



OFFICIAL RECORDS OF THE TENTH REGULAR SESSION (21-28 SEPTEMBER 1966)

OFFICIAL RECORD OF THE HUNDRED AND FIRST PLENARY MEETING

Held at the Neue Hofburg, Vienna,
on Wednesday, 21 September 1966, at 11.30 a.m.

Temporary President: Mr. ASAKAI (Japan)

President: Mr. SARASIN (Thailand)

CONTENTS

<i>Item of the provisional agenda *</i>	<i>Paragraphs</i>
1 Opening of the session	1 — 5
— Address by the Federal President of Austria	6 — 12
— Statement by the Representative of the Secretary-General of the United Nations	13 — 27
— Opening address by the Director General	28 — 54
2 Election of the President	55 — 63

*) GC(X)/326.

OPENING OF THE SESSION

1. The TEMPORARY PRESIDENT declared open the tenth regular session of the General Conference.

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

All present rose and stood in silence for one minute.

3. The TEMPORARY PRESIDENT extended a warm welcome to all delegates and expressed the hope that their participation in the work of the

tenth regular session of the General Conference would prove a rewarding and worth-while experience.

4. Although he had not had the good fortune to have been closely associated with the Agency during the first years of its existence, he was fully aware of the excellent work it had done in helping to make available to mankind the multifarious benefits offered by nuclear energy. In the course of the Conference, more knowledgeable participants would doubtless discuss the Agency's record of achievement in greater detail and point the way to further progress in the future.

5. Before concluding, he wished to express to the Federal President of Austria, the Federal

Chancellor and the many members of the Austrian Government and administration attending the meeting the very deep appreciation of the Conference for all that Austria, and particularly the city of Vienna, had done for the Agency over the past nine years. It would be recalled that the first speaker to address the first meeting of the General Conference in 1957 had been the Federal President of Austria, the late Dr. Schärff. It was particularly gratifying to delegates that the present President, Mr. Jonas, had kindly agreed to follow in his predecessor's footsteps and to address the Conference at its present commemorative meeting.

ADDRESS BY THE FEDERAL PRESIDENT OF AUSTRIA

6. Mr. JONAS (Federal President of Austria) welcomed the delegates and recalled that, as Mayor of Vienna, he had attended all the regular sessions of the General Conference that had been held in Austria.

7. He was glad to be able to draw attention to the excellent spirit of collaboration that had grown up between the Agency and the Austrian authorities. His country had always regarded it as a privilege to be able to lend its support to the activities of the Agency and hoped that its efforts had been of value in contributing to the success of the organization's work.

8. The setting up of the Agency in Vienna barely two years after the declaration of Austrian neutrality had been interpreted by the Austrian people as a first sign of international confidence in the Republic. The excellent record of collaboration between the Agency and his country showed that that confidence had not been misplaced. Because of its experience in two world wars and its geographical situation between East and West, the Austrian people was particularly alive to the urgency of the problem of achieving a lasting peace. It was perhaps for that reason that the political climate of Austria had been found by many delegates and members of the staff of the Agency to be particularly conducive to international collaboration.

9. At the present commemorative meeting of the General Conference it was legitimate to ask to what extent the Agency had justified the hopes that had been placed in it. He was not competent to express an opinion on the technical achievements of the Agency, but he trusted that delegates would be able to confirm his hopes that the results achieved by the organization had led to a significant increase in the use of atomic energy for peaceful purposes and had given rise to more effective co-ordination of the nuclear work being done in Member States. In the political sphere the Agency

had demonstrated that international co-operation within the United Nations was perfectly feasible provided there was a general will to collaborate. As far as nuclear problems were concerned, the interests of the large and the small nations were identical—all countries stood to gain or lose immeasurably from the proper or unwise use of nuclear energy.

10. He was confident that the Agency would pursue the excellent work it had begun towards that end. The potential benefits of atomic energy were so significant that it was to be hoped that all nations would afford the Agency their whole-hearted support in carrying out the tasks ahead.

11. It was symptomatic of the present age that public opinion was far more obsessed by fear of the implications of nuclear weapons than it was impressed by the striking advances made in the peaceful uses of atomic energy. It was up to all countries to correct that situation. The threat of nuclear war must be diminished and nuclear energy must be harnessed to the task of combating hunger and disease throughout the world.

12. He thanked the Director General for the results that had been achieved and expressed the hope that the Agency's work in promoting the peaceful uses of atomic energy would help to reduce international tension and create a world no longer dominated by the spectre of nuclear war. His own country for its part would continue to do everything in its power to further the work of the Agency.

STATEMENT BY THE REPRESENTATIVE OF THE SECRETARY-GENERAL OF THE UNITED NATIONS

13. Mr. BUNCHE (Representative of the Secretary-General of the United Nations) said he had been asked to convey the best wishes of the Secretary-General to the Conference on the occasion of the commemoration of the tenth anniversary of the approval of the Agency's Statute.

14. As one who had attended the first General Conference, he was particularly gratified that he was able to attend the current session and help celebrate the present anniversary of the Agency, now so firmly established as an international organization.

15. Over the past years the Agency had made a constructive and vigorous start towards its main objective, viz. "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world". In so doing it had worked in close concert with all the other members of the United Nations family, which were equally committed to the pursuit of peace and human

advancement. Much credit for the excellent results achieved was due to the present Director General, who had a long and distinguished record of international service in furthering the peaceful uses of atomic energy.

16. Some of the assumptions underlying the original plans drawn up for the Agency had proved false and unexpected difficulties had been encountered. It had been wrongly assumed, for example, that uranium supplies would be scarce and demand great, and that the Agency would have to act as a sort of broker between producers and consumers. The speed with which atomic energy would become competitive throughout the world had also been over-estimated.

17. In the face of those initial difficulties the Agency had concentrated on other ways of implementing its statutory objectives. It had done valuable work in connection with safeguards, the provision of assistance to developing countries, desalination and isotope techniques, and had contributed to the general effort carried out within the United Nations family with a view to improving conventional power technology and to utilizing new sources of energy.

18. Some of the Agency's activities could be of far-reaching importance. General acceptance of the Agency's safeguards system could be of great value in connection with the efforts being made in the United Nations to prevent the proliferation of atomic weapons. The Agency's practical experience in applying safeguards could also be extremely useful for the future in the wider field of disarmament.

19. Good relations had been developed between the Agency and the United Nations, and credit was due to the Director General for the work he had done in that connection. Though the working relationship between the two organizations had never been so close as originally envisaged, it was probably as close as could realistically be expected. Certainly collaboration had been excellent at the Third International Conference on the Peaceful Uses of Atomic Energy ¹⁾ and the Agency could be expected to play an even more central role if a fourth such conference were held. He should also mention that the one United Nations body which now dealt directly with atomic energy, namely the United Nations Scientific Committee on the Effects of Atomic Radiation, was continuing its vital work and always sought the Agency's helpful collaboration.

20. Like other international bodies and like the United Nations itself, the Agency did not operate

in a vacuum. The realization of its objectives depended very largely on the political climate in the world and on the solution of the major political problems of the time. Unfortunately the stresses and strains of the present-day world inevitably dominated the actions of international organizations. It was, however, precisely because of the threatening chaos in international relations and the appalling dangers involved that the whole United Nations concept of international order had been formulated and given tangible expression by the creation of a number of inter-related international organizations. It was obvious that the problems of thousands of years could not be solved in a decade or two by the enunciation of a series of principles and agreements and by the setting up of new organizations to give effect to them. International organizations were only at the beginning of a monumental task; their main work lay ahead and they should not be discouraged if the difficulties appeared at times to be almost insurmountable. That was particularly true of such major problems as disarmament or the efforts being made to narrow the gap between rich and poor in the world. Naturally efforts to come to grips with such problems were inevitably hampered by current conflicts, such as the war in Viet-Nam. Only ceaseless and devoted efforts, which in some cases might require many years, could have a significant impact on such problems.

21. It was salutary to ask from time to time what would be the alternative to the efforts being made to develop a system of international order. In view of the arsenal of destructive weapons deployed throughout the world, not to mention the problems of famine, disease, pollution, over-population and economic anarchy, it was obvious that there was no acceptable alternative. International civil servants should never lose sight of the ultimate goal — an effective system of international order. The necessity of achieving that goal must serve as a stimulus and an inspiration.

22. It also had to be remembered that the work of the United Nations and the specialized agencies was complementary and interdependent. The specialized agencies could not function properly in an atmosphere of political turbulence, nor could the United Nations fulfil its primary function of maintaining peace without the help of the agencies in creating the conditions essential to a stable world.

23. The atmosphere in the United Nations at the present time was extremely gloomy. There was foreboding over the continuation and escalation of the war in Viet-Nam coupled with concern at the statement of the Secretary-General that he would not offer himself for a further term.

1) Held at Geneva from 31 August to 9 September 1964.

24. There were very great dangers in the present inability of nations to communicate with one another, and it was clear that the United Nations was reaping the bitter fruit of its failure to attain universality of membership.

25. There were, however, encouraging features in the present situation. There was growing realization of the futility of war and the suicidal insanity of nuclear war. The "cold war" persisted, but with diminishing vigour. International programmes were continuing unimpeded. A few shifts in national policies could open the way to a new area of international progress. The striking development of international organizations and the increasing confidence which Governments reposed in them were encouraging signs, though they also imposed an ever-increasing responsibility on those who directed such organizations to increase efficiency and achieve economies wherever possible. The Agency had taken commendable steps in that direction by introducing biennial programming, but it had not yet managed to surmount the statutory obstacles in the way of a biennial budget and conference. In view of the greatly increased efficiency and economy which could be achieved with a biennial budget, it was very much to be hoped that the Agency would solve the statutory problems involved within a reasonable time.

26. Before concluding, he wished to pay tribute to the late Dr. Homi Bhabha. Dr. Bhabha's knowledge and versatility had been of enormous value to the United Nations, and later to the Agency, in promoting the peaceful uses of atomic energy. He had been a great scientist and a unique personality and he would be sorely missed in the international world.

27. For the future he trusted that the Agency would continue to develop and consolidate its present programmes and would also be able to evolve new ways of providing its valuable services to the international community.

OPENING ADDRESS BY THE DIRECTOR GENERAL

28. The DIRECTOR GENERAL said that, although ten years in terms of history or in the life of man was but a short space of time, the passage of time was measured more by the intensity of development than by the number of years gone by. In that respect, ten years of development in atomic energy represented a significant period; in order to appreciate what had been achieved in the peaceful uses of atomic energy, it was merely necessary to glance back to the time of the first General Conference, in October 1957.

29. Ten years previously, the first dual-purpose nuclear reactor had been inaugurated, leading to an increase in nuclear generating capacity, which had hitherto been almost nil. Today, nuclear facilities were generating 8000 MW of electricity, and that total was expected to reach 30 000 MW by 1970 and possibly over 200 000 MW by 1980.

30. One year after the Agency's inception, the second United Nations International Conference on the Peaceful Uses of Atomic Energy ²⁾ (the "second Geneva Conference") had been held. About the same time, the International Bank for Reconstruction and Development had given financial support for the construction of a nuclear power plant and, although that was a unique instance, he was optimistic as to the Bank's willingness to repeat that action in the future.

31. The highlights in atomic energy development since 1957 had included the construction of the heavy-water pressure-tube reactor which had started operation in 1962, the holding of the third Geneva Conference in 1964, the start that same year on the construction of the first fast reactor for simultaneous production of power and desalting of water, and the significant emergence in 1965 of a third generation of gas-cooled reactors. By 1965 light-water reactors had become sufficiently established to enable manufacturers to bring out price-lists for standard versions, and the eminently successful results achieved with that type of reactor had led to the decision to construct a 2200-MW station in a coal-producing area where the price of coal was equivalent to only 19 cents per million British thermal units. The acceptance of pre-stressed concrete as a containment element in reactor construction had been a further significant development.

32. The founders of the Agency had had in mind a grand design which the Agency might not have fully achieved. It had, however, much to its credit, considering that its ability to carry out its programme was influenced by the prevailing political climate and the availability of funds. The Agency's physical growth might be measured by the growth in its membership, from 59 in 1957 to 96 at the present time.

33. The Agency's Statute had been based on what were considered to be the main objectives at the time of its founding. The experience gained since then suggested the possible need for modifying those objectives, which might entail a revision of the Statute designed to bring it more into line with reality.

34. An anniversary was an occasion for reviewing

2) Held at Geneva from 1 to 13 September 1958.

past experience with a view to improving future performance, particularly with regard to activities which were to be continued and probably expanded. Obviously, nuclear power technology and economics would have to continue to figure prominently in the Agency's programme, together with some specialized related activities such as desalting of water; but an endeavour should be made to keep those activities in proper perspective. Isotope applications in the physical and life sciences must also play a prominent part in the programme, particularly in relation to food production, health and industrial development.

35. No survey of past activities would be complete if reference was not made to the International Centre for Theoretical Physics at Trieste, which had been successful beyond the most extravagant hopes of its sponsors; it would be necessary in the near future to consider the establishment of the Centre on a more permanent basis. Mention should also be made of the work done by the Agency's Laboratory of Marine Radioactivity in Monaco on radioactive waste disposal into the sea. As a result of the vast increase in nuclear power, that laboratory might have to be expanded into an international centre for waste disposal studies.

36. The Middle Eastern Regional Radioisotope Centre for the Arab Countries in Cairo was another successful venture of a type complementary to the regional training courses that were an established and acceptable feature of the Agency's training programme.

37. The Agency's technical assistance activities constituted a programme that had the widest appeal for developing Member States. Achievements could be measured only in relation to available resources, and that point should be borne in mind in assessing what had to be done. Since the Agency's establishment, over 900 experts had been sent out to serve in 44 countries, 2750 fellowships had been awarded, 450 technicians had attended training courses and equipment had been provided to the value of almost \$3 million. Although those figures might appear impressive, the yearly average value of the assistance the Agency had been able to provide, per Member State, would show how inadequate its resources had been.

38. The initial hope that sufficient funds would be provided to meet the legitimate needs of developing countries had not been fulfilled. The value of annual requests for assistance in the form of experts and equipment had risen from \$700 000 in 1957 to almost \$3 million, whereas the funds made available under the budget would meet only about one fifth of that total. The programme had to be financed from voluntary contributions, which had not grown significantly over the past nine years

despite the fact that programme costs had increased by 20 %. The need for assistance continued unabated and the future development of the programme would be severely jeopardized unless action was taken to meet the deficiency in funds. He would appeal urgently to the Conference to give serious consideration to that problem, for he did not believe Member States would be prepared to see four out of every five requests for assistance from the developing countries go unheeded.

39. With the present rapid development in nuclear power production, the need for international legislation concerning nuclear energy took on added importance. In order to facilitate the transfer of fissile materials between countries, shipping regulations and regulations concerning health and safety, food irradiation and so on should be international. The increase in the potential of Member States to produce fissile materials in power reactors should be accompanied by a general agreement to register all movements of fissile material and important components across national boundaries.

40. Thus far the nuclear industry had fortunately been free from major accidents, but preventive measures should be taken now to deal with any future eventuality. Although progress in the matter had been slow, he was still hopeful that agreement would ultimately be reached on an emergency assistance programme. A nuclear accident, say in a nuclear-propelled ship, could have serious consequences, and it might be desirable for the Member States directly concerned to have an international body such as the Agency ready to participate in or supervise rescue operations in accordance with emergency procedures agreed upon in advance.

41. The application of safeguards had always been envisaged by its founders as an important function of the Agency, but it was only in recent years that significant progress had been made. The first step had been the adoption in 1961 of the Agency's safeguards system ³⁾, limited at that time to reactors below 100 MW(th), but the system had not been accepted by all Member States. However, the hopes raised by the signing of the Moscow test ban treaty in 1963 had been reflected in an increasing willingness of Member States to accept and participate in the constructive revision of the system, which was now being applied to 54 reactors in 24 countries. Specific procedures for safeguarding particular types of facilities were being established on the basis of the revised safeguards system (1965) ⁴⁾, and the general working methods were being constantly studied and improved.

3) INFCIRC/26.

4) INFCIRC/66.

42. With the growing maturity of the system and the increasing number of facilities being placed under Agency safeguards, the time would come when there would need to be periodic consideration of the system's effectiveness in application.

43. The experience gained by the Agency in operating truly international safeguards should be of relevance to the work of the United Nations Eighteen-Nation Committee on Disarmament, which was discussing nuclear disarmament in Geneva.

44. Its membership of the United Nations family not only gave the Agency greater authority, but also made available to it the resources of the United Nations Development Programme, the world-wide chain of United Nations representatives, the expertise of other scientific agencies, and an established system of administrative standards and procedures. Welcome evidence of the United Nations' continuing interest in the Agency was provided by the presence of the Secretary-General's senior adviser, as his representative at the Conference.

45. The Agency also maintained relationships with regional atomic energy organizations, which offered special advantages for launching large-scale joint enterprises in which a heavy capital investment in research or development was shared. He would, however, again express reservations as to the desirability of such regional organizations intervening in regulatory questions, such as safety standards, harbour safety requirements for nuclear ships, safeguards systems, and so on, which by their very nature should be the responsibility of a world-wide organization.

46. In regard to the Agency's role in the future, access to cheap power was an essential requirement for industrial development and good living standards. The growth in nuclear power production would inevitably lead to an increased need for facilities for the reprocessing of spent fuel situated at a reasonable distance from the production point. One commercial reprocessing plant had been established, as well as national plants in some countries and a regional plant in Europe. There would be great future advantage in the establishment of such plants on a regional basis throughout the world.

47. Many reactors used enriched fuels which at present could be supplied in large quantity only by a few countries. The question might therefore arise whether a joint production enterprise by a number of non-producing countries might not constitute a further guarantee toward maintaining the supply of enriched materials.

48. The need for more energy went hand in hand with the need for producing enough food to supply

an ever-increasing population. Accordingly, in the years to come, the Agency, in continued co-operation with FAO, would be required to pay greater attention to the possibilities of using radioisotopes and radiation techniques to increase food production, prevent wastage and crop destruction, and facilitate food preservation.

49. The impact of atomic energy on some of the major Powers was well known; one of its manifestations had been the creation of huge research establishments and smaller countries had followed that example, so that now many countries had research establishments with facilities and equipment of a high order. The early informal contacts among the scientists working in those establishments had led, with the passage of time, to more formal relations between the countries, even in cases where political contacts were poor, followed by the setting up of regional organizations. The end-result of that process had been a proliferation of formal agreements between organizations and Governments for mutual assistance in the development of atomic energy. Nevertheless, new problems were posed now that nuclear power was becoming a commercial proposition. Governments were beginning to question whether continued research was justified and were pressing for reduced expenditure on atomic centres established in many cases primarily for developing nuclear power.

50. During his visits to Member States, he had been struck by the excellent standards of laboratories established under the impetus of atomic energy development, even in countries where the over-all scientific standard might understandably not be high. The contribution thus made to creating a scientific and technical infrastructure in those countries could not be over-estimated; indeed that contribution might eventually be regarded as one of the major benefits derived from the initial phases of the atomic era.

51. An equally strong impression he had gained, however, was that tremendous duplication of work was going on in many of those new establishments. He would single out two fields only for mention: extraction of plutonium from used fuel and subsequent re-incorporation of the recovered element, and the preparation of fuel elements, including canning. Competition in scientific and technical fields was certainly of the utmost value, but it should be concerned essentially with the frontiers of science and technology and should not involve repetition or unnecessary duplication. He would accordingly appeal to the atomic energy commissions in the smaller countries concerned to get together in an endeavour to establish genuine co-ordination and thereby achieve savings both in scarce scientific manpower and in funds. What he had in mind was a thorough analysis of the situa-

tion, leading to an integration of effort by, for example, concentrating extraction work in one laboratory, powdered metallurgy research in another, studies of canning problems in a third, and so on, with free exchange of the results obtained between the participating bodies.

52. He had mentioned only a few of the problems which might have to be faced in the future and in connection with which the Agency might be called upon to provide assistance. The Agency was already well established as a medium for international collaboration in atomic energy matters and for the exchange of scientific thought and information through its programme of conferences, symposia and study groups, its nuclear data service and its scientific documentation facilities. The scientific documentation service had been expanded by putting a computer system into use and steps were well advanced towards the setting up of an international nuclear information service. The mid-point of the current long-term programme 5) had been reached and the time would soon come when a further long-term programme of activities would have to be developed. The experience gained over the past nine years in adjusting to changing circumstances and actively promoting the development of new uses of atomic energy would enable the Agency to plan for the future with greater confidence. For his part, he would continue to do his utmost in carrying out his responsibilities but, let it be said, the results would depend on the understanding and help received from Member States. The essential need for good and friendly working relationships between the Secretariat and Member States could not be stressed too strongly. The Secretariat looked for guidance from the Member States in no less degree than the Member States, particularly among the developing countries, sought guidance, advice and help from the Agency in developing their atomic energy activities. Moreover, the Agency depended upon its Member States for financial sustenance and he would urge all delegations at the Conference to lend their support at home in order that the Agency might be given resources to meet the programme it was required to carry out.

53. He welcomed those countries which had been admitted to membership since the previous session of the General Conference, namely Jamaica, Jordan, Kenya and Panama, and looked forward to their active participation in the Agency's work in the future.

54. Lastly, he availed himself of the opportunity to thank the Austrian Federal Government and the Austrian people for the support they had freely

given, which had served to establish the Agency on a firm foundation and enabled it to work smoothly. Indeed, the Agency had been very fortunate in finding such a generous host country, which was sensitive to the needs of an international organization and which had provided temporary headquarters for the Agency at little or no cost, as well as excellent facilities for its meetings. The Agency looked forward to continued co-operation, to the benefit of both parties and, it was hoped, mankind as a whole.

ELECTION OF THE PRESIDENT

55. The TEMPORARY PRESIDENT invited nominations for the office of President.

56. Mr. TIMBS (Australia) said he had great pleasure in proposing Mr. Sarasin (Thailand), whose distinguished career as a diplomat and whose experience of the United Nations made him especially fitted to direct and guide the work of the session.

57. Mr. SIWABESSY (Indonesia) seconded, and Mr. PRADO (Brazil) and Mr. HOGEN (Japan) supported, the nomination.

58. *Mr. Sarasin (Thailand) was elected President of the General Conference for its tenth regular session by acclamation.*

Mr. Sarasin (Thailand) took the Chair.

59. The PRESIDENT thanked the Conference for the great honour it had done his country and himself in electing him President for the tenth session. He took the opportunity to convey the most friendly greetings of the people and Government of Thailand to the Conference, and thanked the Government of Austria and the city of Vienna for their generous hospitality. He further paid tribute to the outgoing President, who had directed the deliberations of the ninth session in Tokyo with wisdom and understanding.

60. Although important political decisions had been involved in the establishment of the Agency, it was now apparent that from its inception the Agency had succeeded in being a purely scientific and technical organization, devoting its efforts and resources towards the peaceful uses of atomic energy for the benefit of mankind.

61. During the past nine years, the Agency had overcome its initial difficulties by successfully adapting itself to political and technical realities not foreseen at the outset. The growing agreement that had developed among the major Powers in the past few years in relation to the Agency's work had been one of the most gratifying events in international co-operation. He sincerely hoped that that

5) INFC/IRC/50.

spirit would continue to prevail so that the Agency might fulfil its objectives as embodied in the Statute.

62. As was clear from its steadily increasing membership, the world was now well aware that the Agency was the principal technical instrument of the United Nations in regard to the peaceful uses of atomic energy. As a layman, he had been following with keen interest the expanding prospects of atomic energy for the benefit of mankind. As the Director General had remarked, the growth of nuclear power would be more rapid than had been foreseen a few years previously. Developing countries were becoming more and more interested

in the assistance the Agency could render in utilizing atomic energy for the generation of electricity or the combined production of electricity and fresh water. Undoubtedly, the development of nuclear power as a major source of energy would be of great importance to the economic progress of the world.

63. The deliberations of the Conference would, he was confident, result in decisions that would enable the Agency to pursue its immediate objectives. For his part he would do his utmost, in performing the task entrusted to him, to serve the interests of the Conference and the Agency.

The meeting rose at 1.10 p.m.