



International Atomic Energy Agency

PROGRAMME
AND BUDGET
FOR 1964

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LIST OF ABBREVIATIONS

ACABQ	Advisory Committee on Administrative and Budgetary Questions (of the General Assembly of the United Nations)
Agency	International Atomic Energy Agency
Board	Board of Governors (of the Agency)
D	Director
DG	Director General
DDG	Deputy Director General
EPTA	Expanded Programme of Technical Assistance (of the United Nations)
FAO	Food and Agriculture Organization of the United Nations
GS	General Service (staff)
IBWM	International Bureau of Weights and Measures
ICRP	International Commission on Radiological Protection
ICRU	International Commission of Radiological Units and Measurements
ISO	International Organization for Standardization
M & O	Maintenance and Operatives Service (staff)
P	Professional category (staff)
SAC	Scientific Advisory Committee (of the Agency)
TAB	Technical Assistance Board (of the United Nations)
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
WHO	World Health Organization
WMO	World Meteorological Organization

NOTE

All sums of money are expressed in United States dollars.

INTRODUCTION

I. GENERAL

1. In accordance with Article XIV.A of the Statute, the Board of Governors hereby submits to the General Conference the budget estimates for the expenses of the Agency in 1964.
2. These estimates were initially prepared by the Director General, reviewed by the Board's Administrative and Budgetary Committee in May 1963 and finally adopted by the Board in June 1963.
3. The estimates for 1964 reflect in general no significant change from those which the General Conference approved for 1963. As in 1963 there has been a further effort to reduce administrative costs. It is proposed, for example, to reduce the number of Professional posts by eight, bringing total staff in this category to a level which is only six above the 1961 total. In the General Service category, it is proposed to reduce by seven the number of posts to be financed under Section 8 of the Regular Budget [1]. In this connection it is to be noted that in spite of the requirements for new General Service and Maintenance and Operatives Service posts for the publications programme in 1964 [2], the estimate for Section 6 is \$22 500 less than the appropriation for 1963 [3].
4. The target for voluntary contributions to finance the operational programme for 1964 has been retained at the \$2 million level. In regard to pledges towards this target there has been only a slight improvement in the response to the resolution [4] in which the General Conference has called upon Member States "to make voluntary contributions to the General Fund . . . in amounts that are at least the same percentage of the target for each year as are their assessed contributions to the Regular Budget". The Board wishes to stress the urgent need for all Member States to contribute to the maximum extent possible in order to provide for the effective execution of the approved programme.
5. The Board recommends the adoption of the Programme and Budget for 1964 by the General Conference.

II. FORM OF THE PROGRAMME AND BUDGET

6. No changes are proposed in the form of the Programme and Budget for 1964 as compared with that of 1963. A further attempt has been made to reduce repetitive textual material, and explanatory texts are provided only where necessary.

III. THE BUDGET

7. The structure of the budget for 1964 remains essentially unchanged from that for 1963. As in previous years, provision to meet a proportion of the expenditures for salaries and wages, common staff costs, common services and supplies and equipment

[1] See Table 16 below.

[2] See paragraph 167 below.

[3] See Table 10 below.

[4] Resolution GC(V)/RES/100.

has been included in the appropriations for the General Conference and the Board of Governors. In addition, the budget for 1964 reflects for the first time a proportion of salaries and wages and common staff costs attributable to the internal production of the Agency's publications [5].

8. Comparison of the estimates for 1964 with the approved budget for 1963 can be made from Tables 3 and 4. The respective total figures are summarized as follows:

	1963	1964	Increase	
	\$	\$	\$	%
Annual expenditure	7 337 500	7 444 500	107 000	1.46
Miscellaneous income	215 000	224 500	9 500	4.42
Assessments on Member States	7 122 500	7 220 000	97 500	1.37

9. As compared with the 1963 budget, five appropriation sections have been reduced, three remain unchanged, and four show increases. The net increase has been arrived at as follows:

	\$	\$
<u>Increases</u>		
7. Scientific and technical services and laboratory charges		93 500
8. Salaries and wages		130 000
9. Common staff costs		9 500
12. Common services, equipment and non-technical supplies		36 500
		<u>269 500</u>
<u>Decreases</u>		
1. The General Conference	14 000	
2. The Board of Governors	30 000	
5. Seminars, symposia and conferences	68 000	
6. Distribution of information	22 500	
10. Duty travel of staff	28 000	162 500
		<u>107 000</u>
Net		107 000

All the increases are dealt with in detail under the respective appropriation sections.

10. As provided in the Statute and the Financial Regulations, the expenses of the regular programme are financed by contributions for which Members are assessed annually. In accordance with established practice, the Director General will propose to the General Conference a scale of assessments for 1964 based on the United Nations scale for 1963.

11. The final cash surplus for 1961, which will be allocated to Member States in 1964, is more than the increase in the budget for that year. It has been arrived at as follows:

[5] See Table 10 and paragraph 153 below.

	\$	\$
Budget surplus	315 319	
Less contributions unpaid as at 31 December 1961	646 669	
	<hr/>	
Provisional cash deficit as at 31 December 1961		331 350
Arrears of contributions paid during 1962		493 177
Savings on obligations brought forward from 1961		41 407
		<hr/>
Final cash surplus for 1961		203 234
		<hr/>

This surplus is appreciably lower than for the two years 1959 and 1960.

12. The provisional cash deficit in 1962 is approximately twice as high as it was in 1961. The reason for this lies mainly in the fact that a supplementary estimate for 1962 of \$470 600 was approved by the General Conference in September of that year and payment of practically all of this sum is not expected until 1963. In addition, fuller utilization of approved appropriations results in a smaller budget surplus.

13. The estimates for the operational programme in 1964 amount to \$2 367 000. Estimated income from services rendered by the Laboratory to Member States, special voluntary contributions and casual income reduce the sum required to be raised by voluntary contributions to \$2 million. This target is the same as that for the years 1962 and 1963.

14. Pledges of voluntary contributions have continuously failed to meet even the modest targets which the Board felt to be justified and realistic though far below the essential needs of developing Member States. The response to the resolution adopted by the General Conference at its fifth regular session [4] does not reflect any appreciable improvement in the situation. In 1962, only 44 of the Agency's 79 Member States pledged voluntary contributions to the General Fund. Of these, only 22 pledged at a rate equal to or higher than their percentage assessment of the Regular Budget. The remaining 22 pledged contributions lower than their assessment ratio, and 35 Member States pledged no voluntary contributions at all.

15. The following figures reflect the situation from 1959 through 1962:

<u>Year</u>	<u>Target</u>	<u>Pledges</u>	<u>Percentage</u>
1959	1 500 000	1 183 044	78.9
1960	1 500 000	996 103	66.4
1961	1 800 000	1 261 200	70.1
1962	2 000 000	1 380 470	69.0
1963 [6]	2 000 000	1 318 970	65.9

[6] Up to 30 June 1963.

IV. THE WORKING CAPITAL FUND

16. The Board proposes that for 1964 the Agency's Working Capital Fund should remain at the same level as before, namely \$2 million. However, recurring cash deficits in the Administrative Fund point to the possibility that in future years the Working Capital Fund may have to be used to a greater extent than hitherto; fuller utilization of available financial resources will result in smaller residues of unused funds to offset delays in the payment of assessed contributions.

V. SUBMISSION OF THE BUDGET TO THE GENERAL ASSEMBLY OF THE UNITED NATIONS

17. After adoption by the General Conference, and in accordance with Article XVI of the Relationship Agreement with the United Nations, the Agency's budget will be reviewed by ACABQ, which will report thereon to the General Assembly. The comments of ACABQ on the form of the previous budgets and on the Agency's administrative and financial practices have been taken into account in the development of the budget for 1964.

THE PROGRAMME

Summary

Table 1

Part of the Programme	Expenditure under the Regular Budget			
	1962	1963	1964	Increase or
	Actual	Budget ^{a/}	Estimate ^{a/}	(decrease) 1963:1964
	\$	\$	\$	\$
I. Technical assistance and training				
A. Technical assistance	299 713	311 030	308 090	(2 940)
B. Exchange and training	287 811	352 460	319 350	(33 110)
II. Nuclear power and reactors	454 080	555 590	582 300	26 710
III. Isotopes and radiation sources	475 119	603 430	663 220	59 790
IV. Health, safety and waste management	957 665	1 117 390	1 043 710	(73 680)
V. Research and services in physical sciences	555 999	774 490	804 680	30 190
VI. Safeguards	174 637	385 210	334 070	(51 140)
VII. Information and technical services	824 240	895 960	1 001 610	105 650
TOTAL	4 029 264	4 995 560	5 057 030	61 470

^{a/} For details, see Annexes II and III.

I. TECHNICAL ASSISTANCE AND TRAINING

A. Technical assistance

(a) General

18. The need for assistance in the form of experts and equipment has been increasing over the past years in step with the growing number of Member States and with increasing activities in nuclear energy in many countries. The volume of requests, exclusive of those to be financed under EPTA, has risen from \$690 000 in 1959 to \$1 750 000 in 1963, that is by 150 per cent, while funds approved for this purpose have increased only from \$620 000 in 1959 to \$864 000 in 1963, that is by 40 per cent; of the sums annually approved by the General Conference, no more than 70 per cent were usually available. [7]

19. For 1963, the Board of Governors has approved requests involving the services of 39 experts together with equipment worth \$446 550, of which only \$321 550 is expected to be available. In addition, technical assistance projects approved under EPTA provide in 1963 some 39 experts, and equipment worth about \$122 000. The implementation of several projects initiated in 1963 will continue in 1964.

20. In addition to assistance already approved under EPTA for 1964, it is expected that a large number of requests will be received for experts to be financed from the Agency's own resources in 1964. The main reasons are the increasing number of newly independent countries that are expected to become Members of the Agency and the growing demand for assistance in connection with research reactors and radioisotope laboratories now being

[7] See paragraph 15 above.

built or just completed, bilateral assistance being generally limited to the period of construction only. It is estimated that in 1964, in the combined Agency/EPTA programmes, there will be a need for approximately 745 man-months of technical assistance in various peaceful uses of nuclear energy, requiring the services of some 100 field experts in addition to those whose assignments continue from previous years.

21. The amount of equipment to be supplied for technical assistance projects is expected to exceed \$420 000. In addition, a fairly large amount of equipment may be supplied or transferred by the Agency if the proposal made by several Member States at the sixth regular session of the General Conference [8] to establish six medical isotope and six physics laboratories in developing countries is accepted.

(b) Bilateral assistance, Special Fund and similar projects

22. In 1964, as in previous years, the Agency expects to be called upon to assist certain Member States in making arrangements to receive technical assistance directly from other Member States. It may also be required to assist some Member States in preparing suitable requests for assistance from other sources, including the Special Fund; for which it may act as Executing Agency for approved projects in nuclear energy.

(c) Missions

23. By the end of 1963, over 40 countries will have been visited by preliminary assistance missions. New Members that have not been visited by such missions are expected to seek the Agency's assistance in 1964; a preliminary assistance mission is consequently planned for that year.

24. Follow-up missions are particularly important in 1964 because government requests for technical assistance under EPTA during the biennium 1965-1966 and from the Agency's own resources in 1965 will have to be prepared. It is therefore planned to send such missions to Africa, to the Middle East, and to the Far East and South East Asia.

B. Exchange and training

(a) Fellowships

25. During recent years the Agency has been receiving annually between 550 and 650 requests for fellowship awards and it is expected that this level of demand will be maintained in 1964. While extensive use will continue to be made of fellowships offered by Member States at practically no cost to the Agency (Type II fellowships), the extent to which remaining requests can be met will, as in the past, depend upon the availability of funds.

(b) Research grants and the exchange of scientists, experts and visiting professors

26. The demand for training of specialists and for the provision of research opportunities is increasing. Due to lack of funds, only nine out of 14 requests for research grants could be met in 1962. For 1963, 17 requests have been received; the number is expected to be greater in 1964.

27. Under the exchange programme, 26 visiting professors were assigned to developing countries during 1962. Forty-three requests for visiting professors have already been received for 1963, but it may not be possible to meet more than 30 of them.

[8] GC(VI)/RES/131.

(c) Training courses and regional training centres

28. The Agency receives many requests and suggestions for the organization of training courses in developing countries. In 1963, it will only be possible to organize four from Agency funds and four regional courses from EPTA funds. Subject to the availability of funds, the following courses are planned in 1964:

- (i) Nuclear physics for teaching staff of universities of developing countries;
- (ii) Maintenance and repair of electronic equipment;
- (iii) Application of radioisotopes in soil-plant relations;
- (iv) Application of radioisotopes in medicine;
- (v) Application of radioisotopes in general;
- (vi) Use of radioisotopes and radiation in agricultural biochemistry;
- (vii) Radiation protection for inspectors in industry;
- (viii) Reactor physics;
- (ix) Radiobiology; and
- (x) The effect of radiation on biological systems.

29. The question of establishing regional training centres continues to receive attention. Funds available under EPTA have been allocated to be used as soon as the first regional training centre in Cairo comes into operation.

(d) Mobile radioisotope laboratories

30. In past years the Agency's two mobile radioisotope laboratories have provided training on the spot for approximately 1300 trainees in the Far East, Latin America and Europe. It is planned that one mobile laboratory will continue to operate in Latin America and the other one in South East Asia.

II. NUCLEAR POWER AND REACTORS

(a) Nuclear power

31. It is expected that Member States will continue to seek the assistance of the Agency in studies on the prospects of nuclear power in the light of their local resources and needs. In the past, such studies have led to positive results in Pakistan and the Philippines. Where definite projects develop, the Agency will be expected to extend its assistance to project planning, site selection, choice of the reactor system, preparation of specifications, evaluation of bids and advice on construction. The Agency will also continue to assist Governments in formulating requests to the United Nations Special Fund, for which it may, if the request is approved, serve as the Executing Agency. To meet such requests, two nuclear power survey missions and several power-reactor project-evaluation missions are foreseen in 1964.

32. The reports made in the past on the design, construction, operation and costs of several power reactor projects in Canada, the United Kingdom and the United States will be continued. It is hoped that more Member States will make their power reactor projects available for coverage in similar reports.

33. If the present study on the economic aspects of the introduction of nuclear power plants is completed in 1963, it is planned to undertake in 1964, with the assistance of a panel of experts, a study of methods for estimating costs of nuclear power plants in a specific country on the basis of known or assumed costs in another country. It is also hoped to undertake a study of the comparative costs of different reactor systems and other supporting facilities.

34. The General Conference having recognized the importance of considering conventional power in relation to the Agency's nuclear power programme [9], studies of the comparative economics of nuclear and conventional power will be undertaken.

35. A panel will be organized to discuss the technical and economic aspects of the utilization of plutonium for power production. A realistic evaluation of its possibilities is becoming increasingly important as more plutonium is being produced in industrial power reactors.

36. Interest has been growing in the application of power reactors to the production of process heat, particularly for the desalination of water. The Agency will continue to study such auxiliary applications of nuclear power and will make the results available to interested Member States. A panel will be convened to review the current status of the technology and economics of process-heat reactors.

37. With the publication of the sixth volume of the "Directory of Nuclear Reactors", the Agency will in 1964 continue to provide basic information on the design and operational characteristics of reactors in the world.

(b) Reactor research, physics and safety

38. The Agency will continue to promote international co-operation in reactor physics by supporting such projects as the NORA project, and its co-operative programme with Norway, Poland, Yugoslavia, and possibly other States.

39. Efforts will also be continued to promote the effective utilization of research reactors in Member States. With reference to newly-established centres, study group meetings will be held on research reactor utilization including their use for training in power reactor technology.

40. The Agency will continue to encourage international collaboration in the utilization of high-flux research reactors by publishing information regarding availability of irradiation facilities. It is expected that the Agency will act as an intermediary between States needing neutron flux space and those able to make it available.

41. With regard to very high flux reactors, studies will be continued on their need, and on technical and other problems pertaining to their design.

42. A group of experts on long-range planning in nuclear power, which met in Vienna in August 1962, expressed the view that the Agency was well qualified to assist developing countries in the assessment of the safe design, operation and proper siting of new reactors. It is expected that a number of requests for such assistance will be met in 1964.

43. The Agency will continue to follow actively the progress in such subjects as breeder reactor technology; design and operation of high-flux reactors; the theoretical and experimental research relating to possible causes and consequences of reactor accidents and their prevention in relation to the development of safe and reliable power reactors. Assuming that these and related subjects will be dealt with at the Third International

[9] GC(VI)/RES/128.

Conference on the Peaceful Uses of Atomic Energy which the United Nations is expected to organize in Geneva in 1964 [10], the Agency's conference programme for that year does not include meetings on reactor subjects [11].

44. A panel is planned to discuss and correlate theoretical and experimental data on reactor shielding and its engineering design; adequate shielding in power and research reactors is important and its design should aim at maximum safety at low cost.

45. In awarding research contracts, preference will be given to developing countries and stress will be laid on the development of local resources, on new techniques in the utilization of research reactors, and on research related to the special problems of introducing nuclear power into developing countries.

(c) Nuclear fuels and equipment

46. The Agency will continue to provide information and advice to Member States on all aspects of the production, treatment and utilization of source, special and other nuclear materials. It is expected that there will be some increase in the number of requests for special fissionable or source materials for reactor projects in Member States as well as for small quantities of special fissionable materials for research and calibration purposes.

47. Developing Member States will continue to seek assistance from the Agency in connection with the development of their nuclear mineral resources. Requests are expected for expert assistance in prospecting for radioactive and other nuclear minerals, development of uranium deposits, processing of uranium and thorium, uranium metallurgy and fabrication of nuclear fuel elements.

48. A second conference on nuclear electronics is planned for the end of 1964 in India. Its scope will be limited to advanced progress in such projects as fast nuclear electronics, data processing in nuclear electronics and radiation detectors.

49. It is intended to convene a panel to make a study of and recommendations on standard equipment and design of nuclear physics and radiochemistry laboratories.

50. Two meetings of consultants will be called: one on the possibility of a standardization of detectors of radiation, the other to review the recommendations on the tropicalization of electronic equipment prepared by a group of experts in 1961. Developments in electronic equipment for various applications of isotopes and for other branches of nuclear sciences will also be reviewed.

III. ISOTOPES AND RADIATION SOURCES

(a) General

51. Awareness in Member States of the immediate and practical benefits which can be derived from the applications of isotopes and radiation sources in medicine, agriculture, hydrology and industry is reflected by a larger number and a wider scope of requests for technical assistance. The following paragraphs deal with projects planned for 1964; they do not cover the regular provision of assistance to Member States in the form of training, expert guidance, technical information, advisory missions, literature surveys and other aspects of the Agency's work.

[10] Resolution A/RES/1770 (XVII) of the General Assembly of the United Nations.

[11] See paragraph 131 below.

(b) Medicine

52. A symposium on medical isotope scanning was held in 1959 under joint sponsorship with WHO; since then marked advances in techniques have been made and improved scanning instruments, new isotopes and labelled compounds have come into use. A further review of the subject by a second symposium is planned in 1964.

53. The policy of awarding research contracts in endemic and tropical diseases in co-operation with WHO will be continued, to promote the application of established isotope techniques to the study of certain diseases which are common in developing countries, particularly in tropical regions. It is proposed to convene a panel in 1964 to advise on the co-ordination of this programme. A small part of the funds available for medical research contracts will continue to be used to promote the development of new techniques and the application of new isotopes.

54. A panel will be organized to provide guidance in the determination of medically important trace elements by activation analysis. There are many research reactors which can be used for such studies; the Agency's Laboratory will also be able to co-operate. Next to production of isotopes for diagnostic and therapeutic purposes, activation analysis may be the most significant application of reactors to medicine.

55. Two regional training courses in the use of isotopes in medicine will be organized during 1964, one in Greece and one in an Asian country; the latter will be financed from EPTA funds.

56. The calibration and standardization of thyroid radioiodine up-take measurements [12] will be continued; Agency experts will visit countries in South East Asia and the Far East for this purpose.

57. The provision of diagrams and data relating to radiotherapy physics will continue, and emphasis will be laid on the establishment of suitable conditions in the developing countries for the utilization of such data. It is proposed to convene a panel in 1964 to review the recommendations of the joint WHO/Agency panels of 1959 and 1962 regarding the provision of the services of physicists in radiotherapy institutes, and further to determine the future policy of the Agency in assisting the establishment of radiotherapy physics in developing countries.

58. Following the 1963 panel meeting on the use of small sealed sources for interstitial and intracavitary therapy, the Agency expects, in 1964, to be able to co-ordinate the efforts of suppliers in various countries to develop standard sets of such sources for use in less advanced countries. Simplified dosage tables for use with these sources may also be established.

59. The work of ICRU which is of basic importance to the Agency's programme in connection with medical applications of isotopes and radiation sources will be given continued support.

60. Based on information available from Member States and on decisions of the General Conference in 1963, it is expected that in 1964 plans for the establishment of six medical isotope laboratories in developing countries may be pursued if the proposal is accepted [8].

[12] See document GC(V)/155, paragraph 67.

(c) Agriculture

61. During 1964 the emphasis will continue to be on soil-plant relationships and entomology where the most immediate benefits to developing countries can be expected. Guidance and assistance in other areas will be given to Member States to the extent that resources permit. It is proposed to convene a panel in 1964 to discuss specifically the relative emphasis to be given to different areas in the Agency's agricultural research programme.

62. Existing co-ordinated projects involving research contracts on isotope applications in rice fertilization and on radio-tracer measurements of plant nutrient supply and movement in soil systems will be continued.

63. The effectiveness of portable radiation instruments for determining density and moisture content of soil components has now been established. To determine the effect of these instruments on measurements relating to water economy in agricultural production and to outline a new research project involving the use of such instruments, a panel on the use of isotopes and radiation in soil moisture and irrigation will be convened.

64. The Agency's programme of training courses on isotope and radiation applications in agriculture will be extended to include agricultural biochemistry. It is also planned to organize a regional training course in South America on the use of isotopes and radiations in soil-plant relations.

65. Research contracts will continue to cover a co-ordinated project on the eradication of insect pests by radiation methods, with particular emphasis on the Mediterranean fruit fly, Dacus fly and Tsetse fly. The preliminary investigations leading to a possible eradication of locusts by radiation methods will be followed up. A panel on insect population control by the sterile male technique will review the recommendations made by a similar panel in 1962 in the light of progress made under Agency contracts and of new information available. It is planned to distribute an information circular on radiation methods for insect population control.

66. A small group of consultants will review a training manual relating to the use of isotopes and radiations in entomology which is expected to be completed in 1964.

67. A group of research contracts on induction of plant mutation by irradiation will be co-ordinated. A small group of consultants will review recent developments in radiation genetics and plant breeding and the results obtained under Agency contracts in order to give specific direction to this programme.

68. A recent important development is the production of vaccines of irradiated larvae which offer the only practical method of immunizing animals against nematode diseases. Information on this method will be collected and disseminated and support will be given to further research.

69. A symposium, co-sponsored by FAO, on the use of isotopes in animal nutrition and physiology will be held; it will complement the 1963 FAO/Agency technical meeting on isotopes in the biochemistry and physiology of milk secretion. The symposium will discuss such topics as the improvement of animal feeds, feed additives, role of minor elements in nutrition, relations between nutrition and animal health, and innovations in immunology and endocrinology.

70. It is hoped that through a pilot plant operation the technical feasibility of a programme for disinfestation of stored grain products by radiation which was drawn up with the assistance of an expert panel in 1962 will be established.

71. Emphasis will also be placed on radiation treatment of agricultural products moving in international trade, to prevent transmission of diseases or insect pests to plants, animals and man, and on isotope applications which have been found feasible, such as irradiation of potatoes and fruit juice. The Agency expects to participate with FAO in a technical meeting on food irradiation in 1964.

72. Specific problems in plant pathology will be handled through technical assistance to Member States; as appropriate, consultants may be called upon for assistance.

73. The Agency continues to be the Executing Agency of a Special Fund project involving nuclear research and training for the promotion of overall agricultural production in Yugoslavia. Experts assigned to this project will initiate and execute, together with their local counterparts, research programmes involving isotopes in soil fertility and plant nutrition, poultry and animal nutrition, and plant breeding.

(d) Development of natural resources

74. So far, the Agency has been primarily concerned with the applications of isotope techniques to hydrological problems. Since, however, isotope methods can be applied with advantage to the development of other natural resources, it is intended to enlarge the scope of work to include more practical aspects of nuclear geophysics such as nuclear bore hole logging and analyses by X-ray fluorescence and neutron generators. As a first step, contact will be established with various groups engaged in nuclear geophysics.

75. Advisory services on application of isotope techniques to hydrological problems will be extended in 1964. Special missions will continue to visit areas in which the most pressing problems exist and where isotope techniques may be most profitably applied.

76. The world-wide survey of the concentration of hydrogen and oxygen isotopes in natural water will continue into 1964. By that time, it is expected that sufficient data will be available for the results to be studied by a panel. Possible changes in the pattern of work of the survey will be examined.

77. A project involving the application of isotopes to the study of silt movement in the Tonle Sap, Cambodia, is being carried out under EPTA. The results of experiments in 1963 will lead in 1964 to the second stage of the project, which is the determination of the amount of bed load material transported by the Stung Sen, one of the tributaries feeding the Great Lake in Cambodia.

(e) Industry

78. It is expected that by 1964 the current survey of the applications of isotopes in industry and the savings obtained by their use will have yielded sufficient data to enable the Agency to make recommendations concerning a central body for documentation on the industrial uses of isotopes.

IV. HEALTH, SAFETY AND WASTE MANAGEMENT

(a) Effects of radiation on man and his environment

79. A symposium will be held in 1964 on the measurement of body-burdens of radio-nuclides and assessment of their effects. The work of ICRP on permissible doses for external and internal radiation is of basic importance to the Agency's programme in connection with health and safety and will be given continued support.

80. The Agency will continue to support research in radiation biology directed to the investigation of factors modifying radiation sensitivity. A panel will be convened to discuss one particular group of projects dealing with new methods of sensitization.

81. Studies measuring the body-burdens of radionuclides in connection with radio-epidemiological surveys will be continued and a central register will be maintained of cases of accidental Sr⁹⁰ contamination of humans. The research programme on toxicity of ingested radionuclides will be broadened to include such problems as kinetics of the up-take, distribution, retention and elimination of nuclides; delayed effects of internal radiation as a function of dose levels; influence of physiological factors, such as age, on radiosensitivity; and relative toxicity of individual nuclides. This programme cannot be accomplished with the Agency's limited means and will require active participation by research institutions in Member States at nominal cost to the Agency.

82. The research project on the effects of radioactivity in the sea, which was started in 1961 in Monaco is expected to continue. Up to the end of 1963 this project is financed by an annual contribution of \$60 000 from the Agency and a special annual voluntary contribution of \$40 000 by the Government of Monaco. For 1964, it is proposed to raise the Agency's contribution to \$80 000. The results of the work should be of interest to all maritime countries.

(b) Radiation protection

83. A symposium on personnel dosimetry for accidental high-level exposure to external and internal radiation will be held in 1964. The panel on the basic requirements of an adequate system of personnel dosimetry for workers exposed to external and internal radiation will complete its work in 1964. In particular, recommendations on appropriate warning and action levels based on the results of indirect measurement of body-burdens will be drawn up.

84. The panel of experts which met in 1963 to study the question of permissible emergency doses to the public in the neighbourhood of nuclear installations will conclude its work at a second meeting in 1964.

85. The assessment of inhalation hazards arising from many operations involving radioactive materials poses difficult problems and a study will be undertaken in 1964 to consider the adequacy and possible improvement of current techniques for the measurement of radioactive aerosols.

86. It is usually assumed that internal contamination hazards do not arise in work with sealed sources. This assumption is valid only if it can be shown that there is no leakage from the sources. Therefore it is proposed to convene a small group of consultants, in co-operation with ISO, to review and discuss available techniques to ensure safe working conditions.

87. Research contracts will be awarded for work of immediate concern to the Agency's activities in radiation protection, and the publication of manuals on this subject will continue in 1964 with special emphasis on personnel monitoring techniques and the calibration of monitoring devices.

88. Member States will be provided, on request, with technical services, such as assessment of selected radionuclides in foodstuffs and in samples of environmental material, bio-assay, and the direct measurement of body-burdens of certain radionuclides.

(c) Safety of nuclear installations and operations

89. Where appropriate, the Agency will continue to apply its Health and Safety Measures [13] to projects with which it may be associated. As in previous years, some health and safety inspections will be undertaken.

[13] INFCIRC/18.

90. A manual on the provision of radiological protection services in small nuclear establishments will be issued in 1964. A guide will also be compiled for the assistance of persons who are called upon to prepare radiological safety reports on nuclear installations.

91. Increasing attention is being given to the influence which meteorological conditions can have on the safety of nuclear installations. It is proposed to convene a panel on this subject.

(d) Nuclear accidents

92. In order to enable the Agency to play a direct part in the provision of emergency assistance to Member States in the event of a radiation accident, additional equipment including a portable analyser and associated devices will be purchased in 1964. Consideration will be given to the systematic compilation and presentation of available information on the effects of radiation accidents.

93. The services of consultants will be required to study the technical relationship of exposure to damage under the provisions of the Convention on Minimum International Standards Regarding Civil Liability for Nuclear Damage.

(e) Waste management

94. It is proposed to convene a panel in 1964 to evaluate the application of chemical engineering processes in waste treatment and, in particular, the separation of fission products of long half-life. Consideration will continue to be given to the development of methods of reporting disposal of radioactive wastes in international areas and the monitoring procedures adopted.

95. It is proposed also to convene a panel to study the economics of waste management practices in the light of the various methods available.

96. In awarding research contracts emphasis will be on treatment, transportation and storage of radioactive wastes; the economics of waste management; and the movement of radioactive materials in, and their effects on, the environment. An attempt will be made to co-ordinate existing research activities in such subjects as the removal of radioactive materials from liquid effluents. It is planned to convene a panel on co-ordination of waste management methods other than disposal in the marine environment. This will complement the 1962 panel on co-ordination of research projects on radioactivity in the marine environment. It is also proposed to organize a meeting of a small group of consultants to discuss research in the application of mineral reactions in radioactive waste management.

(f) Standards and regulations

97. The Agency's Basic Safety Standards for Radiation Protection [14] were issued in 1962 and it is expected that sufficient experience will have been gained from their use to warrant the convening of a panel in 1964 to consider any revision that may be necessary.

98. As a continuation of the Agency's work on the safe transport of radioactive materials a panel will be convened to discuss the design and testing of transport containers for large radioactive sources and a panel of technical and legal experts will be convened in 1964 to prepare a draft international convention on the transport of radioactive materials.

[14] Safety Series No. 9 (STI/PUB/26).

V. RESEARCH AND SERVICES IN PHYSICAL SCIENCES

99. The following paragraphs describe such parts of the Agency's programme as do not directly involve the Agency's Laboratory. The work and programme of the Laboratory is dealt with in detail in paragraphs 108 to 123 below.

(a) Physics

100. It is intended to hold two meetings of the International Nuclear Data Working Group [15] in 1964.

101. The development of operations in compiling nuclear data will have to be carried out at a site, preferably not too far from the Agency's Headquarters, where large-scale computer facilities co-exist with a group or groups of specialists performing neutron time-of-flight studies. It is expected that it will be possible for the Agency to obtain at this site the necessary services under a technical contract. This should provide a nucleus to which other Member States may attach staff from time to time and which, working in co-operation with other established centres, can act as a group interchanging on a world-wide scale the detailed information now becoming available from sophisticated experiments, as well as digesting and analysing the data to make them available to others. Publication of typical results would be accompanied by frequently up-dated catalogues of what results are available for distribution. It is expected that the manpower required for this work at Agency Headquarters can be provided within the existing manning table. For services away from Vienna, including computer time, it is estimated that \$35 000 will be required in 1964.

102. Arrangements for the Agency's seminar and summer school in theoretical physics will be made in relation to the initial work being undertaken at the International Centre for Theoretical Physics which is to be established on a provisional basis under the Agency's auspices as early as possible next year.

103. Extensive research on the control of nuclear fusion is being undertaken in several advanced countries. The Agency will organize in 1964 a conference on plasma physics and controlled nuclear fusion research, to follow up the work of the first conference held in 1961.

(b) Chemistry

104. A symposium on radiochemical methods of analysis recommended by SAC will be organized in 1964. A second panel on the analytical chemistry of nuclear materials will be organized in order to evaluate studies made in 1963 to assess progress and to consider problems related to sampling.

105. A second panel on thermodynamic properties of important nuclear materials will be organized. The publication of monographs concerning thermodynamic, transport and other physico-chemical properties of nuclear materials is planned.

106. Since research reactors could serve, under appropriate conditions, as a chemistry research tool, a continued effort will be made to assist developing countries in chemistry research with such reactors, by evaluating technical feasibility of particular areas of chemistry research and rendering advice on chemistry research programmes, dissemination of information on methods of production and purification of isotopes, and by the publication of experimental manuals on the subject.

107. It is planned to revise and publish a new edition of the International Directory of Radioisotopes which will also contain information on stable nuclides.

[15] Under the Programme for the current year (see document GC(VI)/200, paragraphs 156 and 157) the Working Group held its first meeting in May 1963.

(c) The work of the Agency's Laboratory

(i) Physics

108. The programme of distribution of calibrated radionuclide samples will be expanded to include new electron capture nuclides of medium atomic number. Stronger sources of nuclides, such as Ir¹⁹² and Co⁶⁰, will be calibrated because they are used industrially for radiography. It is planned to do absolute measurements of radioactive samples at the request of Member States. An improved apparatus for the calibration of electron capture nuclides by X-gamma coincidence method and a scintillating counting system for the spectrometry of beta emitters will be set up and their operational characteristics investigated.

109. The automatic microcalorimetric system will be used for the determination of average beta energies, measurements of half-lives and calibration measurements. A radiation balance for higher activities and a calorimeter for precise determination of specific heats will be set up. Two absorbed-dose calorimeters having been completed and calibrated early in 1963, the first test measurements with Co⁶⁰ sources have been started and this work will continue in 1964. To enable intercomparison and standardization of other absorbed-dose instruments in national laboratories to be made, cavity ionization equipment and chemical dosimeters will be put into operation in 1964.

110. The Laboratory will continue to participate in the intercomparison programme of IBWM. Interlaboratory comparisons for other nuclides will be arranged with specialized national laboratories. In collaboration with the Oesterreichische Studiengesellschaft für Atomenergie, the Laboratory will investigate problems associated with the measurement of neutron fluxes in reactors by foil activation. It is expected that the results of this work will permit the distribution in 1964 of standardized foils to enable workers measuring neutron flux by this method to calibrate and check their equipment. Calibration of equipment used for absolute measurements will be done on request.

(ii) Chemistry

111. In connection with the programme of intercomparison of analytical techniques several methods were established and put into operation in 1962-63. An installation for the gas-chromatographic separation of tritium and hydrogen has been completed and preliminary work shows that such separation is possible. Further investigation will, however, be required in 1964 to develop the best conditions.

112. The first intercomparison of trace analytical techniques and the panel discussion on analytical chemistry in 1962 led to the development of a second intercomparison which was completed in 1963. Results allowed an evaluation of analytical methods for trace amounts in uranyl nitrate. Work will continue on other samples, such as solid uranium dioxide, with the object of establishing analysed samples and recommended methods of analysis. Should the demand warrant it, some typical low-grade ores will be collected and analysed for uranium content.

113. Appropriate analytical services will continue to be offered to Member States, and support will be given to other projects of the Agency, such as radioactivation analysis of the trace element concentration in the blood of individuals suffering from malnutrition; radioactivation analysis for studying solutions of normal and submerged soils; labelling of sand and mud for bedload transport; and determination of trace element concentration in natural waters. Work on the direct determination of trace elements in nuclear materials by mass spectrometry, coupled with isotope dilution analysis, will continue. In support of the oceanographic studies carried out at the Monaco Laboratory, work on the determination of trace elements in the marine environment will continue.

(iii) Environmental radioactivity

114. The analysis and measurement of environmental and bio-assay samples and co-operation with WMO on precipitation studies and air filters aimed at standardization of methods for the determination of radionuclides will be continued.

115. Preparation and distribution of standard radiochemical samples for intercomparison of measurement techniques will continue. UNSCEAR will be consulted on the type of samples to be distributed.

116. In accordance with SAC's recommendation of June 1962, and in view of the importance of improving procedures, investigations will be undertaken to determine the influence of the composition of the human diet on the up-take of certain radionuclides and the mechanisms of discrimination governing the entry of competing elements into the organism.

(iv) Radioisotope techniques for development of natural resources

117. The measurement of tritium in precipitation from the global network of sampling stations for the determination of isotopic composition of natural waters is expected to continue. By 1964, there will probably be an increased demand for the measurement of tritium in samples of ground and river water for the solution of local hydrological problems. The present facilities may need to be enlarged to meet this increased work. The Agency has supported the application of radioisotope techniques to the study of silt movement both by research contracts and field experiments. However, the field service must be prepared to carry out such experiments with laboratory personnel at the request of Member States.

(v) Agriculture

118. The co-ordinated research contract programme on the use of isotopes in rice cultivation will be guided and serviced with respect to the use of P^{32} and N^{15} in analysis of rice samples, with emphasis on the determination of the effect of soil management methods, time of application, and nutrient interaction on the up-take of nitrogen and phosphate. Comparative pot tests using soils from the sites of field experiments in rice-growing areas will be carried out. The effect of water relationships and oxidation-reduction status of the soil on the up-take of major nutrients, using P^{32} , Ca^{45} and N^{15} , will be compared. If possible, a similar programme involving maize cultivation will be initiated. The emphasis will be on the efficiency of nitrogen fertilization and nutrition and on nitrogen-phosphorus interaction.

119. Radioactivation analysis and ion exchange studies of soils under submerged conditions, using labelled nutrient elements, will be done to arrive at an interpretation of soil solution data as a basis for more efficient use of high-cost fertilizers.

120. Standard techniques for radioactive labelling of insects will be developed. This work will be related to the co-ordinated research programme in insect population control by the sterile male technique.

(vi) Medicine

121. The work with the whole-body counting facility set up with the aid of the Government of the United States on the dosimetric study of the approximately 100 Viennese thorotrast cases which was begun in 1962-63 will continue in 1964. Further studies on workers occupationally exposed to thorium compounds and on others occupationally or accidentally exposed to radioactive compounds will be made as a service to Member States. The Laboratory will also study the development of techniques for the assay of Sr^{90} in humans by bremsstrahlung measurements. Institutes in three Member States which have Agency research contracts for the study of luminous dial painters occupationally exposed to Sr^{90} and radium maintain close collaboration with the Laboratory in the conduct of their measurements.

122. It can be expected that the versatile equipment available will be used in a variety of ways to meet requirements of Member States or Agency staff in applications of radio-isotopes in medicine. These may include evaluation of the design of whole-body counters for special purposes, analysis of special samples, development of scanning techniques, etc.

(vii) Training of fellows from Member States

123. As in the past year, some opportunities will be available in the various sections of the Laboratory for in-service training or research training of fellows from Member States. The number of such vacancies will unfortunately have to be limited since the staff and the equipment of the Laboratory are restricted.

VI. SAFEGUARDS

124. All of the agreements covering the application of Agency safeguards to four reactors in the United States of America will have expired by July 1964.

125. The continuous establishment of new nuclear facilities may require that consideration be given to extending the system to certain types of installations which, at present, are not covered by it, such as chemical processing and fuel fabrication plants. Further, detailed procedures will have to be developed to cover safeguards records, accounting for and storage of nuclear materials, operation of sampling methods and new inspection techniques.

126. It is expected that a panel will be convened in 1964 to advise on all or some of the tasks described above.

127. The Agency will, in 1964, apply safeguards to appropriate Agency projects and, at the request of Governments concerned, to bilateral or multilateral arrangements.

128. Research in safeguards will shift from the preliminary investigation of methods to the development of equipment necessary to apply them. Efforts to develop analytical procedures for reactor fuels will continue, and to the extent possible it is proposed to use the Agency's Laboratory and its services for this purpose, in preference to or in addition to awarding contracts for such work to national laboratories. The Laboratory will also be able to undertake, when necessary, the routine analysis of samples required in the application of safeguards.

VII. INFORMATION AND TECHNICAL SERVICES

(a) General

129. The Agency carries out its statutory function of the exchange and distribution of information on the peaceful uses of nuclear energy through scientific meetings, scientific and technical publications, library and documentation services, and visual media.

(b) Scientific meetings

130. The Agency's programme of conferences and scientific meetings in 1964 will be more limited than in previous years, in view of the organization by the United Nations, during the second half of 1964, of a third conference on peaceful uses of atomic energy which is expected to deal mainly with reactors and nuclear power.

131. The Agency's proposed programme based on consultations with SAC is as follows:

- (i) Conference on plasma physics;
- (ii) Conference on nuclear electronics;
- (iii) Symposium on medical radioisotope scanning;
- (iv) Symposium on measurement of body-burdens of radionuclides;
- (v) Symposium on dosimetry in high-level exposure;
- (vi) Symposium on radiochemical methods of analysis;
- (vii) Symposium on the use of radioisotopes in animal nutrition and physiology; and
- (viii) Two seminars on theoretical physics.

132. Other international organizations will, as appropriate, be invited to participate in and co-sponsor Agency meetings; the Agency for its part will continue to co-sponsor scientific meetings of other organizations on subjects which fall within its sphere of interest.

(c) Publications

133. The Agency's programme of scientific and technical publications is an important contribution to the international exchange of information on nuclear science. The present annual production is about 20 volumes of proceedings of scientific meetings, a number of technical directories, bibliographies, safety manuals and technical reports and several issues of two scientific journals, amounting to approximately 18 000 printed pages. The average production is 2500 copies, more than one third of which is distributed free of charge and the remainder is intended for sale.

134. As forecast in the Programme and Budget for 1963 [16], the introduction in 1962 of the "cold-type" method of internal printing has led to a speed-up of production and considerable financial savings. In addition, revenues from sales of Agency publications could, with effect from 1 January 1963, be used to finance the production of new publications intended for sale. As a result, it was possible during 1963 to install printing and binding equipment which rendered the Agency's publishing activity independent of external contractual services. Assuming that the quantity of material to be published in 1964 will remain the same and that no further substantial purchases of equipment will be necessary, the Board proposes to reduce the provision for 1964 by \$56 700 in comparison with 1963 and expects to effect comparable savings in future years.

135. The titles of the items in Section 6 of the Budget [17] have been adjusted to the new methods; the items paper, supplies and materials, and salaries and wages and common staff costs correspond to the former item printing, block-making, art-work and paper, which consisted largely of contractual services now replaced by internal services. It will be noted that the additional staff costs arising out of the new production methods are charged directly to Appropriation Section 6, in the same way as the external services which they replace, and are not absorbed in Appropriation Sections 8 and 9.

(d) Library and documentation

136. The Agency's Library will continue to acquire necessary scientific and technical publications. Assistance and advice will be given to libraries in Member States to solve problems peculiar to specialized collections. It has been found necessary to increase by \$10 000 the financial provision for the Library to cover higher costs of periodicals and books, the larger number of publications which has to be obtained and additional costs for the binding of periodicals.

[16] See document GC(VI)/200, paragraph 213.

[17] See Table 10 below.

137. The growing demand upon the Agency's film library and film loan service necessitates the purchase of prints of some new films and second and third copies of some of others already in stock; it is also necessary to acquire equipment for the production and reproduction of sound tapes in four languages, another 16 mm film projector, and minor equipment such as film reels and cans, projector tubes, a splicer, etc. In addition, other language versions of several films available in one language only will be required and provision has to be made for one-way transport of films. An amount of \$5200 is included for this purpose in the estimates for the Library for 1964.

138. The Agency will continue to co-operate with other international organizations in establishing national and regional documentation centres in developing countries. At the request of Member States, assistance will be provided in the form of experts, documentation facilities, scientific books and periodicals.

139. With regard to the exchange of abstracts in nuclear sciences, close collaboration with other international organizations will continue.

140. Additional data-processing equipment will be required in 1964 to improve methods of retrieving and disseminating scientific information. The type of equipment required depends on the extent to which it can serve other purposes than those of scientific information and the requirements of other sections of the Secretariat in this respect will be taken into account. It is expected that such equipment will be obtained on a rental basis, and an amount of \$35 000 has been included in Appropriation Section 12 for this purpose [18].

(e) Visual media

141. The visual media programme in 1964 will be primarily geared to the Third International Conference on the Peaceful Uses of Atomic Energy, and the financial provision proposed for that year is therefore higher than in a normal year. It is planned to produce two films in co-operation with the United Nations; one will deal mainly with problems of nuclear power; the other with isotope applications in which the Agency is active, such as the eight-nations rice project, the hydrology projects and teletherapy work in the Middle East. These films will be primarily used by television organizations in Member States. The estimated cost to the Agency is \$24 000. National television organizations will also be asked to produce films of their own in connection with the Conference, and these films will be distributed and, when necessary, produced in other languages, at an estimated cost of \$2500.

142. The demand from national television networks for unedited film material on atomic energy activities connected with the Agency's programme is likely to be even more pronounced in 1964. The cost of production or acquisition of such material is estimated at \$2000. In addition, it is planned to continue co-operation with the Visual Information Board of the United Nations and the specialized agencies in joint productions, particularly in the series of films introduced by UNESCO on the need for training in science and technology in the developing countries; the cost to the Agency is estimated at \$3000.

143. The Agency's mobile exhibit which has been in use since the beginning of 1962 will need to be maintained, transported and periodically brought up to date. A provision of \$2500 is included in the estimates for 1964 for these purposes.

[18] See Table 20 below.

THE BUDGET

I. THE CONSOLIDATED BUDGET

Table 2

Item	1962 Actual \$	1963 Budget \$	1964 Estimate \$
RECEIPTS			
Regular Budget			
Assessed contributions of Member States	5 638 304 ^{a/}	7 122 500	7 220 000
Application of Agency safeguards	-	pro memoria	pro memoria
Handling and storage of special fissionable material	-	pro memoria	pro memoria
Transfer from the Publications' Revolving Fund	15 479	pro memoria	20 000
Miscellaneous income	128 798	215 000	204 500
General Fund			
Voluntary contributions	1 340 470	2 000 000	2 000 000
Special voluntary contributions	40 000	40 000	290 000
Miscellaneous income	43 667	67 071	50 000
Withdrawal from unallocated balance	73 970	72 529	-
Operating Fund I			
Savings on prior years' operations	65 897	-	-
Income from reimbursable services	16 770	45 000	27 500
Miscellaneous income	711	pro memoria	pro memoria
Operating Fund II			
Savings on prior years' operations	45 658	-	-
Income from reimbursable services	-	pro memoria	pro memoria
Miscellaneous income	11 719	pro memoria	pro memoria
TOTAL	7 421 443 ^{b/}	9 562 100	9 812 000
EXPENDITURES			
Regular Budget	6 446 139	7 337 500	7 444 500
General Fund	361	-	-
Operating Fund I	333 465	253 600	519 500
Operating Fund II	1 305 036	1 971 000	1 848 000
TOTAL	8 085 001 ^{b/}	9 562 100	9 812 000

^{a/} As at 31 December 1962.

^{b/} The difference of \$663 558 between expenditures and receipts equals the provisional cash deficit for 1962 - see the Agency's Accounts for 1962, document GC(VII)/231.

II. REGULAR BUDGET ESTIMATES

A. Summary of expenditures

Table 3

Appropriation sections	1962 Actual \$	1963 Budget \$	1964 Estimate \$
1. The General Conference	265 998	275 000	261 000
2. The Board of Governors	420 241	395 000	365 000
3. Panels and committees	139 449	170 000	170 000
4. Special missions	42 345	70 000	70 000
5. Seminars, symposia and conferences	94 658	188 000	120 000
6. Distribution of information	246 465	245 000	222 500
7. Scientific and technical services and laboratory charges	882 027	1 110 000	1 203 500
8. Salaries and wages	2 737 642	3 063 000	3 193 000
9. Common staff costs	1 092 978	1 220 000	1 229 500
10. Duty travel of staff	134 295	178 000	150 000
11. Representation and hospitality	32 397	32 500	32 500
12. Common services, equipment and non-technical supplies	357 644	391 000	427 500
TOTAL	6 446 139	7 337 500	7 444 500

B. Summary of receipts

Table 4

Item	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Assessed contributions of Member States	5 638 304 ^{a/}	7 122 500	7 220 000
Application of safeguards to bilateral and multilateral agreements	-	pro memoria	pro memoria
Handling and storage of special fissionable material	-	pro memoria	pro memoria
Transfer from the Publications Revolving Fund	15 479	pro memoria	20 000
Allocation from the Special Account	-	90 000	104 500
Income from investments and miscellaneous income	128 798	125 000	100 000
TOTAL	5 782 581	7 337 500	7 444 500

^{a/} As at 31 December 1962.

144. The above table lists all potential sources of income although experience with regard to some of them is still rather limited.

145. It will be noted that in 1962 the Publications Revolving Fund contributed \$15 479 to income; the balance in the Fund at the end of the year exceeded \$50 000 by the amount shown. In the budget for 1963 no such income was foreseen; the Fund is, however, expected in that year to contribute for the first time to the financing of Agency publications intended for sale. It is hoped that some income will, however, accrue in 1963, and a sum of \$20 000 is shown as estimated income from the Fund in 1964.

146. With regard to EPTA it was originally estimated that for the biennium 1963-1964 a total of \$180 000 would be allocated to the Agency from the Special Account in respect of administrative and operational services costs and that approximately half this sum would be received during each of the two years. As shown in the above table, it is now estimated that in respect of 1964 the Agency will receive \$104 500.

147. As has been pointed out in the Introduction [19] a greater use of the Working Capital Fund is foreseen in order to cover delays in the payment of contributions. As a result, income from investments is likely to decline somewhat and is expected to be approximately \$100 000 in 1964 as against an estimate of \$125 000 in 1963.

C. Appropriation sections

Section 1. The General Conference

Table 5

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Salaries and wages	97 800	95 000	90 000
Common staff costs	41 400	39 000	38 000
Temporary assistance	62 022	65 000	60 000
Rental of space and equipment	28 897	37 000	35 000
Common services	15 795	18 000	17 500
Printing and office supplies	13 429	15 000	13 500
External audit	6 655	6 000	7 000
TOTAL	265 998	275 000	261 000

148. It is assumed that the regular session of the General Conference in 1964 will last no longer than two weeks, and that the pattern of plenary and committee meetings will be similar to that of earlier sessions. The estimates for 1964 are therefore based on the experience of previous years.

Section 2. The Board of Governors

Table 6

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Salaries and wages	244 800	233 000	210 000
Common staff costs	103 200	96 000	88 000
Temporary assistance	42 121	38 000	38 000
Official travel	3 242	500	1 000
Common services	16 352	14 000	17 500
Printing and office supplies	9 526	13 500	10 500
TOTAL	420 241	395 000	365 000

[19] See paragraph 16 above.

149. Developments in the pattern of work of the Board of Governors, together with the apportionment of a larger share of staff costs, especially of the Languages Division, to other activities make it possible to reduce the relevant estimates. The remaining estimates are based on experience of previous years.

Section 3. Panels and committees

Table 7

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Panels and committees	139 449	170 000	170 000

150. In the chapter on the programme, reference is made to panels which it is proposed to convene in 1964. The estimates include provision for two meetings of SAC and cover a programme of scientific and technical panels similar to that approved for 1963. The Director General will select the subjects of panel meetings from those selected below:

(a) Nuclear power and reactors

Estimation of costs of nuclear power plants in a country on the basis of known or assumed costs in another country (33) [20];
 Utilization of plutonium for power production (35);
 Utilization of power reactors for process-heat production (36);
 Utilization of research reactors (39);
 Reactor shielding (44); and
 Equipment for radiochemistry and physics laboratories (49);

(b) Radioisotopes

Co-ordination of research contracts on isotopes in tropical medicine (53);
 Activation analysis of trace elements in medicine (54);
 Radiological physics in developing countries (57);
 Co-ordination of research contracts on isotopes and radiation sources in agriculture (61);
 Isotopes and radiation in the study of soil moisture and irrigation (63); and
 Insect population control by the sterile male technique (65);

(c) Health, safety and waste management

New methods of increasing radiation sensitivity (80);
 Personnel dosimetry for radiation workers (83);
 Permissible emergency doses to the public (84);
 Influence of meteorological conditions on the safety of nuclear installations (91);
 Chemical processes in waste treatment (94);
 Economic evaluation of waste management practices (95);
 Co-ordination of waste management methods (96);
 Basic safety standards for radiation protection (97); and
 Transport containers for large radiation sources (98);

(d) Research and services in physical sciences

Nuclear data (100);
 Analytical chemistry of nuclear materials (104); and
 Thermodynamic properties of nuclear materials (105);

(e) Safeguards

A safeguards subject to be selected (126); and

[20] Figures in brackets indicate paragraph numbers in the Programme, where reference to the respective panel subject can be found.

(f) Legal panels

Transport of radioactive materials (98);
Disposal of waste into fresh water [21]; and
Mutual financial guarantees [21].

Section 4. Special missions

Table 8

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Special missions	42 345	70 000	70 000

151. The need for various missions during 1964 has been explained in the chapter dealing with the programme. It is estimated that expenditure will not be greater than in 1963.

Section 5. Seminars, symposia and conferences

Table 9

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Seminars, symposia and conferences	94 658	188 000	120 000

152. In appropriate sections of the chapter dealing with the programme, the need for scientific conferences, symposia and seminars has been explained; the estimate for the proposed conference programme for 1964 reflects a reduction of \$68 000 as against 1963 for reasons referred to in paragraph 130 above.

Section 6. Distribution of information

Table 10

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Publications			
Printing, block-making, art-work and paper (external)	87 731	19 500	9 000
Paper	33 129	28 000	28 000
Supplies and materials	-	12 000	11 800
Authors' fees	7 732	7 000	9 000
Scientific editing	1 877	1 000	2 000
Salaries and wages	19 531	53 000	54 000
Common staff costs	-	18 000	18 500
External translation	1 544	1 000	2 000
Distribution costs	36 624	30 000	25 000
Equipment	-	63 500	4 000
Sub-total	188 168	233 000	163 300
<u>Less:</u> Publications Revolving Fund	-	43 000	30 000
Sub-total	188 168	190 000	133 300
Library	42 665	40 000	55 200
Visual media	15 632	15 000	34 000
TOTAL	246 465	245 000	222 500

[21] If not convened in 1963.

153. As has been explained in paragraphs 134 and 135 above, the year 1963 will be the first during which almost a hundred per cent internal production of Agency publications will take place, and some of the income from sales will be used to finance the printing of sales copies. In the table above, the various items which make up the cost of the publications programme have been adjusted in order to provide a comparison between the three years shown. In 1964, the Regular Budget will have to bear only \$133 300 for this programme, as against \$190 000 approved for 1963.

154. An additional sum of \$10 000 is provided for the Library for the acquisition of books and periodicals and for binding. The provision has been increased by a further \$5200 to provide for improvements in the Agency's film library and loan services.

Section 7. Scientific and technical services and laboratory charges

Table 11

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Research contracts	664 854	665 000	665 000
Monaco project	60 000	60 000	80 000
Technical contracts	18 587	22 000	71 000
Health and safety services	4 086	4 000	24 000
Laboratory charges	134 500	359 000	363 500
TOTAL	882 027	1 110 000	1 203 500

155. While it is not proposed to increase the appropriation for Agency research contracts, a further step in providing increased support to research in isotope applications will be taken in 1964; a comparison of the provisions for the years 1962 to 1964 is shown in the following table:

Table 12

Subject of research	1962 \$	1963 \$	1964 \$
Radioactive waste management and environmental research	161 592	135 000	120 000
Health physics and radiation protection	153 889	195 000	180 000
Radiobiology	94 500	85 000	75 000
Safeguards	51 700	55 000	50 000
Reactor research	47 735	45 000	45 000
Radioisotope applications in			
Medicine	55 110	55 000	67 500
Agriculture	56 334	55 000	67 500
Hydrology and development of natural resources	43 994	40 000	60 000
TOTAL	664 854	665 000	665 000

156. For the research project on the effects of radioactivity in the sea which is being carried out and financed jointly by the Agency and the Government of Monaco, a sum of \$80 000 is provided in 1964. The collaboration on this work is expected to continue at least through 1966.

157. Under technical contracts an additional \$49 000 has been provided, \$14 000 of which will cover part of the work in connection with the measurement of tritium in precipitation referred to in paragraph 117 above, and \$35 000 the contractual services in connection with nuclear data referred to in paragraph 101 above.

158. The provision for health and safety services has been increased by \$20 000 to provide for the acquisition of emergency equipment referred to in paragraph 92 above.

159. The detailed cost estimates for the operation of the Laboratory in 1964 are shown in Table 23 below. Based on 1962 experience and on cost analysis of the proposed programme, \$363 500 of the total operating costs will be charged to the Regular Budget. This represents an increase of \$4500 over 1963.

Section 8. Salaries and wages

Table 13

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Established posts	2 611 708	2 878 000	3 022 000
Overtime and night differential	20 515	30 000	30 000
Temporary assistance	63 596	65 000	56 000
Consultants	41 823	90 000	85 000
TOTAL	2 737 642	3 063 000	3 193 000

160. The estimate covers salaries and wages, overtime and night differential for all staff of the Secretariat, exclusive of salaries and wages chargeable to the General Conference, the Board of Governors and those salaries incurred in connection with typesetting and printing of Agency publications.

161. The calculation of salaries and wages of established posts, as presented in the following table, is based on salary scales which came into effect on 1 January 1962. It includes a provision of \$95 000 to cover the cost of a post adjustment for staff in the Professional and higher categories serving in Vienna, which came into effect on 1 April 1963.

162. As in previous years a large lapse and lag factor has been applied on the assumption that savings would result from delays in replacing staff holding fixed-term appointments and in recruiting staff for vacant posts. However, because there will be no new posts to be filled in 1964, a lapse factor will only apply to replacements of existing staff. Moreover, it is considered advantageous for the smooth continuation of the Agency's activities to recruit whenever possible replacements of staff members before they vacate their posts, so that new staff members can be familiarized with their tasks by their predecessors. For these reasons the recruitment lag and lapse factor has been reduced to \$70 000 representing approximately 2% of the total cost of established posts.

Table 14

1962	1963	1964	Position	1962 \$	1963 \$	1964 \$
1	1	1	Director General	20 000	20 000	20 000
5	5	5	Deputy Director General	75 000	89 500	89 500
18	18	18	Director (D-1/2)	211 500	239 490	239 490
57	57	56	Senior Officer (P-5)	498 750	607 050	596 400
73	74	73	First Officer (P-4)	532 900	660 820	651 890
72	70	66	Second Officer (P-3)	432 000	522 200	492 360
17	17	15	Associate Officer (P-2)	81 600	104 210	91 950
19	20	20	Assistant Officer (P-1)	68 400	96 000	96 000
<hr/>						
262	262	254	Sub-total	1 920 150	2 339 270	2 277 590
299	288	302	General Service staff	508 300	616 320	651 110
106	91	94	Maintenance and Operatives Service staff	113 950	106 470	117 500
<hr/>						
667	641	650	TOTAL	2 542 400	3 062 060	3 046 200
<hr/>						
			Special post and other allowances	25 000	22 750	22 750
			Post adjustments	102 000	4 650	99 575
			Salary increments	197 000	289 000	277 475
			Supplemental estimate	347 400	-	-
<hr/>						
			Sub-total	3 213 800	3 378 460	3 446 000
			<u>Less:</u> Recruitment lapse and lag factor	259 492	172 460	70 000
<hr/>						
			Sub-total	2 954 308	3 206 000	3 376 000
19	18	17	<u>Less:</u> General Conference	97 800	95 000	90 000
50	47	42	Board of Governors	244 800	233 000	210 000
		29	Publications pro- gramme	-	-	54 000
<hr/>						
598	576	562	NET TOTAL	2 611 708	2 878 000	3 022 000

163. The above table shows an increase in the cost of established posts from \$3 206 000 to \$3 376 000. For comparison, however, the latter amount has to be reduced by \$54 000 in respect of salaries chargeable to the publications programme, work for which was in previous years done by external contractors. The increase of \$116 000 in salaries and wages is the net effect of the introduction of a post adjustment and the reduction of the lapse and lag factor on the one hand, and staff reductions on the other hand.

164. Furthermore, there is a change in the distribution of costs of established posts between the General Conference, the Board of Governors and the Secretariat. Based on experience in previous years, it is assumed that the reduced workload of language and documents services for the General Conference and the Board of Governors will in 1964 result in a reduction of \$28 000 for these two bodies. Inasmuch as an equivalent increase falls on the Secretariat, the Languages Division and the interpretation and documentation services will be able to devote more time and manpower to other activities, particularly seminars, symposia, conferences, panels, etc. in respect of which temporary assistance can be reduced.

165. The following table shows the calculated equivalent of posts, the costs of which are chargeable respectively to the General Conference, the Board of Governors and the publications programme.

Table 15

Staff	General Conference			Board of Governors			Publications programme		
	1962	1963	1964	1962	1963	1964	1962	1963	1964
Professional	8	8	7	20	20	17	-	-	-
General Service	9	9	9	26	23	21	-	-	26
Maintenance and Operatives Service	2	1	1	4	4	4	-	-	3
TOTAL	19	18	17	50	47	42	-	-	29

166. The proposed total of established posts under the Regular Budget in 1964 is 650 as shown in Table 14. The increases and decreases in the divisions affected by the changes, as compared to 1963, are shown in the following table.

Table 16

Division or Office	P-5	P-4	P-3	P-2	Sub-total	GS	M&O	TOTAL
Director General		+1	-1	+1	+1			+1
Internal Audit		+1	-1					
Exchange and Training				-1	-1	-1		-2
Scientific and Technical Information						+18		+18
Economic and Technical Assistance	+1	-1				-1		-1
Technical Supplies	-1	+1						
Health, Safety and Waste Disposal			-2		-2			-2
Research and Laboratories	-1				-1			-1
Isotopes						-1		-1
Safeguards			-1		-1	-1		-2
Inspection		-2	+1		-1			-1
DDG Administration, Liaison and Secretariat			+1	-1				
Secretariat of the General Conference and the Board of Governors			+1	-1				
External Liaison and Protocol				-1	-1	-1		-2
Legal			-1	+1		-1		-1
Public Information			-1		-1			-1
Administrative Office of Technical Assistance		-1			-1			-1
Conference and General Services						+3	+3	+6
Languages						-1		-1
TOTAL	-1	-1	-4	-2	-8	+14	+3	+9
Deduct: Publications programme						-21	-3	-24
NET TOTAL	-1	-1	-4	-2	-8	-7		-15

167. It will be seen that a reduction of eight Professional and seven General Service category posts is proposed in various divisions of the Secretariat. Twenty-one new General Service and three new Maintenance and Operatives Service posts do not represent an increase in the appropriation for salaries and wages because their cost, together with the cost of five existing posts previously charged to this appropriation, is borne by the appropriation for Distribution of information. The total established posts of the Secretariat for 1964 are shown in Annex I.

168. It is expected that in 1964 expenditure for temporary assistance and consultants will remain below the amounts provided for 1963 and that overtime and night differential can be held at the 1963 level [22].

Section 9. Common staff costs

Table 17

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Pension Fund contributions	305 753	338 000	356 000
Medical benefits and social security contributions	58 174	55 000	59 000
Dependency allowance	182 877	200 000	196 000
Education grants	51 602	64 000	58 000
Non-residents' allowance	107 128	110 000	109 000
Travel on recruitment and termination	54 304	71 000	62 000
Assignment allowance	168 693	200 000	180 000
Installation expenses	48 124	55 000	50 000
Removal of household effects and excess baggage	22 527	27 000	25 000
Travel on home leave	94 815	92 000	106 000
Service benefits	82 661	76 000	101 000
Other costs	60 920	67 000	72 000
Sub-total	1 237 578	1 355 000	1 374 000
<u>Less:</u> General Conference	41 400	39 000	38 000
Board of Governors	103 200	96 000	88 000
Publications programme	-	-	18 500
TOTAL	1 092 978	1 220 000	1 229 500

169. The estimate covers common staff costs of the Secretariat excluding the amounts chargeable to the General Conference, the Board of Governors and those costs incurred in connection with typesetting and printing for the publications programme. It includes all costs of allowances and benefits prescribed in the Provisional Staff Regulations and the Staff Rules, as well as costs of language training and medical services.

[22] See Table 13 above.

Section 10. Duty travel of staff

Table 18

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Duty travel	124 123	144 000	118 000
Advisory services to Member States	928	12 000	12 000
Safeguards	9 244	22 000	20 000
Sub-total	134 295	178 000	150 000
<u>Less:</u> Reimbursement from Member States	-	pro memoria	pro memoria
TOTAL	134 295	178 000	150 000

170. The use of economy and tourist class travel has been taken into account to reduce the estimates for 1964 by \$28 000 as compared with the approved appropriation for 1963.

Section 11. Representation and hospitality

Table 19

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Representation and hospitality	32 397	32 500	32 500

171. The Board proposes that no change should be made in 1964 in the provision for representation and hospitality. The allocation of specific sums to certain officials as representation and hospitality allowances will be determined by the Board, or, if it chooses to delegate part or all of its authority, by the Director General.

Section 12. Common services, equipment and non-technical supplies

Table 20

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Communications and transport	66 515	78 500	75 000
Rental and alteration of premises	7 446	8 000	10 000
Utilities	54 980	62 500	60 000
Rental, operation and maintenance of furniture and equipment	28 894	37 500	68 500
Contractual and other administrative services	17 025	22 000	20 000
Insurance and bank charges	42 914	35 000	35 000
Miscellaneous services	5 598	3 500	3 500
Stationery and office supplies	20 629	26 000	22 000
Reproduction supplies and paper	16 820	11 000	15 000
Miscellaneous other supplies	21 483	27 000	24 000
Furniture and fixtures	22 329	15 000	15 000
Office equipment and machines	53 011	62 000	76 500
Transportation equipment	-	3 000	3 000
TOTAL	357 644	391 000	427 500

172. A net increase of \$36 500 is proposed under this appropriation.

173. The main reason for the increase is a provision of \$35 000 for the hiring of computer or other data-processing equipment, mainly for the purpose of improving the Agency's methods of retrieving and disseminating scientific and technical information, as described in paragraph 140 above.

174. Another increase is due to the provision of \$7000 for the installation of X-ray equipment for the Agency's medical service. Approximately \$1500 per annum are being spent on routine examination of Agency staff at outside institutions and hospitals. The provision of a simple installation of this kind on Agency premises will save both time and money.

175. Finally, a provision of \$7500 has been made for the replacement of approximately 25 mechanical and 15 electrical typewriters which by 1964 will be six years old. To the extent possible, the recovery value of the old machines will be used to offset the cost of new ones.

176. For the Division of Safeguards, an amount of \$25 000 is provided for the purchase of special equipment. This, however, presents no increase since the same provision was made in 1963.

III. OPERATIONAL BUDGET ESTIMATES

A. The General Fund

Summary of receipts and expenditures

Table 21

Item	1962 Actual \$	1963 Budget \$	1964 Estimate \$
RECEIPTS			
Voluntary contributions	1 340 470	2 000 000	2 000 000
Special voluntary contributions	40 000	40 000	290 000
Miscellaneous income	43 667	67 071	50 000
Withdrawal from unallocated balance	73 970	72 529	-
Sub-total	1 498 107	2 179 600	2 340 000
Balance carried forward	222 168	150 000	150 000
TOTAL	1 720 275	2 329 600	2 490 000
EXPENDITURES			
Transfers to Operating Fund I	250 087	200 600	492 000
Transfers to Operating Fund II	1 247 659	1 979 000	1 848 000
Exchange difference	361	-	-
TOTAL	1 498 107	2 179 600	2 340 000

177. In accordance with Article XIV.F of the Statute, the General Fund is the depository of voluntary contributions of money from Member States or from other authorized sources. It provides, by transfers to Operating Funds I and II, as appropriate and as approved by the Board, monies for the operational activities of the Agency.

B. Operating Fund I

(a) Summary of receipts and expenditures

Table 22

Item	1962 Actual \$	1963 Budget \$	1964 Estimate \$
RECEIPTS			
Savings from prior years' operations	65 897	-	-
Transfers from the General Fund	250 087	200 600	492 000
Income from reimbursable services	16 770	45 000	27 500
Miscellaneous income	711	-	-
TOTAL	333 465	245 600	519 500
EXPENDITURES			
Laboratory			
Construction	19 188	-	-
Operation	225 437	205 600	229 500
Monaco project	62 086	40 000	40 000
Theoretical Physics Centre	-	-	250 000
Unobligated earmarkings	26 754	-	-
TOTAL	333 465	245 600	519 500

(b) Allocations

1. Laboratory

Table 23

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Salaries and wages	149 844	240 000	301 000
Common staff costs	48 389	94 000	117 000
Duty travel of staff	1 904	6 000	3 000
Scientific and technical supplies	30 434	42 000	48 000
Contractual technical services	1 034	24 600	2 000
Common services and non-technical supplies	57 878	65 000	65 000
Depreciation	70 824	78 460	80 000
Sub-total, operating expenses	360 307	550 060	616 000
Equipment	70 454	93 000	57 000
<u>Less:</u> Depreciation	70 824	78 460	80 000
Sub-total, additional equipment	(370)	14 540	(23 000)
TOTAL	359 937	564 600	593 000
<u>Less:</u> Charges to Regular Budget	134 500	359 000	363 500
NET TOTAL, Operating Fund I	225 437	205 600	229 500

178. The work of the Laboratory is dealt with under the programme for research and services in physical sciences. [23] The following staffing changes are proposed:

- (a) An additional P-5 post is required in the medical section for a senior scientist to run the whole-body counter, develop new techniques and to conduct investigations in the whole-body counting laboratory;
- (b) An additional P-3 post is required in the agricultural section, to be filled by an entomologist who will develop and standardize techniques for labelling insects. A P-2 post is needed in the same section for experiments on the movement of plant nutrients in rice and maize soils. Two technicians' posts in the General Service category are also proposed to be added to the agricultural section; and
- (c) An additional P-1 post is required for a supervisor-mechanic in the workshop.

179. The effect of these changes is shown in the table below:

Table 24

Grade	1962 Staff	1963 Staff	Proposed change	Proposed 1964 staff	
P-5	3	3	1	4	
P-4	4	7	-	7	
P-3	6	5	1	6	
P-2	4	4	1	5	
P-1	-	-	1	1	
	<hr/>				
	Sub-total	17	19	4	23
GS	28	30	2	32	
M&O	13	12	-	12	
	<hr/>				
	TOTAL	58	61	6	67

180. From 1963 onwards, the accounts for the Laboratory will be kept on a cost-by-project basis to provide guidance for future allocation of expenditure between the Regular and the Operational Budgets. On the basis of accounting methods which were developed during 1962 and applied in 1963, it has been possible to estimate that of a total expenditure of \$593 000 in 1964, 61.3% or \$363 500 are chargeable to the Regular Budget, while the balance of 38.7% or \$229 500 falls upon the Operational Budget. It is expected that revenues likely to accrue directly to the Laboratory will amount to \$27 500, reducing drawings on the General Fund to \$202 000.

2. Monaco project

Table 25

Item	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Operating expenses	122 086	100 000	120 000
<u>Less: Charges to Regular Budget</u>	60 000	60 000	80 000
	<hr/>		
NET TOTAL, Operating Fund I	62 086	40 000	40 000

181. The Monaco project is expected to be continued in 1964. The Operational Budget provides \$40 000 in the form of an annual contribution by the Government of Monaco.

[23] See paragraphs 108 to 123 above.

3. Theoretical Physics Centre

Table 26

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Personnel costs			
Scientific staff (7)			127 500
Technical staff (3)			13 500
Administrative staff (5)			17 000
Maintenance staff (4)			10 000
Technical services			
Library			22 000
Computer services			4 000
Publications			4 000
Miscellaneous costs			
Scientific Council			10 000
Guest lectures			10 000
Travel			10 000
Contingency for general costs			10 000
Conferences and seminars (2)			20 000
Fellowships (15)			57 000
			315 000
Sub-total			315 000
<u>Deduct:</u> Contributions from other sources			65 000
			250 000
NET OPERATING FUND I			250 000

182. In accordance with the directive given by the General Conference [24], the Board decided that the International Centre for Theoretical Physics be established as early as possible in Trieste, Italy.

183. The estimates shown in Table 26 above are tentative. They provide for what is considered adequate staffing for the first two years of the Centre's operation. They assume that the host Government will provide all necessary buildings, including living quarters and auxiliary installations and facilities in addition to an annual cash contribution of \$250 000. Contributions from other sources indicated in the foregoing table include \$20 000 from the Agency's Regular Budget for summer schools or seminars and \$35 000 from Operating Fund II for fellowships in theoretical physics. A nominal estimate of \$10 000 is included for other contributions which Member States may make in respect of full or partial costs of fellowships for their own nationals. The estimates as shown will have to be adjusted depending on the amount of such contributions actually received and the experience gained in the Centre's operation.

[24] Resolution GC(VI)/RES/132.

C. Operating Fund II

(a) Summary of receipts and expenditures

Table 27

Item	1962 Actual \$	1963 Budget \$	1964 Estimate \$
RECEIPTS			
Savings from prior years' operations	45 658	-	-
Transfers from the General Fund	1 247 659	1 979 000	1 848 000
Income from reimbursable services	-	-	-
Miscellaneous income	11 719	-	-
TOTAL	1 305 036	1 979 000	1 848 000
EXPENDITURES			
Exchange and training	550 906	935 000	873 000
Technical assistance	567 532	864 000	807 000
Research contracts	108 592	180 000	168 000
Unobligated earmarkings	78 006	-	-
TOTAL	1 305 036	1 979 000	1 848 000

(b) Allocations

1. Exchange and training

Table 28

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Type I fellowships	357 818	594 000	507 000
Type I fellowships, theoretical physics	-	-	35 000
Type II fellowships	11 445	1 000	1 000
Research fellowships and special grants	5 421	60 000	50 000
Exchange of scientists	90 639	150 000	125 000
Training courses	66 398	90 000	85 000
Equipment for laboratory training	-	-	30 000
Sub-total	531 721	895 000	833 000
Mobile radioisotope laboratories	19 185	40 000	40 000
TOTAL	550 906	935 000	873 000

184. Although the Board recommends the retention of the target for voluntary contributions at \$2 million, attention is drawn to the unfortunate situation which is illustrated in the above table by comparison of the proposed estimates for 1964 with those of 1963. As more demands are made upon the Agency for the training of scientists and technicians, and funds have to be spread over more ground, less money remains available for each specific item.

185. Two provisions for 1964 require comment. An amount of \$35 000 is provided for fellowships in theoretical physics.

186. Training of fellows in the Agency's Laboratory during 1962 has revealed the need for additional equipment without which adequate instruction cannot be given. An amount of \$30 000 is provided for this purpose in 1964.

187. A comparison of the total allocations from the Agency's own resources and from EPTA [25] for fellowships and other training is given in the table below:

Table 29

Item	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Operating Fund II	550 906	935 000	873 000
EPTA fellowships	423 950	124 000	90 500
EPTA regional training projects	42 747	190 959	147 382
TOTAL	1 017 603	1 249 959	1 110 882

2. Technical assistance

Table 30

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Experts and equipment	567 531	814 000	757 000
Nuclear science documentation	-	50 000	50 000
TOTAL	567 531	864 000	807 000

188. The requirements of the technical assistance programme in 1964 point to the need for approximately 745 man-months. With more than \$420 000 estimated to be required for the provision of equipment, the total programme needs exceed \$1.6 million. While recognizing the needs of the developing countries, the Board is aware that within a target of \$2 million for voluntary contributions the Agency will not be able to satisfy all demands.

189. A comparison of the total combined allocations from the Agency's own resources and from EPTA is given in the table which follows. The estimates for 1964 fall short of the requirements by almost \$300 000, and if pledges of voluntary contributions in 1964 remain as low as in previous years, the deficiency will be more than \$500 000. As a result, it is likely that approximately one third of the assistance requested cannot be granted.

Table 31

Item	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Operating Fund II	567 531	864 000	807 000
EPTA programmes	679 469	648 606	513 500
TOTAL	1 247 000	1 512 606	1 320 500

[25] See also paragraphs 192 to 196 below.

3. Research contracts

Table 32

Item of expenditure	1962 Actual \$	1963 Budget \$	1964 Estimate \$
Research contracts	108 592	180 000	168 000

190. Research contracts under the Operational Budget provide a useful supplement to the Agency's training and technical assistance programmes in developing countries. An example of the type of research work which the Agency supports under this programme is the co-ordinated programme of research contracts on isotope applications in rice fertilization involving eight research groups in different rice-growing countries in South East Asia and the Far East.

191. Shortage of funds under the Operational Budget makes it impossible, however, to allocate sufficient money to this work.

IV. THE UNITED NATIONS EXPANDED PROGRAMME OF TECHNICAL ASSISTANCE

192. In November 1962, the United Nations Technical Assistance Committee approved a global programme of technical assistance for the 1963-1964 biennium, amounting to \$84 419 000 and covering 113 countries. This includes a programme of assistance through the Agency to 35 countries estimated at \$1 715 000 over the period.

193. The Agency's EPTA country programmes as approved are expected to cost \$696 706 in 1963 and \$529 900 in 1964. In addition, expenditure of \$488 341 for eleven regional projects during 1963-1964 was approved.

194. The following table shows the breakdown of the total programme approved for the Agency. The proportion of EPTA funds devoted to each form of assistance as well as the total sums for either of the years 1963-1964 may change at any time during the two-year period as a consequence of changes which may be requested by recipient governments.

Table 33

Type of assistance	1962 \$	1963 \$	1964 \$
Experts and equipment (excluding regional projects)	679 469	572 706	439 400
Fellowships	423 950	124 000	90 500
Regional projects			
(a) Expert advisory services	-	75 900	74 100
(b) Training projects	42 747	190 959	147 382
TOTAL	1 146 166	963 565	751 382

195. In addition, the Agency could expect to receive, as in the past, EPTA funds for its field programme under the TAB Executive Chairman's contingency authority. For 1961-1962 the Agency received from that source \$126 000. Assuming that the Agency will receive for 1963-1964 an allocation proportionate to its total programme, a sum of approximately \$175 000 could be anticipated.

196. In addition to the amounts shown above, the Agency will receive an allocation of \$104 500 for administrative and operational services costs in 1964.

ANNEX I

MANNING TABLE FOR 1964

A. REGULAR BUDGET	DG	DDG	D	P-5	P-4	P-3	P-2	P-1	Sub-total	GS	M&O	Grand Total
Office of the Director General	1		1		1		1		4	2		6
Office of Internal Audit				1	1			1	3	2		5
Department of Training and Technical Information		1				1		1	3	2		5
Division of Exchange and Training of Scientists and Experts			1	2	7	1			11	15		26
Division of Scientific and Technical Information			1	4	6	8	3	6	28	53		81
Department of Technical Operations		1				1		1	3	2		5
Division of Economic and Technical Assistance			1	4	5	4	2		16	9		25
Division of Reactors			1	5	3	1	1		11	5		16
Division of Technical Supplies			1	2	2	1			6	4		10
Division of Health, Safety and Waste Disposal			1	6	6	1			14	8		22
Department of Research and Isotopes		1				1		1	3	2		5
Division of Research and Laboratories			1	6	2	4			13	9		22
Division of Isotopes			1	8	9	1			19	10		29
Department of Safeguards and Inspection		1						1	2			2
Division of Safeguards			1	3	2				6	3		9
Division of Inspection			1	1		1			3	2		5
Department of Administration, Liaison and Secretariat		1		1		1			3	2		5
Secretariat of the General Conference and the Board of Governors			1	1	5	3			10	5		15
Division of External Liaison and Protocol and Office of the Representative of the Director General at United Nations Headquarters			2	3	1	1	1		8	10		18
Legal Division			1	2	1	1	1		6	5		11
Division of Public Information				1	2	1			4	6		10
Division of Budget and Finance			1	2	4	3	2	5	17	18		35
Division of Personnel			1	1	2	1		1	6	14		20
Administrative Office of Technical Assistance				1		1			2	3		5
Division of Conference and General Services			1	1	2	2	4	2	12	73	94	179
Languages Division				1	12	27		1	41	38		79
Total	1	5	18	56	73	66	15	20	254	302	94	650
Approved manning table for 1963	1	5	18	57	74	70	17	20	262	288	91	641
Difference	-	-	-	(1)	(1)	(4)	(2)	-	(8)	14	3	9

B. OPERATIONAL BUDGET	P-5	P-4	P-3	P-2	P-1	Sub-total	GS	M&O	Grand Total
Laboratory facilities	4	7	6	5	1	23	32	12	67
Approved manning table for 1963	3	7	5	4		19	30	12	61
Difference	1	-	1	1	1	4	2	-	6
Mobile radioisotope laboratories		1				1	2	2	5
Approved manning table for 1963		1				1	2	2	5
Difference		-				-	-	-	-

ANALYSIS OF THE CONSOL

A. By Regular Budget appropriations

Budgetary appropriation section or allocation	Part of the 1963 Programme							VII. Informa- tion and technica. services
	Scientific and technical work							
	I. Technical assistance and training		II. Nuclear power and reactors	III. Radio- isotopes	IV. Health, safety and waste man- agement	V. Research and services in physical sciences	VI. Safe- guards	
A. Technical assistance	B. Exchange and training							
REGULAR BUDGET								
1. The General Conference	-	-	-	-	-	-	-	-
2. The Board of Governors	-	-	-	-	-	-	-	-
Sub-total	-	-	-	-	-	-	-	-
3. Panels and committees	-	-	28 000	35 000	60 000	28 000	9 000	-
4. Special missions	38 000	8 000	19 000	5 000	-	-	-	-
5. Seminars, symposia and conferences	-	-	54 000	31 000	65 000	38 000	-	-
6. Distribution of information	5 000	5 000	45 000	50 000	40 000	40 000	-	60 000
7. Scientific and technical services and laboratory charges	-	-	45 000	150 000	479 000	359 000	55 000	22 000
Sub-total	43 000	13 000	191 000	271 000	644 000	465 000	64 000	82 000
8. Salaries and wages	181 800	230 600	246 300	222 000	324 600	208 600	190 000	556 800
9. Common staff costs	71 600	93 050	95 650	87 100	126 200	81 500	75 750	229 800
10. Duty travel of staff	13 500	14 300	21 000	21 560	21 100	17 500	27 600	11 000
11. Representation and hospitality	1 130	1 510	1 640	1 770	1 490	1 890	2 860	3 360
Sub-total	268 030	339 460	364 590	332 430	473 390	309 490	296 210	800 960
12. Common services, equipment and non-technical supplies	-	-	-	-	-	-	25 000	13 000
T O T A L	311 030	352 460	555 590	603 430	1 117 390	774 490	385 210	895 960
OPERATIONAL BUDGET								
Laboratory	-	-	-	-	-	205 600	-	-
Monaco project	-	-	-	-	40 000	-	-	-
Exchange and training	-	935 000	-	-	-	-	-	-
Technical assistance	864 000	-	-	-	-	-	-	-
Research contracts	-	-	-	180 000	-	-	-	-
T O T A L	864 000	935 000	-	180 000	40 000	205 600	-	-
T O T A L Agency funds	1 175 030	1 287 460	555 590	783 430	1 157 390	980 090	385 210	895 960
EPTA funds	574 000	542 000	-	-	-	-	-	-
GRAND TOTAL	1 749 030	1 829 460	555 590	783 430	1 157 390	980 090	385 210	895 960

EX II

DATED BUDGET FOR 1963

and Operational Budget allocations

The General Conference and Board of Governors		General direction and administrative services	Total appropriations and allocations	Object of expenditure							
				Salaries and wages	Common staff costs	Travel of staff, panel members, etc.	Common services	Scientific, technical and other contractual services	Representation and hospitality	Supplies and equipment	Fellowships and technical assistance
General Conference	Board of Governors										
275 000	-	-	275 000	160 000	39 000	-	55 000	6 000	-	15 000	-
-	395 000	-	395 000	271 000	96 000	500	14 000	-	-	13 500	-
275 000	395 000	-	670 000	431 000	135 000	500	69 000	6 000	-	28 500	-
-	-	10 000	170 000	17 000	-	153 000	-	-	-	-	-
-	-	-	70 000	-	-	70 000	-	-	-	-	-
-	-	-	188 000	47 000	-	94 000	47 000	-	-	-	-
-	-	-	245 000	18 000	-	-	20 000	167 000	-	40 000	-
-	-	-	1 110 000	161 700	63 300	4 000	43 800	764 200	-	73 000	-
-	-	10 000	1 783 000	243 700	63 300	321 000	110 800	931 200	-	113 000	-
-	-	902 300	3 063 000	3 063 000	-	-	-	-	-	-	-
-	-	359 350	1 220 000	-	1 220 000	-	-	-	-	-	-
-	-	30 440	178 000	-	-	178 000	-	-	-	-	-
-	-	16 850	32 500	-	-	-	-	-	32 500	-	-
-	-	1 308 940	4 493 500	3 063 000	1 220 000	178 000	-	-	32 500	-	-
-	-	353 000	391 000	-	-	-	247 000	-	-	144 000	-
275 000	395 000	1 671 940	7 337 500	3 737 700	1 418 300	499 500	426 800	937 200	32 500	285 500	-
-	-	-	205 600	84 000	32 900	2 000	22 600	8 500	-	55 600	-
-	-	-	40 000	-	-	-	-	40 000	-	-	-
-	-	-	935 000	12 000	2 000	15 000	8 000	-	-	3 000	895 000
-	-	-	864 000	-	-	-	-	-	-	-	864 000
-	-	-	180 000	-	-	-	-	180 000	-	-	-
-	-	-	2 224 600	96 000	34 900	17 000	30 600	228 500	-	58 600	1 759 000
275 000	395 000	1 671 940	9 562 100	3 833 700	1 453 200	516 500	457 400	1 165 700	32 500	344 100	1 759 000
-	-	-	1 116 000	-	-	-	-	-	-	-	1 116 000
275 000	395 000	1 671 940	10 678 100	3 833 700	1 453 200	516 500	457 400	1 165 700	32 500	344 100	2 875 000

B. By units of

Organizational unit	Part of the 1963 Programme							
	Scientific and technical work							
	I. Technical assistance and training		II. Nuclear power and reactors	III. Radio-isotopes	IV. Health, safety and waste management	V. Research and services in physical sciences	VI. Safeguards	VII. Information and technical services
	A. Technical assistance	B. Exchange and training						
Office of the Director General	-	-	-	-	-	-	-	
Internal Audit	-	-	-	-	-	-	-	
Sub-total	-	-	-	-	-	-	-	
Department of Training and Technical Information								
Office of the Deputy Director General	-	27 450	-	-	-	-	-	
Exchange and Training	-	1 173 700	-	-	-	-	-	
Scientific and Technical Information	5 000	5 000	99 000	81 000	105 000	78 000	534	
Sub-total	5 000	1 206 150	99 000	81 000	105 000	78 000	562 410	
Department of Technical Operations								
Office of the Deputy Director General	17 050	-	17 050	-	17 050	-	5 750	
Economic and Technical Assistance	1 086 900	-	98 090	-	-	-	-	
Reactors	-	-	233 060	-	-	-	-	
Technical Supplies	-	-	45 940	-	-	-	67 460	
Health, Safety and Waste Disposal	-	-	-	-	323 250	-	-	
Sub-total	1 103 950	-	394 140	-	340 300	-	73 210	
Department of Research and Isotopes								
Office of the Deputy Director General	-	-	-	27 500	-	27 500	-	
Research and Laboratories	-	-	45 000	330 000	515 000	860 040	55 000	
Isotopes	-	-	-	327 480	82 320	-	-	
Sub-total	-	-	45 000	684 980	597 320	887 540	55 000	
Department of Safeguards and Inspection								
Office of the Inspector General	-	-	-	-	-	-	33 900	
Safeguards	-	-	-	-	-	-	173 590	
Inspection	-	-	-	-	-	-	84 100	
Sub-total	-	-	-	-	-	-	291 590	
Department of Administration, Liaison and Secretariat								
Office of the Deputy Director General	-	-	-	-	-	-	-	
Secretariat of the General Conference and the Board of Governors	-	-	-	-	-	-	68 800	
External Liaison and Protocol	-	-	-	-	-	-	-	
Legal	12 040	-	-	-	42 070	-	24 070	
Public Information	-	-	-	-	-	-	-	
Budget and Finance	-	-	-	-	-	-	-	
Personnel	-	-	-	-	-	-	-	
Administrative Office of Technical Assistance	24 940	37 660	-	-	-	-	-	
Conference and General Services	-	-	-	-	-	-	155 840	
Language Services	29 100	43 650	17 450	17 450	72 700	14 550	20 700	
Sub-total	66 080	81 310	17 450	17 450	114 770	14 550	260 340	
T O T A L Agency funds	1 175 030	1 287 460	555 590	783 430	1 157 390	980 090	385 210	895 960

he Secretariat

The General Conference and Board of Governors		General direction and administrative services	Total appropriations and allocations	Object of expenditure							
General Conference	Board of Governors			Salaries and wages	Common staff costs	Travel of staff, panel members, etc.	Common services	Scientific, technical and other contractual services	Representation and hospitality	Supplies and equipment	Fellowships and technical assistance
-	-	109 100	109 100	56 600	23 500	19 000	-	-	10 000	-	-
6 000	-	41 300	47 300	29 000	12 300	-	-	6 000	-	-	-
6 000	-	150 400	156 400	85 600	35 800	19 000	-	6 000	10 000	-	-
-	-	-	54 900	34 700	14 700	3 000	-	-	2 500	-	-
-	-	-	1 173 700	170 100	66 400	31 000	8 000	-	200	3 000	895 000
-	-	-	907 960	381 600	129 700	101 000	67 000	174 000	1 560	53 000	-
-	-	-	2 136 560	586 400	210 800	135 000	75 000	174 000	4 360	56 000	895 000
-	-	-	56 900	36 700	14 700	3 000	-	-	2 500	-	-
-	-	-	1 184 990	179 900	71 300	69 300	-	-	490	-	864 000
-	-	-	233 060	139 400	52 100	40 900	-	-	660	-	-
-	-	-	113 400	78 200	32 100	3 000	-	-	100	-	-
-	-	-	323 250	196 800	75 600	46 500	-	4 000	550	-	-
-	-	-	1 911 600	630 800	245 800	162 700	-	4 000	4 300	-	864 000
-	-	-	55 000	34 800	14 700	3 000	-	-	2 500	-	-
-	-	-	1 805 040	429 200	166 300	47 200	66 400	966 700	640	128 600	-
-	-	-	409 800	246 900	94 800	67 460	-	-	640	-	-
-	-	-	2 269 840	710 900	275 800	117 660	66 400	966 700	3 780	128 600	-
-	-	-	33 900	22 400	9 500	-	-	-	2 000	-	-
-	-	-	173 590	92 100	35 700	20 100	-	-	690	25 000	-
-	-	-	84 100	48 600	20 400	15 000	-	-	100	-	-
-	-	-	291 590	163 100	65 600	35 100	-	-	2 790	25 000	-
-	-	64 600	64 600	39 900	16 700	3 000	-	-	5 000	-	-
14 500	56 200	-	159 500	114 600	44 300	500	-	-	100	-	-
-	-	189 040	189 040	126 200	52 500	9 340	-	-	1 000	-	-
-	-	60 090	138 270	88 100	30 600	19 200	-	-	370	-	-
-	-	89 700	104 700	63 100	24 300	2 000	-	15 000	300	-	-
-	-	262 600	262 600	186 500	74 000	2 000	-	-	100	-	-
-	-	125 100	125 100	86 900	36 100	2 000	-	-	100	-	-
-	-	-	62 600	39 400	15 100	8 000	-	-	100	-	-
6 800	92 800	671 460	1 026 900	421 400	153 900	1 000	316 000	-	100	134 500	-
7 700	246 000	58 950	662 800	490 800	171 900	-	-	-	100	-	-
9 000	395 000	1 521 540	2 796 110	1 656 900	619 400	47 040	316 000	15 000	7 270	134 500	-
5 000	395 000	1 671 940	9 562 100	3 833 700	1 453 200	516 500	457 400	1 165 700	32 500	344 100	1 759 000

A N N

ANALYSIS OF THE CONSOLIDATED

A. By Regular Budget estimates and

Budgetary appropriation section or allocation	Part of the 1964 Programme							VII. Information and technical services
	Scientific and technical work							
	I. Technical assistance and training		II. Nuclear power and reactors	III. Radio-isotopes	IV. Health, safety and waste management	V. Research and services in physical sciences	VI. Safeguards	
	A. Technical assistance	B. Exchange and training						
REGULAR BUDGET								
1. The General Conference	-	-	-	-	-	-	-	-
2. The Board of Governors	-	-	-	-	-	-	-	-
Sub-total	-	-	-	-	-	-	-	-
3. Panels and committees	-	-	40 200	40 200	60 300	13 400	6 700	-
4. Special missions	35 000	-	30 000	5 000	-	-	-	-
5. Seminars, symposia and conferences	-	-	22 000	18 000	18 000	62 000	-	-
6. Distribution of information	4 000	-	44 000	25 000	22 000	33 000	-	94 50
7. Scientific and technical services and laboratory charges	-	-	45 000	195 000	479 000	398 500	50 000	36 00
Sub-total	39 000	-	181 200	283 200	579 300	506 900	56 700	130 50
8. Salaries and wages	188 940	226 280	281 220	252 890	319 120	206 100	161 640	590 79
9. Common staff costs	73 080	85 960	106 720	92 560	119 390	77 650	63 720	230 98
10. Duty travel of staff	5 900	5 700	11 600	32 700	24 200	12 500	24 200	10 60
11. Representation and hospitality	1 170	1 410	1 560	1 870	1 700	1 530	2 810	3 74
Sub-total	269 090	319 350	401 100	380 020	464 410	297 780	252 370	836 11
12. Common services, equipment and non-technical supplies	-	-	-	-	-	-	25 000	35 00
TOTAL	308 090	319 350	582 300	663 220	1 043 710	804 680	334 070	1 001 61
OPERATIONAL BUDGET								
Laboratory	-	-	-	-	-	229 500	-	-
Monaco project	-	-	-	-	40 000	-	-	-
Theoretical Physics Centre	-	-	-	-	-	250 000	-	-
Exchange and training	-	873 000	-	-	-	-	-	-
Technical assistance	807 000	-	-	-	-	-	-	-
Research contracts	-	-	-	168 000	-	-	-	-
TOTAL	807 000	873 000	-	168 000	40 000	479 500	-	-
TOTAL Agency funds	1 115 090	1 192 350	582 300	831 220	1 083 710	1 284 180	334 070	1 001 61
EPTA funds	513 500	237 882	-	-	-	-	-	-
GRAND TOTAL	1 628 590	1 430 232	582 300	831 220	1 083 710	1 284 180	334 070	1 001 61

EX III

D BUDGET ESTIMATES FOR 1964

proposed Operational Budget allocations

The General Conference and Board of Governors		General direction and administrative services	Total estimates and proposed allocations	Object of expenditure							
General Conference	Board of Governors			Salaries and wages	Common staff costs	Travel of staff, panel members, etc.	Common services	Scientific, technical and other contractual services	Representation and hospitality	Supplies and equipment	Fellowships and technical assistance
261 000	-	-	261 000	150 000	38 000	-	52 500	7 000	-	13 500	-
-	365 000	-	365 000	248 000	88 000	1 000	17 500	-	-	10 500	-
261 000	365 000	-	626 000	398 000	126 000	1 000	70 000	7 000	-	24 000	-
-	-	9 200	170 000	17 000	-	153 000	-	-	-	-	-
-	-	-	70 000	-	-	70 000	-	-	-	-	-
-	-	-	120 000	48 000	-	42 000	30 000	-	-	-	-
-	-	-	222 500	65 000	18 000	-	12 500	43 000	-	84 000	-
-	-	-	1 203 500	184 500	71 700	1 800	37 400	841 200	-	66 900	-
-	-	9 200	1 786 000	314 500	89 700	266 800	79 900	884 200	-	150 900	-
-	-	966 020	3 193 000	3 193 000	-	-	-	-	-	-	-
-	-	379 440	1 229 500	-	1 229 500	-	-	-	-	-	-
-	-	22 600	150 000	-	-	150 000	-	-	-	-	-
-	-	16 710	32 500	-	-	-	-	-	32 500	-	-
-	-	1 384 770	4 605 000	3 193 000	1 229 500	150 000	-	-	32 500	-	-
-	-	367 500	427 500	-	-	-	272 000	-	-	155 500	-
261 000	365 000	1 761 470	7 444 500	3 905 500	1 445 200	417 800	421 900	891 200	32 500	330 400	-
-	-	-	229 500	116 500	45 300	1 200	23 600	800	-	42 100	-
-	-	-	40 000	-	-	-	-	40 000	-	-	-
-	-	-	250 000	-	-	-	-	250 000	-	-	-
-	-	-	873 000	-	-	-	-	-	-	-	873 000
-	-	-	807 000	-	-	-	-	-	-	-	807 000
-	-	-	168 000	-	-	-	-	168 000	-	-	-
-	-	-	2 367 500	116 500	45 300	1 200	23 600	458 800	-	42 100	1 680 000
261 000	365 000	1 761 470	9 812 000	4 022 000	1 490 500	419 000	445 500	1 350 000	32 500	372 500	1 680 000
-	-	-	751 382	-	-	-	-	-	-	-	751 382
261 000	365 000	1 761 470	10 563 382	4 022 000	1 490 500	419 000	445 500	1 350 000	32 500	372 500	2 431 382

B. By units of

Organizational unit	Part of the 1964 Programme							VII. Information and technical services
	Scientific and technical work							
	I. Technical assistance and training		II. Nuclear power and reactors	III. Radioisotopes	IV. Health, safety and waste management	V. Research and services in physical sciences	VI. Safeguards	
A. Technical assistance	B. Exchange and training							
Office of the Director General	-	-	-	-	-	-	-	-
Internal Audit	-	-	-	-	-	-	-	-
Sub-total	-	-	-	-	-	-	-	-
Department of Training and Technical Information	-	29 050	-	-	-	-	-	-
Office of the Deputy Director General	-	1 097 700	-	-	-	-	-	-
Exchange and Training	3 630	-	62 120	40 750	38 000	92 000	-	-
Scientific and Technical Information	-	-	-	-	-	-	-	-
Sub-total	3 630	1 126 750	62 120	40 750	38 000	92 000	-	61.26
Department of Technical Operations	-	-	-	-	-	-	-	-
Office of the Deputy Director General	18 060	-	18 060	-	18 060	-	-	6 000
Economic and Technical Assistance	1 025 980	-	85 510	-	6 790	-	-	-
Reactors	-	-	257 760	-	-	-	-	-
Technical Supplies	-	-	53 190	-	-	-	-	69 600
Health, Safety and Waste Disposal	-	-	-	-	328 350	-	-	-
Sub-total	1 044 040	-	414 520	-	353 200	-	-	75 600
Department of Research and Isotopes	-	-	-	-	-	-	-	-
Office of the Deputy Director General	-	-	-	29 600	-	29 600	-	-
Research and Laboratories	-	-	45 000	363 000	495 000	1 140 680	50 000	-
Isotopes	-	-	-	357 740	78 000	-	-	-
Sub-total	-	-	45 000	750 340	573 000	1 170 280	50 000	-
Department of Safeguards and Inspection	-	-	-	-	-	-	-	-
Office of the Inspector General	-	-	-	-	-	-	38 900	-
Safeguards	-	-	-	-	-	-	165 090	-
Inspection	-	-	-	-	-	-	58 700	-
Sub-total	-	-	-	-	-	-	262 690	-
Department of Administration, Liaison and Secretariat	-	-	-	-	-	-	-	-
Office of the Deputy Director General	-	-	-	-	-	-	-	-
Secretariat of the General Conference and the Board of Governors	-	-	-	-	-	-	-	87 600
External Liaison and Protocol	-	-	-	-	-	-	-	-
Legal	10 690	-	-	-	41 750	-	21 380	-
Public Information	-	-	-	-	-	-	-	-
Budget and Finance	-	-	-	-	-	-	-	-
Personnel	-	-	-	-	-	-	-	-
Administrative Office of Technical Assistance	18 480	27 720	-	-	-	-	-	-
Conference and General Services	370	-	3 880	2 250	2 000	3 000	-	162 200
Languages	37 880	37 880	56 780	37 880	75 760	18 900	-	18 900
Sub-total	67 420	65 600	60 660	40 130	119 510	21 900	21 380	302 700
TOTAL Agency funds	1 115 090	1 192 350	582 300	831 220	1 083 710	1 284 180	334 070	1 001 610

the Secretariat

The General Conference and Board of Governors			Total estimates and proposed allocations	Object of expenditure							
General Conference	Board of Governors	General direction and administrative services		Salaries and wages	Common staff costs	Travel of staff, panel members, etc.	Common services	Scientific, technical and other contractual services	Representation and hospitality	Supplies and equipment	Fellowships and technical assistance
-	-	143 100	143 100	82 100	32 700	18 300	-	-	10 000	-	-
7 000	-	45 200	52 200	32 100	13 100	-	-	7 000	-	-	-
7 000	-	188 300	195 300	114 200	45 800	18 300	-	7 000	10 000	-	-
-	-	-	58 100	38 100	15 500	2 000	-	-	2 500	-	-
-	-	-	1 097 700	161 000	61 600	2 000	-	-	100	-	873 000
-	-	-	830 740	430 100	143 100	49 000	77 500	45 000	2 040	84 000	-
-	-	-	1 986 540	629 200	220 200	53 000	77 500	45 000	4 640	84 000	873 000
-	-	-	60 200	38 200	15 500	4 000	-	-	2 500	-	-
-	-	-	1 118 280	186 800	72 800	51 100	-	-	580	-	807 000
-	-	-	257 760	142 200	52 900	62 100	-	-	560	-	-
-	-	-	122 790	82 800	30 800	9 000	-	-	190	-	-
-	-	-	328 350	188 800	69 900	45 100	-	24 000	550	-	-
-	-	-	1 887 380	638 800	241 900	171 300	-	24 000	4 380	-	807 000
-	-	-	59 200	38 200	15 500	3 000	-	-	2 500	-	-
-	-	-	2 093 680	475 400	181 900	26 100	61 000	1 240 000	280	109 000	-
-	-	-	435 740	261 400	93 500	80 200	-	-	640	-	-
-	-	-	2 588 620	775 000	290 900	109 300	61 000	1 240 000	3 420	109 000	-
-	-	-	38 900	25 100	10 300	1 000	-	-	2 500	-	-
-	-	-	165 090	82 700	31 200	26 000	-	-	190	25 000	-
-	-	-	58 700	39 500	16 100	3 000	-	-	100	-	-
-	-	-	262 690	147 300	57 600	30 000	-	-	2 790	25 000	-
-	-	69 900	69 900	44 700	18 200	2 000	-	-	5 000	-	-
32 000	58 000	-	177 600	130 200	46 300	1 000	-	-	100	-	-
-	-	173 000	173 000	119 000	48 000	5 000	-	-	1 000	-	-
-	-	53 450	127 270	77 200	30 600	19 100	-	-	370	-	-
-	-	79 900	113 900	56 600	22 000	1 000	-	34 000	300	-	-
-	-	269 600	269 600	192 000	75 500	2 000	-	-	100	-	-
-	-	135 300	135 300	96 800	37 900	500	-	-	100	-	-
-	-	-	46 200	30 600	11 000	4 500	-	-	100	-	-
100 000	84 000	696 100	1 053 800	430 700	160 500	1 000	307 000	-	100	154 500	-
22 000	223 000	95 920	724 900	539 700	184 100	1 000	-	-	100	-	-
254 000	365 000	1 573 170	2 891 470	1 717 500	634 100	37 100	307 000	34 000	7 270	154 500	-
261 000	365 000	1 761 470	9 812 000	4 022 000	1 490 500	419 000	445 500	1 350 000	32 500	372 500	1 680 000

ANNEX IV

Draft Resolutions

A. REGULAR BUDGET APPROPRIATIONS FOR 1964

The General Conference,

Accepting the recommendations of the Board of Governors [1],

1. Appropriates an amount of US \$7 444 500 for the administrative expenses of the Agency in 1964 as follows:

<u>Section</u>	<u>United States dollars</u>
1. The General Conference	261 000
2. The Board of Governors	365 000
3. Panels and committees	170 000
4. Special missions	70 000
5. Seminars, symposia and conferences	120 000
6. Distribution of information	222 500
7. Scientific and technical services and laboratory charges	1 203 500
8. Salaries and wages	3 193 000
9. Common staff costs	1 229 500
10. Duty travel of staff	150 000
11. Representation and hospitality	32 500
12. Common services, equipment and non-technical supplies	427 500
	7 444 500

2. Decides that the foregoing appropriations shall be financed as follows:

- (a) US \$100 000 from miscellaneous income;
- (b) US \$104 500 from the Special Account of the United Nations;
- (c) US \$20 000 from the Publications Revolving Fund; and
- (d) US \$7 220 000 from contributions by Member States on the basis of a scale of assessments to be determined by the General Conference, the contributions being adjusted pursuant to the Agency's financial Regulations [2] to take account of the cash surplus for 1961; and

3. Authorizes the Director General, with the prior approval of the Board of Governors, to make transfers between any of the sections listed in paragraph 1 of this resolution.

[1] GC(VII)/230.

[2] INFCIRC/8 and Add. 1.

B. OPERATIONAL BUDGET ALLOCATIONS FOR 1964

The General Conference,

- (a) Accepting the recommendations of the Board of Governors [1], and
- (b) Noting that funds from various sources, estimated at US \$340 000, are expected to be available for the Agency's operational programme in 1964,
1. Decides that for 1964 the target for voluntary contributions to the General Fund shall be US \$2 million;
2. Allocates the following sums for the operational programme:

	<u>United States dollars</u>	
<u>Operating Fund I</u>		
Laboratory	202 000	
Monaco project	40 000	
Theoretical Physics Centre	250 000	492 000
	<hr/>	
<u>Operating Fund II</u>		
Exchange and training	873 000	
Technical assistance	807 000	
Research contracts	168 000	1 848 000
	<hr/>	<hr/>
		2 340 000
		<hr/>

3. Urges Member States to make voluntary contributions to the General Fund in 1964 in accordance with Article XIV. F of the Statute and with the terms of paragraphs 2 and 3 of its resolution GC(V)/RES/100; and
4. Authorizes the Director General to employ staff for the Laboratory in addition to that for which provision is made in the budget for 1964, provided that the salaries and other costs of such staff are met from revenues arising out of work performed in the Laboratory for Member States, research grants, special contributions or other sources extraneous to the Regular and Operational Budgets for 1964.

[1] GC(VII)/230.

C. USE OF THE WORKING CAPITAL FUND IN 1964

The General Conference,

Accepting the recommendations of the Board of Governors [1],

1. Decides:
- (a) That the Working Capital Fund of the Agency shall remain at US \$2 million in 1964; and
- (b) That the Fund shall be financed, administered and used in 1964 in accordance with the relevant provisions of the Agency's Financial Regulations [2];

2. Authorizes the Director General:

(a) To make advances from the Fund, not exceeding US \$25 000 at any time, to provide temporary financing for projects and activities of a strictly self-liquidating character which will not necessitate an increase in the Fund in future years; and

(b) With the prior approval of the Board of Governors, unless in his opinion the situation requires immediate action before such approval can be obtained, to make advances from the Fund to meet the costs incurred by the Agency in organizing and rendering emergency assistance to Member States in connection with radiation accidents, up to \$50 000 in each case;

3. Requests the Director General to submit to the Board periodic statements of advances made from the Fund under the authority given in paragraph 2 above; and

4. Urges Member States that have not yet done so to pay their advances to the Fund as soon as possible.

[1] GC(VII)/230.

[2] INFCIRC/8/Add. 1.