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RECORD OF THE FOURTH PLENARY MEETING

Held at the Neue Hofburg, Vienna, on Thursday, 25 September 1986, at 10.30 a.m.

President: Mr. MANOUAN (Côte d'Ivoire)

later: Mr. WALLMANN (Federal Republic of Germany)

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^[*] A provisional version of this document was issued on 4 December 1986.

^[**] GC(SPL.I)/1.

ARRANGEMENTS FOR THE CONFERENCE

- (a) ADOPTION OF THE AGENDA AND ALLOCATION OF ITEMS FOR INITIAL DISCUSSION (GC(SPL.I)/1)
- 1. The <u>PRESIDENT</u> said that the General Committee, at its meeting held the previous day to consider the provisional agenda of the special session, had authorized him to report that it recommended that the agenda consist of all the items on the provisional agenda set forth in document GC(SPL.I)/1 and that those items be taken in the order in which they appeared in that document.
- 2. The General Committee further recommended that the items be allocated for initial discussion as indicated in the provisional agenda, subject to the understanding that certain specific matters requiring detailed consideration might, if necessary, be referred to the Committee of the Whole and that the decision would be taken by himself in consultation with his colleagues on the General Committee. In that connection, it appeared from the long consultations which he had held the previous evening about the various texts and proposals concerning the final document of the special session that a large majority was in favour of that matter being considered first by the Committee of the Whole.
- 3. He therefore suggested that the draft contained in document GC(SPL.I)/4, which enjoyed wide support at the Conference, as emerged from the consultations he had held with a representative group of Member States, should be referred to the Committee of the Whole for initial discussion, together with the two proposals made by Denmark and Luxembourg on that draft (documents GC(SPL.I)/5 and 9) and the two draft resolutions submitted by Mexico on behalf of the Group of 77 (documents GC(SPL.I)/6 and 7).
- 4. If there were no objections, he would assume that the Conference approved the General Committee's recommendations on the agenda of the special session and accepted the suggestions which he had just made.
- The General Committee's recommendations and the President's suggestions were accepted.

(b) CLOSING DATE OF THE SESSION

- 6. The <u>PRESIDENT</u> informed the Conference that the General Committee recommended fixing Friday, 26 September as the closing date of the special session. If there were no objections, he would take it that the General Committee's recommendation was acceptable to the Conference.
- The General Committee's recommendation was accepted.

MEASURES TO STRENGTHEN INTERNATIONAL CO-OPERATION IN NUCLEAR SAFETY AND RADIOLOGICAL PROTECTION (GC(SPL.I)/2 and Corr.1, 3, 4, 5, 6, 7 and 9) (resumed)

- 8. Mr. ZANONE (Italy) said that the problem of the safety of nuclear facilities and nuclear activities after the Three Mile Island accident and especially after that at Chernobyl was now making it necessary for the international community to seek every means for meeting the expectations of world public opinion, which demanded better guarantees and accurate and early information in that area.
- 9. During the first stages of the accident there had been a delay in the transmission of information about the nature of the event. That delay had unfortunately created difficulties for governments and the institutions responsible for the safety of populations in various countries. It had nevertheless to be recognized that at the meeting held at the end of August the Soviet delegation had made available copious information on the characteristics of the facility, on the dynamics of the accident and on its consequences.
- 10. That meeting had also revealed the considerable differences which existed between the damaged Soviet reactor and other reactor types, as regards both the facility itself and its management. It had been noted in that connection that it would be desirable for the implications of such diversity from the safety standpoint to be discussed in depth with a view to international agreements.
- 11. It was essential, therefore, that the process of verification initiated after Chernobyl should not remain isolated and that the international community, which was aware of the universal nature of the problem of nuclear safety, should persevere in the effort to give effect to all the necessary initiatives.

- 12. Numerous proposals had been made in the Agency regarding the various aspects of technical and scientific collaboration, and they should, in his opinion, be implemented without delay. Those aspects included: development of experimental and technical research on accidents at existing reactors and improvement of the man-machine interface; development of protection criteria for personnel and for the population, of intervention techniques when accidents occurred, and of decontamination methods; improvement of the international legal framework concerning civil liability in the nuclear sector.
- 13. Another area where a common action plan should be developed was radiation protection in general, involving medical intervention techniques (in cases of acute exposure), mechanisms of radioactivity transport in the environment and effects of low-level radiation.
- 14. While those initiatives were highly pertinent, his delegation considered that, in view of the international character and importance of the problems at issue, priority should be accorded to harmonizing the safety rules and criteria applied in various countries to the design, construction and operation of nuclear facilities. The Chernobyl accident had shown that even the most stringent standards were of no value if equally stringent standards were not applied in neighbouring countries and, more generally, at world level.
- 15. Italy believed that the Agency's safety standards programme should be developed urgently. It fully supported the initiative taken by the Agency on the subject in convening a meeting of experts from Member States towards the end of the year.
- 16. Nuclear safety was the responsibility of each State and the activities relating to it could not be delegated. Nevertheless, it was now necessary for all countries to undertake to adopt safety standards which were not less stringent than those established internationally.
- 17. The safety standards adopted in Italy for its power plants in operation, under construction or at the design stage were, in his opinion, broadly satisfactory. However, as Chancellor Kohl had done in the case of certan power plants in the Federal Republic of Germany, the Italian Government was requesting the Agency to carry out safety reviews at the operational Latina, Trino 1 and Caorso power plants, and at the Montalto di Castro and Trino 2 plants under construction. Italy hoped, at the same time, that all

countries would declare their willingness to open their power plants to the Agency.

- 18. With respect to the two draft conventions which the special session was called upon to consider and approve formally, his Government fully endorsed the draft text on emergency assistance which the Board had transmitted to the General Conference.
- 19. Regarding the draft convention on early notification, he wished to confirm that Italy, which had been a member of the drafting group and had not joined the consensus at the meeting of governmental experts, was not satisfied with the proposed draft. It continued to maintain that the wording of Article 1 on the scope of application fell short of current requirements, both because the obligation to notify was expressed in terms which were too vague and because the wording was too restrictive the obligation to notify an accident would depend on the exclusive judgement of the country where the accident occurred regarding the likelihood of releases of radioactive material with transboundary effects and the likelihood of significant radiological dangers for another State.
- The Italian delegation considered that the time lag and the unavoidable 20. margin of uncertainty involved in those evaluations was not in keeping with the main objective of the convention, namely to ensure prompt transmission of information. It was on those grounds that, during the discussions in August, the Italian delegation had requested that the obligation to notify should cover, independently of any other evaluation, all accidents which by giving rise to significant radioactive releases created emergency situations outside a facility. His delegation considered that it was necessary to reach agreement soon on criteria for determining the radiological safety significance of a nuclear accident, and it intended to press for action in that direction. The Chernobyl accident had clearly demonstrated the importance of early information; there was no doubt that in case of an accident one of the essential conditions for satisfying public expectations in the matter of nuclear safety was to adopt, as early as possible, emergency measures to protect populations.
- 21. His Government regarded the conventions on emergency assistance and on early notification as a first step in the right direction in order to

strengthen international co-operation in a sensitive area where real solidarity among all countries was called for. However, it was only a first step since, in his Government's opinion, all accidents with off-site radiological effects ought to be notified, even if those were not necessarily transboundary effects.

- Mr. CONSTANTINI (Argentina) observed that the special session of the General Conference was a historic event, not only because its conclusions and recommendations would to a large extent determine the immediate future of nuclear power as an energy source for mankind but also because all the delegations present were moved by a common concern to learn as much as possible from the tragic accident at Chernobyl, for the benefit of the whole international community and in order to minimize such risks in the future.
- 23. Argentina, for its part, applied to its nuclear facilities an ambitious nuclear safety philosophy with quantitative safety objectives. For that purpose it made more efforts than would be required if it only applied safety criteria which were still in use in several developed countries, for example, for transboundary contamination and global dispersion of radioactive effluents. Quantitative analyses of nuclear safety had convinced his country that man was the weak link in the safety of the man-machine system; it was therefore vital to engineer devices into that system in order to reduce the probability and to mitigate the consequences of human errors, and to optimize operator training.
- 24. Moreover, Argentina fully supported the Agency's activities in that area under specific provisions of its Statute. That support was not new, nor was it motivated by the Chernobyl accident. It consisted of important contributions by Argentine scientists and technicians to the development of the sophisticated set of Agency recommendations on radiological protection and nuclear safety, which had resulted in more than one hundred volumes in the Safety Series.
- 25. In that regard, his country had always maintained that the Agency's nuclear safety activities should be carried out at the highest scientific level without being influenced by political circumstances or passing moods of public opinion. That was a sine qua non for the Agency's activities to enjoy due respect and to have the necessary openness.

- 26. It was in that general context that he wished to comment on the documents submitted for consideration by the General Conference and on the events which had occurred in the Agency in recent months. The two draft conventions contained in document GC(SPL.I)/2, which had been prepared in record time, were the product of laudable efforts, in which Argentina was proud to have actively participated.
- 27. Unfortunately, Argentina felt frustrated by the fact that the scope of application of the convention on early notification had been limited by the refusal of certain nuclear-weapon States to extend the basic commitment to cover all nuclear accidents. Whether Article 3, inserted at the last moment as a compromise solution, would mitigate that deficiency would depend to a great extent on the statements which it was hoped the Member States with nuclear weapons would make at the General Conference, clearly expressing their willingness to notify immediately and to provide essential information on all nuclear accidents, including those involving nuclear weapons, which might have signficant transboundary radiological consequences. His Government would certainly take those statements into account in deciding whether the serious limitation in the scope of the convention was thereby satisfactorily remedied.
- 28. On the same subject he wished to point out that on 29 July 1986 his country and the Federal Republic of Brazil had signed a protocol on the provision of prompt information and reciprocal assistance in case of nuclear accidents, undertaking to work out within a mandatory period of six months the necessary procedures for its implementation. That promising event at regional level was a clear proof of Argentina's firm and unreserved support for the purposes and spirit which had inspired the drafting of the two conventions, in spite of its concern at the aformentioned deficiency and at others of lesser importance, which it had pointed out at the appropriate time and place.
- 29. Referring to the report of the Post-Accident Review Meeting on the Chernobyl accident (document GC(SPL.I)/3), he once again congratulated the delegation of the Soviet Union on the quantity and quality of the information supplied on the accident, without which the report could not have been prepared. He also wished to express his admiration for the high scientific and technical level of the review meeting. It was the first time that such comprehensive information on a nuclear accident had been discussed in such depth in such a high-level technical forum.

- 30. The report was highly satisfactory and would be of great use in the future. His delegation was of the opinion that the recommendations made in the report after a thorough consideration of various apsects of the Chernobyl accident should be specially taken into account in adjusting the Agency's expanded nuclear safety and radiation protection programme and in all future activities of the Agency on that vital sector of the nuclear field. In his view, the high price paid by mankind in gaining that tragic experience imposed a moral obligation on all to learn as much as possible from the accident and to apply those lessons fully and unhesitatingly.
- 31. Lastly, the draft final document submitted for consideration at the special session expressed the Conference's general feeling in a balanced and precise manner. Although it might be improved, his delegation was willing to endorse it and to accept amendments which did not alter its substance or its delicate balance.
- 32. Indisputably, nuclear energy was already and would increasingly be the preferred energy alternative in the following century. The cost to mankind of its use and its degree of acceptance by public opinion would depend to a great extent on the work of the General Conference. Bearing that in mind, the participants in the special session should leave aside all selfishness and reservations and face up jointly to the ardous task of ensuring for mankind the benefits of nuclear energy without prejudice and with a minimum of risks.
- 33. Mr. SCHLUMPF (Switzerland) also wished to underline the importance of energy for man and the absolute need for international collaboration in the peaceful utilization of nuclear energy. The serious accident at Chernobyl was a proof thereof the consequences of such an accident did not stop at national frontiers. It was essential for all countries to take into account the very useful work and the basic documentation of the Agency, whose services should be strengthened.
- 34. Close and permanent collaboration should be established in the main sectors of safety. The standards for construction of nuclear power plants should correspond to the highest possible requirements of safety according to the latest advances in science and technology, and should comprise the technical safety measures for example in the form of effective containments necessary to resist any perturbations. As for operational safety,

equal importance lay in the selection, training and further training of personnel and in an adequate organization of plant operation. Emergency measures were intended, first of all, to protect human life and health, and animals, plants and foodstuffs. Those measures were inconceivable without mutual assistance in case of accidents. Lastly, prompt and full information was of primary importance, and should cover all regions likely to be threatened.

- The conventions on early notification and emergency assistance were global legal instruments of unquestionable value, and represented major progress. His delegation noted with satisfaction that the scope of application of the early notification convention covered all nuclear facilities, both civil and military. He regretted, however, that it was only voluntary in case of accidents relating to nuclear explosives and the testing thereof. For that reason he appealed to nuclear-weapon States to declare their willingness to notify, in accordance with the convention, States which might be threatened by such an accident. His delegation also observed that the time of notification and the radioactivity level triggering such notification were subject to a wide margin of interpretation. It therefore suggested that notification should take place as long as possible before radioactivity entered the threatened State and that the concept of "radiological safety significance" should be quantitatively harmonized. all events, he had been authorized by his Government to sign the two conventions, subject to ratification by Parliament.
- 36. The application of radiation protection standards had made the problem of health the foremost concern in the public mind, the reason being that different States applied different criteria for implementation of protective measures against radioactive contamination. Better harmonization of the decision-governing criteria at international level was highly desirable. The Swiss Government had consequently launched an international initiative. It wished to suggest to the international community that a scientific basis should be prepared for the purpose of bringing into line, at international level, the concepts of protection in case of radioactive contamination. By that initiative it hoped to make a rapid and effective contribution to

resolving one aspect of the problem, namely international harmonization of criteria for applying protective measures in the food and agriculture sector in order to limit the risk due to long-term effects (cancers) in cases of transboundary radioactive contamination. Switzerland had communicated its intention to the World Health Organization (WHO), and had suggested that it jointly hold an expert meeting in Switzerland in the spring of 1987 to discuss those matters and to provide the basis for making a recommendation on the subject. In that connection he noted with satisfaction that the Agency intended to work in that field in collaboration with other international organizations.

- 37. Lastly, liability in case of an accident, especially civil liability for the consequences of an accident, called for a uniform system covering all the legal and economic aspects of the matter. That liability should be of causal nature, independent of any proof of guilt. Moreover, it should cover the whole foreseeable damage without any cost to those having suffered it. He fully supported the stand taken in the matter by the head of the delegation of the Federal Republic of Germany and others. It was indeed an important problem. Switzerland had enacted legislation to that effect as long ago as 1983. It approved all efforts made in that direction, including bringing the Paris and Brussels Conventions into line with the Vienna Convention.
- 38. His country was aware of the scope of national sovereignty and However, it was also necessary to respect the international character of the problems relating to nuclear power generation and of the possible consequences of accidents. National sovereignty should not be allowed to impede essential international co-operation. Throughout the world a sufficient, rational and environmentally safe supply of energy was necessary in order to ensure the well-being of man and the quality of life. In that context nuclear energy would occupy an important place tomorrow as it did today. Man, the environment and the bases of existence must therefore be protected. That was a long-range, historic responsibility and obligation. Switzerland, a small State in the heart of Europe, with its high population density, attached the greatest importance to the safety of power plants and to the management of the waste produced. For that reason it was prepared to collaborate in any way which would contribute to a joint victory over the problems faced by all.

- 39. Ms. DAHL (Sweden) said that the tragic event which had led to the convening of the special session of the General Conference confirmed once more that modern technology was acceptable only if full account was taken of its effects on health and on the environment. The risks were due not only to nuclear energy but also to other sources of energy, in particular fossil fuels. They were indeed related to all types of modern technology.
- 40. The sad fact was that the problem of the present time was not lack of knowledge but the lack of a political will to take advantage of new technologies in order to offset the wastage of natural resources, particularly in the energy field, and to clean up the environment. The experience already available about the unacceptable damage resulting from air pollution, from nuclear accidents which had occurred in both West and East, and catastrophes in the chemical industry such as those at Seveso and Bhopal, should prompt countries to have immediate recourse to efficient and clean technologies, and to strive to develop them in those sectors where they were lacking. It was necessary to accept responsibility towards present and future generations by using the knowledge and power which were available to bring about a change of direction.
- 41. It should not be forgotten that the ecological disasters which threatened the modern world resulted from the way in which the industrialized countries, where only a small proportion of the world population lived had developed and exploited wasteful and inadequate technologies. The world-wide adoption of those technologies would have incalculable results. It was certain that no one would be able or willing to pay the price for those, whether from the financial, health, ecological or social points of view.
- 42. The same applied to the energy sector. For example, the world must no longer by using inadequate or wasteful technology expose itself to risks from nuclear installations or releases from plants burning fossil fuels. That was why Sweden did not accept the assumption that the only choice was between the unrestricted use of nuclear power or of fossil fuels. Neither did Sweden believe that those were indispensable prerequisites to social and economic development. Already valid alternatives existed, and the first action to be taken in order to improve safety and the environment was to make use of them.

- 43. Following a referendum in 1980, the Swedish Parliament had unanimously decided to reduce to a minimum the use of fossil fuels and to phase out nuclear power in Sweden by the year 2010. That decision had been confirmed in 1985 and again in the present year by Parliament. Thus, Sweden had already succeeded in reducing its consumption of fossil fuels by 50%, and at the same time in bringing down, right in the middle of a period of economic growth and intense industrial activity, its total energy consumption to the benefit of both the environment and the Swedish economy. Sweden did not doubt that it would succeed in reaching those goals by the introduction of new environmentally acceptable energy techniques.
- 44. The Chernobyl accident had involved relatively serious radioactive fallout over parts of Sweden. Measures to mitigate the consequences thereof would have to be taken for many years to come. Those measures would cost hundreds of millions of Swedish kronor. But the most serious effects were of a human and social nature. All Swedes were deeply concerned, and many had experienced the consequences of the accident as a real problem in their daily life. Sweden was therefore already studying what conclusions should be drawn from the accident for its present energy programme, and whether the replacement of nuclear power should be accelerated.
- 45. Every country obviously had to take its own decisions on energy policy, a circumstance which would have to be borne in mind when drafting the final document of the current special session, the purpose of which was to agree on measures to increase nuclear safety and radiological protection. All countries would have to accept one basic condition, namely that the impact on the health of the population and on the environment of other countries had to be taken into account when discussing different alternatives to meet energy demands in the respective States. Each country had a responsibility to choose solutions to energy problems which met strict environmental demands and did not cause harm from which present and future generations would suffer.
- 46. The Agency's report on the Chernobyl accident was mainly based on the information presented by the authorities of the USSR, and further studies would be required to explain fully the sequence of events that initiated the accident. Her delegation welcomed the initiative to conduct such

investigations in collaboration with other countries. It urged all States to collaborate through the Agency and other international organizations, primarily the World Health Organization (WHO) and United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), for the purpose of making a more accurate estimate of the global impact of the accident.

- 47. The Swedish delegation noted with great satisfaction that it had been possible to prepare in a very short time the two draft international conventions now before the General Conference for adoption. The Swedish Government had decided to sign the conventions at the present session, and to submit them to Parliament for ratification when it reassembled in the following month. Until then, the convention on early notification of a nuclear accident would be applied provisionally. The same would apply to the convention on emergency assistance, with due regard to the need for certain legislative measures in that connection.
- 48. Those international conventions constituted a well-designed framework for strengthening international co-operation in that field. Her Government expected them to be supplemented in many cases by bilateral or regional agreements in order to regulate more detailed arrangements between neighbouring countries. In fact, her Government had already initiated discussions on such agreements with a number of countries in the area, in addition to the agreements that already existed for example between the Nordic countries. Those supplementary agreements should be based on an exchange of all data relevant from the nuclear safety point of view. The Swedish Government shared the view that every State had a fundamental right to demand such information from other countries and to call for adequate means of verification. Also, existing international agreements concerning liability for accidents which had transboundary effects needed to be improved, and all the countries concerned should accede to them.
- 49. Noting that, in spite of the work already accomplished by the Agency, there still remained much to be done in order to promote nuclear safety and to institute an effective safety regime, she recalled that at the beginning of May the Swedish Government had proposed a number of new tasks for the Agency, which should, inter alia, establish criteria and guidelines that could serve to

achieve the highest standards of safety in the design, construction, operation and maintenance of nuclear installations. In addition, the Agency should develop mechanisms for control and auditing if so requested. It should furthermore extend its data bank so as to include safety-relevant data on all nuclear installations, in particular data concerning accident prevention measures and consequence-mitigating arrangements.

- 50. The Agency should secure the effective participation of all Member States in the Incident Reporting System, and undertake post-incident studies at the request of interested Member Governments. The Agency should also take the initiative in establishing collaboration between all countries that had major resources for technical research and analysis in the field of nuclear installation safety. In particular, it should seek a wider agreement with the group of countries which had already established such collaboration under the auspices of the OECD's Nuclear Energy Agency.
- 51. The Agency should combine its efforts with those of WHO, UNSCEAR and other international organizations to establish without delay a permanent international observation and reporting system of radiological measurements in Member States. There was also need for a joint effort to establish additional intervention criteria, especially those of relevance to the transboundary effects of accidents.
- 52. The Agency should initiate a wider technical collaboration on the safety of nuclear installations, so that the latest developments could be implemented in all countries. From what was already known, it had to be concluded that, unless radical improvements in safety were made, the probability of a major accident in the next decade would remain higher than any country would regard as acceptable. That should encourage all States to put forth the maximum effort to improve safety.
- 53. It was important that the Agency should likewise intensify its efforts to promote the exchange of knowledge and experience concerning the man-machine interface and in particular the training of operators. That was a question which should be regarded with maximum seriousness. It was extremely dangerous and hence unacceptable to display arrogance and negligence in the face of modern technology. Such was the lesson which should be drawn from Three Mile Island and Chernobyl, from Bhopal and Seveso.

- 54. What could happen as the result of human error could also occur as a result of deliberate acts, whether military attacks or actions by terrorist groups. That was why it was of the utmost importance to prohibit military attacks against nuclear installations and to improve the physical protection of nuclear material.
- 55. Sweden, which was making every effort to achieve as high a standard of safety as possible in its own nuclear programme, was anxious that there should be no erosion of the liability of governments in that field. Countries that made use of nuclear technology should accept the highest possible standards of safety and adopt an open and frank attitude towards the international community.
- 56. Much of what Sweden had suggested in May was reflected in the revised programme on nuclear safety which the Board of Govenors had recently approved in principle. Other matters would call for a more thorough discussion in order to arrive at a consensus on the role of the Agency in the longer term. The Swedish delegation was therefore very satisfied that the Board had decided to establish an appropriate procedure to examine the consequences for the Agency's programme of extended co-operation in the field in question. Her delegation urged all Member States to join in a strengthening of their national policies and their co-operation on nuclear safety. Openness in safety matters was necessary in order to maintain confidence between States. It was therefore necessary to apply new principles such as would ensure safety for present and future generations.
- 57. In conclusion, she recalled that in the field of safeguards she had proposed at the twenty-eighth session of the General Conference that the utilization of nuclear energy for peaceful purposes in all States should be subject to Agency safeguards. It was of great satisfaction to her delegation that that principle had been approved by all the parties to NPT at the last NPT Review Conference. The analogy with other aspects of nuclear safety was obvious: it was only through international co-operation that it would be possible to build a safer world. In the Agency there existed an efficient and flexible instrument for that purpose.

Mr. Wallman (Federal Republic of Germany) took the Chair.

- Mr. LEE (Republic of Korea) said that nuclear safety was an essential aspect of the promotion of the peaceful uses of nuclear energy, and that the Chernobyl accident had shown that it was high time to strengthen international co-operation on nuclear safety and radiological protection, together with international and regional emergency preparedness.
- 59. The Republic of Korea had nine nuclear power plants with an installed capacity of 7650 MW, and its nuclear power programme was continuously expanding to meet the increasing demand for energy. His Government had therefore set up a national nuclear safety system applicable to all stages of projects, ranging from the selection of a site for a nuclear power station to the latter's decommissioning. The basic concept applied in the Republic of Korea, as in other countries, was not only to protect persons working on the site and neighbouring populations but also to reduce to a minimum the effects of radiation, as provided in the Korean Atomic Energy Law of 1958, which has been several times amended in order to keep pace with changing situation.
- 60. Under the Atomic Energy Law, a nuclear safety centre had been established in 1982, in order to take account of the increased scope of the Korean nuclear power programme and of growing public concern. The centre was responsible for preparing safety codes and standards, and also for carrying out evaluations of safety analysis reports submitted by the utility company; it likewise dealt with radiation protection, emergency preparedness and the inspection and audit of nuclear facilities. It conducted environmental impact studies both on-site and off-site, with special attention to the evaluation of radiation hazards. The centre had set up regional radiation monitoring stations.
- 61. The Republic of Korea likewise attached great importance to radiological emergency preparedness. At each site, a radiological emergency unit had been established and improved through emergency drills, which had been performed every two years by each installation, in co-operation with the Government, the utility and the local inhabitants.
- 62. At the time of the Chernobyl accident, the Government of the Republic of Korea had immediately taken all necessary measures to meet public concern. The Ministry of Science and Technology had quickly convened the existing

Radiological Protection Committee, and had formed two additional units under the Committee, working 24 hours a day and responsible on the one hand for responding to public demand and on the other to maintaining technical services such as radioactivity measurements and data analysis. That response system automatically went into action in radiological emergencies under the National Emergency Preparedness Plan.

- 63. Nuclear safety had now become a major concern throughout the world; that was to be welcomed, but the trend should not lead to a slowing-down of current activities in the peaceful uses of nuclear energy, because a stable supply of energy at reasonable cost was a necessity for all.
- 64. The Government of the Republic of Korea was ready to approve unreservedly the two draft conventions prepared by the governmental experts. In order to facilitate prompt action on early notification the Agency should immediately devise a precise reporting format for the purpose.
- 65. Many constructive ideas and recommendations had been presented at the Post-Accident Review Meeting. The Republic of Korea wished to congratulate the experts, the Agency Secretariat and the members of INSAG on their excellent work, and also the Soviet Union which had contributed valuable information. The ideas and recommendations in question should be embodied in the Agency's future programme.
- 66. The Republic of Korea was not yet able to state its position regarding expanded activities in the nuclear safety field, but it attached great importance to prevention. That was why his Government had always supported the Agency's activities in the safety field. In his delegation's opinion, the Agency should henceforth put the emphasis, in the safety area, on probabilistic safety assessment, the man-machine interface, operator training, and exchange of safety-related information and technology.
- 67. In conclusion, he expressed the hope that the participants in the present special session, combining their wisdom and their efforts, would find ways and means of promoting international co-operation on nuclear safety and radiation protection.

- that the international community should take action to prevent further accidents of the magnitude of Chernobyl and to minimize the probability of any nuclear accident in the future. The Agency had a central role to play in that field, since under the terms of its Statute, in particular Article III.A.6, it had the function of ensuring the safe use of nuclear energy, and, in particular, of establishing or adopting standards of safety for protection of health and minimization of danger to life and property. The nuclear accidents at Three Mile Island and Chernobyl had nevertheless shown that the full co-operation of the Agency with other international specialized organizations, in particular WHO, WMO, FAO and UNSCEAR, was essential.
- Regarding the Agency's activities in the field of nuclear safety, he 69. wished first to recall that his country had always attached great importance thereto. That had been attested by Iran's active participation, as a member of the Special Task Force of the Group of 77, in the consultations conducted by the Secretariat on the Agency's programme and budget in general and on its nuclear safety activities in particular. As the Iranian representative on the Administrative and Budgetary Committee had said in December 1985, the Iranian Government regretted the cuts in the resources and programme in the field of nuclear safety and radiation protection, particularly in the item "Safety of Nuclear Installations", where a decrease of up to 25% had been proposed. Those reductions no doubt reflected the wish to apply the zero-growth policy to promotional activities in general and to nuclear safety and radiation protection in particular. One should not jeopardize the safety and health of the world public and of the environment by saving a few thousands of the one hundred million dollars to which the Agency's annual budget amounted. After the Chernobyl accident and the special meeting which it had devoted to the matter, the Board of Governors had come to the same conclusion as that already reached by the Islamic Republic of Iran before the accident, namely that the programmes that had been cut should be restored and the existing nuclear safety activities expanded. As far as public health was concerned, the Agency safeguards and nuclear safety programmes should be treated on a practically equal basis.

- 70. While commending the Agency's Secretariat on the current nuclear safety programmes, the Iranian delegation considered that the Nuclear Safety Standards (NUSS) programme should be reviewed so as to ensure incorporation of the latest lessons learnt. The Agency should establish criteria and guidelines for achieving the highest standards of safety in the design, construction, operation and maintenance of nuclear installations. With the co-operation of international organizations such as FAO, WHO and UNSCEAR, it should develop guidelines and references for intervention levels in the case of radioactive releases. It should assist Member States in fixing national intervention levels, provided that the requesting States made the necessary data available. INSAG could play an essential role in that respect.
- 71. The Incident Reporting System (IRS) should be expanded to cover all nuclear incidents. The Iranian Government was ready to report any significant nuclear accident to the Agency, in order to protect the public and to assist the Agency to improve nuclear safety. The OSART programme should be strengthened by converting it into a system in which all operational safety information and experience could be exchanged. Extension of the Agency's assistance to other stages in the lifetime of facilities such as construction and commissioning was strongly to be recommended. The programme relating to the Analysis of Safety-Significant Events Teams (ASSET) was useful, particularly if the lessons learnt were disseminated among the interested utility companies. The launching of training programmes, in particular on-the-job training, in the field of nuclear power station operation, drawing on the lessons learnt from OSART and ASSET missions, was urgently proposed. In the light of the Three Mile Island and Chernobyl accidents, it was essential to call upon international co-operation to correct, at the design stage of reactors, the imbalance between automation and human action, so as to minimize operator errors. The Agency could play an important role in that respect by organizing international technical meetings. The Agency should assist requesting Member States in establishing radioactive monitoring networks, training necessary manpower, and setting up calibration services in order to achieve global monitoring systems, whereby the world public could be notified promptly and the radiological consequences of accidents minimized.

72. Turning to the two draft conventions submitted to the General Conference, he said that his delegation firmly believed that all incidents relating to nuclear safety with radiological consequences should be notified. At the meeting of governmental experts to prepare the drafts, the Iranian expert had proposed the following wording for Article 1 of the convention on early notification, dealing with its scope of application:

"This Convention shall apply to any nuclear incident which occurs in any facility or within the scope of any activity, including nuclear weapons or nuclear weapons tests, in the territory or in any area under the jurisdiction or control of a State Party from which a release of radioactive material occurs or is likely to occur and has resulted or may result in a transfer of radioactive material that could be of radiological safety significance to other States."

73. The continuing proliferation of nuclear weapons and their widespread deployment throughout the world together with the associated risks of radioactive releases and non-stop nuclear-weapon tests, in particular by the United States, had caused deep pessimism regarding the peaceful and safe use of nuclear energy. During the long discussions on the drafting of the conventions, the Islamic Republic of Iran, demonstrating a spirit of co-operation, had jointly proposed with six other countries, namely Argentina, France, Greece, India, Japan and Spain, the following version for Article 1, where nuclear weapons and nuclear tests were implicitly covered:

"This Convention shall apply to any nuclear accident or radiological emergency which occurs in the territory of a State Party or within the scope of any activity conducted under the jurisdiction or control of that State and from which a release of radioactive material occurs or is likely to occur and which has resulted or may result in a transboundary transfer of radioactive material that could be of radiological safety significance in other States or in areas beyond its jurisdiction or control."

74. Only the United States of America and the Soviet Union had opposed that proposal. Whereas the Soviet Union had subsequently modified its stand, the uncompromising position of the United States had disappointed almost all experts who believed that radioactive releases due to nuclear weapons and nuclear tests were even more dangerous than accidental releases from peaceful nuclear installations.

- 75. The concern of the Islamic Republic of Iran was not limited to nuclear accidents accompanied by transboundary radioactive releases, since it was convinced that the radiological consequences of nuclear accidents could be transferred from one region of the world to another through export of materials and the food chain. Iran was also seriously concerned about the contamination of international waters by disposal of radioactive materials during normal and abnormal operation of nuclear facilities and other nuclear activities. Needless to say, his Government was particularly concerned about the protection of marine life in the Caspian sea, which was for Iran an essential source of food and of export income.
- 76. The Iranian delegation firmly believed that the two conventions could only be effective and useful if plans were laid in advance. That was why his delegation proposed that Article 9 of the convention on early notification should be worded as follows: "In furtherance of their mutual interests, States Parties may consider, where deemed appropriate, the conclusion of bilateral or multilateral arrangements, including advance emergency response planning in the area of this convention". More than ten countries had officially supported that proposal, and only one the United States had been opposed to it.
- 77. That attitude on the part of the United States was not unexpected, because it was exactly in line with the aggressive nuclear policy which that country had pursued during the Second World War at Hiroshima and Nagasaki, and with its recent opposition to the Soviet proposal for a nuclear test-ban moratorium. In the opinion of the Iranian delegation, the United States, under the pretext of protecting the secrecy of its military nuclear installations, would deploy nuclear weapons for the suppression of all those who were struggling for their freedom. What assurances were there that one day the United States would not resort to nuclear force in order to crush the oppressed people of the world?
- 78. The Islamic Republic of Iran condemned any armed attacks and any nuclear terrorism against nuclear installations which might have serious radiological consequences, and urged all Member States to take appropriate measures to prevent them.

- 79. Having noted with interest the technical report presented by Soviet experts at the Chernobyl Post-Accident Review Meeting, in which Iranian experts had participated, his delegation fully endorsed the suggestions made during that meeting and expected the full co-operation of the Agency in that respect.
- 80. The Iranian Government considered that the existing draft of the convention on early notification was incomplete, but in order to prove its goodwill it was ready to associate itself with the consensus, provided that the nuclear-weapon States declared, at the General Conference, their readiness to notify any nuclear accident with radioactive releases of radiological significance, from nuclear-weapon tests and nuclear weapons. The Iranian delegation trusted that that compromise would create a co-operative atmosphere for the preparation of a full-scope convention in the near future.

Mr. Manouan (Côte d'Ivoire) resumed the Chair.

- 81. Mr. SOWINSKI (Poland) noted that the lengthy discussions on nuclear safety, which for a long time had been thought to consist simply of operating nuclear facilities in such a way as to avoid any accident which might lead to excessive releases of radioactivity, had imparted a wider scope to the notion of nuclear safety.
- 82. The accidents which had occurred at nuclear facilities, particularly the accident at Chernobyl, had given cause to reflect upon the nuclear dangers facing humanity. They might be related to faults in the nuclear facilities, to inadequate qualifications of operators, to terrorist acts in time of peace, to military attacks in time of war, to the proliferation of nuclear weapons in the world and to the extension of the arms race to outer space.
- 83. It was in the interests of all nations that the risks associated with those dangers should be drastically reduced. Co-operation in the area of the peaceful uses of nuclear energy was of special importance since all countries were exposed to the potential dangers inherent in those uses. Since the halting of nuclear tests in the atmosphere, little attention had been paid to the fact that in the event of significant releases to the environment following a nuclear accident, the radioactive substances released could be transported over very great distances.

- 84. His delegation also believed that the meeting of governmental experts held from 21 July to 15 August had been crowned with success since it had managed in a very short space of time to reach a consensus on two draft international conventions of fundamental importance. It also welcomed the statements made by the delegates of nuclear-weapon States that the early notification convention would also be applied in the event of accidents other than those specified in Article 1.
- 85. With regard to the Post-Accident Review Meeting which had examined many technical aspects of the Chernobyl accident as well as matters relating to the safety of populations and the protection of the environment, his delegation believed that the detailed information presented by the Soviet experts and the wide-ranging exchange of views which had taken place between specialists from many countries had greatly enriched knowledge about nuclear safety in the world.
- 86. It was now obvious that the safe development of nuclear energy was a universal problem. In his Government's opinion, only a stop to all nuclear tests and the abolition of nuclear weapons under conditions of peace and security for all nations could guarantee that safe development.
- 87. Poland attached special importance to safety matters. That was why it also welcomed all disarmament initiatives, co-operated with other countries under the auspices of the Agency in the area of nuclear safety and radiation protection, supported the Agency's safeguards system and hoped that the International Convention on the Physical Protection of Nuclear Material would soon enter into force. The adoption by the Polish Parliament of a nuclear energy law which had come into force on 1 July and which concerned the protection of the public in the event of a nuclear emergency and liability for nuclear damage demonstrated Poland's responsible attitude towards nuclear safety problems.
- 88. Poland would continue construction of its first nuclear power plant, taking into account economic factors and the need for environmental protection, and it proposed to develop nuclear power in the future. In doing so it would pay particular attention to safety matters, both in human and technical terms. Thus, an additional study had been made of the technical

solutions planned for the nuclear power plant under construction at Zarnowiec from the point of view of nuclear safety and radiation protection, and a specialized training course for engineers at plants embodying WWER reactors was at present being organized in collaboration with the Agency.

- 89. Poland firmly supported all the efforts made at international level to establish and implement a universal nuclear safety system as proposed by Mr. Gorbachev on 14 May 1986. The importance of the programme to establish an international regime for the safe development of nuclear power, which the Soviet delegation had proposed the previous day, could not be overemphasized. Poland was prepared to participate actively in the implementation of that programme.
- 90. Attention also had to be given to important problems which had not yet been solved, such as the drafting of international recommendations on increased safety of nuclear facilities, intervention levels for the public and the environment, the responsibility of States in the event of nuclear damage, the development of a new generation of nuclear reactors through international co-operation, and the protection of nuclear facilities against terrorism.
- 91. Poland warmly appreciated all the Agency's activities in the area of the peaceful uses of nuclear energy and considered that it should play a leading role in the world in the establishment of a nuclear safety system.
- 92. His delegation also supported the draft document prepared by the Board of Governors for approval by the General Conference at its special session.
- 93. In conclusion, his Government, aware of the importance of the safe development of nuclear power, had given him full authority to sign the two conventions on its behalf. The Polish Government had also decided to apply the conventions provisionally pending their ratification in accordance with Polish law.
- Mr. NIJPELS (Netherlands) said that the consequences of the Chernobyl accident for his country were probably typical of those arising in other countries in Europe and elsewhere. Nuclear energy created conflicting feelings, which made it a controversial issue. Many people regarded the Chernobyl accident as a confirmation of their worst fears.

- 95. A few days after the accident the Netherlands Government had had to take measures to protect public health. Until that time it had been thought impossible that an accident occurring at a nuclear power plant more than 1000 km away could affect the Netherlands. One of the main problems was the fact that no-one knew exactly how much radioactivity had been released, how much was still to be released and the nature of the radioactive substances involved. His Government therefore attached the highest priority to the establishment of an international information system in the event of nuclear accidents.
- 96. The accident had also caused a change in the energy debate in the Netherlands. Years of discussion and preparation had been on the point of culminating in a decision to increase the country's nuclear capacity. At the beginning of May various contractors were even to have been invited to tender for the construction of reactors. However, after Chernobyl, the Government had postponed all decisions on future energy generation. As Mr. Blix had pointed out in his impressive statement, many politicians had felt compelled to abandon nuclear power as a possible source of energy. From the political point of view that would probably be the most popular decision, and in the short term the easiest one.
- 97. Nevertheless, his Government had not yet concluded that nuclear energy could or should be abandoned. Before taking a decision it was important to learn all that there was to learn from Chernobyl. The necessary studies would be carried out so that a decision could be taken during the first half of 1988. The draft decision which would be presented by the Government to Parliament might or might not be favourable to an increased use of nuclear power in the Netherlands. The comparison of the advantages and disadvantages of alternative energy sources would have to be an integral part of any evaluation, as Mr. Blix had rightly pointed out.
- 98. In view of the foregoing, the Netherlands Government attached great importance to the draft conventions submitted. If the General Conference approved those conventions, he would be able to sign them subject to ratification. Pending ratification by Parliament, the Netherlands would adhere, wherever possible, to the provisions of those conventions. However,

it should be stressed that the proposed texts were the result of mutual concessions. Although the compromise was perfectly acceptable to his Government, that did not mean that everything was perfect. In particular, the Netherlands was strongly in favour of the inclusion of <u>all</u> significant accidents in Article 1 of the convention on early notification.

- 99. With regard to the Chernobyl accident, it was also essential to have a clear idea about what exactly had happened. In that respect the Post-Accident Review Meeting had been extremely useful. The frankness with which the Soviet Union had participated in the meeting was greatly appreciated. Its report and the additional information provided by the high-level Soviet experts during the meeting had given a clear picture of the accident and its consequences. However, it was obvious that certain questions still awaited a reply. It was therefore gratifying that the Soviet Government had agreed to join the Agency in its efforts to seek an answer to those questions. In that connection INSAG was to be congratulated for the extensive report which it had prepared and which the Netherlands authorities would study in detail.
- 100. It was now necessary to decide what should be done next. The supplementary programme for 1987-1988 drawn up by the Secretariat listed a large number of activities. The Netherlands attached great importance to two of those projects. Firstly, since it had no national nuclear industry, the Netherlands had not itself developed regulations on the design, quality assurance and operation of nuclear power plants. The codes and guides recently established in the Netherlands had been based inter alia on the Agency's nuclear safety standards. Those standards should therefore be constantly reviewed, also taking into account the lessons of the Chernobyl accident, and they should be given a more binding character, as had likewise been suggested by the Director General and other speakers. The Agency should therefore examine that possibility as a priority.
- 101. The second project concerned the Operational Safety Review Teams (OSART) which promoted the safe operation of nuclear power plants through the international exchange of experience. At the request of the Netherlands Government, two OSART missions were shortly to visit the nuclear reactors of Borssele and Dodewaard, the main aim being to determine whether their

operational safety could be further improved. The Netherlands would like all countries with a peaceful nuclear programme to apply for OSART missions, which would of course entail an expansion of the Agency's activities.

- 102. Finally, the Netherlands Government believed that after Chernobyl international agreements on liability in the event of a nuclear accident should be extended and that an open public information policy should in future be applied at national and international levels.
- 103. It was regrettable that the draft final document did not fully reflect all his country's preoccupations. His delegation had also taken note of the various interesting proposals and suggestions made by their delegations, and particularly those put forward by the Soviet Union regarding the preparation of international standards for radiation. The establishment by the Board of Governors of an ad hoc committee to determine the Agency's role in the promotion of international collaboration in the field of nuclear safety would be an appropriate follow-up to the work of the special session. The expert group on nuclear safety which would meet in November 1986 would also contribute to it. It was essential that all countries which wished to do so should have the opportunity to participate in the work of those two groups.
- 104. It was to be hoped that the Secretariat would continue to work with the efficiency and diligence which it had demonstrated during the Chernobyl accident. It would, however, be unfair to ask it to carry out the additional tasks following the accident without providing it with the necessary financial resources. Therefore his Government had decided to contribute to defraying the additional costs which would be incurred in 1986 for that purpose, and also agreed that the principle of zero growth should be abandoned for the years 1987 and 1988.
- 105. While deeply regretting the Chernobyl accident, his Government believed that its consequences had not been entirely negative since it had given an enormous boost to international co-operation in the field of nuclear power. It was to be hoped that that trend would continue. Whether or not one was in favour of nuclear power, the fact remained that it was used by many countries, which was their sovereign right. However, each country also had a right to be

protected against the harmful consequences which could result from the use of nuclear power beyond its frontiers. That was why the most extensive guarantees possible should be applied at international level with regard to nuclear safety and radiological protection. The Netherlands Government was ready to give every support to the Agency in that important area.

- 106. Mr. MASSOL (Ukrainian Soviet Socialist Republic) said that the special session of the General Conference was being held at a time when mankind was faced with a historical choice: either to continue on the road to the nuclear holocaust, or to strive to ward off the catastrophe while there was still time and to open the way to a safe world. Everywhere there was an ever-increasing awareness of the extent of the danger represented by nuclear weapons, and of what could happen when control over nuclear energy was lost, as had occurred in the accident at the Chernobyl nuclear power plant. There was also anxiety at the numerous cases of accidents and radioactive releases which had occurred at North American and Western European nuclear power stations. However, the Chernobyl accident was nothing compared with the threat to mankind if a nuclear war were to break out, for the nuclear arsenals which had already been accumulated represented thousands and thousands of catastrophes much more terrible than that at Chernobyl.
- 107. It was that awareness of the threat hanging over mankind which had prompted the Soviet Union to propose a programme for the abolition of nuclear weapons and of other types of weapons of mass destruction throughout the world by the year 2000. There could be no safety for the peoples of the world if the nuclear armaments race were to continue. Thus, the cessation of nuclear tests could mark a turning point in the efforts made to call a halt to it. The USSR had manifested goodwill by repeatedly renewing its unilateral moratorium on all nuclear explosions. As the General Secretary of the Central Committee of the USSR Communist Party, Mr. Gorbachev, had noted in his letter to the Director General of the Agency, Mr. Blix, those two tasks ensuring the safety of peaceful nuclear installations and freeing the planet from nuclear weapons called for broad international co-operation and the united efforts of all States, and in particular of the nuclear States and the international organizations. He delegation believed that the special session

in progress would make a substantial contribution to implementing the proposals put forward by Mr. Gorbachev in May 1986 regarding the establishment of an international regime for the safe development of nuclear power. That matter remained fully topical.

- 108. More than 30 years' experience of the use of nuclear energy had demonstrated its viability and its safety. However, none could guarantee absolute reliability and safety when a new and complex technique was in its early stages of application. Mankind had to pay the price of technical progress, and could never halt that progress. Unlike accidents at non-nuclear power stations, whose consequences were normally limited to the territory of the country in which they occurred, accidents at nuclear power plants frequently caused transboundary releases of radioactivity. At his speech on Soviet television on 14 May 1986, Mr. Gorbachev had announced in that connection a series of specific measures which found their expression in the draft conventions submitted to the General Conference. Those documents which had a logical link between them, envisaged a series of measures ranging from notification of an accident to provision of assistance in order to limit its consequences. They took account of the fact that certain States were not in a position to cope with an accident on their own. International co-operation in that field and the exchange of experience would make it possible not only to minimize the damage caused by accidents but also to develop preventive measures, which would even exorcise the possibility of an accident. That was an indispensable condition for improving the safety of nuclear power, from which all States would profit.
- 109. The Government of the Ukrainian Soviet Socialist Republic was prepared to sign the conventions in question. Furthermore, the Ukrainian delegation approved the programme proposed by the Soviet Union, which called for action to establish an international regime for the safe development of nuclear power. It also considered that other measures, such as the prohibition of deliberate attacks on nuclear installations as a result of terrorism or acts of war, the drafting of recommendations relating to the safety of power plants and the development of a new generation of reactors, would likewise contribute to improving the safety of nuclear power.

- 110. If it was desired to institute such an international regime for the safe development of nuclear power, it was essential for States and also international organizations and the co-ordination centres responsible for safety to unite their efforts. The Agency, whose present activities took on particular significance, should undoubtedly play a leading role in that respect. The Ukrainian delegation also recommended active participation by the United Nations and its specialized agencies, such as WHO and UNEP, in the implementation of measures intended to ensure the safe development of peaceful nuclear activities.
- 111. Regarding the Chernobyl accident, the Agency had been given complete and reliable information, based on the conclusions of Soviet Government commissions, regarding the causes of the accident and the investigations, measurements and calculations undertaken subsequently. The international experts had praised that enormous mass of experience accumulated by the Soviet experts, which had now become international public property. As everyone knew, the Chernobyl accident had occurred as a result of serious violations of the technical operating regulations on the part of the staff of the power plant. Working under difficult conditions, Ukrainian experts had, after the accident, performed the measurements and calculations necessary for the rapid provision of data to the international community, data whose completeness and reliability had been praised by the experts. For that reason he was unable to understand the statement by one delegation regretting the inadequacy of the information supplied and thus contradicting the opinion of its own experts.
- 112. Thanks to the action taken, the consequences of the accident had been substantially reduced. The systems of meteorological, radiological and health monitoring had been improved and reinforced. On the basis of the data supplied, recommendations had been made to limit or prevent the consumption of certain foodstuffs exhibiting a high level of radioactivity, and guidelines for the population in the zones to a greater or lesser extent affected had been issued.
- 113. More than 135 000 persons had been evacuated within a radius of 30 km from the reactor. During the preceding four months, more than 8000 houses had been constructed in the region, and 10 000 apartments had been allocated to

evacuated families. Whole villages had been built, which had available all public services and an extensive network of medical establishments intended for treatment and prophylaxis. Furthermore, a radiology centre had been established at Kiev for the health monitoring of the population.

- 114. Particular attention had been given to finding work for the evacuated persons. At present, all the members of evacuated families able to work had found another occupation. The State had taken over all the expenses associated with the material assistance given to the evacuees. Special care had also been taken of children. As a preventive measure, all children within a radius of 30 km from the power plant, together with those living in Kiev and its surroundings, had been sent to summer camps; thus, more than 100 000 children been able to take a cost-free vacation in the summer.
- 115. That gigantic population evacuation and removal operation had called for the adoption of strict dosimetric monitoring methods, intended to avoid any radioactive contamination and which had in fact proved their full worth. It was no exaggeration to say that the whole country had participated. The danger had brought people together, and thousands of volunteers had offered to work at the scene of the accident. One could say now that their joint efforts had made it possible to solve the problems which had arisen. In spite of the loss of power due to the shutdown of the Chernobyl plant, Ukrainian industry was fulfilling the growth norms laid down in the plans, and even somewhat exceeding them.
- 116. In conclusion, he wished to stress that the accidents which had occurred at Three Mile Island, at Hamm, at Chernobyl and elsewhere should, in spite of their consequences, contribute to strengthening the general will to increase the reliability of technological systems. It would be naive and dangerous to blame what had happened on particular designs or particular organizational systems. It was clear that, even by abandoning the use of space ships of the Challenger type, graphite-uranium reactors, and tankers for the transport of phosphorous and poisonous chemicals, it was impossible to exclude all possibility of a serious accident unless one first of all solved the general problem of the relationship between man and contemporary power-dependent technology. That was why it was essential to take full

account of the conclusion of the experts that "There is potential for improvements in the design and operation of nuclear power plants". That could be done only by means of as broad an international co-operation as possible.

- 117. Mr. BRADY ROCHE (Chile) trusted that all delegations would exhibit a spirit of co-operation at the present important session, and that they would endeavour not to introduce into the discussion matters extraneous to the problem of nuclear safety.
- 118. The tragedy of Chernobyl, which had shown that the consequences of nuclear accidents made themselves felt not only in the country of origin but also elsewhere, had strongly highlighted the problem of nuclear safety but should not for that reason call into question the development of nuclear power, which was the only way of meeting the needs of countries striving to raise their standard of living.
- 119. Chile would always be prepared to participate actively in work undertaken under the auspices of the Agency to unify criteria governing measures to be applied by countries in an emergency. The Chernobyl accident was a reminder that, without safety, nuclear power could not develop; thus the Agency, responsible as it was for promoting such power, should regard nuclear safety as a priority activity, and it was necessary to seek adequate means of financing work in that field.
- 120. States with nuclear installations liable to harm the environment and public health in neighbouring countries, on a scale comparable to that which had occurred at Chernobyl, should of course immediately supply the necessary data whenever transboundary damage was caused or was likely to be caused.
- 121. Furthermore, it should not be forgotten that accidents such as that at Chernobyl did not affect only neighbouring countries: the most distant States felt, for example, the economic effects, particularly the contamination of food commodities imported from countries directly affected. Also, the efforts made by countries such as Chile to win national public acceptance for nuclear power were being brutally frustrated by a single accident, which the opponents of nuclear technology would not fail to exploit in order to advance their cause, while the mass media, badly informed as they were, likewise unwittingly damaged the nuclear image.

- 122. Developing countries such as Chile, which regarded the nuclear option as important for meeting their energy needs, should give matters such as nuclear safety and radiation protection the attention which they deserved. That was why the Chilean Government had always been anxious to have international standards formulated and adopted on the subject. It had itself promulgated legislation and regulations intended to reduce to a minimum the risks inherent in the peaceful uses of nuclear energy.
- 123. Similarly, Chile attached great importance to the work of the expert group which had prepared the two draft conventions submitted to the General Conference. The principles laid down therein should be reflected in bilateral and regional agreements, which would thereby gain in authoritativeness. But the two conventions, which he urged all States to sign, would remain inadequate if countries did not undertake to respect the minimum international standards of safety and radiation protection, so as to protect the world from the nuclear threat emanating from an accident such as that at Chernobyl.
- 124. Chile would support any bilateral or multilateral agreement between States Members of the Agency, at regional or international level, for the purpose of fixing criteria governing the amounts of radioactive effluents which could be released to the environment, whether under emergency or under normal operating conditions, particularly when those releases could have harmful effects for a neighbouring country.
- Mr. SUAREZ de PUGA (Spain) recalled that energy was vital to the development of countries and to the welfare of peoples, but that its generation had always raised serious problems, in view of the effects which it was liable to have on persons and on the environment. It had still not been possible to find a sufficiently abundant source of energy which did not contain some social or human drawback, and that was why Spain considered it essential to use energy in the most efficient manner possible and to exploit renewable energy sources to the maximum.
- 126. It was up to each country, depending inter alia on its available sources of energy and the potential risks for the environment, to take what it considered to be the optimum decisions on meeting its national energy requirements, but it still remained a fact that accidents which occurred in a

given country were liable to have transboundary effects. Thus, in addition to the decisions taken by countries regarding energy supplies and apart from the full and complete liability incumbent upon States in connection with the safety of their installations, it had become essential to take measures such as those which the General Conference was about to adopt at its present special session on the subject of notification and emergency assistance.

- 127. Spain generated 30% of its electric power in nuclear plants i.e. it represented the mean of European Community countries in that respect. Hence Spain considered that the question of nuclear safety had absolute priority over all others. That was why, in recent years, it had substantially strengthened its safety systems, establishing a special body for that purpose and assigning priority status to radioactive waste management. With the same motivation, Spain would collaborate to the best of its ability with the international organizations and in particular with the Agency.
- 128. Having participated in the negotiations which had led to the preparation of the draft conventions for submission to the General Conference, he had been in a position to appreciate the efforts made to ensure that the Agency constituted an adequate framework within which States could find common ground on legal texts intended to protect the international community from the consequences of any nuclear accident and to reduce the effects of radioactive releases. The uncertainty facing the whole world in a situation whereby States were under no obligation to notify nuclear accidents and had not been much inclined to keep public opinion informed of operating faults in their installations should now become a thing of the past.
- 129. Since the most remote antiquity, the legal systems of various civilizations had come into being through the same process: written laws, however ancient, had always been preceded by statements of moral principle, and it was only subsequently that the latter had been embodied in legal texts. Similarly, in the present case, his delegation would have preferred that the obligation to notify related to all accidents, whatever their origin or cause, but it expected that that principle would acquire mandatory force in the near future.

- of its regular sessions an item relating to review of the conventions in the light of the progress made at international level in the matters concerned. Thus, the dialogue would remain open and it would be possible to improve the texts which had been prepared under the pressure of events not yet incompletely gauged and analysed. A new way had just opened in the nuclear safety field, which should result in increased confidence on the part of all.
- 131. The safety procedures at Spanish nuclear installations were in all respects in harmony with the provisions usually adopted at international level, and particularly with the instructions of the countries supplying the technologies used and with the recommendations of international organizations such as the European Economic Community, the NEA and the IAEA. Those procedures were carried out under the auspices of the Spanish Nuclear Safety Council, a body which was independent of the central government and of industry and which performed its task with complete objectivity. Its practices, particularly as regards inspection, were identical to those of comparable organizations in countries operating similar nuclear power plants, and the Nuclear Safety Council had concluded collaboration agreements with a number of them. The Council was obliged by law to act with complete openness, and to keep Parliament and public opinion informed.
- 132. For several years past, Agency missions dealing with nuclear safety matters had had access to Spanish power plants. Spain participated in Agency technical missions, and lent support to the work on unifying safety criteria and standards recommended by various international organizations, and it was pleased at the new impulse which had been given to the Agency's activities. It believed, however, that the adoption and supervision of the application of recommendations formulated by international bodies remained the sole responsibility of the State concerned.
- 133. Reverting to the adoption of the draft conventions before the General Conference, he recalled that Spain had energetically championed the principle that, in the interests of public safety, all nuclear accidents, whatever their origin, should be notified. The texts finally adopted in fact gave grounds for hoping that the States in question would notify all types of accident

occurring on their territory: the nuclear-weapon States had in fact declared - for which all credit was due - that they would notify all accidents or radiolgical emergency situations without exception, to the extent that they threatened the health and safety of the populations of other countries. That was why Spain would sign the two conventions, in the belief that the nuclear Powers would keep their promises and immediately report all nuclear accidents, both those referred to in Article 1 and those referred to in Article 3 of the convention on early notification of a nuclear accident. The Spanish delegation hoped that the statements made by the nuclear-weapon States at the present session would constitute a body of doctrine for purposes of interpreting the texts adopted.

134. Thus Spain, which had been one of the first countries to call for the adoption of a system of early notification of nuclear accidents, including accidents involving weapons, was ready to take up the responsibilities involved in the subordination of its domestic legislation to the international standards contained in the conventions in question. The Spanish delegation would sign the conventions subject to ratification, and stressed that, pending completion of the necessary legislative démarches, Spain there and then undertook to notify any accident which occurred and which was liable to have effects beyond the national frontiers.

The meeting rose at 1.15 p.m.