, 1985 and 1989, recommending to the Board of Governors that, in

appointing the Director General after the expiry of the term of the incumbent Director General, due regard be given to the principle of equitable representation and that particular consideration be given to candidates from developing areas who met the requirements of the position. His delegation believed that the principle of rotation that was followed by other agencies in the United Nations system should also govern the Agency's selection of its Director General.

- Mr. KOCH (Denmark) said that several statements during the current session of the General Conference had stressed the need for developing energy policies which would bring about a substantial reduction in emissions of CO₂ and other damaging pollutants. Two main conclusions were being drawn: the first conclusion was that far-reaching energy policy decisions were required. The second conclusion was that the utilization of nuclear power in national energy policies should be an indispensable element in combating the problem. Denmark strongly supported the first conclusion but disagreed with the second.
- 69. The World Commission on Environment and Development had stated in its report that it was a precondition for worldwide sustainable development that the industrialized countries reduce their energy consumption by 50% over the coming 40-50 years, and make strong efforts to curb emissions of greenhouse gases. The Toronto Conference on the Changing Atmosphere had recommended a 20% reduction in CO, emissions at least before the year 2005. Denmark's energy policy was in strict accordance with those recommendations. The main targets of the Danish energy action plan for the year 2005 were to reduce the CO, emissions by at least 20% and to reduce the consumption of energy by 15%. The main instruments to be used were substantial conservation in electricity and heat consumption, combined heat and power production based on natural gas, a substantial conversion from coal to natural gas resulting in a 45% decrease in coal consumption, and a 100% increase in the utilization of renewable energy. Cost-benefit analyses of the action plan based on the OECD assumptions of economic growth and energy prices demonstrated that the investments required to implement the plan would have been paid back by 2005 even assuming a stable oil price of \$16 per barrel up to that date. Higher oil prices would increase the economic benefits of the investments.

Danish energy action plan demonstrated that it was possible to reach very ambitious targets in energy and environment policies without any utilization of nuclear power and without cost increases. The decision to abstain from using nuclear power in Denmark had been taken even before the Chernobyl accident and had been motivated by unsolved nuclear safety and nuclear waste storage problems.

- 70. During the preceding few years the foundation had been laid for expanded co-operation in key areas of nuclear safety. The Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency had been acceded to by an increasing number of States. The five NUSS safety codes and a number of safety guides had been improved. The International Nuclear Safety Advisory Group (INSAG) had developed basic safety principles for nuclear power plants reflecting the most advanced policies and practices. Furthermore, the establishment of stronger and more restrictive safety principles and criteria had been supplemented by more frequent use of various types of safety It was encouraging that countries with major nuclear activities were showing greater openness towards proposals to improve the safety of nuclear installations, though the availability of technical and financial resources for such improvements remained a problem. The Agency should intensify the assistance it provided to countries with the modernization of safety systems in older nuclear power plants. Denmark attached great importance to the establishment of a network of bilateral agreements as a supplement to the multilateral agreements concluded within the framework of the Agency or in other forums. One important element in such bilateral agreements should be a clear and unequivocal commitment to inform neighbouring countries about the planning of new installations or about major changes in existing nuclear installations, in order to provide the country concerned with an opportunity to express its views before a decision was taken.
- 71. Recently there had been increased interest in nuclear-powered non-military vessels, though the current number of such vessels was relatively low. Accidents involving nuclear-powered vessels during the preceding few years had underlined the potentially disastrous consequences that accidents

involving seaborne reactors could have. The code of safety for nuclear merchant ships should therefore be revised to bring it in line with the state of the art in nuclear safety technology. The possibility of extending the code to apply to all types of non-military ship should also be examined. Denmark, together with the Governments of the other Nordic countries, had submitted a proposal to the General Conference suggesting that the Director General conduct a study on the need to revise and extend the code of safety for nuclear merchant ships.

- 72. The safeguards activities of the Agency were an outstanding example of effective multilateral co-operation on the prevention of the proliferation of nuclear weapons. Full-scope Agency safeguards were a crucial element in the non-proliferation regime. All States which had not yet done so should place all their nuclear facilities under Agency safeguards. More than 50 of the non-nuclear-weapon States party to NPT had not yet fulfilled their treaty obligation to conclude safeguards agreements, and he urged them to do so as soon as possible.
- 73. Denmark supported the work done by the Agency to develop new safeguards approaches with a view to increasing efficiency. Since the amount of nuclear material under safeguards would substantially increase in the coming years, it was important to ensure the continued effectiveness and credibility of the safeguards system. In that regard, the current temporary financing arrangement for the safeguards system should be replaced by a viable long-term arrangement based on clearly defined elements.
- 74. The Fourth NPT Review Conference had just completed its work.

 Regrettably, the conference had not been able to agree on a final document.

 However, many important issues had been aired.
- 75. With regard to the question of civil liability for nuclear damage, Denmark strongly supported the work of the open-ended working group which was studying the matter, and hoped its important work would be brought to a successful conclusion at an early date.
- 76. Denmark placed a high value on the Agency's technical assistance activities which continued to show substantial growth, and approved the target of \$49 million for the Technical Assistance and Co-operation Fund for 1991. Denmark would contribute its full share of the target.

- Mr. MONTESDEOCA (Uruguay) said that in recent years his country, convinced of the importance of the peaceful uses of nuclear energy, had been engaged in the introduction of nuclear technology, to which end it had received valuable assistance from, among others, Argentina, Brazil and Chile. It had also participated actively in various forums set up to consider matters relating to nuclear energy, where it had held to its view that the key to success in the peaceful uses of atomic energy lay in its rational utilization, in radiation protection and in nuclear safety. In that connection, Uruguay had in 1990 been visited by a RAPAT mission; its Government was currently considering adherence to the Convention on Liability for Nuclear Damage; and it was in the process of ratifying the Convention on the Physical Protection of Nuclear Material.
- 78. Another important area was that of environmental radiological protection, and he urged the international community to work toward the establishment of a co-ordinated system to monitor environmental radioactivity. That would require a reallocation of the Agency's limited resources, although his country would also like to see the economically more powerful countries taking a leading role in developing such a mechanism. For its part, Uruguay stood ready to contribute to those efforts.
- 79. The principle of universality was particularly applicable and effective in the case of a technical organization such as the Agency. Situations involving local or regional tensions should therefore not be allowed to interfere with policies aimed at increasing the safe use of nuclear technology for socially beneficial purposes.
- 80. At the recent Fourth NPT Review Conference, Uruguay, in raising the question whether NPT was the only possible way to prevent the proliferation of nuclear weapons, had stated that although it was the most important way, it was certainly not the only one: there were also the Tlatelolco and Rarotonga Treaties, which were designed to ensure the maintenance of nuclear-weapon-free zones, and which, unlike NPT, did not create two different classes of State with regard to the fabrication, use and supply of nuclear weapons. There were also unilateral or bilateral agreements between States aimed at preventing the spread of nuclear weapons. For its part, Uruguay a Party to the Tlatelolco

Treaty - was involved in the efforts now being made to find formulas to enable Argentina, Brazil, Chile and Cuba to join the Tlatelolco Treaty, in the interests of making the whole of Latin America a nuclear-weapon-free zone. He also urged all Member States to work toward the creation of other such zones around the world, and, in the case of those which had not yet done so, to enter into full-scope safeguards agreements with the Agency.

- 81. The whole region of which Uruguay was a part was engaged in a great effort to improve the social and economic conditions of its inhabitants. Developing the peaceful uses of nuclear energy was a key element in that effort, and one to which Uruguay was committed. One way in which it could achieve progress was to place a number of its well-trained specialists within the Agency's Secretariat, thus eventually providing the country with invaluable technical and organizational experience.
- 82. It was no less important that Uruguayan nationals receive adequate training in the nuclear field, to which end the National Directorate for Nuclear Technology (DNTN) would shortly be engaging new staff who had already specialized in nuclear activities in other countries, and would also be setting up the laboratories at the Nuclear Technology Development Centre. In all of those developments the Agency had been providing its traditional and much-valued support.
- 83. Mr. AAMODT (Norway) welcomed the idea of establishing medium-term plans for the Agency's scientific and technical activities and hoped that it would be possible to introduce a medium-term plan in the biennial programme for 1993 and 1994. He also supported the target of US \$49 million for voluntary contributions to the Technical Assistance and Co-operation Fund for 1991 and was pleased to announce that, pending Parliamentary approval, Norway would contribute its assessed share to that fund. The rate of growth in resources for technical assistance clearly demonstrated that the present system of indicative planning figures and voluntary contributions worked well. His delegation did not therefore see a need, for the time being, to change to any other method of financing. The low overall financial implementation rate of the technical co-operation programme during the past few years and the further fall in that rate from 1988 to 1989 were to be regretted.

Although there were various reasons for the low implementation rate, it was partly a result of understaffing in the Department of Technical Co-operation. In the long run, it seemed likely that some expansion of promotional activies would be required in order to overcome the problem of understaffing, but such expansion could not be combined with a zero-growth budget without detrimental effects on the Agency's regulatory activities and, as his delegation had pointed out in the past, it was important to maintain a balance between the Agency's promotional and regulatory functions.

- 84. In order to ensure that the Agency could operate continuously, his delegation could accept the Board's proposal to increase the level of the Working Capital Fund for 1991 to US \$8 million. One of the most pressing administrative problems facing the Agency was the threatening cash flow situation caused by late and uncertain payments. His delegation, therefore, appealed to States that were in arrears to make their payments as soon as possible.
- 85. His delegation deplored the fact that there had been reductions in the 1991 budget in the area of nuclear safety and radiation protection and in the area of safeguards. Those were important Agency activities which needed to be strengthened, even if that entailed future increases in the budget.
- 86. His Government recognized the considerable contribution of the nuclear applications programme to environmental protection and sustainable development. Extensive use of nuclear energy in the long run would be acceptable only if the strictest safety and environmental protection standards were observed. His delegation was pleased to note that the number of ratifications of the conventions on early notification and on assistance in the case of a nuclear accident or radiological emergency had increased considerably in 1989. The Agency had a vital task in promoting international co-operation in the field of safety and it should have the necessary resources to enable it to respond to Member States requests for its services and advice in that field. His delegation welcomed the Agency's activities to assess the radiological consequences of the Chernobyl accident and to upgrade the safety of older power reactors and the proposed Code of Practice on the International Transboundary Movement of Radioactive Waste.

- 87. While regretting that the Fourth NPT Review Conference had failed to reach agreement on the wording of a final document, it was encouraging to note that there had been widespread support for the texts which were of direct relevance to the Agency and its activities. His delegation welcomed the accession to NPT of Kuwait and Qatar in 1989 and the recent accession of Mozambique. It also welcomed the various new safeguards agreements which had entered into force. However, it noted with regret that at the end of 1989 51 non-nuclear-weapon States parties to the NPT, including States with significant nuclear activities, had not concluded safeguards agreements with the Agency within the prescribed period of 18 months after ratification. He urged those States to fulfil their NPT obligations.
- 88. Failure to ensure that effective safeguards were maintained would have serious repercussion on continued international co-operation in the nuclear field. The Agency should therefore pay close attention to any indication of possible irregular procurement of nuclear material in any State. Although the quantities of nuclear material and the number of new facilities coming under safeguards would continue to increase, there had been severe budgetary constraints in the Department of Safeguards for the past few years. It was essential that the safeguards budget was sufficient to ensure a level of activity that maintained confidence in the safeguards system. Norway was one of 21 Member States which had accepted a simplified procedure for inspector designation and it invited those Member States with safeguards agreements which had not done so to follow suit.
- 89. Mr. KAHILUOTO (Finland) said that, since the last General Conference, the world had witnessed events in both the economic and political spheres which would have far-reaching repercussions also with regard to energy supplies. Those who bore the responsibility for new energy and environment policies were facing greater and more complex challenges than ever before. They had to find an acceptable balance between the unavoidable need to produce energy and the environmental effects thereof. Efforts to alleviate the environmental damage caused by burning of fossil fuels would not be successful without the widest possible co-operation at an international level. Thus,

Finland attached great importance to the work of the Inter-governmental Panel on Climatic Change (IPCC), and was in favour of the conclusion of new international agreements on reduction of sulphur dioxide emissions. The use of nuclear energy to produce electricity reduced emissions of so-called greenhouse gases and thus contributed to the prevention of global climatic changes. As such, it was an option which could not be disregarded. Nuclear power was currently in a period of stagnation, but growing awareness of the seriousness of environmental problems would change the public's attitude towards it and revive the industry. Finland also attached great importance to the Senior Expert Symposium on Electricity and the Environment to be held in May 1991 in Helsinki. The effects of the Gulf crisis on international energy markets could not at present be predicted. The conflict had already caused increases in crude oil prices and uncertainty in international oil markets which, in turn, was likely to raise the market prices of other fossil fuels. Those developments would no doubt have a substantial effect on national energy policy strategies and priorities. A reassessment of nuclear power was inevitable. Nuclear power continued to be one alternative in the future energy plans of Finland. The question of whether Finland would install additional nuclear power capacity was to be decided upon after the coming parliamentary elections.

90. The Agency had performed remarkably well in the nuclear safety area, in particular after the Chernobyl accident. Its role in that area could be much expanded. It was now up to Governments and operators to implement the rules and guidelines prepared by the Agency, and to ascertain that they were strictly observed. The Chernobyl accident had shown the world that nuclear safety and environmental protection were no longer local and national tasks but international ones. Universal acceptance of internationally agreed codes, such as the NUSS codes, and other recommendations could greatly contribute to a general qualitative improvement in reactor safety. He welcomed the increasing number of safety missions being undertaken. Finland was also fully in support of the new and central role the Agency had assumed, at the request of the USSR, in the clean-up activities following the Chernobyl accident.

- 91. For more than 30 years the Agency had been introducing numerous nuclear techniques in various fields of science and technology, in developing areas of the world in particular. The Agency's programme should be reviewed from time to time in order to keep it up to date. Finland attached great importance to the preparation of a medium-term plan and special efforts should be made to identify global common problems, preferably in co-operation with other United Nations agencies. At the same time, activities which relied on methods that had already been fully developed, or where the role of atomic energy was negligible or non-existent should be phased out. Such activities came within the domain of other United Nations organizations. If future biennial programmes could be planned in line with the above criterion, it would be easier to judge whether it was appropriate to continue with a zero-real-growth budget.
- 92. The safeguards programme comprised a major part of the Agency's work. Safeguards methods and concepts could, however, still be further developed and refined. Efforts in that direction should continue and a review of basic concepts might be in order. The Agency's right to make ad hoc inspections should be more often considered and implemented. The model safeguards agreements gave the Agency sufficient authority in that respect.
- 93. The Fourth NPT Review Conference had recently been concluded in Geneva. It was regrettable that no consensus had been reached on a final document. However, in substantive discussions the Agency's work had been generally commended and a number of recommendations concerning the work of the Agency agreed upon. The latter could serve as guidelines in the planning of the Agency's future activities.
- 94. Mr. BRNELIC (Yugoslavia) said that, having witnessed the start of a relaxation of tension in one area, the world was now witnessing a dangerous confrontation in the Middle East which had unforeseeable consequences for economic and social development and peace well beyond that region. The Conference should therefore consider what positive contribution it could make to solving the problem.

- 95. The Annual Report for 1989 provided a concise account of the numerous activities which had been undertaken within the scope of the Agency's programme. The main objectives and tasks had been fulfilled, and the Secretariat was to be congratulated for a job well done. His delegation approved the Annual Report for 1989 and also the Agency's programme and budget for 1991 and 1992.
- Yugoslavia had not deviated from its principles and long-standing policy concerning the peaceful use of nuclear energy and, although it had passed a law prohibiting the construction of new nuclear power plants, it continued to be interested in constructive co-operation with the Agency. One nuclear power plant and several research reactors in operation and a large number of experts provided a solid basis for such operation. His Government strongly supported the Agency's programme, including its safeguards activities, which should be guaranteed adequate resources. The efforts made by the Agency's safeguards inspectors were commendable, and that function of the Agency should be strengthened in order to implement fully the non-proliferation treaties. Yugoslavia welcomed the recommendation of the Fourth NPT Review Conference that NPT should be unlimited in time.
- 97. The Agency's technical co-operation programme had made a considerable contribution to Yugoslavia's development of the peaceful uses of nuclear energy. Among the significant projects implemented was one concerning research reactor modernization. The Agency should increase its efforts to enhance the transfer of technology to developing countries in order to speed up their socio-economic development.
- 98. His country attached great importance to nuclear safety and radiological protection and expressed its satisfaction at significant results achieved by the Agency in that area in the past year. The growing demand for the Agency's various safety services however would require more resources. Yugoslavia welcomed the progress achieved towards creating a universal legal liability system for nuclear damage, and supported the Code of Practice on the International Transboundary Movement of Radioactive Waste. An effective solution for radioactive waste disposal was vitally important for the future of nuclear energy and, although theoretically and technically there were

solutions, no practical solution had yet been found, especially for high- and intermediate-level wastes. The Agency should intensify its efforts and assistance in that area.

- 99. One issue which was inseparable from economic development was the ecological aspect of nuclear energy, to which his Government attached special importance. No effort should be spared to protect life on the planet. The initiatives and measures taken by the Agency in that area were most welcome.
- 100. His country was extremely interested in participating in research in the field of nuclear fusion. It had a solid scientific base and other necessary conditions for such activity.
- 101. Mr. SCHEEL (German Democratic Republic) said a radical political change had been achieved in his country since the thirty-third session of the General Conference. The people of the German Democratic Republic had decided in favour of unification with the Federal Republic of Germany, which would take place on 3 October 1990. The conditions thus created provided the possibility of pursuing an ecologically sound environmental policy with the aim of substantially improving the critical environmental situation.
- 102. The major contributor to environmental devastation and pollution in his country was the heat and electricity generating industry, based predominantly on local lignite. That was one of the reasons why nuclear power would continue to form part of the power supply system, but highest priority would be given to nuclear safety and radiation protection. All power reactors, those in operation and those under construction, were being subjected to a thorough reassessment of safety and reliability. Analyses carried out since the mid-1980s had resulted, in July 1989, in the establishment of safety requirements by his country's regulatory body in co-operation with the competent authorities of the Soviet Union, Czechoslovakia and Bulgaria. A thorough safety reassessment had been carried out by a German-German working group on units 1 to 4 of the Greifswald nuclear power plant. The report prepared by the group, in whose work experts from the Soviet Union and France had also participated, identified safety deficiencies in plant design and operation and set out the requirements to be met in order to enhance safety to

- a level commensurate with international standards. His Government wished to thank the Government of the Federal Republic of Germany for the valuable support given in that matter.
- 103. On the basis of the results, the Minister for the Environment, Nature Conservation, Energy and Nuclear Safety had decided, on 1 June 1990, to shut down unit 4 of the Greifswald nuclear power plant. Units 2 and 3 had already been shut down in February. Unit 1 would continue operation until December 1990 at the latest. If the safety requirements put forward by the experts were met through, inter alia, extensive improvements in the engineered safety systems, operation could be continued for a limited period. The necessary backfitting would be very expensive, and cost-benefit analyses had to be carried out before definite decisions could be taken.
- 104. Unit 5 of the Greifswald plant, which was in the commissioning stage, and units 6 to 8, now under construction, as well as units 1 and 2 of the Stendal nuclear power plant, also under construction, would be subjected to the same safety assessment procedure. Regulatory decisions on all nuclear installations would be made on the basis of the Nuclear Energy Act and other regulations of the Federal Republic of Germany, which had come into force for the German Democratic Republic on 1 July 1990.
- 105. Another area opened up for investigation as a result of the political changes was the uranium ore mining district in the southern part of his country. The programme drawn up for the district aimed at obtaining a comprehensive picture of the radiological situation created by mining in past centuries and, in particular, by uranium ore mining over the past four decades. The programme also called for the adoption of systematic corrective action.
- 106. Just as nuclear safety and radiation protection were integral parts of all nuclear activities, so safeguards were inseparably associated with all uses of nuclear material. The Agency's efforts at verifying, through its safeguards system, that nuclear material was not diverted to the manufacture of nuclear weapons were of great importance. The assurance thus provided that States were complying with their non-proliferation commitments contributed fundamentally to an atmosphere of mutual confidence among States and facilitated international nuclear co-operation.

- 107. For twenty years, NPT had been instrumental in creating such an atmosphere. It was therefore regrettable that the Fourth NPT Review Conference had been unable to reach consensus on a final document. The participating States parties to NPY had, however, expressed their conviction that the Treaty was essential to peace and security, and had pledged continued support for its objectives. They had urged all States not party to the Treaty to accede to it and to bring into force the required safeguards agreements. Proposals aimed at furthering the implementation of Articles III and IV could be a valuable input for future Agency activities. That applied particularly to the promotion of international co-operation with due regard for nuclear safety and for full-scope, effective safeguards.
- 108. Mr. ALER (Sweden) said that the past year had again demonstrated the global interdependence of the energy market and the inevitable problems, particularly in developing countries, of meeting future energy needs without damaging health and the environment. Leading experts from a large number of countries had recently met in Sweden for the fourth session of the Intergovernmental Panel on Climate Change and had predicted a more rapid increase in global mean temperatures than over the past 10 000 years unless greenhouse gas emissions, not least from the energy sector, were considerably reduced.
- 109. He hoped that the political conclusions of those findings would be drawn at the Second World Climate Conference in November and that binding commitments should be agreed upon in the negotiations on a climate convention. Such a convention ought to be finalized during the United Nations Conference on Environment and Development in 1992, where energy policies would be a key issue because of their close interrelationship with environmental policies.
- 110. The Swedish Parliament was expected to decide on the country's future energy policy during its coming session. It would be based on a previous decision to phase out Sweden's considerable nuclear power capacity by 2010 and to reduce the use of fossil fuels as much as possible.

- 111. Technical co-operation was an important part of the Agency's work. The system of voluntary contributions to an agreed planning figure for the Technical Assistance and Co-operation Fund was a satisfactory form of financing, provided that all donors paid their share of the target in a reliable and timely manner. Sweden had already pledged its share of the target for 1991 and, aware that Agency resources could not meet all sound requests, had in recent years paid more than twice its share of the Fund in support of multi-year projects, primarily in agriculture and environmental protection. He urged other donor countries to make similar extrabudgetary contributions for such national or regional projects.
- 112. Although the Fourth NPT Review Conference had not managed to reach agreement on disarmament measures, he was pleased to note that there had been complete unity on the central role of the Agency in furthering international co-operation in the peaceful use of nuclear energy and that new emphasis had been given to nuclear safety and safeguards. The participants in the Conference had agreed to join Sweden and other countries in requiring full-scope safeguards as a condition for the export of significant nuclear supplies in the future. That policy was expected to be implemented universally without delay. The Review Conference had also recognized the non-proliferation benefits of the conversion of research and test reactors from high-enriched to low-enriched uranium fuel and, in cases where that was not feasible, of significantly lowering the level of enrichment. Sweden strongly endorsed the recommendation to continue international co-operation in order to reduce the proliferation risks associated with direct-use material. Particular attention must be given to the physical protection of such material in handling, storage and transport. States which had not already done so were urged to accede to the Convention on Physical Protection of Nuclear Material. Finally, there had been general agreement at the Review Conference that any transfer of nuclear materials and facilities from military to civil use should be verified by Agency safeguards. His delegation welcomed the confirmation by the Soviet Union that it would open all its civil power reactors and most research reactors to Agency safeguards, thus following other NPT depositary States.

- 113. In spite of the general support for safeguards, the financing of those activities remained an unsolved problem. The progress made in the working group established by the General Conference in 1989 was encouraging, but he wished to underline the importance of reaching agreement on the main features of a new financing arrangement during 1991 so that a firm foundation could be laid for the budget process that would end in the spring of 1992.
- 114. Sweden was one of the Board members which had agreed to the safeguards budget for 1991 only with the greatest hesitation. Also, it had strong reservations on the 1992 estimates in view of the postponement of important items that had been necessary in order to balance the 1991 budget. Several delegations had urged that the present safeguards criteria be revised in order to reduce Agency costs. The Secretariat, with the advice of the Standing Advisory Group on Safeguards Implementation (SAGSI) was working in that direction, but in the meantime the Agency should follow the present rules strictly and must maintain the political trust vested in its safeguards system.
- 115. The report by the Board and the Director General on the strengthening of international co-operation in nuclear safety presented an ambitious plan for the 1990s covering the whole area of nuclear safety, radiological protection and waste management. Sweden welcomed the holding of a special conference on nuclear safety in August 1991 and was willing to contribute to its financing. It hoped in particular that agreement would be reached on safety fundamentals for the guidance of national authorities. The General Conference should be able to codify such an agreement at its 1991 session.
- 116. In addition to the topics contained in the report just mentioned, the safety of seaborne reactors was of special interest to Sweden and the other Nordic countries. The present IMO code of safety for nuclear merchant ships had been established in 1981, but, given the rapid development of safety principles since then, the Nordic countries were proposing that the Agency review the code and study its possible application to other categories of nuclear vessels.
- 117. Another topic worth highlighting was the disposal of spent fuel from research and test reactors. Such spent fuel might in the future present serious storage and reprocessing problems because of the limited availability

of specialized facilities for such purposes. Those problems should be given proper attention, and suppliers and operators of such reactors should work together to find satisfactory solutions with regard to safety and security. The management of spent fuel from research and test reactors should be given early attention in the elaboration of the new series of RADWASS recommendations and the Agency should, if requested, assist Member States with any acute problems.

- 118. The financial constraints on the Agency were a recurrent theme in all fields of its activities, particularly after the long period of application of the principle of zero real growth in the Regular Budget. Sweden did not support that principle as a management tool. Flexibility was needed in reallocating the Agency's resources in response to the rapidly changing needs of Member States. Sweden had supported stringent measures considered necessary for improving the use of Agency resources in the past, but now saw a need to strengthen nuclear safety and safeguards programmes.
- 119. The previous year his delegation had called for the resumption of medium-term planning in the Agency and it noted with great satisfaction that there now appeared to be general agreement in that regard. The Board had approved a plan submitted by the Director General for work on a medium-term plan for the years 1993-98 that would serve as a framework for future biennial programmes and budgets. The planned elaboration of strategies for the main areas of the Agency's activities and the consideration of certain in-house issues, in particular human resource development and the structure and organization of the Secretariat, were most welcome.
- 120. Mr. AL-KITAL (Iraq) said that his country had always considered that the Agency's essential role, as laid down in its Statute, was to expand the peaceful uses of nuclear energy. In that spirit, Iraq had continuously endeavoured, despite the financial difficulties which it might have experienced at certain times, to pay its full contributions to the Regular Budget and to the Technical Assistance and Co-operation Fund. It had also always been an active member of the Agency, contributing to most of the organization's scientific and technical activities, and had conscientiously discharged

its obligations in the Agency's policy-making and subsidiary organs. Furthermore, it had always faithfully implemented agreements concluded with the Agency and had never contravened a single provision of those agreements.

- 121. Consequently, his delegation considered that the remarks made by the Director General in his opening statement of 17 September 1990 on the subject of the provision of technical assistance to Iraq could only be understood in political context in which the Agency had been forced to give in to strong pressure from States that were hostile to Iraq and preparing to launch a military attack against it.
- 122. Recalling that, in his opening statement, the Director General had referred to a "suspension" of technical assistance to Iraq, he noted that the Director General was an experienced legal expert who ought to be well aware of the legal significance of the word "suspension" as defined in the Agency's Statute, and to know which organs were competent to decide on such a suspension and which legal and disciplinary measures were to be taken in such cases. The Board of Governors was the organ which approved the technical assistance programmes and which, therefore, was competent to decide on the suspension of technical assistance. The Director General, and any other member of the Secretariat, were bound to comply fully with decisions taken by the Board.
- 123. It was to be hoped that the use of the word "suspension" was a mere slip which the Director General would swiftly correct. In his opening statement he had said that the sanctions decided upon by the Security Council had made it unpractical for the Agency to provide technical assistance to Iraq. On that subject the delegation of Iraq had a number of comments to make.
- 124. Firstly, Security Council resolution 661 was an unjust and arbitrary resolution. It deprived Arab States of the possibility of finding an Arab solution to the problem, and certain States had used it as a pretext for concentrating naval forces and troops in the Arab region in anticipation of a military attack against Iraq. It had also served to justify the use of food and medical products for the purposes of a political and military offensive.

- 125. Secondly, that resolution applied to States and not to international organizations. It was quite clear and unambiguous on that point. To attempt to apply its provisions to the Agency was therefore an illegal step which constituted a violation of that resolution and was contrary to the Agency's Statute.
- 126. Thirdly, resolution 661 did not extend to technical assistance and training activities. That view had been clearly expressed by several permanent members of the Security Council.
- 127. Fourthly, the Director General was well aware that certain States were ready to welcome Iraqi trainees within the framework of the Agency's technical assistance and co-operation activities, as had been confirmed in the Board of Governors on 14 September 1990. While circumstances might make it impractical for the Agency to provide technical assistance to Iraq, for example in the form of equipment, they did not prevent the training of Iraqis abroad. The Director General was legally and administratively bound, in accordance with the Agency's Statute, to do everything to find means of providing technical assistance to Iraq, and his delegation was convinced that he would carry out that duty.
- 128. It was true that the Middle East was going through an extremely serious crisis. However, experience had shown that all crises could be solved, that the worse a crisis became, the more necessary it was to show a sense of balance and reason, and that far from facilitating peaceful solutions, precipitate measures were likely to complicate matters and to impede efforts to create a favourable climate for defusing the conflict.
- 129. There was a danger that the hasty steps proposed would have consequences which it would be very difficult to remedy. Iraq and the Agency were united not only by the ties of technical assistance, but also by other types of agreement. If technical assistance activities were to be affected, Iraq would be forced to reconsider entirely its relations with the Agency. It was difficult to understand how practical circumstances could be unfavourable to sending experts to Iraq under the technical co-operation programme while

allowing visits by other people associated with the Agency. Iraq wanted its relations with the Agency to remain undamaged and hoped that the Agency's organs would continue to share the same desire.

- Mr. van GORKOM (Netherlands) said that during the past year the world political situation had been characterized by rapid and profound changes. Countries in Eastern Europe had made great strides towards democracy. Relations between Eastern and Western Europe had improved considerably and the two parts of divided Germany were soon to be reunited. All those changes offered possibilities for new forms of co-operation and for improving the peaceful relations between States, not only in Europe, but throughout the world.
- 131. The energy sector was one area in which European countries should co-operate more closely and pool their resources to a greater extent than before. In June, his Government had proposed to the European Council in Dublin the establishment of a European energy community. Just as the establishment of the European Coal and Steel Community after the Second World War had become the symbol and instrument of reconciliation and renunciation of war, the establishment of a European energy community could help to prevent new walls from dividing Europe again.
- 132. In other parts of the world, the chances of settling long-standing conflicts and differences had also improved. In southern Africa, Namibia had gained independence and new policies in South Africa offered the prospect of an end to apartheid and a solution to that country's problems which could facilitate regional co-operation. In South East Asia, the warring parties in Cambodia had reached a basic agreement as a result of the efforts made by the permanent members of the Security Council and the Indonesian Government. In Latin America, remarkable progress had been achieved on the road to democracy.
- 133. Nevertheless, the crisis in the Middle East, caused by Iraq's aggression against Kuwait, was a reminder that the maintenance of international peace and security could not be taken for granted. However, the collective efforts made by the international community to restore peace and security in

the Gulf were impressive. His country entirely supported what the Director General had said in his statements to the Board of Governors and at the opening of the General Conference on the subject of technical assistance to Iraq and believed that he had taken the steps required by the circumstances and by the Security Council resolutions adopted under Chapter VII of the United Nations Charter.

- 134. That encouraging and positive development highlighted once again the importance of the Agency's activities in the areas of peace, disarmament, arms control and co-operation. His country attached great importance to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the 1990 NPT Review Conference. Despite the initial optimism and the achievements with respect to the implementation of various articles of the Treaty, including Article VI, the Review Conference had been unable to agree on a final document. Although that was disappoint—ing, the Review Conference had nevertheless proved to be extremely useful. The participants in Geneva had found common ground on a number of points and it was on that basis that the Agency also should continue its work. As in 1985, fundamental agreement had been reached in the Review Conference on all aspects of direct relevance to the Agency.
- 135. Recent facts underlined once again how important it was to implement and improve the Agency's safeguards system in order to prevent any further proliferation of nuclear weapons, to increase mutual confidence between nations and to promote the peaceful use of atomic energy. His delegation noted with satisfaction and accepted the conclusion of the Safeguards Statement in the Annual Report that in 1989, as in previous years, no safeguarded nuclear material had been diverted for non-peaceful purposes.
- 136. It was necessary to continue to improve the effectiveness and efficiency of safeguards, and in that connection, he recalled two recommendations in the draft final document of the Fourth NPT Review Conference, on both of which there had been consensus and which called on the Agency to carry out studies. The first recommendation related to questions which might arise regarding the commitment of certain States party to NPT to the Treaty's non-proliferation objectives. The Review Conference had noted that there was

no experience with special inspections as outlined in Articles 73 and 77 of document INFCIRC/153 and that it would welcome a study by the Agency of the possible scope, application and procedures of such inspections, including their implications for the information requirements and policy of the Agency. His delegation urged the Director General to carry out such a study. The second recommendation was a call for the wider application of safeguards to peaceful nuclear facilities in nuclear-weapon States. The Review Conference had invited the Agency to consider the implementation of a scheme under the nuclear-weapon States' agreements consisting of full reporting in combination, where appropriate, with verification based on randomization. His delegation also urged the Director General to carry out such a study. In that connection, his Government welcomed the offer made by the Soviet Union to increase the number of reactors under its voluntary-offer safeguards agreement with the Agency.

- The regrettable lack of agreement in Geneva had not shaken his 137. country's conviction that the NPT was the most effective instrument for preventing the spread of nuclear weapons. His delegation welcomed the accession to the Treaty of other States, such as Mozambique. It also welcomed the more positive attitude with regard to the Treaty reflected in the paper presented by some observers to the Review Conference. It noted with much interest the statement made by Argentina and Brazil that full implementation of the Tlatelolco Treaty was currently the subject of an active and intense exchange of views among interested parties. It urged countries of the Middle East to enter into similar co-operation agreements on the peaceful application of nuclear energy and non-proliferation and noted with interest, in that connection, the comments made by the Director General in his opening state-It deplored the fact that South Africa had not yet acceded to NPT, but welcomed with much interest the statement made by the South African Minister for Foreign Affairs on 17 September. It urged all countries in southern Africa to become party to the Treaty without further delay.
- 138. It was his country's policy to require full-scope safeguards in a recipient country as a condition for new nuclear exports. Furthermore,

the NPT Review Conference had made important progress towards a consensus that the acceptance of full-scope safeguards by recipient countries should be a condition of supply. Despite differences of view between Agency Member States on some aspects of non-proliferation policy and the NPT, there was undeniably a common area of political and economic interest between States party and States not party to NPT and between traditional and new nuclear suppliers. His delegation believed that there was justification for the Committee on Assurances of Supply to resume its formal meetings without delay. Almost all States accepted the need for effective practical non- proliferation measures and themselves required that nuclear material or equip- ment which they exported should be subject to safeguards. It was important to recall that the Director General had the previous year requested all suppliers to ensure that exported nuclear material or equipment was subject to Agency safeguards and to inform the Agency in a timely manner of all relevant intended exports and actual shipments.

- 139. The Fourth NPT Review Conference had paid more attention than earlier review conferences to nuclear safety, recognizing its vital importance for the future of nuclear energy. For the same reason the Board of Governors had decided to hold a special conference on nuclear safety in 1991. Since the Chernobyl accident in 1986, nuclear safety had received increased attention, and it was appropriate for the Agency to re-evaluate the situation in the affected region. His Government, which had also offered to implement a bilateral co-operation programme with the Soviet Union on the consequences of the Chernobyl accident, awaited with interest the results of that evaluation. It also welcomed the Agency's activities on the evaluation and improvement of the safety of ageing reactors, particularly WWER-440 reactors, and had offered a contribution of US \$150 000 for the financing of those activities as a demonstration of its interest in them.
- 140. International co-operation between countries in Western, Central and Eastern Europe in the area of nuclear energy, especially with regard to safety, was a vital component of the European energy community proposed by his country's Prime Minister in Dublin, and energy questions should have an

important place in the United Nations Conference on Environment and Development to be held in 1992. The role of energy production in sustainable development was of primary importance. However, a sustainable energy path had not yet been found. Nuclear energy was not the solution, but it could certainly be part of the final solution. The conference on nuclear safety in 1991 and the Helsinki symposium should provide the elements of the Agency's contribution to the 1992 United Nations Conference on Environment and Development.

- 141. The Netherlands had decided to leave the nuclear option open for the future. Additional research started after Chernobyl was continuing, and an additional research programme had been approved to preserve the country's nuclear know-how and infrastructure.
- 142. Technical co-operation was the third vital element of the Agency's mandate. His Government had pledged to pay its share of the target, amounting to nearly \$800 000, to the Technical Assistance and Co-operation Fund in 1991, and it would continue to finance the co-ordinated research programmes on the productivity and health of African livestock. His country did not object to technical assistance being financed from the Regular Budget, since that would clearly show the importance of the Agency's work for developing countries.
- 143. All States had an interest in the safe and peaceful development of nuclear energy. All States were therefore entitled to full membership in the Agency in accordance with its Statute. The Netherlands would continue to defend that principle of universality. In conclusion, he expressed his Government's gratitude and admiration to the Director General and his staff for the exemplary manner in which they had conducted the Agency's affairs.
- Mr. SMALL (Ireland) associated himself with the statement made by the delegate of Italy on behalf of the 12 Member States of the European Community and recalled that, at the previous session of the General Conference, his delegation had expressed his Government's concerns at the idea of promoting the role of nuclear energy as a solution to problems of pollution and global warming. The international debate on those issues was going on in other forums, and his Government's concerns, which were shared by many other

States, remained unchanged. More recently, the situation in the Middle East had affected and threatened oil markets and thereby introduced another element of uncertainty into energy supply systems. Difficult as it might be to find solutions to all those problems, both environmental and political, his Government convinced of the view that large-scale and widespread recourse to nuclear energy was not an acceptable solution in view of the serious health and environmental risks which were intrinsic to the nuclear industry. The analysis and conclusions presented on that subject in the report of the World Commission on Environment and Development were still valid.

- 145. The question of safety and risks of serious accidents with transboundary implications was still at the heart of the nuclear question. His
 Government fully recognized and respected the considerable efforts made by the
 Agency to promote nuclear safety. It had supported the expanded safety
 programme which the Agency had undertaken after the Chernobyl accident.

 During 1990, his country, in its capacity as President of the European
 Community, had been pleased to propose, on behalf of the Community's
 Member States, the holding by the Agency of a conference on nuclear safety in
 September 1991, and it looked forward to the deliberations and conclusions of
 that conference, which it hoped would make a timely contribution to
 determining the nuclear safety agenda for the following decade.
- 146. His delegation stressed once again that nuclear countries had to recognize the legitimate concerns of their non-nuclear neighbours and that, accordingly, operators of nuclear power plants should respect the highest standards at all stages of their activities, from siting and construction to operation and decommissioning. That was equally valid for all aspects of final disposal of nuclear waste. The NUSS codes were an appropriate minimum standard for application by Member States within the context of their own national standards, and that should be formally confirmed by countries with nuclear programmes.
- 147. In that context, he reiterated that it would be extremely useful to have independent reviews of Member States' regulatory systems on a voluntary basis by teams of Agency experts and along the same lines as OSART missions.

Because of various national factors, it was inevitable that structures and procedures would be different from one country to another and it was therefore necessary to ascertain whether that had implications for nuclear safety. His country supported initiatives to gather as much information as possible on areas where regulatory practices differed and to use that information to promote consistency among regulatory approaches to common safety objectives. The holding of specialist meetings of regulators could make a useful contribution to achieving those objectives. However, there was also an urgent need for peer reviews. A new and real openness was needed to improve safety and verify that it was in keeping with present and future requirements. Peer reviews could be undertaken by teams of experts put together by the Agency at the request of Member States. In requesting such reviews, the regulatory authorities of Member States with nuclear power programmes would clearly demonstrate to the international community their commitment to nuclear safety. His country would press for such an initiative at the conference on nuclear safety planned for 1991.

- 148. Any discussion of nuclear safety clearly had to consider the question of damage resulting from an accident, including the problems of liability and compensation. The Working Group and the Standing Committee on Liability for Nuclear Damage had met a number of times under the very able chairmanship of Ambassador van Gorkom (Netherlands), and the Irish delegation welcomed the progress which had thus far been made. It believed that a comprehensive liability regime was well overdue and hoped that substantial progress could be made at forthcoming meetings.
- 149. During the previous year, the question of nuclear safety and radiation protection had been evaluated and had given rise to animated debate in many different forums. Competent international bodies such as UNSCEAR and the ICRP had recognized that the radiation risk coefficient should be revised upwards to take into account developments in scientific knowledge. Despite the doubts and uncertainties which Member States had expressed on that subject, his country was convinced that that was fully justified if, as seemed likely, the current individual dose limits for workers and members of the public had to be

reduced. His delegation hoped that the matter would be extensively discussed and that recommendations made by the ICRP the following year would meet with a positive response.

- 150. His delegation strongly supported the activities which were under way in the co-ordinated research programme on radon. That natural source of radiation continued to pose a serious problem and contributed significantly to the average annual dose throughout the world. Accordingly, his delegation was in favour of accelerating and extending radon research and believed that, given the increasing significance of that work, the Agency should invest more resources in it.
- 151. Ireland encouraged the Agency to maintain the contacts established with the Soviet authorities after Chernobyl and particularly welcomed the co-operation in the epidemiological studies, the treatment of patients, the taking of countermeasures and the transfer of studies.
- 152. A solid foundation of knowledge had already been established in nuclear safety, to which the Agency had made a significant contribution, but much remained to be done, particularly in the area of human error, the principal factor behind incidents which might lead to accidents.
- 153. The Fourth NPT Review Conference had completed its work a few days previously in Geneva, and his delegation, a strong and unconditional supporter of NPT, regretted that the participants in the Conference had been unable to agree upon a final document. Nevertheless, his delegation was convinced that the comprehensive review which had taken place would strengthen both the NPT and the commitment of States parties to it. Those States intended to build on the basis of the consensus reached at the Conference on a large number of issues so as to ensure the continued viability of NPT and a successful meeting of the States parties in 1995.
- 154. His delegation had been particularly struck by the degree of consensus reached in Geneva on matters of great importance for the peaceful uses of nuclear energy. The fact that all the parties to NPT had agreed to urge nuclear suppliers to make their supplies conditional on full-scope safeguards

was historic. His delegation was also pleased with the importance which had been given at the Conference to nuclear safety issues and in particular to the need for international co-operation in that area. It hoped that, as a follow-up to the Review Conference, the Agency would seek further ways of enhancing that co-operation.

- 155. Ireland welcomed the growing number of signatories to NPT and urged those countries which had not yet adhered to it to consider doing so. The existence of a universal and effective non-proliferation regime was the best way of ensuring international peace and security. His delegation accordingly appealed to signatories which had not yet done so, in particular Member States having significant nuclear programmes, speedily to conclude a safeguards agreement in conformity with Article III of the Treaty. The voluntary-offer safeguards agreements already in force with the five nuclear-weapon States contributed substantially to achieving the objectives of NPT. However, all civil facilities in all non-nuclear-weapon States should be under safeguards.
- 156. His delegation fully supported the efforts made by the Department of Safeguards to improve the effectiveness and efficiency of safeguards as well as to expand their coverage. It encouraged the Agency to consider the implementation, under agreements with nuclear-weapon States, of a system combining full reporting with where appropriate verification based on randomization.
- 157. His delegation paid tribute to all those who had been involved in the impressive technical assistance programme implemented by the Agency in 1989 and described in the Annual Report, a programme which his country had been glad to contribute to and to benefit from.
- 158. Lastly, his delegation fully associated itself with the remarks made by the delegate of the Netherlands with regard to the suspension of technical assistance to Iraq and strongly supported the action taken by the Director General.
- 159. Mr. LASERNA-PINZON (Colombia) said that the circumstances and events which made up the world's present historical situation had been

referred to and analysed during the current session, particularly in the brilliant opening address by the Director General. Consequently, rather than looking at new facts, it would perhaps be useful to come to some conclusions and to highlight trends which called for decisions and measures to be taken. The historical facts which had given birth to the Agency would serve as a point of departure for some of those conclusions. The author of an article had wondered whether the world had come to the end of its history. The answer was perhaps that it was the end of an era, the end of well-established balances which had made up a certain "life style" for centuries. Could it be that that historical change had its origins in science's access to atomic phenomena?

- 160. The importance of the discovery of nuclear processes for the awakening of a new perception of the world lay less in the emergence of new sources of energy and new ways for man to dominate nature than in the creation of a global scenario which called for an intelligent and vigilant solidarity between people and between man and nature, or, more precisely, with the whole cosmic balance which made life possible. Perhaps without knowing it, the world was approaching a stage where facts could not be judged in isolation, but had to be seen in a global context.
- 161. The need to globalize, to universalize the different aspects of existence, as well as the need to go from the particular to the general and from the regional to the global and not only in matters of climate was something new in the history of Homo sapiens. The existential—institutional mode ushered in by the atomic era and its applications for both war and peace was equally unaccustomed. The paradox was that the microcosm had engendered a radical transformation of the conditions not merely of life but of survival in the macrocosm.
- 162. That unwanted change of scale was at the root of the crisis of adaptation which the world was currently going through and which went back to the beginning of the so-called modern age, an age which had commenced with the radical change in the scale for measuring the universe brought about by the cosmology associated with the name of Newton.

- 163. The current crisis stemmed from the globalization of a situation which had been known previously only at group level, and for which institutions were therefore not prepared. The world was becoming aware that it was not only possible to respond to that crisis but also that there was an urgent need to do so, as had been said at the Helsinki meeting with regard to events in the Gulf. The nuclear revolution was explosive not only because it had given rise to phenomena associated with nuclear explosions for peaceful and other purposes, but also because it had exploded the order which had governed the Newtonian cosmos, not on the intellectual but on the material plane.
- Though it was necessary to wonder about facts, their sequence and their 164. origin, priority had to be given to asking where the world was going, towards what historic scenario, under the impulsion of the Faustian energy of subatomic phenomena. It was John von Neumann who, with an admirable and universal creative vision, had explicitly posed that disturbing question, or at least glimpsed the parameters of a possible answer. That physicist and mathematician had known well what he was talking about since he had contributed much to the understanding of both atomic and mental and institutional processes. In an article published in 1955 in Fortune magazine, he had anticipated the crisis of the 1980s while at the same time proposing a diagnosis for analysing it. He had explained that the entire world was in the throes of a rapid process of maturation towards a crisis which was attributable neither to fortuitous events nor to human errors, but to the fact that the environment in which technological progress necessarily took place had two characteristics: it was both undersized and underorganized. Any attentive reader of that noteworthy futuristic but realistic study must come to the conclusion that unless reorganization succeeded in time - and the author had not been very optimistic on that point since he knew the limitations of tribal consciousness as opposed to world consciousness - there would be repercussions beyond anything thus far experienced, leading to the destruction of the balance of the biosphere which was essential to survival. The author's vision of the environmental crisis, including the greenhouse effect, in his article entitled "Can We Survive Technology?" deserved further elaboration.

- He would indicate briefly how his country planned to respond to the 165. need to end the underorganization which characterized the world. Colombia, and other countries members of the Andean Group whose heads of State had met in Machu Picchu on 22 and 23 May 1990 had declared that, in preparing and implementing their respective economic policies, the appropriate measures should be taken to ensure that those policies were compatible with the obligations stemming from the process of integration. As many delegations had reaffirmed at the General Conference, they had highlighted the importance of atomic energy for the development of the Andean countries. It would consequently be highly desirable and beneficial for the Agency to meet with the Board of the Cartagena Agreement and with the Andean Development Corporation with a view to establishing the necessary links to promote development projects for countries in that region. The Agency was therefore cordially invited to take the measures it considered appropriate to carry out that task, which fitted in so well with the process of globalization characterizing the current era.
- 166. At a national level, his country was engaged in a process of reassigning its resources devoted to nuclear research, as it was fully aware that both the technology and the national and international context had changed. That opened up new promising perspectives for research and development activities in industry, energy, agriculture and health. The new legal order which was being established provided for close collaboration between public bodies, the private sector and the universities on nuclear activities, in accordance with available resources and national interests and taking into account, as always, co-operation with the Agency and its stated and pursued objectives.
- 167. Mr. BOBAK (Trade Unions International of Workers in Energy TUIWE), after warmly thanking the Agency for giving him the opportunity to attend the thirty-fourth session of the General Conference as an observer, said that the Agency's activities to promote the peaceful uses of nuclear energy were of great interest to the TUIWE and all its affiliated organizations throughout the world. The TUIWE greatly appreciated the efforts made

in that direction by the Agency's Member States and considered that the work done by Agency experts on the Code of Practice on the International Transboundary Movement of Radioactive Waste and on measures to strenthen international co-operation in nuclear safety and radiological protection was of great importance.

- 168. The generation of nuclear power involved special technologies which, above all, called for assurances of absolute safety. In that connection, he recalled the dreadful consequences of accidents such as the disaster at the Chernobyl nuclear power plant, which had affected thousands of people. The fact that the Soviet authorities and trade unions had just adopted four years after the accident a programme of action for the years 1991-95 to deal with the ecological situation, which was making life impossible for the inhabitants of the region, showed the seriousness of the consequences which continued to be felt by the people affected. More than four million people lived in the contaminated area and about 600 000 of them who had been involved in clean-up operations after the accident were still suffering from the effects of the radiation to which they had been exposed. It was thought that, in addition to the 360 000 inhabitants who had been evacuated in the months following the explosion, another 200 000 should still leave the region.
- 169. The TUIWE understood the significance of the data on the situation published by the Agency's experts and much appreciated the role the Agency played in providing an accurate picture of the accident, which had been given a great deal of useless publicity by the press. The media had indeed published sensational and alarming information on the contamination of land in Byelorussia, on the many cases of the cancer called Chernobyl AIDS, on the disastrous condition of the forests, where the trees were changing colour, on vegetation suffering mutations, etc.
- 170. As it had repeatedly stated, the TUIWE shared the view of scientists who considered that the future of mankind lay in the development of nuclear power with perfect mastery and control to guarantee safety and confidence. The TUIWE was firmly convinced that the opponents of nuclear power, who were still very numerous and who were winning popular support in various regions of

the world, would abandon their intransigent position once those conditions were fully met in all the countries concerned.

- 171. Although many studies had been carried out as to causes of the Chernobyl accident, too little had been done for the inhabitants who were suffering from the consequences of the accident. It was no coincidence that the trade unions were closely involved with those problems, even on a purely technical level. The international scope of the accident made necessary the help of international specialists and in particular of the Agency, which was the body most competent to play an effective role in that area.
- 172. The TUIWE was organizing an international conference of trade unions of workers in energy which would be held from 11 to 15 December 1990 in Paris. Problems related to energy and nuclear power had a priority place on the agenda. Participants would pay the greatest attention to the results of the current session of the Agency's General Conference, and he was convinced that, for its part, the Agency would show interest in the TUIWE conference in the mutual interest of the two organizations.

STATEMENT BY THE DELEGATE OF IRAQ

173. Mr. AL-KITAL (Iraq) rejected the remarks made by the delegate of the Netherlands, in particular with regard to Iraq. He wished to make it clear that his Government had never associated itself with acts of aggression against the Netherlands whereas that country, as the news showed, was involved in aggressive activities against Iraq.

The meeting rose at 7.20 p.m.