



International Atomic Energy Agency

# General Conference

GC(IX)/OR.92  
17 December 1965

GENERAL Distr.

ENGLISH

Ninth regular session

## OFFICIAL RECORD OF THE NINETY-SECOND PLENARY MEETING

Held at the Tokyo Prince Hotel, Tokyo,  
on Tuesday, 21 September 1965, at 3.30 p.m.

President: Mr. ASAKAI (Japan)

### CONTENTS

<u>Item of the provisional agenda*</u>		<u>Paragraphs</u>
3(a)	Appointment of the Credentials Committee	1 - 2
4	Election of the Vice-Presidents	3 - 7
5	Appointment of the General Committee	8 - 11
6	Applications for membership of the Agency	12 - 16
7	Statement by the Director General	17 - 48
-	Statement by the Representative of the Secretary-General of the United Nations	49 - 59

\* GC(IX)/295.

The composition of delegations attending the session is given in document  
GC(IX)/INF/82/Rev.20.

#### APPOINTMENT OF THE CREDENTIALS COMMITTEE

1. The PRESIDENT proposed that, in accordance with Rule 28 of the Rules of Procedure, a Credentials Committee should be appointed consisting of the following nine Members: Australia, Colombia, Iraq, Italy, Poland, Thailand, Union of Soviet Socialist Republics, United States of America and Uruguay.
2. The proposal was adopted unanimously.

#### ELECTION OF VICE-PRESIDENTS

3. The PRESIDENT pointed out that under Rule 34 of the Rules of Procedure the Conference was required to elect its Vice-Presidents after the election of the Chairmen of the two Main Committees. He therefore intended to suspend the plenary meeting for a short time to enable the two committees to elect their chairmen.

The meeting was suspended at 3.35 p.m. and resumed at 3.45 p.m.

4. The PRESIDENT invited nominations for the eight posts of Vice-President of the Conference.
5. Mr. QUIHILLALT (Argentina) proposed the delegates of the following States: Brazil, Democratic Republic of the Congo, France, India, Iran, Romania, Union of Soviet Socialist Republics and United States of America.
6. Mr. ESCHAUZIER (Netherlands) seconded the nominations.
7. The delegates nominated were declared elected to the eight Vice-Presidencies.

#### APPOINTMENT OF THE GENERAL COMMITTEE

8. The PRESIDENT observed that under Rule 40 of the Rules of Procedure the General Conference was required to elect four additional members to the General Committee. He invited nominations.
9. Mr. BAFFOUR (Ghana) nominated the delegates of the following States: Canada, United Arab Republic, United Kingdom of Great Britain and Northern Ireland and Yugoslavia.
10. Mr. MARTINO (Italy) seconded the nominations.

11. The delegates of the States nominated were declared elected to the General Committee, which was thus duly appointed in compliance with the provisions of Rule 40 of the Rules of Procedure.

APPLICATIONS FOR MEMBERSHIP OF THE AGENCY (GC(IX)/508)

12. The PRESIDENT invited the General Conference to consider the recommendations of the Board of Governors concerning the applications for membership of the Agency made by Jamaica and Jordan. The Board had submitted a draft resolution in respect of each of those applications, but he thought the Conference might take the two draft resolutions together.

13. Sir William PENNEY (United Kingdom) supported the two applications for membership.

14. Mr. TOHAMY (United Arab Republic) welcomed the applications for membership made by Jamaica and Jordan. The confidence of the developing countries in the Agency was reflected by the increasing number of such countries applying for membership. He welcomed in particular the application by Jordan, whose admission to the Agency would bring up the number of Arab countries within the area of Africa and the Middle East which were Member States to a total of 12.

15. The two draft resolutions were adopted unanimously.

16. The PRESIDENT stated that, in accordance with Article XXI.C of the Statute, Jamaica and Jordan would become Members of the Agency as soon as their respective instruments of acceptance of the Statute had been deposited with the United States Government.

STATEMENT BY THE DIRECTOR GENERAL

17. The DIRECTOR GENERAL said that he would like, as in former years, to welcome those States which had joined the Agency since the preceding session of the Conference. The new Members were Costa Rica, Cyprus, Kenya, Kuwait and Madagascar, and the membership of the Agency now stood at 93.

18. Recalling that the Agency was approaching the second year of its long-term programme<sup>1/</sup>, he said he was pleased to report that implementation of that programme was proceeding satisfactorily.

<sup>1/</sup> INFCIRC/500.

19. One of the proposals included in it had been the reorganization of the Agency's technical assistance activities by concentrating them in one department. That department, which had come into full operation at the beginning of 1965, contained two divisions concerned with programming and with implementation, while overall planning, financing and statistical reporting were concentrated in the office of the Deputy Director General for Technical Assistance. Economies in staff and a consequent increase in operational efficiency had thus been achieved. A further improvement had been secured through another feature of the long-term programme, namely, unified programmes of assistance for Member States in which the provision of experts and equipment was fully integrated with the basic training of personnel who would work with the experts and continue the work after their departure. The 1966 programme of technical assistance would reflect that arrangement.

20. He had also tried to initiate a new form of assistance whereby research institutions in developing countries entered into reciprocal arrangements with similar institutions in the more advanced countries. Such arrangements, he felt, should be developed to an increasing extent, since they offered prospects of important lasting benefits and would probably permit more efficient use of the limited funds available for technical assistance. He hoped that Member States would find it possible to support the scheme by providing the necessary fellowships and equipment.

21. The Agency was playing an increasingly active part in United Nations Special Fund projects. Delegates would be aware of the projects which had already been in operation the previous year in Yugoslavia and the Philippines. The Yugoslav project, relating to research and training in the applications of atomic energy to agriculture, would be completed in 1966. As for the Philippines project, which was concerned with pre-investment studies on power, including nuclear power, the first phase had been concluded and the Agency had been authorized to proceed with studies envisaging the use of nuclear power plants in the context of planning an optimum expansion of power capacity. A detailed cost analysis was now being made of alternative methods of expansion based on conventional and nuclear plants; the results of that analysis, and the methods of analysis employed, should be of interest to other countries finding themselves in a similar situation.

22. The implementation of the Special Fund project for eradication of the Mediterranean fruit fly in Central America by employing the sterile male technique had begun under the technical direction of the Joint FAO/IAEA Division of Atomic Energy in Agriculture. The Joint Division would also implement the latest Special Fund project to be entrusted to the Agency, which concerned the establishment in Turkey of a pilot plant for grain disinfection by irradiation. It was expected that the pilot plant would successfully demonstrate the feasibility and economic practicability of using radiation on a commercial scale to prevent considerable losses of stored grain resulting from the action of insect pests.

23. The value of the Special Fund projects for which the Agency was the executing agency now exceeded \$6 million. Another project involving the use of similar techniques in which the Agency was participating was the Austrian/ENEA/IAEA international programme of irradiation of fruit and fruit juices in progress at the Seibersdorf laboratories near Vienna.<sup>2/</sup>

24. He now wished to refer again to the Joint FAO/IAEA Division, which had come into being on 1 October 1964. After some very minor initial difficulties the Division was now operating harmoniously and effectively and was demonstrating the advantages of that particular form of close co-operation between two organizations in the United Nations family on subjects of mutual interest. Such co-operation represented the best way of avoiding duplication of effort and eliminating inter-organizational rivalries.

25. The Agency's technical operations had continued and greater efficiency had been achieved by organizing the divisions concerned into sections. For example, the Division of Nuclear Power and Reactors was sub-divided into units dealing with nuclear power and desalting, economics, and reactor physics and research reactor utilization.

26. During the past year several important new nuclear power projects had been initiated, and the competitive position of nuclear power had improved significantly. In the United Kingdom it was estimated that an AGR (Advanced Gas-cooled Reactor) station would generate electricity at a lower cost than in the

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<sup>2/</sup> See document INFCIRC/640.

case of a coal-fired station, while in the United States of America various public utility undertakings had ordered light-water nuclear power plants in preference to conventional equipment. Developments in several other countries had shown a similar encouraging trend in favour of nuclear power.

27. More and more countries were giving serious consideration to the possibility of using nuclear plants to supplement their available energy resources, and that had led to increasing calls on the Agency's services for analysing nuclear power prospects in particular areas and for undertaking power reactor feasibility studies, site evaluation and assessment of tenders. During 1965 the Agency had dispatched nuclear power missions to Argentina and Turkey, and another was expected to visit Brazil, Chile and Peru.

28. The rapid development of nuclear power would be accompanied by an increasing production of plutonium by power reactors. The Secretariat had organized a panel to discuss the utilization of plutonium in power reactors. The conclusion reached by the panel had been that the technical basis for using plutonium in thermal reactors had already been established and would be strengthened in coming years. In view of the large thorium reserves available in several developing countries, the Agency was also interested in the utilization of thorium in converter and breeder reactors.

29. The Agency's experience in connection with international co-operative projects of training and research had been very encouraging; in particular, the projects relating to basic reactor physics and neutron diffraction had progressed satisfactorily. The former - the NPY (Norway/Poland/Yugoslavia) Project<sup>3/</sup> - was receiving enthusiastic reports from the scientists concerned in the three countries. The latter - IPA (India/Philippines/Agency) Project involving the use of a neutron crystal spectrometer at the atomic research centre at Manila<sup>4/</sup> - had made a promising start. The results already achieved would be published and a second spectrometer was now under construction. The success of those two projects confirmed his belief in the importance of regional undertakings of that nature.

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<sup>3/</sup> See document INFCIRC/550.

<sup>4/</sup> See document INFCIRC/560.

30. With regard to health and safety, much had been done to establish international services and improve co-operation. The Agency's revised Basic Safety Standards, revised transport regulations<sup>5/</sup> and codes of practice on personnel monitoring<sup>6/</sup>, waste management<sup>7/</sup> and radiological safety in mining and milling had been approved by the Board; the transport regulations had already been adopted extensively by Member States and transport organizations. A number of codes on other subjects were also being published. That type of publication continued to be well received by Member States.

31. A regional study group on health physics was to meet in November 1965 in Bangkok. The establishment of an advisory service at Agency Headquarters jointly with FAO and ILO would mean that information and advice on radiation protection and the management of radioactive wastes would be available to Member States. Several Member States had furnished the Agency with reports on the research into radioactive waste management which they were conducting; the publication of summaries of those reports would permit the benefits of the research to be more widely shared by the Members of the Agency. A similar scheme dealing with selected topics in health and safety was to be instituted in 1966. A regional advanced training seminar on radioactive waste management was scheduled for October 1965 at the Tokai-mura establishment in Japan.

32. As far as health and safety in general were concerned, he could not too strongly urge the need for early agreement on a scheme to provide for emergency assistance in the event of radiation accidents. Emergencies had to be dealt with immediately, and one should not be lulled into a feeling of false security by the excellent safety record which the nuclear industry had hitherto enjoyed. One should rather express one's gratitude for that state of affairs by ensuring that if an emergency situation ever did arise, one would be ready to meet it, bearing in mind that the public confidence so carefully built up over the years could be destroyed overnight by a single emergency, to meet which the proper measures were not taken. For that reason it was his fervent hope that the discussions of the subject in the Board of Governors during recent years would soon result in some acceptable universal or regional arrangement.

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<sup>5/</sup> STI/PUB/97.

<sup>6/</sup> STI/PUB/95.

<sup>7/</sup> STI/PUB/87.

33. While on the subject of technical operations, he wished to mention the important role being played by the Division of Scientific and Technical Information in the organization of scientific meetings and the production of scientific publications, which was likely to reach a record level in 1965. In that connection he would mention that the United Nations was publishing the proceedings of the Third International Conference on the Peaceful Uses of Atomic Energy and it was expected that all 16 volumes would have appeared by October of the current year.

34. Throughout the period covered by his statement preparations had been under way for using a computer in connection with many of the Agency's operations. In-service training of staff and the programming of work had ensured that the computer, an IBM 1401, would be effectively used when it was installed in October 1965. It might be possible later to provide some computer services for Member States.

35. As regards the work of the Department of Research and Isotopes, he wished to supplement what he had already said about agriculture by reporting continued progress in co-ordinated programmes relating to rice and maize cultivation and studies of soil moisture and efficient use of water. In medicine, progress was also being made in co-ordinated programmes relating to protein deficiency, endemic diseases and other subjects. The Agency also hoped to introduce co-ordinated programmes involving the application of radioisotopes in industry.

36. He had been greatly encouraged during the past year by the readiness of certain Member States to execute programmes of research of interest to the Agency at no cost to the latter. Members which had lent assistance in that way included Australia, Hungary, India, Israel, Japan, Sweden, the Union of Soviet Socialist Republics, the United States of America and Yugoslavia. It was particularly gratifying to observe that developing countries receiving assistance were so ready to provide something in return. He also wished at that point to acknowledge the value of research reports made available by Hungary, Poland and the Soviet Union.



37. The time at his disposal would permit only a passing reference to the work of the Agency's Laboratory, whose activities in the preparation of standards had been so well received. The distribution from Seibersdorf of standardized radioisotope sources had continued to expand, and in 1964 some 2600 sources and samples had been sent to 114 institutes in 43 countries. The Laboratory had also provided assistance in the implementation of the agricultural programme, which now covered 11 countries involved in the co-ordinated rice research programme, 3 in the maize programme and 12 in the disinfection programme using the sterile male technique.

38. The Monaco Laboratory had continued useful work on the dispersal and biological uptake of radioactive waste released into the sea.

39. The Agency had recently begun an international exchange of nuclear data, the technical area covered being that of generally measured quantities, such as the cross-sections of various reactor materials (including fuel isotopes) for reactions induced by neutrons of different energies. Quantities such as the yield of neutrons in fission were also covered, but not the constants derived for any one reactor or type of reactor. The data were now available in such detail that they could best be handled by computer techniques, and it was felt that exchanges of such data would be of assistance in the development of nuclear power.

40. The International Centre for Theoretical Physics had commenced operations in October 1964, with the support of UNESCO, and in that connection he wished to quote Professor Weisskopf, who in a letter to Professor Slater had said that "the most decisive achievements of theoretical physics during 1964/65 took place at Trieste". In its short life the Centre had already held two important seminars, one on plasma physics and the other on high-energy and elementary particles, which had been attended by no less than 125 scientists from about 30 countries, with lecturers of 14 different nationalities. The Centre had already issued more than 70 scientific publications and a major contribution to that work had been made by scientists from the developing countries.

41. The financial problems of the Centre were a source of some concern, and he had sought many ways and means of overcoming them. In 1966 the Board and the General Conference might be asked to give serious consideration to the future of that excellent institution, when its formative years could be regarded as completed.

42. One of the most significant achievements of the past year had been the unanimous acceptance by the Board of the revised safeguards system, a document which the Conference would be asked to consider at its present session. The Agency's revised system marked an important step towards ensuring that the atom would be used only for peaceful purposes; moreover, under it the first international inspection programme in the nuclear energy field would be put into effect with the support of both East and West. As Dr. Seaborg, Chairman of the United States Atomic Energy Commission, had once said, "Except for the limited Test Ban Treaty, there are few more important steps than this being taken to preserve international peace and security".

43. The Agency's executive responsibility for the application of safeguards had developed remarkably in the past year. Only two years had gone by since he had informed the Conference of the first transfer to the Agency of responsibility for applying safeguards in relation to a bilateral arrangement.<sup>8/</sup> In the meantime 21 Member States had submitted identifiable parts of their atomic energy programmes to Agency safeguards, either because they desired assistance under an Agency project, or were requesting the Agency to apply safeguards in relation to a bilateral arrangement, or wished to submit facilities unilaterally to Agency safeguards. The total power represented by the facilities thus subject to Agency safeguards exceeded 1400 MW(th) out of some 25 000 MW(th) at present generated by power reactors.

44. The Board had approved the request of Denmark and the United Kingdom to transfer to the Agency the administration of the safeguards required by their bilateral arrangement. At the Board's meetings in June, the Governor from the United Kingdom had announced the decision of his Government unilaterally to place the Bradwell Power Station, with a capacity of over 1000 MW(th), under

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<sup>8/</sup> GC(VII)/OR.73, para. 57.

Agency safeguards. More recently, Sweden had requested negotiations with a view to placing its bilateral arrangements with both the United States and the United Kingdom under Agency safeguards. At the Board's meeting a few days earlier approval had been given for the application of Agency safeguards in relation to the bilateral arrangement between Canada and Japan - a transfer of particular interest, since it was fully reciprocal and provided for each country to act as a supplier to the other.

45. Finally, he wished to say a word about the desalting of sea water, a technical development in which the Agency was actively engaged and which might contribute to the solution of water shortage problems. The Agency had continued to organize panel meetings on the use of nuclear power for desalting, the most recent of which had reviewed its work to date and recommended a programme for the future. The extent of international collaboration in which the Agency had been invited to participate was most encouraging. It included the joint Israeli/United States project and a project of considerable importance to Mexico and the United States in the Gulf of California. It was expected that the latter project would be the subject of a study carried out jointly by the two Governments and the Agency, the Agency to provide the chairman and secretary of the study group. Tunisia was also being given Agency assistance in its work on desalting, and the Agency was receiving an increasing number of requests for surveys to determine the possibilities of nuclear desalting in regions of the world where water was scarce.

46. The agreement for co-operation in desalting work concluded in November 1964 by the Soviet Union and the United States<sup>9/</sup> was an event of great significance. In order that the Agency and its individual Member States might receive the full benefit from that co-operation, the two Governments had undertaken to provide the Agency with copies of their reports and to invite observers from the Agency to their scientific meetings on the subject. Assurances had also been received from the United Kingdom that the Agency would be able to share the benefits of its extensive desalting programme.

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<sup>9/</sup> INFCIRC/60.

47. The spirit of co-operation manifest in the agreements he had mentioned seemed to be a measure of the goodwill which existed between the Agency and its individual Members, and between those Members themselves; it encouraged him to think that the Agency had before it many opportunities for constructive work.

48. In conclusion, he expressed gratitude to the Government of Japan for its invitation to the Conference to meet in Tokyo, and for the excellent facilities placed at the Agency's disposal for that purpose. It was fitting that a country which had made such outstanding progress in the peaceful uses of atomic energy should be host to the first session of the General Conference held away from Headquarters. Perhaps there was also significance in the fact that Japan was unique in having provided, by legislation, that atomic energy must be used only for peaceful purposes.

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

49. Mr. HOO (Representative of the Secretary-General of the United Nations) conveyed to the Conference the best wishes of the Secretary-General of the United Nations. They reflected the interest with which the United Nations had followed the Agency's activities. He would comment on its work and on the relations between the two organizations in the context of the United Nations Development Decade. Although, as the Secretary-General had stated, the goals of the Development Decade had **not yet** been reached, the institutions and programmes of the United Nations had been greatly strengthened during the past few years. The establishment of the United Nations Trade and Development Board had added a new dimension to its work and the proposed establishment of the United Nations Development Programme, by merging the Expanded Programme of Technical Assistance with the Special Fund, should strengthen technical co-operation. The creation of the United Nations Institute for Training and Research should assist in the execution of economic, social and political tasks. The reorientation and expansion of the United Nations International Children's Fund, the consolidation of the Centre for Industrial Development and the proposed expansion of the World Food Programme should all contribute towards an expansion of United Nations activities.

50. The papers submitted to the Conference indicated the development of the Agency's work, some aspects of which were of special importance for achieving the purposes of the Development Decade.
51. Inter-agency arrangements for co-operation had been reinforced, reflecting the general recognition of the inter-relationship between various forms of activity.
52. The Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas had stimulated effort in that domain, and the United Nations, its specialized agencies and the Agency were co-operating - through a new committee reporting to the Economic and Social Council of the United Nations (ECOSOC) - in studying the complex problems involved in applying science and technology, suitably adapted to local conditions, in developing countries. High-priority topics had been selected with a view to concerted action. ECOSOC, in its resolution 1083(XXXIX), had invited the Committee to submit recommendations aimed at stimulating, co-ordinating or, if necessary re-orientating the activities of the United Nations family in that field.
53. Arrangements had been made to intensify co-operation between the United Nations and the Agency in regard to energy and power and the Third International Conference on the Peaceful Uses of Atomic Energy was an example of such co-operation. Another example was the Special Fund project in the Philippines for a pre-investment study on power.
54. The production of fresh water by desalination was of great interest to both organizations, and the Advisory Committee on the Application of Science and Technology to Development had recommended that high priority be given to the problem. As several international organizations were interested, co-ordination was of great importance. At its recent session, ECOSOC had asked the Secretary-General to intensify the role of the Secretariat as a clearing house for the exchange of information and to explore further possibilities, in consultation with the agencies concerned, for accelerating progress. To that end the United Nations was organizing an inter-regional seminar on the economic application of water desalination; the seminar would be attended by about 40 participants from developing countries, and one of the subjects to be discussed would be the application of nuclear power to desalination.

55. In its resolution 1089(XXXIX) relating to the Development Decade, adopted at its July 1965 session, ECOSOC had requested the Secretary-General and the executive heads of agencies "to review their work programmes and to explore the possibility of formulating future programmes of action and, if possible, to make projections over the next five years with a view to identifying areas in which their organizations can make their maximum contribution both individually and by concerted action". The Administrative Committee on Co-ordination had also recognized the need for synchronization and adjustment of programmes.

56. While the links of the Agency with other United Nations organizations were developing, its role and prospects had also been clarified. The concentration, in the economic field, on major projects such as nuclear power and water desalination was an obvious example, while in the technical field the Agency had in recent years increasingly contributed to the use of radioisotopes, especially in nuclear medicine, radiation biology and agriculture, and had established closer relationship with WHO and FAO. Research was also firmly established, and important work was being carried out, at the International Centre for Theoretical Physics in Trieste and at the Seibersdorf Laboratory for example, and under research contracts awarded to outside organizations.

57. The Agency played a vital part in setting standards in the increasingly important fields of health, safety and waste disposal, and had also achieved significant progress in the field of safeguards, which was of particular importance in view of the increasing use of nuclear power.

58. Interest in the possible use of the Agency's facilities in the field of disarmament, and in particular to prevent the proliferation of nuclear weapons, had increased in the past year. In the Disarmament Commission of the United Nations and in the Conference of the Eighteen-Nation Committee on Disarmament in Geneva specific proposals were under consideration for extending Agency safeguards to all countries, while the Preparatory Commission for the Denuclearization of Latin America was considering a system of verification, inspection and control in which the Agency's safeguards system would be the basic element.

59. If successful, such efforts to use the Agency as a ready and effective means of ensuring compliance with disarmament measures could be of great value, both in strengthening the Agency and in furthering the primary objectives of the United Nations.

The meeting rose at 4.45 p.m.

