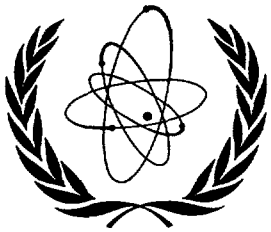

International Atomic Energy Agency

PROGRAMME AND BUDGET FOR 1963

GC(VI)/200

Printed by the
International Atomic Energy Agency
in Austria - August 1962

TABLE OF CONTENTS

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
ECOSOC	Economic and Social Council of the United Nations
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
ILO	International Labour Organisation or Office
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)
TAC	Technical Assistance Committee (of the Economic and Social Council of the United Nations)
UNESCO	United Nations Educational, Scientific and Cultural Organization
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 1963.

2. These estimates were initially prepared by the Director General, reviewed by the Board's Administrative and Budgetary Committee in May 1962 and finally adopted by the Board in June 1962.

3. During 1962 it is proposed to initiate the preparation of a long-term programme for the Agency's activities[1]. When the broad outlines of such a programme have been determined, a review of the organizational structure of the Secretariat may be required. In the meantime, it is not considered appropriate to propose any increase in the total staff. Such increases as are proposed in the Professional staff of technical divisions are offset by corresponding reductions in posts in the administrative divisions. At the same time, reductions in the General Service and Maintenance and Operatives Service staff have been made in both technical and administrative departments. As a result of this effort the total number of posts financed from the Regular Budget in 1963 has been reduced to 641, which is 26 below the approved level for 1962, and four below the level for 1961.

4. The estimates for 1963 reflect a significant change in the distribution of laboratory charges as between the Regular and Operational Budgets. This change is based on the application of cost accounting principles to the operations of the Laboratory.

5. The target for voluntary contributions to support the operational programme for 1963 has been retained at the $2 million level approved for 1962.

6. The Board recommends the adoption of the programme and budget by the General Conference, and in connection with the Operational Budget wishes to stress the urgent need for all Member States to contribute to the maximum extent possible to assure effective execution of the approved programme. At its fifth regular session the General Conference adopted a resolution inviting economically developed Members of the Agency "to make voluntary contributions to the General Fund for 1962 and succeeding years in amounts that are at least the same percentages of the target for each year as are their assessed contributions to the Regular Budget"[2], and inviting other Members to make at least a token contribution. As at 30 June 1962 only 17 Member States had responded by pledging contributions equal to or higher than the amounts that they were invited to contribute under the terms of the above resolution.

II. SUPPLEMENTARY ESTIMATE FOR 1962

7. On 5 March 1962 the Board approved the recommendations of the Director General to increase with effect from 1 January 1962 the emoluments of staff in the Professional and higher categories in accordance with a new scale approved by the General Assembly of the United Nations; in addition, General Service staff members were granted salary increases of approximately 17%, effective from the same date. The total additional cost thus arising is estimated at $520 600 in 1962. In order to finance this, it has been necessary to make advances from the Working Capital Fund, pending the approval of a supplementary estimate providing for additional assessments on Member States. The need for such action was foreseen by the General Conference in sub-paragraph 2(c) of Resolution GC(V)/RES/104.

---

[1] See Resolution GC(V)/RES/105.

[2] GC(V)/RES/100.

8. It is too early in the year to determine what specific savings may become available under the budget appropriations for 1962, but efforts are being made to effect economies and the Board estimates that a sum of $50 000 can be saved in 1962 in order to offset part of the additional cost of salaries. A supplementary request for $470 600 will accordingly be presented to the General Conference in a separate document [3]. In this connection, it should be noted that the final cash surplus for 1960, which becomes available to reduce the assessments of Member States as at 1 January 1963, amounts to $833 411. This is $362 811 more than the proposed supplementary appropriation.

9. The increased costs affect four appropriation sections, and the extent to which the original provisions are thereby changed is shown in the footnotes to Table 1.

III. FORM OF THE PROGRAMME AND BUDGET

10. Several important changes have been made in the form of the Programme and Budget for 1963 as compared with that of previous years.

11. The first significant change has been to eliminate the entire chapter which in previous budget documents showed in detail the functions, responsibilities and staffing of each division of the Secretariat. As a result, much repetition has been avoided and the document itself has been shortened. The organizational structure of the Secretariat and the functions and responsibilities of each division, which were described in Chapter II of the Program and Budget for 1962 [4], remain unchanged and will be laid down in the Agency's Administrative Manual, now in preparation. If realignment of functions or changes in organization are made, they will be reflected in amendments to appropriate sections of the Manual.

12. The second major change in presentation is that in the Budget the justification of individual appropriations has been reduced to a minimum consistent with clarity. In general, such justification is provided under the Programme. Where no significant change is requested, very little comment is included. Where an increase is involved, a brief justification is given or reference is made to that section of the Programme under which the need has been explained in detail.

13. Finally, the chapter dealing with the programme is preceded by a summary (Table 3) showing the estimated expenditure for each major sector of the programme, and the increases between 1962 and 1963.

14. Details of these expenditures are given in Annexes II and III which show:

(a) The origin of costs by division and type of expenditure;

(b) The estimated distribution of these costs among programmes; and

(c) The breakdown of the various appropriation sections of the budget.

The relationship between the programmes, the divisions concerned with their implementation, and the source of funds by appropriation section is thus shown for each fiscal year.

15. The resulting total cost for each programme must, however, not be considered as a firm estimate. The distribution of estimated costs shown in Annexes II and III has been made in many cases by allocating the total expenditure of a division to its major function. The estimated cost of panels and committees, seminars, symposia and conferences, publications and research contracts have been distributed between the programmes to which they relate. In some cases, particularly in the technical departments, easily identifiable costs have been shown under a programme which does not represent the major function of a division. For instance, a part of the cost of the Division of Isotopes is

---

[3] GC(VI)/191.

[4] GC(V)/155.

charged to the programme under health, safety and waste management, and parts of the costs of the Division of Technical Supplies and of the Division of Economic and Technical Assistance are charged to that part of the programme which deals with nuclear power and reactors. Similarly, parts of the cost of the Secretariat of the General Conference and the Board of Governors, the Division of Conference and General Services, and the Division of Language Services have been distributed, on the basis of the work performed, to the General Conference and the Board of Governors. Parts of the cost of the Legal Division have been distributed to programmes to the extent that they represent identifiable expenditures for legal panels or conferences or for other legal work closely related to the programmes concerned. The estimated expenses of the Administrative Office of Technical Assistance have been distributed to the programmes for technical assistance and exchange and training in proportion to their respective costs.

16. This presentation has resulted in the deletion of the former Annex I which attempted a very broad allocation of costs to various programme activities.

IV. THE PROGRAMME

17. In drawing up the broad outlines of a suitable programme for the Agency in 1963, the Board has been strongly influenced by the need to circumscribe the Agency's activities to the extent necessitated by the strictly limited resources that are likely to be available. These circumstances may also require adjustments between different parts of the programme as the year proceeds, if the best use is to be made of funds as they become available.

18. The Board has also, to the extent appropriate, taken into account the suggestions and recommendations of SAC concerning some of the principal activities of the Agency, such as the scientific meetings it will sponsor, and certain parts of the publications and research programmes. The recommendations of SAC were formulated at meetings held in Vienna in October 1961 and June 1962.

19. The General Conference will observe that the programme is again presented in the way that was first used for 1962 [4]. This approach, of stating succinctly the work in a particular area that the Agency will do instead of describing it in relation to the Secretariat's machinery for carrying it out, has, however, now been further developed. Thus the intention to publish a manual, for example, is merely referred to under "Health, safety and waste management" (part IV), but treated somewhat more fully in "Information and technical services" (part VII) as part of the Agency's statutory function to disseminate scientific information.

20. The Board is of the opinion that this way of presenting the programme is an improvement over that of earlier years, but is nonetheless aware that it can lead to ambiguities in the treatment of some of the Agency's functions and activities. Such a situation has arisen with regard to the presentation of the part of the present programme that relates to the exchange of information the Agency will promote next year, which is in fact planned, organized and executed as an entity. However, by its very nature, it encompasses activities under many different disciplines; for this reason, and also to show clearly its integration within the totality of the Agency's scientific and technical work, its presentation has been divided up. Very similar considerations apply in the case of research contracts and the work of the Laboratory. It should be emphasized, however, that the form of presentation will not affect the execution of the work.

21. With these few general comments the programme can be left to speak for itself; but the Board believes it useful to draw attention to the following trends of a detailed nature that are discernible in it:

(a) There are somewhat more activities of a potentially long-term character now in the programme than in the past, which would seem to reflect the spirit of the resolution on the subject adopted by the General Conference in 1961 [5];

---

[5] GC(V)/RES/105.

(b) To a larger extent than in the past the programme has been developed on the basis of the advice and help given to the Secretariat by SAC and various ad hoc groups of scientists; and

(c) Greater efforts have been made to devise a programme that offers as much help as possible to the Governments of those Member States whose needs are the most urgent.

V. THE BUDGET

A. General

22. The structure of the budget for 1963 remains essentially the same as for 1962. Apart from the reduction of explanatory text to a minimum, which has already been referred to,[6] the only other change is the consolidation of two appropriation sections into a new one which is entitled "Common services, equipment and non-technical supplies".

23. As in previous years, provision to meet a proportion of the expenditures for salaries and wages, common staff costs, and common services, equipment and non-technical supplies has been included in the appropriations for the General Conference and the Board of Governors. The assumptions on which the amounts to be so charged have been determined are the same as those for 1962. However, the exact distribution of costs based on the actual work of the interpretation, translation, documentation and other services can only be made during 1963 when the implications of the changed pattern of meetings of the Board and its committees can be fully assessed. To that extent, therefore, the present provisions are subject to adjustment in the light of actual experience.

B. Comparison of the Regular Budget estimates for 1962 and 1963

24. The total amount originally appropriated for the Regular Budget in 1962 was $6 261 000 which, by the addition of the supplementary appropriation referred to above ($470 600), and offset by expected miscellaneous income ($100 000), is increased to $6 631 600.

25. The Regular Budget for 1963 provides for expenditures totalling $7 337 500, which is $1 076 500 (17.19%) higher than the approved budget for 1962. If the supplementary estimate for 1962 is taken into account, the increase in 1963 is $605 900 (9.00%). Revenues of $215 000 are expected in 1963, so that the assessments on Member States will total $7 122 500, an increase of $490 900 (7.40%) over the combined original and supplementary assessments for 1962. A comparison of appropriations under the Regular Budget for 1962 and 1963, and of actual expenditure in 1961, is given in Table 1 below.

---

[6] See paragraph 12 above.

Table 1

Appropriation section	1961 Actual $	1962 Budget $	1963 Estimate $	Increase or (decrease) 1962:1963 $
1. The General Conference	239 054	245 000 a/	275 000	30 000
2. The Board of Governors	569 689	398 000 b/	395 000	(3 000)
3. Panels and committees	129 894	160 000	170 000	10 000
4. Special missions	48 180	70 000	70 000	-
5. Seminars, symposia and conferences	131 513	180 000	188 000	8 000
6. Distribution of information	289 000	260 000	245 000	(15 000)
7. Scientific and technical services and laboratory charges	703 000	885 500	1 110 000	224 500
8. Salaries and wages	2 363 524	2 467 000 c/	3 063 000	596 000
9. Common staff costs	948 214	1 030 000 d/	1 220 000	190 000
10. Duty travel of staff	141 983	180 000	178 000	(2 000)
11. Representation and hospitality	26 779	32 500	32 500	-
12. Common services, equipment and non-technical supplies	439 727	353 000	391 000	38 000
Sub-total	6 030 557	6 261 000 e/	7 337 500	1 076 500
Less: Revenues	145 186	100 000	215 000	115 000
TOTAL	5 885 371	6 161 000 f/	7 122 500	961 500

a/ $ 258 000 including the supplementary estimate.
b/ $ 439 000 including the supplementary estimate.
c/ $2 799 000 including the supplementary estimate.
d/ $1 114 600 including the supplementary estimate.
e/ $6 731 600 including the supplementary estimate.
f/ $6 631 600 including the supplementary estimate.

26. It will be more meaningful if the increases are explained in relation to specific items of expenditure, such as salaries and wages, panels, conferences, etc. and not by reference to the appropriation section in which such items are included. On this basis, the breakdown of the increase in 1963 is as below:

Purpose	Increase over original appropriations for 1962 $	Increase over combined original and supplementary appropriations for 1962 $
Salaries and wages	600 000	225 000
Common staff costs	196 000	100 400
Laboratory charges to the Regular Budget	224 500	224 500
Panels and committees	10 000	10 000
Conferences	8 000	8 000
Equipment	38 000	38 000
TOTAL	1 076 500	605 900

27. The increase of $225 000 for salaries and wages, over and above that resulting from the inclusion of the supplementary estimate in 1962, is primarily due to provision for normal annual increments and the application in 1963 of a smaller factor for lag in recruitment of new staff and lapse in replacing existing staff. Other items affecting the total are the reduction of 11 General Service posts, 15 Maintenance and Operatives Service posts, and of special post and other allowances. The effect of these changes is explained in detail under appropriation Section 8 of the Budget [7]. The increase in common staff costs is a concomitant of the increase for salaries and wages.

28. The increase of $224 500 in laboratory charges provided for under the Regular Budget is explained in paragraphs 249 to 257 below.

29. The only remaining major increase is $38 000 for equipment, of which $25 000 is for portable equipment in connection with the application of safeguards, and $13 000 for equipment for the automatic retrieval of scientific information.

30. Income from various sources, estimated at $215 000 in 1963, includes $90 000 from the Special Account to cover administrative and operational services costs in connection with EPTA. [8] The remainder is composed of interest on investments, and miscellaneous income.

31. Table 2 below provides a comparison of total expenditures under the Regular Budget in 1961, 1962, and 1963 on the various parts of the programme, the governing bodies and general administration.

Table 2

Purpose of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $	Increase or (decrease) 1962:1963 $
The Programme				
I. Technical assistance and training				
A. Technical assistance	265 146	270 060	311 030	40 970
B. Exchange and training	279 178	279 360	352 460	73 100
II. Nuclear power and reactors	437 548	459 840	555 590	95 750
III. Radioisotopes	378 829	472 230	603 430	131 200
IV. Health, safety and waste management	871 324	1 047 840	1 117 390	69 550
V. Research and services in physical sciences	464 242	529 920	774 490	244 570
VI. Safeguards	177 709	252 720	385 210	132 490
VII. Information and technical services	688 668	734 010	895 960	161 950
Sub-total	3 562 644	4 045 980	4 995 560	949 580
The General Conference and Board of Governors				
The General Conference	239 054	245 000	275 000	30 000
The Board of Governors	569 689	398 000	395 000	(3 000)
Sub-total	808 743	643 000	670 000	27 000
General direction and administrative services	1 659 170	1 572 020	1 671 940	99 920
TOTAL	6 030 557	6 261 000	7 337 500	1 076 500
Less: Revenues	145 186	100 000	215 000	115 000
GRAND TOTAL	5 885 371	6 161 000	7 122 500	961 500

[7] See paragraphs 220-232 below.

[8] See also paragraph 278 below.

C. Financing of Regular Budget expenses

32. As provided in the Statute and the Financial Regulations, the expenses of the regular programme are financed by contributions for which Member States are assessed annually. Following the practice recommended by the General Conference at its second regular session[9], the Director General will propose to the General Conference a scale of assessments for 1963 based on the United Nations scale for 1962.

33. The Director General will report to the General Conference on the collection during 1961-62 of Members' contributions and of advances to the Working Capital Fund. At the end of 1961 there remained unpaid 0.08% of assessed contributions due for 1957-58, 0.24% for 1959, 6.24% for 1960 and 10.43% for 1961, as well as 0.42% of the advances due to the Working Capital Fund.

34. In accordance with the Financial Regulations, any surplus cash which by the end of the financial year has accrued in the Administrative Fund is retained in the Fund for 12 months as a provisional cash surplus. At the end of this 12-month period there are added to the provisional cash surplus any arrears of contributions received during the period and any savings on obligations brought forward for liquidation in that period. The resulting balance constitutes the final cash surplus which, after audit by the External Auditor, is allocated among Member States in accordance with their percentages in the scale of assessments for the year to which the surplus pertains.

35. The share allocated to each Member State, whose contribution for that year has been paid in full, is applied to liquidate, first, any debt due from that State towards the Working Capital Fund, secondly, any arrears of assessed contributions, and thirdly, any assessed contribution due for the financial year then commencing. The allocations to the remaining Member States are similarly applied after they have paid the full amount of their contributions for the year to which the surplus pertains.

36. The final cash surplus for 1960, which will be allocated to Member States in 1963, is more than the increase in the budget for that year. It has been arrived at as follows:

Budget surplus	$837 868	
Less: 1960 contributions unpaid as at 31 December 1960	568 946	
Provisional cash surplus as at 31 December 1960		$268 922
Arrears of contributions paid during 1961		484 557
Savings on obligations brought forward from 1960		79 932
Final cash surplus		$833 411

37. Whereas in 1959 and 1960 the budget surplus exceeded the unpaid contributions at the end of the year, so that a provisional cash surplus resulted, in 1961 the budget surplus was far exceeded by the unpaid contributions, and consequently a provisional cash deficit of $331 350 was reported as at 31 December 1961. Although this deficit will undoubtedly be more than offset by arrears of contributions that will be paid during 1962, the final cash surplus for 1961 will be appreciably less than that for either of the previous two years.

D. Financing of Operational Budget expenses

38. The estimates for the operational programme in 1963 amount to $2 224 600. Estimated income from services rendered by the Laboratory to Member States, interest on investments, a special voluntary contribution, and an amount drawn from the reserve in the General Fund, reduce the sum required to be raised by voluntary contributions to $2 000 000. This target is the same as that for 1962.

39. Past experience indicates that pledges of voluntary contributions have continuously failed to meet even those modest targets which the Board felt to be justified and

[9] See Resolution GC(II)/RES/33.

realistic, though far below the essential requirements of less-developed Member States. This is borne out by the following figures.

Year	Target	Pledged	Percentage
1959	1 500 000	1 183 044	78.9
1960	1 500 000	996 103	66.4
1961	1 800 000	1 261 570	70.1
1962 [10]	2 000 000	1 277 142	63.9

40. It will be noticed that the response to the resolution adopted by the General Conference at its fifth regular session [11] does not reflect any appreciable improvement in the situation. The uncertainty of financial resources adds to the difficulty of planning programmes in advance, and results in uneconomical utilization of staff provided under the Regular Budget to service these programmes.

VI. APPLICATION OF COST ACCOUNTING TO THE LABORATORY'S WORK

41. The Board has for some time considered it essential that a study be made to determine the expenditures for laboratory work which should properly be charged, in accordance with sound cost accounting principles, to the Regular and Operational Budgets respectively, rather than continue the arbitrary practice of charging 40% of the Laboratory's operating costs to the Regular Budget.

42. A consultant was engaged during September and October 1961 to appraise the problem and to make recommendations with regard to a suitable accounting system for the Laboratory. As a sequel to the consultant's work, a cost accountant joined the Division of Budget and Finance in January 1962.

43. Before cost accounting principles could be applied to the operation of the Laboratory it was necessary to determine the criteria which should govern the distribution of costs between the Regular and the Operational Budgets. Guidance in this respect has been found in the views already expressed by the Board and the General Conference both with regard to this subject and the financing of research contracts.

44. The Board and the General Conference have recognized that the fundamental authority for the allocation of costs must be derived from Article XIV.B of the Statute. For example, in the Programme and Budget for 1961 it was stated that:

> "It can be expected that the Laboratory will undertake, on a wider scale, work in the fields of health, safety, standardization, calibration, safeguards, etc., which is now being done in the provisional laboratory. Under Article XIV.B of the Statute, the cost of such work is considered an 'administrative' expense to be funded under the Regular Budget." [12]

45. Similarly, in the Program and Budget for 1962 [13] it was indicated that:

> "Research projects falling within this broad group (applications of radioisotopes in agriculture, hydrology and medicine) will provide a means for generating new information not only of general interest to the Agency's membership as a whole, but of specific interest to developing countries, and relating to a field of work with which a substantial part of the Agency's technical assistance projects are concerned. Other research, of clearly limited interest to one or a small group of Member States, or designed especially to assist an institute in a Member State will, as in the past, be financed from the Operational Budget."

[10] Up to 30 June 1962.

[11] See also paragraph 6 above.

[12] GC(IV)/116, paragraph 37.

[13] GC(V)/155, paragraph 344.

46. The foregoing decisions of the Board and the General Conference establish the basis for allocating laboratory charges as follows:

(i) Items of general interest to the Agency's membership as a whole should be charged to the Regular Budget; and

(ii) Items of limited interest, that is, of interest to one Member or a small group of Members, such as a regional project, should be charged to the Operational Budget.

47. With these general criteria for the distribution of laboratory costs as a guide, the work of the Laboratory has been broken down into major areas of effort, each being further broken down into as many sub-areas as practicable. The result was a laboratory programme made up as follows:

(a) Standardization and metrology (with four sub-areas);

(b) Physics associated with standardization of nuclides (with five sub-areas);

(c) Chemistry (with five sub-areas);

(d) Water resources survey (with two sub-areas);

(e) Measurements and analysis (with four sub-areas);

(f) Soil sciences (with three sub-areas);

(g) Health, safety and radiation protection (entirely chargeable to the Regular Budget);

(h) Training of scientists from Member States (with five sub-areas, all chargeable to the Operational Budget); and

(i) Work not readily classifiable under any of the above headings, such as the preparation of the International Directory of Radioisotopes [14].

In addition, cost collection centres have been established for the electronics shop, the mechanical shop, and general services, from which costs are distributed on a work order or overhead basis.

48. This breakdown into more than 30 sub-areas of effort has made it possible in most cases to allocate each sub-area completely to either the Regular or the Operational Budget. For instance, work dealing with soil sciences consists of the following:

(a) The preparation of a manual on isotope techniques in soil-plant research - obviously of interest to all Member States, and therefore, chargeable to the Regular Budget; and

(b) The co-ordination of the programme of research on rice cultivation - a regional project of limited interest, therefore, chargeable entirely to the Operational Budget.

49. Similarly, work in connection with the survey of water resources consists of:

(a) The determination of the isotopic composition of natural waters - of general interest, therefore, chargeable to the Regular Budget;

(b) Surface and groundwater investigations - individual projects are of interest to certain areas only; for instance, the Agency is conducting studies in Greece as a sub-contractor under the joint project of FAO and the Special Fund. In this case the Special Fund will reimburse the Agency for expenses for travel, supplies, transport of samples, etc. The cost of salaries and overhead expenses of Agency staff engaged in support of this project will be accounted for under the Operational Budget; and

(c) Silt movement studies - a proposal will be made to the Mekong River Committee, under another Special Fund project, for use of isotopic techniques in qualitative

---

[14] STI/PUB/5 (vol. I) and STI/PUB/7 (vol. II).

measurement of siltation and quantitative measurement of the silt load in the river bed. Work will not be undertaken unless total costs, or at least direct costs, are reimbursable. Since this project would be of value only to a particular region, any costs borne by the Agency will be charged to the Operational Budget.

50. One more example may be worth citing. Although the entire area of "physics associated with standardization of nuclides" might be considered as chargeable to the Regular Budget, since it falls within the terminology set forth in the paragraph quoted from the 1961 budget [15], an analysis of the sub-areas indicates that part of the item called "calibration of equipment used for radiation measurements" could properly be charged to the Operational Budget if the equipment calibrated is being used to serve a regional project, or should be charged to the recipient if special calibration services are provided to a Member State. Therefore, some charges to the Operational Budget are foreseen even under the heading of calibration, which might reasonably have all been charged to the Regular Budget if the programme had not been broken down into sufficient detail.

51. By this process of analysis and evaluation of the components of the Laboratory's work, it was possible in most cases to assign all charges for a sub-item to the Regular or the Operational Budget. In only a few cases, based on the judgement of the scientists in charge of the work concerned, was the distribution made on a percentage basis.

52. After this detailed analysis, the present estimated programme costs chargeable to each budget were totalled and it was found that the portion of total operating expenses, exclusive of equipment and depreciation, chargeable in 1962 to the Regular and Operational Budgets respectively represented approximately 67% and 33% as against 40% and 60% which had been charged previously on the basis of an arbitrary assumption.

53. The application of cost accounting principles to the Laboratory requires, in addition, that charges be made for depreciation of capital assets, such as buildings and equipment. Accordingly, whether a Member State is the recipient of a service or the service is charged to an appropriation section under the Regular Budget, the cost will, as from 1 January 1963, include depreciation. The Board proposes to utilize that part of the income from laboratory services which constitutes depreciation charges, to reduce the annual budgetary estimates for equipment and for structural renovations which are not in the nature of routine maintenance work.

54. Although this procedure does not provide for the building-up of a large cash reserve for depreciation, it will have the desirable effect of allocating costs for the use of equipment on a fair basis among recipients of laboratory services.

VII. THE WORKING CAPITAL FUND

55. Despite the progressive expansion of the Agency's activities, the Board does not consider it necessary to propose any increase in the level of the Working Capital Fund which, since its establishment at $2 million at the first special session of the General Conference, has remained unchanged. The pattern of payments of contributions in previous years has made extensive advances from the Fund unnecessary and it is not expected that this situation will change substantially in 1963.

56. However, as reflected in the Agency's Accounts for 1961 [16], there was in that year, for the first time, a provisional cash deficit in the Administrative Fund, amounting to $331 350. This deficit resulted from the fact that payments of assessed contributions were $646 669 in arrears which more than offset the total of unobligated appropriations ($137 443), miscellaneous income ($145 186), and assessments on new Member States

[15] See paragraph 44 above.

[16] See document GC(VI)/199.

($32 690). This points to the possibility that in future years the Working Capital Fund may have to be used to a greater extent than hitherto; particularly as it must be foreseen that a better utilization of the available financial resources for the implementation of the various programmes will lead to smaller residues of unused funds to offset delays in the payment of assessed contributions.

57. As stated in paragraphs 7 and 8 above, the Board is presenting separately a supplementary estimate to provide for the cost of increased emoluments of the Agency's staff in 1962. No special provision is required to repay the Working Capital Fund in 1963 the sums advanced for this purpose in 1962 in accordance with the authority granted by the General Conference at its fifth regular session[17]. The draft resolution on the use of the Working Capital Fund in 1963 is presented in Annex IV, part C.

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

58. 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 1963.

[17] See Resolution GC(V)/104.

Summary

Table 3

Part of the programme	Expenditures under the Regular Budget			
	1961 Actual $	1962 Budget[a] $	1963 Estimate[a] $	Increase 1962:1963 $
I. Technical assistance and training				
A. Technical assistance	265 146	270 060	311 030	40 970
B. Exchange and training	279 178	279 360	352 460	73 100
II. Nuclear power and reactors	437 548	459 840	555 590	95 750
III. Radioisotopes	378 829	472 230	603 430	131 200
IV. Health, safety and waste management	871 324	1 047 840	1 117 390	69 550
V. Research and services in physical sciences	464 242	529 920	774 490	244 570
VI. Safeguards	177 709	252 720	385 210	132 490
VII. Information and technical services	688 668	734 010	895 960	161 950
TOTAL	3 562 644	4 045 980	4 995 560	949 580

a/ For details see Annexes II and III.

I. TECHNICAL ASSISTANCE AND TRAINING

A. Technical assistance

(a) General

59. The technical assistance programme has grown from year to year and, including projects financed under EPTA, the Agency will have been implementing over the four-year period 1959-62 a programme involving the services of over 200 experts and the supply of equipment of an estimated value of one million dollars.

60. For 1962, the Board of Governors has approved requests involving the services of 40 experts and equipment worth $229 750. This is in addition to some 36 experts who will already be serving in 1962, and equipment worth about $100 000 to be procured in that year under the EPTA biennium 1961-62. The implementation of many projects initiated in 1962 will continue in 1963.

61. In addition to the programme to be implemented under EPTA during 1963-64, it is expected that a large number of requests for projects to be financed from the Agency's own resources in 1963 will be received as a result of visits by the Agency's missions and emerging from programmes already under way in Member States. Consequently, it is estimated that in 1963 the need will arise for approximately 680 man-months of technical assistance in various peaceful uses of nuclear energy, requiring the services of some 90 field experts additional to those whose assignments continue from prior years. Requests for equipment are expected to exceed $250 000.

(b) Bilateral assistance and Special Fund and similar projects

62. It is expected that the Agency will be called upon to assist certain Member States in making arrangements to receive technical assistance directly from other Member States. Similarly, it may be required to assist some Member States in preparing suitable projects for assistance from the Special Fund and other international financing institutions.

(c) Missions

63. By the end of 1962, a total of 46 countries will have been visited by preliminary assistance missions, and it is planned to dispatch one such mission in 1963.

64. Two programme follow-up missions were sent out in 1961 and two are foreseen in 1962. These missions are smaller in composition, shorter in duration and, therefore, cost less than preliminary assistance missions. Two follow-up missions are planned for 1963, to renew direct contacts with atomic energy organizations in Member States and to assist Governments in preparing technical assistance requests for projects to be financed from the Agency's own resources in 1964 and under the EPTA biennium 1965-66.

B. Exchange and training

(a) General

65. The exchange and training programme consists of the following:

(a) The fellowships programme;

(b) The exchange programme of scientists, experts and visiting professors, and the award of research grants; and

(c) The organization of training courses and of regional training centres co-operatively financed, and the use of the mobile laboratories.

The explanations that follow will therefore be treated under these heads.

(b) Fellowships

66. The number of applications for fellowships received by the Agency, primarily from countries not advanced in the use of atomic energy, has increased steadily from 287 in 1958 to 647 in 1961. However, the funds available for awards have not increased correspondingly, and consequently, although the number of fellowships granted by the Agency from its own resources (Type I and II fellowships) has risen, the increase has not been sufficient to keep pace with the number of applications that are being received from Member States. Thus, 147 awards were made in 1958, 250 in 1959, 327 in 1960 and 313 in 1961. It is hoped to make still fuller use of Type II fellowships in 1963 but even so it will in all likelihood again prove not possible to meet all deserving requests.

67. In 1962, a modest start was made to provide in-service training at the Agency's Laboratory. The opportunities thus afforded will be further developed in 1963, with a view to accepting about 20 fellows, whose training will be financed from the Operating Budget. Training in the following subjects is considered particularly suitable:

(a) Metrology and standardization of radionuclides;

(b) Analysis of environmental radioactivity;

(c) Analytical and physical chemistry; and

(d) Nuclear electronics.

It is intended to supplement the programme of practical laboratory work by inviting outside professors to deliver lectures.

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

68. With the development of programmes in Member States for the peaceful uses of nuclear energy, there is an increasing demand for the training of specialists and for the provision of research opportunities. During 1960, awards covering seven research grants were made, and already the requests for 1962 number 15 but it seems unlikely that more than eight of those can be met. The Board believes that there is a justifiable need for more funds in 1963.

69. Under the exchange programme, visiting professors provide instruction and training in the countries where it is needed. During 1961, 15 visiting professors were assigned by the Agency to less-developed countries and five more, who were assigned in 1960, had their terms extended for various periods at the request of the recipient Governments. Fifty-seven applications for visiting professors have already been received for 1962, but it may not be possible to satisfy more than 30 of these requests.

(d) Training courses and regional training centres

70. The number of requests for the organization of training courses in the less-developed countries themselves is also increasing. Although the cost of some of these courses is met from EPTA funds and a few are co-sponsored by other organizations, it will only be possible to finance four in 1962 from Agency funds and two regional courses from EPTA funds. To the extent that funds are available, this part of the programme needs increasing support in 1963. The demand for training courses can be gauged from the fact that requests and suggestions for courses in the following subjects have so far been made:

(a) Bio-assay techniques;

(b) Environmental monitoring procedures;

(c) Library service in nuclear science;

(d) Research reactors;

(e) Radiation chemistry;

(f) Use of isotopes and radiation in entomological investigations;

(g) Prospecting for and evaluation and development of deposits of nuclear materials;

(h) Applications of radioisotopes to industry;

(i) Radiation protection;

(j) Applications of radioisotopes to medicine;

(k) Health physics instrumentation;

(l) Maintenance of electronic equipment;

(m) Absolute calibration of radionuclides;

(n) The physics of radiotherapy;

(o) Training of the technicians required for experimental work in nuclear science; and

(p) Nuclear physics for teaching staffs of universities in less-developed countries.

71. The question of establishing regional training centres has also been receiving attention. In the past, Agency funds have not been available for this purpose. However, in 1963 a part of the funds available under EPTA for regional projects [18] could be utilized to defray a proportion of the costs for the establishment of regional training centres. In this connection, due consideration will be given to all requests and proposals that may be received for the establishment of such centres.

(e) Mobile radioisotope laboratories

72. The Agency's two mobile radioisotope laboratories have, in past years, provided training on the spot for approximately 750 trainees in the Far East, Latin America and Europe. It is expected that one of the laboratories will move to Africa late in 1962 or early in 1963.

---

[18] See paragraph 275 and Table 34 below.

(f) Visits to Member States

73. In connection with the Agency's training programme it is desirable to pay occasional visits to the less-developed Member States in order to review on the spot their requirements for fellowships, interview candidates, ascertain the use that is being made of specialists, after their return to their own country on completion of training, and help these States in developing their own training programmes.

74. In addition it is also desirable that occasional visits be paid to Member States, where facilities have been made available to train Agency fellows, in order to ascertain the progress that the candidates are making, and also to discuss the possibility of new training opportunities. Similarly, visits to developing countries that are gradually acquiring the potentiality themselves to provide such training opportunities would be particularly useful. Visits of these types will, however, be kept to a minimum and will be limited to countries not being visited during the year by any of the Agency's missions.

II. NUCLEAR POWER AND REACTORS

(a) Nuclear power

75. As a result of an increasing volume of information which has become available, the Agency's studies of the economics of nuclear power have progressed considerably during the past two years, and it has been possible to issue reports on the present status and on likely future trends in the cost of production. These studies will continue.

76. A study of the methodology of nuclear power costing, which was published in 1961, dealt with present methods of estimating the cost of energy produced by a reactor. With the assistance of experts from countries that are advanced in this subject a further step has now been taken, namely an investigation into the cost of nuclear power in an integrated system and a comparison thereof with the cost of power production by conventional alternatives. It is planned to convene a panel of experts in 1963 to discuss the Agency's report on the result of this investigation.

77. In connection with the development of nuclear power and in response to various resolutions of the General Conference [19], the Agency continues to study the technology and economics of small and medium sized power reactors, particularly with regard to the needs of less-developed countries. It has been possible, for example, to follow closely the design, construction and operation of several small and medium sized power reactor projects in the United States of America. This work will continue, and the information gathered will be published.

78. By 1963, a number of large and small power reactors, including some of recent design, will have been in operation for a sufficiently long time to provide material for an exchange of information on the experience gained in their operation and maintenance. It is therefore proposed to convene a conference in 1963 at which such operating experience, including initial start-up, fuel cycle management and production costs can be discussed. In view of the recent developments in nuclear superheat and its potential for reducing nuclear power costs, the conference will devote special attention to the experience gained with nuclear superheat reactors.

79. Further volumes of the Agency's "Directory of Nuclear Reactors" will continue to be issued, and will provide detailed information on reactors in operation or nearing criticality. Basic information on new reactor projects and on reactors in the early stages of construction will also be collected and published in the form of reviews.

80. The Agency will continue to provide, on request, technical advice and guidance to Member States regarding their nuclear power programmes. In the past, various power survey missions have, in co-operation with the atomic energy authorities in several countries, examined the prospects of nuclear power in relation to the countries' economic

[19] GC(II)/RES/27, GC(III)/RES/57 and GC(IV)/RES/86.

development and power requirements. It is expected that two further power survey missions will visit several countries in 1963. Where appropriate, the co-operation of the United Nations and its regional economic commissions and of the International Bank for Reconstruction and Development will be sought.

81. Some of these missions may lead to nuclear power projects, including possibly some on a regional or international basis. In the latter event, it is expected that the Agency may be involved in such matters as the selection of the type and size of the plant and its site, hazards evaluation, preparation and the evaluation of international bids.

(b) Reactor research, physics and safety

82. The effective utilization of research reactors recently completed or now under construction will be one of the foremost problems confronting new research establishments all over the world, particularly those in developing countries. This became clear during a symposium on programming and utilization of research reactors which was held in Vienna in October 1961. The General Conference at its fifth session also emphasized this problem. [20]

83. The Agency expects, therefore, to receive an increasing number of requests for technical advice, guidance and assistance in problems connected with the operation of such reactors and the development of suitable programmes for their fruitful exploitation in relation to local needs and resources. It is planned to convene in 1963 two panel meetings to discuss in detail the work that can be done in specific circumstances by research reactors of low and medium power.

84. It is also planned to organize discussions between scientists from Member States who face analogous problems in their research establishments, members of the Agency's scientific staff and consultant specialists on problems relating to the operation and utilization of research facilities in newly established centres, in order to develop guidance and proposals for assistance towards their solution.

85. The Agency will continue, in 1963, to play its role in the programme of research on reactor data which is being carried out with the Norwegian reactor NORA.

86. A panel on nuclear data in December 1961 considered that the Agency's activities in reactor physics were sound and should be continued but that, in order to provide more continuity, the establishment of an advisory panel on reactor physics should be considered. One of the subjects to be discussed will be the feasibility of extending the Agency's sponsorship to other international projects in reactor physics.

87. In the meantime, the study of the physics of specific reactor lattices will be continued. A panel on heavy water lattices recommended in 1959 that a review of data on this subject should be made in three years' time. A four-year period will, in fact, have elapsed when, in 1963, another group of experts on the physics of heavy water lattices is convened.

88. For the development of power reactors it is important to assess the limitations of exponential experiments and to determine when they should be superseded by critical experiments. Both types of experiments, when related to costs, have considerable influence on the progress of the development of power reactors. It is proposed that in 1963 a symposium should examine exponential and critical experiments from the points of view of reactor design, safety, operation and relative results. Staffing and economics will also be discussed.

89. Reactor control has an important bearing on the safety and economics of nuclear power. So far, no international meeting has been organized to discuss the numerous problems associated with the choice of materials for control rods and the metallurgical and physical properties of these materials, the design and fabrication of control rods and their

---

[20] See Resolution GC(V)/RES/106.

performance under actual operating conditions. It is proposed to discuss these topics at a symposium on the physics and material problems of control rods to be held in 1963. This symposium will also consider methods of reactor control without the use of control rods.

90. Research contracts will continue to be awarded on subjects of particular interest to newly developing reactor centres. Particular emphasis will be given to those aspects of reactor physics which have a bearing on the safety of reactors.

91. Hazards evaluation of individual reactor plants will continue to be made. In connection with Agency projects, safety features of reactors will be examined to ascertain their conformity with appropriate agreements. At the request of Member States safety evaluations will be made regarding the siting, construction, operation and administration of specific reactors.

92. SAC has considered that by 1963 it would be timely for the Agency to organize a symposium to exchange and disseminate information collected on problems related to the siting of reactors. It is proposed to hold a symposium to deal with the criteria for guidance in the selection of sites for the construction of reactors and nuclear research centres.

(c) Nuclear fuels and equipment

93. The Agency will continue to provide information and advice on all aspects of the production, fabrication and utilization of source, special and other nuclear materials. It is expected that during 1963 several requests will be received for special fissionable material for reactor projects in Member States.

94. Following the Symposium on Fuel Element Fabrication organized by the Agency in 1960 and the Conference on the Corrosion of Reactor Materials in 1962, it is intended in 1963 to organize a Conference on new nuclear materials technology with special interest in the use of these materials in the fabrication of non-metallic fuel elements. The possible use of non-metallic fuels in high-temperature reactors together with the use of some new nuclear materials in other parts of a reactor promises to lead to lower fuel costs and higher efficiency in nuclear power plants. This meeting is expected to contribute much to the exchange of recent information on the technology of producing such elements and on their physical, thermodynamical, metallurgical and other properties.

95. It is expected that requests from Member States for technical assistance and fellowships in connection with uranium processing and fabrication of nuclear fuel elements will continue. Much prospecting for uranium will be carried out in countries just beginning their nuclear energy programmes, and it will be necessary for the Agency to provide all possible assistance.

96. A regional or international training seminar on essential aspects of prospecting for, as well as evaluation and development of deposits of nuclear materials will, if possible, be held in 1963 in a country with uranium deposits and a good geological organization, so as to permit practical demonstration of prospection principles and evaluation techniques.

97. The need to study problems encountered when using nuclear electronic equipment in tropical countries was stressed by a group of consultants which met in December 1961. As a first step it is proposed to place contracts for research into tropicalization of nuclear electronic equipment, and to study means other than the air-conditioning of laboratories to guarantee satisfactory operation of the equipment.

III. RADIOISOTOPES

(a) General

98. During 1961 and 1962 there has been an increasing awareness in Member States of the immediate and practical benefits which can be derived from the application of radioisotopes in medicine, agriculture, hydrology and industry. Demands for the

Agency to provide fellowships and other training opportunities, experts and equipment, are continuously increasing in number and in scope. Similarly, the interest in contracts for research in these subjects is growing. In this connection, plans have been made to bring the Agency's publication "The International Directory of Radioisotopes" [14] up to date in 1963.

(b) Medicine

99. In close co-operation with WHO, it is intended to award more research contracts in tropical medicine. The main object will continue to be the promotion of the application of established radioisotope techniques to the study of diseases affecting large groups of the populations in less-developed, tropical countries; increased funds will also allow the award of contracts for work on parasitology and medical entomology. The provision of funds in the Regular Budget will enable the Secretariat to make firmer plans and play a greater part in co-ordinating such research in various institutions. A panel on co-ordination of research contracts in tropical medicine will be convened in co-operation with WHO. It is also planned to arrange a meeting of consultants to discuss the use of radioisotopes in studies of the life span of red cells in blood, a subject for which the Agency has already awarded several research contracts.

100. The Secretariat is also co-operating closely with experts in tropical medicine in WHO on the development and co-ordination of work on the applications of isotopes to tropical medicine which is being done by a considerable number of institutes in tropical countries under Agency research contracts.

101. Studies of the desirability and feasibility of establishing a regional research centre for the use of radioisotopes in medicine in a Member State situated in a tropical area will be undertaken. The establishment of such a centre would allow part of the radioisotope research in tropical medicine to be carried out there; it would also provide long-term training opportunities for scientists from the region.

102. A smaller 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. The calcium-47 research [21] is expected to be terminated in 1963, since institutions now working under research contracts should by then be able to continue their studies without further financial support from the Agency. A second meeting of the panel on research applications of calcium-47 will be called to review the final results achieved and to discuss ways in which the Agency could continue its co-ordinating role in the work without giving direct financial support.

103. With regard to the use of radioisotopes for teletherapy, assistance will continue to be supplied to Member States in the form of dosimetric data and related information. The Agency has now accumulated a considerable amount of dose distribution data on cobalt-60 and caesium-137 beams under different physical conditions. Developments in design and construction of teletherapy machines and rooms in which to house them will be reviewed. An advisory mission on co-operation between radiotherapy centres visited several countries in Africa and the Middle East in 1962. It is planned to dispatch a similar mission to countries in South East Asia and the Far East next year.

104. The use of external radiation beams from cobalt-60 and caesium-137 sources for total body irradiation will be studied, special attention being given to the design of total body irradiators and to dosimetric problems. WHO plans to organize a symposium on total body irradiation in 1963 which the Agency expects to co-sponsor.

105. Investigations into the use of isotopes and radiation sources in radiotherapy will be extended to include their application for intracavitary and interstitial implantation. A panel on the desirable physical characteristics of such sources will be convened to review

---

[21] See document GC(V)/155, paragraph 137.

the results of the increasing use of cobalt-60, caesium-137, iridium-192 and other isotopes during recent years and to examine methods by which the experience gained by some institutes can be made available to others.

106. To supplement the work being done on human radioepidemiology under research contracts, the whole-body-counting facility set up in 1962 in the Laboratory with the assistance of the United States Government will continue to be used for the examination of persons who have absorbed radium and thorium. The programme will also include metabolic studies to clarify the localization and retention in the body of radioisotopes of practical importance for the study and diagnosis of human disease, as well as measurements on occupationally-exposed workers as part of the health and safety services offered by the Agency to Member States. The whole-body counter will also be used, as in 1962, for training.

107. The calibration and standardization of thyroid-radioiodine-uptake measurements[22] will be continued in 1963 and 1964 and will include visits to countries in South East Asia, the Far East and Latin America.

(c) Agriculture

108. A symposium, possibly co-sponsored by FAO, on the use of radioisotopes and radiations to control plant pests will be held in 1963. The exchange of views at the Agency's Symposium on Radioisotopes and Radiation in Entomology, held in 1960, and the increased use of radioisotopes in this work has quickened progress and has led to the initiation of new projects. It would therefore be reasonable in 1963 to review the work done to date and to exchange views on the latest information available, particularly with regard to the control of insect pests.

109. Because chemical control of insect pests in stored grain and similar products is relatively ineffective in tropical and sub-tropical areas, and because losses due to insects are very great, the Agency has examined the possibility of radiation disinfestation of grain. A panel which met in 1962 made recommendations as to the work on the subject the Agency might undertake, and it is planned to give effect to those recommendations in 1963.

110. Not only insect pests but also plant diseases cause extensive economic losses. A panel on the use of isotopes and radiation in plant pathology will review current applications and will help to determine the role of the Agency in this work.

111. During 1961 the Yugoslav Government prepared, with the Agency's help, a project to use nuclear energy to promote agriculture in Yugoslavia, for consideration by the United Nations Special Fund. If the Governing Council of the Special Fund approves the project, it is expected that the Agency will in 1963 be involved as the Executing Agency[23].

112. The Panel on the Application of Isotopes and Radiation to Agricultural Research in Tropical Africa recommended in 1961 that the Agency take active steps to initiate a programme for the use of radioisotopes in agriculture in tropical Africa. Discussions are being held between the Agency, FAO and Governments in the region regarding implementation of the recommendation, and it is expected that it will be under way in 1963.

113. In many South American countries the economy is dependent upon agriculture and some of their agricultural problems can be solved by the application of radioisotopes and radiations. In 1963 a small panel of experts will meet to advise the Agency on how it could best meet the obvious needs of some Latin American countries in this regard.

114. Research contracts so far awarded for agricultural work have largely been related to applications of radiations and radioisotopes to genetics and more recently to soil-plant

---

[22] Ibid., paragraph 67.

[23] See the Agreement between the Agency and the Special Fund for such a purpose (INFCIRC/33).

relationships. It is intended gradually to shift the emphasis in genetics research towards more immediate applications, in line with the urgent need to develop applications that will be of use in the rapidly developing areas of the world. The emphasis on soil-plant relationships will be maintained, and research into problems of entomology will be expanded. Depending on the availability of funds, research contracts will be awarded for animal science, with particular reference to meat and milk production, and for work on plant pathology.

115. In 1962 a regional research programme on rice was started, involving the use of radioisotopes to solve problems related to soil fertility. Because of lack of facilities in the rice-growing regions, the relevant rice samples will be sent to the Agency's Laboratory to be analysed for isotope content. The Secretariat's agricultural scientists will supervise this work in conjunction with fellows who are being trained to use radioisotopes and radiations in agriculture.

116. Irradiation work, the most important part of which relates to food preservation, will receive limited contractual support while undergoing continuing review. It is planned to organize a small panel of experts to review the problems of food irradiation in developing countries. The Agency also plans to co-sponsor a symposium organized by FAO to review the progress in, and potentialities of, food preservation through the use of radiation.

117. A small group of consultants will be convened to review the recommendations contained in various training manuals at present in preparation relating to the use of radioisotopes and radiations in agriculture and animal husbandry.

118. The increased assistance now being given to countries whose economy is based primarily on agriculture is resulting in increasing requests for technical advice being made to the Division of Isotopes. These requests come from a variety of regions whose ecology varies and whose agriculture has developed quite differently; they also involve many different areas of specialized knowledge, such as the relation of radioisotopes and radiation to fertilizer production and use, soil fertility, soil physics and irrigation, the organic content of soils, plant diseases and soil-borne diseases, plant physiology, plant breeding, silviculture, control or elimination of insect pests, animal biology relating to milk and meat production, residues and food irradiation. The requests relate not only to the technical assistance and training work, but also to the research contracts that are being increasingly placed in such countries.

(d) Hydrology

119. So far there has been little co-operation between radioisotope specialists and hydrologists. An important task is therefore to make the former acquainted with the problems which the latter face, and to make the hydrologist aware of the potentialities of radioisotopes for his work. The initial emphasis will be placed on helping rapidly developing countries that have water resource problems; and newly established atomic energy centres will be encouraged to undertake experimental work in co-operation with existing hydrological services. Research contracts in hydrology will be placed in countries where facilities for the work exist. The main trend of the work will be in the direction of studies of hydrological problems in Member States, surveys of existing facilities for the application of radioisotope techniques, the provision of advice on such applications and assistance in interpreting results.

120. A symposium on uses of radioisotopes in hydrology is planned for 1963, possibly in co-operation with WMO. Plans are also being made for the Agency to serve as a centre of information on radioisotope techniques in hydrology.

121. The development of the application of radioisotope techniques to hydrological problems is dependent upon the availability of low-level, tritium-counting laboratories. At present there are few such laboratories in existence and the Agency must therefore enlarge its own facilities for analysing samples and for training also.

122. The world-wide survey of the concentration of the isotopes of hydrogen and oxygen in natural water[24] will continue with the addition of a programme of river water sampling arranged in co-operation with WMO. The Agency will continue to issue standards for tritium to the various laboratories involved.

(e) Industry

123. A survey of the application of radioisotopes in industry and the savings obtained by their use, which was started in 1962, will be continued during 1963.

124. The possibilities of using the resources of the Laboratory for a training course on the industrial applications of radioisotopes will be investigated.

IV. HEALTH, SAFETY AND WASTE MANAGEMENT

(a) Effects of radiation on man and his environment

125. The safety of nuclear installations and the emergency measures necessary to safeguard both employees of and populations near such installations in the event of an accident require that assumptions as to acceptable emergency doses be worked out in order to determine the policy on which emergency measures may be based. In view of the difficulties involved in arriving at such assumptions it is proposed to convene in 1963 a panel of experts to study this question and, if possible, to issue appropriate recommendations.

126. The scientific meeting in 1962 on the diagnosis and treatment of radioactive poisoning, which may also cover the question of discharge of patients from hospital, is in effect a continuation of a meeting organized jointly by the Agency and WHO in 1960 on the diagnosis and treatment of acute radiation injury. Based on the results of these meetings, a manual on the handling of patients will be prepared in 1963.

127. It is proposed to hold in 1963 a symposium on the biological effects of neutron irradiation. One of the major subjects to be discussed will be the concept of relative biological effectiveness which is of fundamental importance in the setting-up of health and safety standards for work involving exposure to neutrons. In addition, it is planned to co-sponsor a symposium to be organized by UNESCO on radiation-carcinogenesis during which the cellular mechanisms of radiation-induced malignant growth will be discussed.

128. A panel on the effects of radiation on the endocrine system and their implications for the pathogenesis of radiation disease will be convened. This will be supplementary to the discussions on the effects of radiation on the central nervous system, which were held in 1961.

129. Research contracts on the effects of radiation and on radiobiology will continue to be awarded for three specialized subjects. The first group of contracts will support research into the genetic consequences of radiation exposure, with the aim of arriving at more correct assessments of the possible genetic hazards of radiation and radioactive contamination. The second group will deal with research on radiation sensitivity and radiation resistance. Preliminary results of such research supported by the Agency have indicated possible practical applications to the successful preservation of food in tropical climates by using combined processes of pasteurization/irradiation and fermentation/irradiation. The third group of contracts will continue to deal with the study of the primary lesions and the mechanism of radiation injury to investigate different aspects of the complex reaction of organisms to radiation exposure. As in previous years, a panel meeting of the principal scientific investigators on these subjects will be organized to co-ordinate the work.

---

[24] See document GC(V)/155, paragraph 72.

130. A three-year research project on the effects of radioactivity in the sea was started in 1961 at the Laboratory of Marine Radioactivity in the Oceanographic Museum at Monaco. This work will be continued in 1963 and its results should be of interest to countries with a sea coast.

(b) Radiation protection

131. Personnel dosimetry plays an important part in the effective application of safety standards. In view of the diversity of the current approaches to this question it is proposed to convene a panel of experts in 1963 to assess the basic requirements for an adequate system of personnel dosimetry for workers exposed to radiation and to draw up recommendations on appropriate warning and action levels.

132. Adequate training of personnel is of primary importance in ensuring continued compliance with safe procedures in work involving the use of radioactive materials and it is desirable that at least one training course on a subject connected with radiation health and safety should be organized each year, preferably on a regional basis.

133. It is planned to organize, in co-operation with IBWM, a panel on the development of standard methods of measuring contamination. A small consultants meeting will also be held on the development of standard methods for measuring radiation attenuation in various protective materials.

134. The calorimetric system for measuring the absorbed gamma-ray dose in tissue-equivalent materials will be completed and put into operation in the Laboratory. An attempt will be made also to use this instrument to measure absorbed neutron doses.

135. It is planned to undertake a comparison of film dosimetric techniques between laboratories of different countries, and to start work on the measurement of neutron fluxes of radioactive neutron sources which are mainly used for the calibration of neutron detectors. A critical evaluation will also be made of neutron-foil detectors, followed by intercomparisons in an attempt to achieve standardization. The Symposium on the Detection and Dosimetry of Neutron Fluxes and on the Standardization of Neutron Sources to be held in December 1962, will be of direct interest to this work and will serve as a guide for the work to be done in the Laboratory in 1963.

136. The Agency will continue to provide Member States, on request, with certain technical services relating to radiation protection. These include the quantitative assessment of a number of radionuclides in foodstuffs and in the environment, a bio-assay service, and the assessment of body burden of certain radionuclides. Steps will be taken to publish a handbook on health and safety instrumentation, which will contain information on the relative merits of various types of detecting and measuring instruments, on the choice of essential instruments for limited programmes of radiological safety, and on the routine maintenance and calibration of instruments and of the radiation sources used for checking their performance.

137. The Agency's efforts to support research work in health physics and radiation protection will continue to be concentrated on a few specialized subjects. One group of research contracts will be awarded to institutions working on the effectiveness of medical compounds to protect workers against the harmful effects of ionizing radiation, and to speed the discharge of ingested radioactive materials from the body. A second group will be concerned with treating workers accidentally exposed to high-level radiation doses, by administering bone marrow from healthy donors. The third group will comprise contracts supporting measurements of the body burden of radionuclides in connection with radio-epidemiological studies. In addition to the subjects mentioned above, it is planned to devote some attention to research on possible improvements in monitoring techniques, on protective devices and on methods for decontaminating personnel and equipment. Research on the measurement of high-level radiation in cases of emergency and the evaluation of resulting biological doses also deserves support.

(c) Safety of nuclear installations and operations

138. The number of requests, either for the Agency's assistance in connection with the supply of nuclear reactors and fuel, or under the programme of technical assistance, is increasing. The Agency will continue to determine the application of the Health and Safety Measures [25] to its own operations or to those assisted by it. This involves evaluation of each project on the basis of the proposed operating conditions. It is possible that in a small number of cases health and safety inspections, arising out of the application of those Measures, will be required in 1963.

139. Technical advice on problems of radiation safety and waste management, such as the types of monitoring equipment to be used, and the procedures to be adopted, will continue to be provided, on request, to Member States and to other international organizations. The majority of requests can be dealt with by the staff of the Agency, but in certain cases the services of outside experts may be required. Further, it may be necessary for members of the health and safety staff to visit the States concerned, but where possible such visits will be combined with visits to the same geographical area for other purposes.

140. As a part of the above advisory service, information will continue to be collected and classified on the specialized health and safety equipment, and the services and facilities available in the more advanced countries.

141. A symposium on radiological health and safety in nuclear materials mining and milling will be held in 1963, possibly in collaboration with ILO. It will bring together health physicists and experts of the other disciplines concerned with problems of health and safety arising from these operations.

142. A panel of experts will have met in 1962 to consider the problems involved in the establishment of health physics services for nuclear installations, with particular reference to the needs of developing countries. It is expected that a second meeting of this panel will be required in 1963 and that thereafter a manual incorporating recommended procedures can be issued. The production of manuals on other subjects such as the design and safe operation of radiation installations, radiation shielding, high-level radiation facilities and criticality control will continue [26].

(d) Nuclear accidents

143. In view of the growing number of nuclear installations now coming into operation, questions of hazards evaluation and emergency procedures in the event of a serious accident assume increased importance. It is proposed in 1963 to review the general problems of emergency conditions and to convene a panel to consider and advise on the establishment of emergency procedures and adequate emergency monitoring techniques. The recommendations of this panel will be issued as a manual which should assist in the development of local capability to deal with the consequences of radiation accidents.

144. The Agency's plans for the provision, on request, of international emergency assistance to Member States in the event of a serious radiation accident will need to be developed further. A number of States have agreed to make assistance available, in the form of equipment, facilities and skilled personnel, for use in accident relief; careful planning is required to ensure that the most effective use can be made of the assistance offered.

(e) Waste management

145. Waste management is essentially an operational function. Increased attention will therefore be paid to the development of techniques for dealing with specific problems that may arise. A useful approach is the preparation and distribution of guides and criteria

---

[25] INFCIRC/18.

[26] See also paragraph 189 below.

which can be used in countries at various stages of development. To do this effectively visits to Member States may be necessary in order to obtain first-hand information on the waste management problems with which these States are faced and on the methods which are being adopted for dealing with them.

146. A very useful purpose would be served by a meeting of selected experts to discuss recent developments in the design and operation of waste management facilities including settling tanks, storage tanks, incinerators, etc.

147. The control of the release of radioactive waste material into the atmosphere merits careful consideration. The effectiveness of filters and other devices for removing radioactive contamination from gaseous effluents is limited and widespread dispersal of the released material can occur. It is proposed to convene a panel of experts to consider and, if possible, to issue recommendations on air-cleaning and atmospheric pollution problems which may result from the operation of nuclear facilities.

148. Research contracts on waste management will be concentrated on studies of the natural processes of transport and distribution of radioactive material, on the efficient treatment of radioactive wastes to remove or immobilize their radioactive components prior to further operation, and on methods of storage of radioactive wastes. In connection with the latter subject, it is planned to convene a panel on methods of radioactive waste storage in the lithosphere.

149. The charting of sea-disposal and sea-monitoring data provided by Member States, and of the levels of concentration of various radionuclides in the sea will be continued.

(f) Standards and regulations

150. The Agency's Regulations for the Safe Transport of Radioactive Materials[27], issued in 1961, have been incorporated, to a large extent, in the regulations of certain international transport organizations. The experience gained from their use by these organizations and by individual Member States will be assembled and analysed. Following this analysis a panel will be convened in 1963 to consider any revision of the regulations that may be necessary. It is expected that a two-week meeting will be sufficient to complete the work.

151. On the basis of the revision, additional work, possibly in collaboration with ISO, will be required on the design and testing of containers for the transport of radioactive materials. The services of consultants may be required for specialized aspects of this work.

152. With a view to establishing uniform standards for national legislation studies appear necessary in connection with the possible incorporation, in an international instrument, of the rules contained in the Agency's Regulations for the Safe Transport of Radioactive Materials.

153. It is felt that it would be useful to produce in 1963 a film dealing with the safe transport of radioactive materials, if no other suitable film on the subject is available by that time.[28]

154. Work will continue as required on the drafting of the health and safety regulations and supervision procedures for the Agency's operations.

---

[27] Safety Series No. 6 (STI/PUB/40).

[28] See also paragraph 214 below.

V. RESEARCH AND SERVICES IN PHYSICAL SCIENCES

(a) Physics

155. In order that newly established research centres should be able to use their reactor and associated facilities to the maximum advantage they will, in 1963, be assisted, upon request, by advisory missions from the Agency, by promotion of direct liaison between laboratories and by surveys of current research programmes. It is also proposed to convene a panel to discuss regional development of research in physical sciences at new Asian nuclear science centres. [29]

156. With regard to nuclear data, SAC at its meetings in June 1962 endorsed the proposal to establish an international nuclear data scientific advisory committee as a sub-committee of SAC. This body should guide the programmes of practical work - including those now reviewed by smaller international groups - with the aim of ensuring necessary international co-operation in measurement and collection of basic nuclear data which are of general relevance to nuclear energy programmes. The establishment of an international committee on reactor physics data was thought to be premature but might be reconsidered in due course.

157. The Board proposes that the implementation of this recommendation by SAC should be commenced in 1963 to the extent that sufficient financial means can be found within appropriations as now proposed. Preliminary estimates indicate that two meetings of the sub-committee during that year would cost approximately US $18 000.

158. A further report on studies regarding the possible establishment of a permanent institute of theoretical physics will be presented to the General Conference at its sixth regular session. In the meantime, SAC has recommended that the 1962 training seminar in high-energy theoretical physics should be followed by a similar seminar on a topic in nuclear, solid-state, or plasma physics in 1963.

159. It is proposed to study the desirability and feasibility of developing a super high-energy accelerator on an international co-operative basis. If appropriate, the Board will, in consultation with the Director General, convene a panel of experimentalists and theoreticians drawn from as many different countries as possible.

(b) Standardization

160. The distribution of calibrated radionuclide samples, for which a large number of orders have been received from Member States, will be continued and developed further in 1963 on the basis of experience gained in 1962 and in accordance with requests from Member States. New calibration methods will be developed, especially for low-energy beta emitters, e.g. liquid scintillation counting and gas counting, and for electron capture nuclides.

161. The automatic microcalorimetric system for the calibration of radionuclides will be improved by a new automatic regulation system to achieve greater precision and sensitivity.

162. The Agency will continue to participate in the international intercomparison measurements of radionuclides organized by IBWM. It is intended to organize additional inter-laboratory comparisons of radionuclides which are not included in the programme of IBWM.

(c) Chemistry

163. A conference on experimental facilities for and applications of large radiation sources (excluding radiation therapy) is expected to be held in 1963.

---

[29] See also paragraphs 82 - 84 above.

164. During 1962 a comparative study of methods used in different laboratories for the chemical analysis of nuclear materials was started. The aim of this work, which will be continued in 1963, is the eventual establishment of standard methods by the Agency. The laboratory group concerned will render analytical services to Member States upon request.

165. It is envisaged that in 1963 there will be a considerable amount of radiotracer work such as is necessary in most modern studies of analytical methods.

166. An optical spectroscopy group will begin work in 1963 in collaboration with other groups in the Laboratory working on general chemical analysis and analysis by radiation activation. Only accessory equipment will be required if a spectrograph and other measuring equipment have been purchased in 1962.

167. The work begun in 1962 on the determination of trace elements in the marine environment will be continued. The results of this work, which is in support of the oceanographic studies carried out at the Monaco laboratory under the sponsorship of the Agency, will contribute to the knowledge of the marine environment and its variation from place to place and time to time.

168. The laboratory group working on analysis by radiation activation will need some new counting equipment, as much of the equipment used in 1962 will be diverted to radiotracer analytical work for general chemical purposes in 1963. It is also envisaged that with the Monaco laboratory fully in operation and with the interest of the Agency in medical and agricultural applications, in which the determination of trace elements by this method of analysis plays an important part, the work of this group will increase considerably.

169. In mass spectroscopy the programme will consist of the application of stable isotopes to analyses by the isotope dilution method, and of the use of the mass spectrograph for the direct analysis of trace elements in sea water and nuclear materials. This work will contribute to other Agency projects, such as the determination of the ratio of oxygen isotopes in water.

170. The development of methods to improve the measurement of tritium in tritium-hydrogen mixtures will be continued, depending on the results obtained by the end of 1962 with the gas chromatography project now in progress. Other aspects of this work are described in the section dealing with radioisotopes [30]. In particular, the work concerned with the measurement of tritium in groundwater as applied to the solution of hydrological problems is expected to increase considerably.

171. The Agency will collaborate with the International Union of Pure and Applied Chemistry in the compilation, critical evaluation and distribution of reliable thermodynamic data of nuclear materials. Following the trend to use high temperatures in reactor development, the Agency's work in this respect will be expanded to cover all relevant data on nuclear materials at high temperatures. Future activities will take into consideration the results of the symposium and panel on thermochemical and thermonuclear properties of reactor materials which were convened in 1962; these are at present being assessed.

172. In 1962 a panel was convened to discuss problems in analytical chemistry as applied to nuclear energy and to advise on the lines along which research was most necessary. A further panel meeting to deal with chemical research using research reactors is envisaged for 1963.

(d) Environmental analyses

173. The analysis of radionuclides in air, water, soil, plants, food and human bio-assay samples submitted by Member States will be continued and, as in the past, the results communicated to the United Nations Scientific Committee on the Effects of Atomic Radiation.

---

[30] See paragraphs 119, 121 and 122 above.

174. In 1962 a programme for the distribution of standards for radiochemical analysis was started. These standards consist of dried milk, meat, bone ash and other environmental materials, samples of which have been analysed, in several laboratories of international reputation, for caesium-137, strontium-90, stable calcium, potassium and other constituents. They are now distributed to interested laboratories in several countries who make use of them in checking their processing, radiochemical and measuring techniques. This service will be extended in 1963 to include other materials such as dried and ashed bio-assay materials which will be analysed for an extended range of nuclides.

175. Investigations in regions where climatic, biological or agricultural factors have led to high local concentrations of radionuclides in soil, vegetation, animals or man will be continued. The Agency's Laboratory will continue to assist in these studies by measuring samples and by co-ordinating the work through its research contract programme and by meetings at which the programmes of various institutes can be discussed.

176. In early 1962 the Agency was requested by WMO, in response to a resolution of the General Assembly of the United Nations[31], to advise on equipment for air monitoring for gross beta activity and to assist in the standardization of such equipment. The assistance was rendered by:

(a) Provision of standards prepared from natural potassium and other radioactivity standards; and

(b) Acceptance of air-filters for analysis in the Agency's Laboratory and checking on measurements carried out elsewhere with different equipment.

177. All these activities which were started in 1962 will be continued in 1963. The range of equipment studied will be increased to include equipment used for monitoring liquids and solids.

VI. SAFEGUARDS

178. Present indications are that in 1963 a number of nuclear facilities will be subject to Agency safeguards, including some of relatively high capacity. Depending, therefore, on actual developments during the current year, it may be desirable for preliminary consideration to be given in 1963 to a possible extension of the safeguards system to certain types of nuclear facilities not at present covered by it.

179. When necessary, safeguards provisions will be included in project agreements between the Agency and Member States; similarly, agreements will be prepared whereby Members can voluntarily place materials or facilities under Agency safeguards. In addition, whenever a Member State so requests, advice on its own internal safeguards problems will be provided, for which purpose a visit by members of the Division of Safeguards may be required.

180. Plans are being made to buy the essential minimum of portable equipment that will be needed to enable the inspections which it is foreseen will have to be made during 1963 to be carried out satisfactorily. The task of systematizing the various inspection procedures required for different types of nuclear facilities will be carried forward.

181. Other procedures for the application of safeguards will also continue to be developed, including those for accounting for, measurement, inventory control and storage of nuclear material. It is also intended to set up facilities for the computation of burn-up and production of fissionable material subject to Agency safeguards. General research on safeguards methods will be continued, with particular reference to the determination of fuel burn-up, production of plutonium and the time-integral of power.

182. Some work to develop techniques for the application of safeguards will be done in the Laboratory, which will have to acquire, calibrate and maintain suitable equipment for the purpose.

[31] A/RES/1629 (XVI).

183. It is proposed to convene a panel on non-destructive analysis of irradiated fuel in 1963. The panel will be asked to evaluate the Agency's plans for research on this subject and make recommendations for further work because the assay of irradiated fuel is complex and relatively unexplored. It is considered important to obtain the advice of a panel.

VII. INFORMATION AND TECHNICAL SERVICES

(a) General

184. This section deals with that part of the Agency's work for the exchange and dissemination of information, namely publications, library and documentation services and visual media, which has not been covered under other sectors of the programme. Work in connection with the exchange of information can be broadly divided under the following heads:

(a) Scientific meetings;

(b) Publications;

(c) Library and documentation; and

(d) Visual media.

The programme of scientific meetings which is of great importance for this work is organized in relation to the scientific and technical development in Member States and has as its sole and proper aim the free exchange of information. However, individual meetings have been dealt with under various specific sections of the programme, according to subject matter. The observations in paragraph 20 above in regard to this form of presentation are of relevance in this connection. A list of meetings proposed for 1963 is presented in Section 5 of the budget[32].

185. A number of scientific meetings of interest to the Agency which are expected to be organized by specialized agencies or other international organizations will be co-sponsored by the Agency in order to ensure maximum co-ordination of work in certain subjects.

186. Certain other services of a technical nature which give effective support to the scientific work of the Agency are also included in this section. For example, identification, location and procurement of technical and scientific supplies and equipment constitute such support.

(b) Publications

187. An important contribution to the international exchange of information will be made through Agency publications. To the extent possible, estimated costs of publications on various subjects in nuclear science are reflected in the programmes to which they relate, and where appropriate, they have been referred to in the respective sections.

188. The publications programme in 1963 will again include the proceedings and reports on scientific meetings referred to above. It will also include further issues in the Agency's safety series which is published in four languages; a serial publication embodying essentially the former review series; technical and panel reports; four numbers of the Journal of Plasma Physics and Thermonuclear Fusion; several bibliographies; and general information material.

189. Further volumes of the Agency's "Directory of Nuclear Reactors", four of which have been issued so far, will be published. Manuals on selected topics concerning the design and safe operation of radiation installations, ranging from small radioisotope laboratories to a reactor or a processing plant will be of value to countries in which such

---

[32] See paragraphs 209 - 212 below.

installations are being made for the first time. The production of such manuals will continue. Topics which may be covered in 1963 include radiation shielding, high-level radiation facilities and criticality control.

190. Training manuals on the use of radioisotopes and radiation in agriculture and animal husbandry will be reviewed and re-issued as appropriate.

191. The value of the Agency's publications is generally recognized, but efforts will have to be made to improve their distribution which is not as wide or satisfactory as it should be.

(c) Library and documentation

192. The Agency's Library will continue to acquire necessary scientific and technical publications and will develop effective methods for the rapid dissemination of information. Assistance and advice will be given to libraries in Member States to solve problems peculiar to specialized collections.

193. It is expected that five extensive bibliographies will be compiled and approximately 18 reviews prepared on selected scientific subjects. Special attention will be paid to rendering assistance to developing Member States that are organizing scientific information services. If required, experts will be made available under the technical assistance programme to help organize such services. The Board proposes the inclusion in the allocation for technical assistance in 1963 of an amount of $50 000 for the general purpose of assisting Member States with scientific documentation. It is also proposed to acquire in 1963 equipment for the automatic retrieval of scientific information from among available collections.

194. As part of the improvement and extension of documentation services, plans are being made for the Agency to serve as a centre of information on radioisotope techniques in hydrology.

195. In regard to the exchange of abstracts, further steps will be taken towards implementing Resolution GC(IV)/RES/78 of the General Conference which calls for improved and increased efforts in this respect[33].

196. A small amount has been provided for technical contracts to be concluded with other information centres and with institutions which specialize in standardization of terminology and the development of suitable schemes of classification of literature on nuclear sciences.

(d) Visual media

197. Instructional films illustrating important features of the procedures for the safe handling of radioactive materials are a valuable supplement to training, and it is proposed that in 1963 production should be undertaken of a short educational film dealing with the safe transport of radioactive substances, provided that no suitable film on this subject has been made available on a commercial basis by that time.

---

[33] See document GC(VI)/INF/51.

I. THE CONSOLIDATED BUDGET

Table 4

Item	1961 Actual $	1962 Budget $	1963 Estimate $
RECEIPTS			
Regular Budget			
Assessed contributions of Member States	5 554 021[a/]	6 161 000	7 122 500
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	-	pro memoria	pro memoria
Miscellaneous income	145 186	100 000	215 000
General Fund			
Voluntary contributions	1 221 570	2 000 000	2 000 000
Special voluntary contributions	40 000	pro memoria	40 000
Miscellaneous income	65 598	pro memoria	67 071
Withdrawal from unallocated balance	29 296	pro memoria	72 529
Operating Fund I			
Income from reimbursable services	2 386	5 000	45 000
Miscellaneous income	-	pro memoria	pro memoria
Operating Fund II			
Savings on prior years' operations	34 810	-	-
Income from reimbursable services	-	pro memoria	pro memoria
Miscellaneous income	296	50 000	pro memoria
TOTAL	7 093 163	8 316 000	9 562 100
EXPENDITURES			
Regular Budget	6 030 557	6 261 000	7 337 500
Operating Fund I	320 920	262 000	253 600
Operating Fund II	1 073 036	1 793 000	1 971 000
TOTAL	7 424 513	8 316 000	9 562 100

a/ As at 31 December 1961.

II. REGULAR BUDGET ESTIMATES

A. Summary of expenditures

Table 5

Appropriation sections	1961 Actual $	1962 Budget $	1963 Estimate $
1. The General Conference	239 054	245 000	275 000
2. The Board of Governors	569 689	398 000	395 000
3. Panels and committees	129 894	160 000	170 000
4. Special missions	51 504	70 000	70 000
5. Seminars, symposia and conferences	131 513	180 000	188 000
6. Distribution of information	289 000	260 000	245 000
7. Scientific and technical services and laboratory charges	703 000	885 500	1 110 000
8. Salaries and wages	2 363 524	2 467 000	3 063 000
9. Common staff costs	948 214	1 030 000	1 220 000
10. Duty travel of staff	138 659	180 000	178 000
11. Representation and hospitality	26 779	32 500	32 500
12. Common services, equipment and non-technical supplies	439 727	353 000	391 000
Sub-total	6 030 557	6 261 000	7 337 500
Less: Miscellaneous revenues	145 186	100 000	215 000
TOTAL	5 885 371	6 161 000	7 122 500

B. Summary of receipts

Table 6

Item	1961 Actual $	1962 Budget $	1963 Estimate $
Assessed contributions of Member States	5 554 021[a/]	6 161 000	7 122 500
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	-	pro memoria	pro memoria
Allocation from the Special Account	-	-	90 000
Income from investments and miscellaneous income	145 186	100 000	125 000
TOTAL	5 699 207	6 261 000	7 337 500

a/ As at 31 December 1961.

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

199. The Publications Revolving Fund stood at 31 December 1961, that is two years after its inception, at $29 167. Since income from this Fund becomes available for transfer to the Administrative Fund only when the balance in the Publications Revolving Fund exceeds $50 000[34] it is too early to assume that any income will be derived from it during 1963.

200. As is stated in paragraph 278 below, it is expected that an amount of approximately $180 000 will be allocated to the Agency from the United Nations Special Account to meet the administrative and operational services costs of implementing the EPTA programme during the two years 1963-64. It is estimated that half this sum will be received in 1963.

201. Income from investments and miscellaneous income during 1961 amounted to $145 186. The Board considers that a reasonable expectation of similar income during 1963 is approximately $125 000.

C. Appropriation sections

Section 1. The General Conference

Table 7

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Salaries and wages	64 992	76 000	95 000
Common staff costs	31 992	30 000	39 000
Temporary assistance	66 446	65 000	65 000
Rental of space and equipment	36 434	35 000	37 000
Common services	17 245	20 000	18 000
Printing and office supplies	16 105	15 500	15 000
External audit	5 840	3 500	6 000
TOTAL	239 054	245 000	275 000

202. It is assumed that the regular session of the General Conference to be held in 1963 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 requirements for 1963 are therefore based on the experience of previous years. Apart from a minor increase in the cost of the external audit, the increase in the estimates for 1963 is almost entirely due to rises in salaries and wages and common staff costs.

Section 2. The Board of Governors

Table 8

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Salaries and wages	249 996	229 000	233 000
Common staff costs	105 996	95 000	96 000
Temporary assistance	59 329	38 000	38 000
Official travel	-	1 000	500
Common services	18 326	17 500	14 000
Printing and office supplies	15 463	17 500	13 500
Sub-total	449 110	398 000	395 000
Permanent equipment for the new Board room	120 579	-	-
TOTAL	569 689	398 000	395 000

[34] See Resolution GC(II)/RES/53, Annex, paragraph 3.

203. During 1961-62 there has been a gradual reduction in the number and duration of meetings of the Board and its committees, and it is assumed that there will be no significant change in the existing pattern during 1963.

204. The budget for 1962 provided a sum of $229 000 for the proportion of salaries and wages chargeable to the expenses of the Board. The corresponding figure for 1963 in Table 8 above reflects the expectation that the changes referred to in paragraph 203 above will make it possible to absorb, with only a minor increase in the estimate, the additional costs of salaries of staff directly serving the Board. The same applies to the estimate for common staff costs.

Section 3. Panels and committees

Table 9

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Panels and committees	129 894	160 000	170 000

205. The estimates provide for 19 panel and committee meetings on scientific subjects. In addition, two legal panels and one meeting of a group on safeguards to discuss non-destructive isotopic analysis of irradiated fuel elements are foreseen. The estimates also provide for two meetings of SAC.

206. The cost estimate therefore is made up as follows:

19 panels at $7 000	$133 000
2 legal panels at $9 000	18 000
1 safeguards panel	9 000
2 meetings of SAC	10 000
	$170 000

207. In appropriate sections of the chapter dealing with the programme, references have been made to the panels it is proposed to convene in 1963. The Director General will have discretion to select the subjects of panel meetings, in accordance with the most urgent requirements, from those listed below.

(a) Nuclear power and reactors

Integration of nuclear power into an existing electrical system;
Utilization of low and medium research reactors (two meetings);
Heavy water lattices;
Reactor physics;

(b) Radioisotopes

Co-ordination of research contracts in tropical medicine;
Research application of calcium-47;
Physical requirements of radiation sources for intercavitary and interstitial radiotherapy;
Use of isotopes and radiation in ecological regions of South America;
Application of food irradiation in developing countries;
Use of isotopes and radiations in plant pathology;
Application of isotope techniques to hydrological problems;

(c) Health, safety and waste management

Acceptable emergency radiation doses to the public;
Effects of radiation on the endocrine system;
Emergency procedures and monitoring techniques;
Health physics services for small nuclear centres;
Personnel dosimetry for radiation workers;
Standard methods of contamination measurement;
Revision of transport regulations;
Co-ordination of research contracts in radiobiology;
Storage in the lithosphere;
Atmospheric pollution and air cleaning techniques;

(d) Research and services in physical sciences

Nuclear data;
Super-high-energy physics;
Chemical research using research reactors;
Development of regional nuclear research programmes;

(e) Safeguards

Non-destructive analysis of irradiated fuel elements;

(f) Legal panels

Legal implications of waste disposal into the sea;
Legal implications of waste disposal into fresh water;
Mutual financial guarantees relating to nuclear damage;
Transportation of radioactive materials.

Section 4. Special missions

Table 10

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Special missions	51 504	70 000	70 000

208. The need for missions during 1963 has been explained in the programme. It is estimated that their cost will not be greater than in the current year.

Section 5. Seminars, symposia and conferences

Table 11

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Seminars, symposia and conferences	131 513	180 000	188 000

209. The estimate for 1963 provides for two scientific conferences at an estimated cost of $22 000 each, one diplomatic conference costing $40 000 and eight or nine seminars or symposia at an average cost of $8 000 each, as well as for co-sponsorship of conferences and meetings of other organizations.

210. SAC has been consulted and has recommended that meetings on the following subjects should be convened in 1963:

(a) Experimental facilities and applications of large radiation sources (excluding radiation therapy);

(b) Biological effects of neutron irradiations;

(c) Use and application of radioisotopes in plant pest control;

(d) Theoretical physics;

(e) Radiological health and safety in nuclear materials mining and milling;

(f) Criteria for guidance in the selection of sites for the construction of reactors and nuclear research centres;

(g) Application of radioisotopes in hydrology;

(h) Exponential and critical experiments;

(i) Operating experience in power reactors, including operating experience of nuclear superheat in reactors;

(j) Physics and material problems of reactor control rods; and

(k) Nuclear materials technology, including that applicable to reactor fuel elements.

211. In addition, it is proposed to hold in 1963 an international diplomatic conference on civil liability for nuclear damage.

212. Co-sponsorship will be extended to meetings proposed by other organizations, if they deal with subjects of interest to the Agency. Examples of such meetings have been referred to in the programme for 1963.

Section 6. Distribution of information

Table 12

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Printing, block-making, art-work and paper	204 569	158 000	152 000
Authors' fees	1 775	9 500	9 500
Scientific editing	1 824	4 000	4 000
Translation services	1 065	13 000	4 500
Mailing costs	16 452	20 000	20 000
Library	46 653	40 000	40 000
Visual media	16 662	15 500	15 000
TOTAL	289 000	260 000	245 000

213. During 1961 additional funds had to be made available to deal with an accumulated backlog, particularly of conference proceedings, the publication of which had at times lagged considerably. It is expected, however, that some changes in the methods employed will result not only in a speeding-up of production in 1962 but also in reduced costs in 1963.

214. With regard to visual media, the estimate for 1963 covers the cost of a short educational film on the subject of safe transport of radioactive materials. Some film footage dealing with field projects is also expected to be produced. Provision is also made for the cost of maintenance and transportation of the Agency's portable exhibit.

Section 7. Scientific and technical services and laboratory charges

Table 13

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Research contracts	519 599	665 000	665 000
Monaco project	60 000	60 000	60 000
Technical contracts	3 000	22 000	22 000
Health and safety services	-	4 000	4 000
Laboratory charges	120 401	134 500	359 000
TOTAL	703 000	885 500	1 110 000

215. Based on the assumption that about 70% of the sum spent in any one year on new contracts will be required for renewals in the second year and that this drops to 50% and 30% respectively in the third and fourth years, it is expected that approximately $445 000 will be required to finance renewals of existing contracts.

216. The balance of $220 000 is for the award of new contracts and takes into account the views expressed by SAC during its examination, in October 1961, of the Agency's research contracts programme.

217. The following table illustrates the use of research funds in 1961 and their proposed use in 1962 and 1963 as between various subjects:

Table 14

Subject of research	1961 $	1962 $	1963 $
Radioactive waste management and environmental research	72 960	145 000	135 000
Health physics and radiation protection	166 579	205 000	195 000
Radiobiology	109 735	95 000	85 000
Safeguards	69 320	60 000	55 000
Reactor research	50 190	50 000	45 000
Radioisotope applications			
Medicine	48 420	40 000	55 000
Agriculture	-	40 000	55 000
Hydrology	2 400	30 000	40 000
TOTAL	519 599	665 000	665 000

218. It will be seen that in view of the recommendation by SAC to give greater emphasis to research in the application of radioisotopes to medicine, agriculture and hydrology, the proposed allocation for this purpose in 1963 has been increased by $40 000, while funds devoted to research in other subjects have been correspondingly reduced.

219. The only increase under this appropriation section is for laboratory charges. The application of cost accounting principles to determine the share of the operating costs of the Laboratory which should properly be charged to the Regular Budget has been dealt with in detail in the Introduction; explanations of the estimates for the Laboratory are provided in connection with expenditures under the Operational Budget [35].

[35] See Table 25 and paragraphs 249 - 257 below.

Section 8. Salaries and wages

Table 15

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Established posts	2 228 900	2 282 000	2 878 000
Overtime and night differential	19 972	30 000	30 000
Temporary assistance	60 335	65 000	65 000
Consultants	54 317	90 000	90 000
TOTAL	2 363 524	2 467 000	3 063 000

220. The estimate covers salaries and wages, and overtime and night differential for all staff of the Secretariat, exclusive of salaries and wages chargeable to the General Conference and the Board of Governors.

221. The calculation of salaries of established posts, as presented in the following table, has been based on the new salary scales for Professional, General Service and Maintenance and Operatives Service staff approved by the Board of Governors with effect from 1 January 1962. The lapse factor (interval between termination of services and recruitment of a replacement) which has been applied is based on the assumption that savings, through delays in replacing staff holding fixed-term appointments will amount to approximately 8½% of the cost of such staff.

Table 16

1961	1962	1963	Position	1961 $	1962 $	1963 $
1	1	1	Director General	30 000	20 000	20 000
5	5	5	Deputy Director General	75 000	75 000	89 500
18	18	18	Director (D-1/2)	211 500	211 500	239 490
49	57	57	Senior Officer (P-5)	428 750	498 750	607 050
74	73	74	First Officer (P-4)	540 200	532 900	660 820
70	72	70	Second Officer (P-3)	420 000	432 000	522 200
17	17	17	Associate Officer (P-2)	81 600	81 600	104 210
14	19	20	Assistant Officer (P-1)	50 400	68 400	96 000
248	262	262	Sub-total	1 827 450	1 920 150	2 339 270
291	299	288	General Service staff	519 435	508 300	616 320
106	106	91	Maintenance and Operatives Service staff	103 880	113 950	106 470
645	667	641	TOTAL	2 450 765	2 542 400	3 062 060
			Add: Special post and other allowances	20 000	25 000	22 750
			Post adjustments	97 000	102 000	4 650
			Salary increments	142 000	197 000	289 000
			Sub-total	2 709 765	2 866 400	3 378 460
			Deduct: Recruitment lapse and lag factors	165 877	279 400	172 460
			Sub-total	2 543 888	2 587 000	3 206 000
			Less: General Conference	64 992	76 000	95 000
			Board of Governors	249 996	229 000	233 000
			NET TOTAL	2 228 900	2 282 000	2 878 000

222. There is thus in 1963 an increase in salaries and wages for established posts of $596 000. However, the greater part of this increase results from the introduction of higher salary scales for the staff of the Secretariat with effect from 1 January 1962. If this is taken into account, the actual increase in 1963 is $229 000 as will be demonstrated if the lower part of Table 16 is amended as follows:

Table 17

Item				1962 $	1963 $
Sub-total, after deduction of lapse and lag factors, as in Table 16 above				2 587 000	3 206 000
Add: Salary increases 1962				415 000	
				3 002 000	
Deduct:	General Conference budget	76 000			
	Plus salary increases 1962	11 000	87 000		
Deduct:	Board of Governors budget	229 000			
	Plus salary increases 1962	37 000	266 000	353 000	233 000
	NET TOTAL			2 649 000	2 878 000

223. As shown in Annex I and in Table 16, it is proposed to have a total of 641 established posts under the Regular Budget in 1963. This compares with an approved manning table of 645 in 1961 and 667 in 1962. The increases and decreases in the divisions affected by the changes, in 1963 as compared with 1962, are as follows:

Table 18

Division or Office	P-4	P-3	P-2	P-1	Sub-total	GS	M&O	Total
Isotopes	+3	+1			+4	+ 1		+ 5
Scientific and Technical Information		+1			+1	- 2		- 1
Exchange and Training						- 2		- 2
Economic and Technical Assistance						- 2		- 2
Reactors						- 1		- 1
Health, Safety and Waste Disposal						- 1		- 1
Secretariat of the General Conference and the Board of Governors	-1				-1			- 1
External Liaison		-1			-1	- 1		- 2
Legal				-1	-1			- 1
Public Information	-1				-1	- 1		- 2
Budget and Finance				+2	+2	- 2		
Conference and General Services		-1			-1	- 5	-10	-16
Language Services		-2			-2			- 2
Sub-total	+1	-2		+1		-16	-10	-26
Reclassification of M&O to GS						+ 5	- 5	
Net changes by category	+1	-2		+1		-11	-15	-26

224. An explanation of the proposed changes is given in paragraphs 225 to 230 below.

225. By 1963, the supervision of the scientific aspects of technical assistance projects involving the medical applications of radioisotopes, and of research contracts relating to the use of isotopes in tropical medicine, will justify the addition of one Professional post at the P-4 level to the Division of Isotopes. Further, with increasing assistance being given to countries whose economy is based primarily on agriculture, the Division of Isotopes receives many more requests for technical advice relating not only to technical assistance and training but also to research problems. The volume and diversity of these requests are such that it is planned to add two Professional posts, namely one P-4 and one P-3, and one General Service post to the Division of Isotopes to ensure efficient planning and co-ordination of the various projects and activities.

226. It should be pointed out that one of the Professional posts referred to above was approved for the Division of Isotopes in 1961 at the P-2 level [36], but it was not then shown in the Division's manning table since it was intended to use a vacant post elsewhere in the Secretariat; in 1963, it is proposed to transfer this post to the Division and to re-classify it from P-2 to P-3.

227. A similar situation exists with regard to a post at the P-4 level which was approved for the Division of Isotopes in 1961, for work in connection with the calibration and standardization of thyroid-radioiodine-uptake [37]; this post was also not shown in the manning table of the Division as it was intended to use another vacant post elsewhere in the Secretariat. It is proposed to transfer this post to the Division of Isotopes in 1963, as shown in Annex I.

228. In order to improve and widen the distribution of Agency publications, it is proposed to add one Professional post at the P-3 level to the Division of Scientific and Technical Information, to take charge of sales organization and distribution.

229. In addition, it is proposed to reclassify two GS posts in the Division of Budget and Finance as P-1; this is in continuation of a three-year plan which was first proposed in the Program and Budget for 1962 [38]. During the past year, it has become apparent that it would be proper to reclassify five posts in the Maintenance and Operatives Service as General Service posts, and provision has accordingly been made in 1963. Some further reclassifications of this type may be required during the course of 1963 and the Board proposes that the Director General be given the authority to make them within the total ceiling of 379 approved posts for General Service and Maintenance and Operatives Service staff.

230. It will be seen from Table 18 that all increases referred to above are not only balanced by reductions in staff elsewhere, but that it is proposed to make an overall reduction of 26 posts in the Secretariat. It is realized that when the full effect of the proposed reductions, especially in the administrative divisions, can be assessed, it may be found necessary for the Director General to make some adjustments within the total number of approved posts.

231. The increase in the appropriation for salaries and wages is entirely due to two factors. The first of these is the need to provide for salary increments. Secondly, it has been necessary to reduce considerably the lapse and lag factors to be applied in 1963. In preparing the estimates for salaries and wages for 1962, it was assumed that the lapse and lag factors would account for as much as $279 400, and this deduction was applied in arriving at the figure for the proposed appropriation. When the 1962 budget is adjusted to take account of the new salary scales, this figure increases to $298 710, which compels the Director General to leave vacant between 30 and 35 Professional posts for almost the

---

[36] See document GC(IV)/116, paragraphs 217 and 219.

[37] Ibid., paragraphs 216 and 219.

[38] GC(V)/155, paragraphs 213 - 216.

entire year. The Board believes that the General Conference does not intend that over 10% of all Professional posts which it has approved should remain vacant because of an inadequate appropriation. Therefore, in 1963 a reduced factor of $8\frac{1}{2}\%$ has been applied to salaries of Professional staff holding fixed-term appointments. Even this may be high because it is becoming increasingly desirable to retain a Professional staff member on duty until his replacement has been recruited, in order to assure continuity in the execution of programmes. As it is expected that the number of vacant posts in 1963 will be very small, the lag factor that can be applied is negligible.

232. It is estimated that expenditure in 1963 for overtime and night differential, temporary assistance, and consultants can be held at the level of 1962.

Section 9. Common staff costs

Table 19

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Pension Fund contribution	241 094	250 000	338 000
Medical benefits and social security contribution	45 373	48 000	55 000
Dependency allowance	143 618	150 000	200 000
Education grants	40 629	48 000	64 000
Non-residents' allowance	119 935	137 000	110 000
Travel on recruitment and termination	62 842	71 000	71 000
Assignment allowance	169 751	169 000	200 000
Installation expenses	52 094	33 000	55 000
Removal of household effects and excess baggage	28 166	27 000	27 000
Travel on home leave	67 995	89 000	92 000
Service benefits	65 687	61 000	76 000
Other costs	49 018	72 000	67 000
Sub-total	1 086 202	1 155 000	1 355 000
Less: General Conference	31 992	30 000	39 000
Board of Governors	105 996	95 000	96 000
TOTAL	948 214	1 030 000	1 220 000

233. The estimate covers common staff costs of the Secretariat excluding the amounts chargeable to the General Conference and the Board of Governors. It includes all costs of allowances and benefits prescribed in the Provisional Staff Regulations approved by the Board of Governors and the Staff Rules promulgated by the Director General, as well as the cost of language training and medical services.

234. The appropriation for 1963 reflects the increase in dependency allowance and education grants as approved by the Board of Governors, and the increase in the Agency's contribution to the United Nations Joint Staff Pension Fund arising out of salary increases for Professional and General Service category staff. However, a large part of the increase of $190 000 occurs actually in 1962 when new emoluments of staff became effective. If the 1962 estimate is appropriately adjusted, the net increase in 1963 is $116 400.

Section 10. Duty travel of staff

Table 20

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Duty travel	129 436	150 000	144 000
Advisory services to Member States	6 426	15 000	12 000
Safeguards	2 963	15 000	22 000
Sub-total	138 825	180 000	178 000
Less: Reimbursement from Member States	166	pro memoria	pro memoria
TOTAL	138 659	180 000	178 000

235. The estimate for duty travel in 1963 is slightly lower than the appropriation for 1962. It is difficult to foresee exact requirements at this stage, but previous experience has been taken into account; at the same time it is recognized that in 1963 there may be more travel in connection with safeguards.

236. To the extent that travel costs will be reimbursed by Member States, the net requirements will be reduced but it is not possible to estimate the amounts likely to be received.

Section 11. Representation and hospitality

Table 21

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Representation and hospitality	26 779	32 500	32 500

237. The Board proposes that no change should be made in 1963 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.

Table 22

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Communications and transport	71 305	80 000	78 500
Rental and alteration of premises	30 469	9 000	8 000
Utilities	51 783	67 000	62 500
Rental, operation and maintenance of furniture and equipment	18 015	16 000	37 500
Contractual and other administrative services	21 665	24 000	22 000
Insurance and bank charges	42 857	24 500	35 000
Miscellaneous services	3 758	3 500	3 500
Stationery and office supplies	33 691	35 000	26 000
Reproduction supplies and paper	(6 587)	22 500	11 000
Miscellaneous other supplies	56 166	27 500	27 000
Furniture and fixtures	46 297	22 500	15 000
Office equipment and machines	68 385	20 000	62 000
Transportation equipment	1 923	1 500	3 000
TOTAL	439 727	353 000	391 000

238. When comparing the estimates for 1962 and 1963 with actual requirements in 1961, it must be recalled that the appropriation for 1961, namely $447 000, included a provision of $93 000 for alterations to the old Grand Hotel building and the extension of the restaurant facilities at Headquarters. Owing to unforeseen delays, the work was not completed during 1961; however, the amount required for the purpose was obligated in that year, since no provision for it existed in the succeeding year.

239. The estimates for 1963 exceed the appropriations for 1962 by $38 000. A comparison of the details shows increases in only four items, namely:

(a)	Rental, operation and maintenance of furniture and equipment	$21 500	
(b)	Insurance and bank charges	10 500	
(c)	Office equipment and machines	42 000	
(d)	Transportation equipment	1 500	
		$75 500	

which are offset by reductions in:

(e)	Communications and transport	$ 1 500	
(f)	Rental and alteration of premises	1 000	
(g)	Utilities	4 500	
(h)	Contractual and other services	2 000	
(i)	Stationery and office supplies	9 000	
(j)	Reproduction supplies and paper	11 500	
(k)	Miscellaneous supplies	500	
(l)	Furniture and fixtures	7 500	37 500
	Net increase in 1963		$38 000

240. There is a direct relation between the increase under item (a) above and the decreases under (i) and (j) because with effect from 1 January 1962 three electronic copying machines have been installed on a rental and service basis; they are not available for purchase. The rental of these machines includes the cost of paper consumed in the photocopy process, and the Agency will, apart from obtaining better quality and quicker reproduction of many documents, be able to economize on supplies.

241. A significant increase is unavoidable in regard to item (b) which also includes book losses on exchange. Up to the end of 1961, the Agency applied the TAB rate of S 26 to the dollar. The actual rate, however, fluctuated to an extent which caused significant book losses during that year. These are, however, expected to be reduced in future by the introduction from 1 January 1962 of an adjusted rate of S 25.90 to the dollar. It must be foreseen, nevertheless, that the provision in 1962 will prove an underestimate.

242. The increase in the provision for equipment arises partly from the need to procure, for the Division of Safeguards, such equipment as a portable gamma-ray spectrometer, a portable X-ray radiography unit and some minor photographic equipment. The cost of this is estimated to be $25 000.

243. Further, because almost 30 000 new scientific papers and reports are published every year on the peaceful applications of nuclear energy as well as a large number of papers on related subjects, the locating of relevant information in the shortest possible time presents problems. It is felt that the Agency should give consideration to the employment of mechanical means for assisting in literature surveys and other scientific information work. It is therefore proposed to purchase and install microfilm equipment and a two-speed automatic selector at an estimated cost of $13 000.

244. With regard to transportation equipment, it is planned to replace in 1963 two of the Agency's cars which will by then have been in service for three years. It is expected that their re-sale value at that time will be such that the net cost of two new vehicles will not exceed $3000.

III. OPERATIONAL BUDGET ESTIMATES

A. The General Fund

Summary of receipts and expenditures

Table 23

Item	1961 Actual $	1962 Budget $	1963 Estimate $
RECEIPTS			
Voluntary contributions	1 221 570	2 000 000	2 000 000
Special voluntary contributions	40 000	40 000	40 000
Miscellaneous income	65 598	-	67 071
Withdrawal from unallocated balance[a/]	29 296	-	72 529
Sub-total	1 356 464	2 040 000	2 179 600
Balance carried forward	296 138	326 898	150 000
TOTAL	1 652 602	2 366 898	2 329 600
EXPENDITURES			
Transfers to Operating Fund I	318 534	297 000	200 600
Transfers to Operating Fund II	1 037 930	1 743 000	1 979 000
TOTAL	1 356 464	2 040 000	2 179 600

a/ See document GC(VI)/INF/49.

245. 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 24

Item	1961 Actual $	1962 Budget $	1963 Estimate $
RECEIPTS			
Transfer from the General Fund	318 534	297 000	200 600
Income from reimbursable services	2 386	5 000	45 000
TOTAL	320 920	302 000	245 600
EXPENDITURES			
Construction of the Laboratory	29 296	-	-
Operation of laboratory facilities	251 624	262 000	205 600
Monaco project	40 000	40 000	40 000
TOTAL	320 920	302 000	245 600

246. The allocation of laboratory costs as between the Regular and the Operational Budgets has already been dealt with in paragraphs 41 to 54 above.

247. Preliminary cost analyses indicate that the demands upon Operating Fund I, which were originally estimated at $262 000 in 1962, can be reduced to $205 600 in 1963.

248. The figures in Table 24 include that portion of the operating costs of the Monaco project which, under an agreement with the Government of Monaco, is financed from a special voluntary contribution amounting to $40 000 for each of the three years 1961, 1962 and 1963.

(b) Allocations

1. Laboratory facilities

Table 25

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Salaries and wages	73 575	171 500	233 000
Common staff costs	23 529	78 000	94 000
Consultants	-	5 000	7 000
Duty travel of staff	-	6 000	6 000
Scientific and technical supplies	28 067	31 500	42 000
Contractual technical services	-	-	24 600
Common services and non-technical supplies	41 806	45 000	65 000
Depreciation	-	-	78 460
Unobligated earmarkings	31 588	-	-
Sub-total, operating expenses	198 565	337 000	550 060
Equipment	173 460	59 500	93 000
Less: Depreciation	-	-	78 460
Sub-total, additional requirements for equipment	173 460	59 500	14 540
TOTAL, operating expenses and equipment	372 025	396 500	564 600
Less: Charges to Regular Budget	120 401	134 500	359 000
NET TOTAL, Operating Fund I	251 624	262 000	205 600

249. The work of the laboratory facilities is dealt with under the programme for research and services in the physical sciences [39]. The following staffing changes are proposed:

(a) An additional P-3 post is required in connection with the work on measurement of tritium in groundwater, as applied to hydrological problems;

(b) An additional P-4 post and a General Service post for a technician is proposed for optical spectroscopy;

(c) For radiotracer work in connection with studies of analytical methods, it is proposed to re-classify one existing P-3 post to P-4;

(d) In the laboratory group working on analysis by radiation activation, it is proposed to re-classify one existing P-3 post to P-4 and to add a General Service category post for a technician; and

(e) It is proposed to abolish one post in the Maintenance and Operatives Service category.

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

[39] See paragraphs 155 - 177 above.

Table 26

Grade	1961 Staff	1962 Staff	Proposed change	Proposed 1963 staff
P-5	2	3	-	3
P-4	3	4	3	7
P-3	5	6	(1)	5
P-2	4	4	-	4
Sub-total	14	17	2	19
GS	28	28	2	30
M&O	13	13	(1)	12
TOTAL	55	58	3	61

251. The estimated costs for 1963 shown in Table 25 reflect the changes resulting from the application of principles of cost accounting to the operations of the Laboratory [40].

252. It will be seen that the total operating costs of the Laboratory, including the cost of equipment, show an increase of $168 100 over the figure for 1962. The main reason for the increase is the need to strengthen the staff and to provide additional equipment in order that the services which Member States are demanding may be provided. These demands and, in addition, demands for training already exist in 1962 but cannot be adequately met because lack of funds has prevented the Laboratory from being fully staffed or equipped during that year. For example, it will be necessary to leave unfilled, during almost the whole of 1962, as many as ten of the 58 posts authorized.

253. To bring the personnel up to the strength required, as shown in Table 26 above, the total provision for salaries and wages and common staff costs for 1963 has been increased by $77 500. However, part of this is due to increases in emoluments of existing staff which became effective in 1962. This accounts for approximately $17 600 of the total increase shown in Table 25 above.

254. Apart from increases of a minor character, two other items warrant special comment.

255. On the basis of actual operations, it is now known that the budgetary provision in 1962 for heating, electricity and other utilities which are supplied from the adjacent Austrian reactor facilities was inadequate. It is therefore necessary to increase the provision for these services in 1963 by $20 000.

256. As in the case of staffing, the provision of equipment for the Laboratory in 1962 was inadequate owing to lack of funds. If the equipment is to be brought up to the required standard, considerable additions will have to be made in 1963. It is planned to circulate a list of essential equipment which is urgently needed, in the hope that part of the requirements may be met from gifts of equipment that some Member States may find it possible to make. As has been pointed out in paragraphs 53 and 54 above, the Board proposes in 1963 to utilize that part of the income from laboratory services which constitutes depreciation charges, to reduce the net additional budgetary requirements for new equipment.

257. The new accounting procedures will be refined during 1962. Particular attention will be paid to the need for the establishment, in consultation with SAC, of a reasonable basis for a scale of charges for services performed by the Laboratory. It is hoped that after a full year's operating experience under these procedures it will be possible to submit a report on the action taken in this respect. This experience will also be reflected in the programme and budget for 1964.

[40] See paragraphs 41 - 54 above.

2. Monaco project

Table 27

Item	1961 Actual $	1962 Budget $	1963 Estimate $
Operating expenses	65 692	100 000	100 000
Unobligated earmarkings	34 308	-	-
TOTAL	100 000	100 000	100 000
Less: Charge to Administrative Fund	60 000	60 000	60 000
NET TOTAL, Operating Fund I	40 000	40 000	40 000

258. The Monaco project is to be carried out over a three-year period on the basis of an annual contribution of $40 000 by the Government of Monaco and of $60 000 by the Agency [41].

C. Operating Fund II

(a) Summary of receipts and expenditures

Table 28

Item	1961 Actual $	1962 Budget $	1963 Estimate $
RECEIPTS			
Savings from prior years' operations	34 810	-	-
Transfers from the General Fund	1 037 930	1 743 000	1 979 000
Income from reimbursable services	-	-	-
Miscellaneous income	296	50 000	-
TOTAL	1 073 036	1 793 000	1 979 000
EXPENDITURES			
Exchange and training	601 679	867 000	935 000
Technical assistance	414 012	758 000	864 000
Research contracts	57 345	168 000	180 000
TOTAL	1 073 036	1 793 000	1 979 000

[41] See also paragraph 130 above.

(b) Allocations

1. Exchange and training

Table 29

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Type I fellowships	360 250	545 000	594 000
Type II fellowships	15 917	20 000	1 000
Research fellowships and special grants	41 213	40 000	60 000
Exchange of scientists	92 680	148 000	150 000
Training courses	70 950	74 000	90 000
Sub-total	581 010	827 000	895 000
Mobile radioisotope laboratories	20 669	40 000	40 000
TOTAL	601 679	867 000	935 000

259. A realistic appraisal would have to recognize the need in 1963 for at least 350 Type I fellowship awards which, at an average cost of more than $3000, would require funds exceeding $1 million. However, in the light of past experience, the Board is forced to acknowledge that within the proposed target of $2 million for all the Agency's operational programmes, only a small increase in the allocations for fellowships and training courses is possible.

260. The Board proposes to make no allocation for travel, in connection with Type II awards, in recognition of the fact that the cost-free principle should be applied in its entirety to this type of fellowship. The relatively small sums previously provided for purpose of travel - which in any case had always to be further reduced because of short-falls in voluntary contributions - have given rise to serious problems, since they were used up entirely in connection with the first few awards. It is however necessary to assist recipients of such awards by providing small amounts for the purchase of books. A token provision of $1000 has accordingly been made for this purpose.

261. A comparison of the combined availability of funds from the Agency's own resources and from EPTA, for fellowships and other training, is given in the table below. Attention must, however, be drawn to the tentative nature of the figures relating to EPTA for 1963 [42].

Table 30

Item	1961 Actual $	1962 Budget $	1963 Estimate $
Operating Fund II	601 679	867 000	935 000
EPTA fellowships	92 939	347 961	311 000
EPTA regional projects	53 638	56 512	231 000
TOTAL	748 256	1 271 473	1 477 000

[42] See also paragraphs 274 - 276 below.

262. Both of the Agency's mobile radioisotope laboratories were in full operation during 1961. One of them will remain during the current year in South East Asia. It is planned that this unit should continue to operate in South East Asia for some time during 1963 and then move to the Middle East.

263. The second mobile unit spent most of 1961 in Uruguay and Brazil, and will probably continue to operate in South America during the greater part of the current year. It will then be moved to Africa, either late in 1962 or early in 1963.

264. There will be no change in the method of operation and financing of the mobile laboratories. Experience indicates that it is usually possible in the comparatively more developed countries to obtain assistance from local professors or other qualified personnel in conducting the training courses. The budget estimates for 1963 take into account the possibility that training staff may not be available without payment in some of the less-developed areas in which the laboratories will operate.

2. Technical assistance

Table 31

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Experts and equipment	414 012	758 000	814 000
Nuclear science documentation	-	-	50 000
TOTAL	414 012	758 000	864 000

265. As has been pointed out in paragraph 61 above, it is expected that approximately 680 man-months of technical assistance will be required in 1963. In addition, requests for equipment are expected to exceed $250 000, so that the total estimated demand upon Agency funds for technical assistance amounts to approximately $1.3 million.

266. While recognizing the needs of the requesting countries, the Board is aware that within a target of $2 million for voluntary contributions to the General Fund, the Agency will not be able to satisfy all demands. Even the proposed allocation of $814 000 for experts and equipment in 1963 may, in the light of past experience, have to be reduced.

267. A provision of $50 000 is made for a programme of assistance to improve and strengthen documentation facilities for nuclear science in less-developed Member States [43].

268. A comparison of the combined availability of funds from the Agency's own resources and under EPTA, for experts and equipment, is given in the table below. Attention must, however, be drawn to the tentative nature of the figure relating to EPTA for 1963 [42], and it has to be borne in mind that a proper comparison of figures relating to EPTA can only be made on the basis of the allocations for the two-year programme periods. For 1961-62 these were $932 450 as compared with $1 275 000 for 1963-64.

[43] See also document GC(V)/155, paragraph 100.

Table 32

Item	1961 Actual $	1962 Budget $	1963 Estimate $
Operating Fund II	414 012	758 000	814 000
EPTA	303 613	628 837	574 000
TOTAL	717 625	1 386 837	1 388 000

3. Research contracts

Table 33

Item of expenditure	1961 Actual $	1962 Budget $	1963 Estimate $
Research contracts	57 345	168 000	180 000

269. The award of research contracts financed from the Operational Budget, to institutions in developing Member States, has proved to be a useful supplement to the Agency's technical assistance and fellowships programmes.

270. In 1961, because of insufficient funds, assistance for research in those applications of radioisotopes that can be most beneficial to the less-developed countries could not be granted to the extent desired. In 1962 there is also likely to be a reduction in the amount available for this purpose, because voluntary contributions to the General Fund will be below the target.

271. A co-ordinated research programme in the applications of radioisotopes to rice cultivation was started in 1962 and will continue on an expanded basis in 1963. A number of institutions in rice-producing countries of South East Asia are participating. The support of research in the applications of radioisotopes to medicine will be continued as recommended by SAC and special attention will be given to research on diseases affecting large sections of the population in less-developed countries, particularly those in tropical areas.

272. It is assumed that a number of contracts awarded in 1960 and financed from the Operational Budget will terminate in 1963. However, the majority of contracts awarded in 1961 and the research contracts awarded in 1962 under the co-ordinated research programme referred to above will be renewed in 1963. On the basis of this assumption approximately $80 000 will be required for renewals.

IV. THE UNITED NATIONS EXPANDED PROGRAMME OF TECHNICAL ASSISTANCE

273. It is not possible to give now more than a general idea of the funds which will be available to the Agency under EPTA in the biennium 1963-64. Under the system of project programming introduced by ECOSOC with effect from 1 January 1963 [44], agency planning-shares and agency sub-totals have been eliminated from all programming operations and

[44] ECOSOC Resolution 854 (XXXII).

will in future derive from the programme as approved by TAC/ECOSOC in November of the year preceding the first year of the biennium in question (e.g. in November 1962 for the programme period 1963-64).

274. On the basis of discussions at the meeting of the TAB Ad hoc Working Party on 1963-64 Country Targets Under EPTA, which was held in New York in January 1962, the Agency can envisage, for 1963-64, programmes of technical assistance under EPTA for 45 countries at a total estimated cost of $1 778 000. It must be emphasized that this figure is merely an order of magnitude; the actual sum may be lower or higher, depending on the programmes actually requested by Governments. If this figure were to be realized, it would represent an increase of 30% over the Agency's allocation of $1 374 000 for country programmes under EPTA for 1961-62.

275. In addition, a sum of $462 000 is expected to be available for regional projects in 1963-64.

276. The following table is provided, for information and comparison only, to indicate the approximate basis on which the figures for 1963 and 1964 referred to above are arrived at. As has been stated, neither the totals nor the breakdown can at this stage be considered as more than general indications and expectations.

Table 34

Item of expenditure	1961 Allocation $	1962 Allocation $	1963 Allocation $	1964 Allocation $
Fellowships	92 939	347 691	311 000	192 000
Experts and equipment	303 613	628 837	574 000	701 000
Regional projects	53 638	56 512	231 000	231 000
TOTAL	450 190	1 033 040	1 116 000	1 124 000

277. In the Programme it has been assumed that the amount available for regional projects in 1963 will be utilized for training activities, although the exact use of these funds must, of course, depend on requests and on TAB approval.

278. The Agency also expects to receive an allocation of approximately $180 000 for administrative and operational services costs for the two years 1963-64. With the abolition of agency sub-totals, these funds can no longer be used to finance additional field programmes as was done in previous years; accordingly, of the sum estimated to become available in 1963-64, 50% has been shown as income under the Regular Budget for 1963 [45].

[45] See Table 6 and paragraph 200 above.

ANNEX I

MANNING TABLE FOR 1963

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			3	2		5
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	1		12	16		28
Division of Scientific and Technical Information			1	4	6	8	3	6	28	35		63
DEPARTMENT OF TECHNICAL OPERATIONS		1				1		1	3	2		5
Division of Economic and Technical Assistance			1	3	6	4	2		16	10		26
Division of Reactors			1	5	3	1	1		11	5		16
Division of Technical Supplies			1	3	1	1			6	4		10
Division of Health, Safety and Waste Disposal			1	6	6	3			16	8		24
DEPARTMENT OF RESEARCH AND ISOTOPES		1				1		1	3	2		5
Division of Research and Laboratories			1	7	2	4			14	9		23
Division of Isotopes			1	8	9	1			19	11		30
DEPARTMENT OF SAFEGUARDS AND INSPECTION		1						1	2			2
Division of Safeguards			1	3	2	1			7	4		11
Division of Inspection			1	1	2				4	2		6
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	2	1		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	2		9	11		20
Legal Division			1	2	1	2			6	6		12
Division of Public Information				1	2	2			5	6		11
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	1			3	3		6
Division of Conference and General Services			1	1	2	2	4	2	12	70	91	173
Division of Language Services				1	12	27		1	41	39		80
Total	1	5	18	57	74	70	17	20	262	288	91	641
Approved manning table for 1962	1	5	18	57	73	72	17	19	262	299	106	667
Difference	-	-	-	-	1	(2)	-	1	-	(11)	(15)	(26)

B. OPERATIONAL BUDGET	P-5	P-4	P-3	P-2	P-1	Sub-total	GS	M&O	Grand Total
LABORATORY FACILITIES	3	7	5	4		19	30	12	61
Approved manning table for 1962	3	4	6	4		17	28	13	58
Difference	-	3	(1)	-		2	2	(1)	3
MOBILE RADIOISOTOPE LABORATORIES		1				1	2	2	5
Approved manning table for 1962		1				1	2	2	5
Difference		-				-	-	-	-

ANNE

ANALYSIS OF THE CONSOL

A. By Regular Budget appropriations

Budgetary appropriation section or allocation	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. Safe-guards	VII Informa and technical services
	A. Technical assistance	B. Exchange and training						
REGULAR BUDGET								
1. The General Conference	-	-	-	-	-	-	-	-
2. The Board of Governors	-	-	-	-	-	-	-	-
Sub-total	-	-	-	-	-	-	-	-
3. Panels and committees	-	-	22 000	24 000	80 000	18 000	-	6 000
4. Special missions	38 000	8 000	21 000	3 000	-	-	-	-
5. Seminars, symposia and conferences	-	-	28 000	36 000	47 000	69 000	-	-
6. Distribution of information	5 000	5 000	50 000	54 500	45 000	40 000	-	60 500
7. Scientific and technical services and laboratory charges	-	-	50 000	110 000	509 000	134 500	60 000	22 000
Sub-total	43 000	13 000	171 000	227 500	681 000	261 500	60 000	88 500
8. Salaries and wages	150 000	176 300	188 300	157 700	243 200	175 400	123 000	435 000
9. Common staff costs	61 900	75 450	77 900	62 050	98 200	67 850	53 100	192 050
10. Duty travel of staff	13 500	13 100	21 000	23 100	23 800	23 500	15 600	13 960
11. Representation and hospitality	1 660	1 510	1 640	1 880	1 640	1 670	1 020	4 500
Sub-total	227 060	266 360	288 840	244 730	366 840	268 420	192 720	645 510
12. Common services, equipment and non-technical supplies	-	-	-	-	-	-	-	-
TOTAL	270 060	279 360	459 840	472 230	1 047 840	529 920	252 720	734 010
OPERATIONAL BUDGET								
Laboratory facilities	-	-	-	-	-	262 000	-	
Monaco project	-	-	-	-	40 000	-	-	
Exchange and training	-	867 000	-	-	-	-	-	-
Technical assistance	758 000	-	-	-	-	-	-	-
Research contracts	-	-	-	168 000	-	-	-	-
TOTAL	758 000	867 000	-	168 000	40 000	262 000	-	-
TOTAL Agency funds	1 028 060	1 146 360	459 840	640 230	1 087 840	791 920	252 720	734 010
EPTA funds	628 837	404 473	-	-	-	-	-	-
GRAND TOTAL	1 656 897	1 550 833	459 840	640 230	1 087 840	791 920	252 720	734 010

X II

IDATED BUDGET FOR 1962

and Operational Budget allocations

The General Conference and Board of Governors		General direction and administrative services	Total appropriation or allocation	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										
245 000	-	-	245 000	141 000	30 000	-	55 000	3 500	-	15 500	-
-	398 000	-	398 000	267 000	95 000	1 000	17 500	-	-	17 500	-
245 000	398 000	-	643 000	408 000	125 000	1 000	72 500	3 500	-	33 000	-
-	-	10 000	160 000	16 000	-	144 000	-	-	-	-	-
-	-	-	70 000	-	-	70 000	-	-	-	-	-
-	-	-	180 000	45 000	-	90 000	45 000	-	-	-	-
-	-	-	260 000	26 500	-	-	20 000	173 500	-	40 000	-
-	-	-	885 500	70 600	31 200	2 400	16 000	747 000	-	18 300	-
-	-	10 000	1 555 500	158 100	31 200	306 400	81 000	920 500	-	58 300	-
-	-	818 100	2 467 000	2 467 000	-	-	-	-	-	-	-
-	-	341 500	1 030 000	-	1 030 000	-	-	-	-	-	-
-	-	32 440	180 000	-	-	180 000	-	-	-	-	-
-	-	16 980	32 500	-	-	-	-	-	32 500	-	-
-	-	1 209 020	3 709 500	2 467 000	1 030 000	180 000	-	-	32 500	-	-
-	-	353 000	353 000	-	-	-	224 000	-	-	129 000	-
245 000	398 000	1 572 020	6 261 000	3 033 100	1 186 200	487 400	377 500	924 000	32 500	220 300	-
-	-	-	262 000	105 900	46 800	3 600	24 000	-	-	81 700	-
-	-	-	40 000	-	-	-	-	40 000	-	-	-
-	-	-	867 000	12 000	2 000	15 000	8 000	-	-	3 000	827 000
-	-	-	758 000	-	-	-	-	-	-	-	758 000
-	-	-	168 000	-	-	-	-	168 000	-	-	-
-	-	-	2 095 000	117 900	48 800	18 600	32 000	208 000	-	84 700	1 585 000
245 000	398 000	1 572 020	8 356 000	3 151 000	1 235 000	506 000	409 500	1 132 000	32 500	305 000	1 585 000
-	-	-	1 033 310	-	-	-	-	-	-	-	1 033 310
245 000	398 000	1 572 020	9 389 310	3 151 000	1 235 000	506 000	409 500	1 132 000	32 500	305 000	2 618 310

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. Safe-guards	VII. Informa- and [illegible]ical services
	A. Technical assistance	B. Exchange and training						
Office of the Director General	-	-	-	-	-	-	-	-
Internal Audit	-	-	-	-	-	-	-	-
Department of Training and Technical Information								
Office of the Deputy Director General	-	23 400	-	-	-	-	-	23 400
Exchange and Training	-	1 052 200	-	-	-	-	-	-
Scientific and Technical Information	5 000	5 000	78 000	90 500	92 000	109 000	-	445 250
Sub-total	5 000	1 080 600	78 000	90 500	92 000	109 000	-	468 650
Department of Technical Operations								
Office of the Deputy Director General	14 500	-	14 000	-	14 000	-	-	4 100
Economic and Technical Assistance	953 260	-	87 220	-	-	-	-	-
Reactors	-	-	181 480	-	-	-	-	-
Technical Supplies	-	-	34 740	-	-	-	-	40 760
Health, Safety and Waste Disposal	-	-	-	-	262 350	-	-	-
Sub-total	967 760	-	317 440	-	276 350	-	-	44 860
Department of Research and Isotopes								
Office of the Deputy Director General	-	-	-	23 600	-	23 600	-	-
Research and Laboratories	-	-	50 000	278 000	545 000	647 220	60 000	-
Isotopes	-	-	-	233 730	64 960	-	-	-
Sub-total	-	-	50 000	535 330	609 960	670 820	60 000	-
Department of Safeguards and Inspection								
Office of the Inspector General	-	-	-	-	-	-	19 300	-
Safeguards	-	-	-	-	-	-	99 590	-
Inspection	-	-	-	-	-	-	39 500	-
Sub-total	-	-	-	-	-	-	158 390	
Department of Administration, Liaison and Secretariat								
Office of the Deputy Director General	-	-	-	-	-	-	-	-
Secretariat of the General Conference and the Board of Governors	-	-	-	-	-	-	-	58 100
External Liaison and Protocol	-	-	-	-	-	-	-	-
Legal	11 060	-	-	-	48 230	-	22 230	-
Public Information	-	-	-	-	-	-	-	15 500
Budget and Finance	-	-	-	-	-	-	-	-
Personnel	-	-	-	-	-	-	-	-
Administrative Office of Technical Assistance	19 640	29 560	-	-	-	-	-	-
Conference and General Services	-	-	-	-	-	-	-	138 500
Language Services	24 600	36 200	14 400	14 400	61 300	12 100	12 100	8 400
Sub-total	55 300	65 760	14 400	14 400	109 530	12 100	34 330	220 500
TOTAL Agency funds	1 028 060	1 146 360	459 840	640 230	1 087 840	791 920	252 720	734 010

The General Conference and Board of Governors		General direction and administrative services	Total appropriation or allocation	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										
-	-	97 700	97 700	49 300	19 400	19 000	-	-	10 000	-	-
3 500	-	32 800	36 300	22 800	9 800	200	-	3 500	-	-	-
-	-	-	46 800	28 600	12 700	3 000	-	-	2 500	-	-
-	-	-	1 052 200	129 200	53 800	31 000	8 000	-	200	3 000	827 000
-	-	-	824 750	325 400	106 000	105 400	65 000	180 000	2 950	40 000	-
-	-	-	1 923 750	483 200	172 500	139 400	73 000	180 000	5 650	43 000	827 000
-	-	-	46 600	28 700	12 700	2 700	-	-	2 500	-	-
-	-	-	1 040 480	147 500	62 500	71 400	-	-	1 080	-	758 000
-	-	-	181 480	103 500	41 100	36 400	-	-	480	-	-
-	-	-	75 500	50 200	22 200	3 000	-	-	100	-	-
-	-	-	262 350	143 400	59 600	54 800	-	-	550	4 000	-
-	-	-	1 606 410	473 300	198 100	168 300	-	-	4 710	4 000	758 000
-	-	-	47 200	29 000	12 700	3 000	-	-	2 500	-	-
-	-	-	1 580 220	330 200	136 400	44 200	40 000	933 000	420	96 000	-
-	-	-	298 690	170 400	65 100	62 400	-	-	790	-	-
-	-	-	1 926 110	529 600	214 200	109 600	40 000	933 000	3 710	96 000	-
-	-	-	19 300	13 400	5 900	-	-	-	-	-	-
-	-	-	99 590	60 200	26 600	12 000	-	-	790	-	-
-	-	-	39 500	24 900	11 500	3 000	-	-	100	-	-
-	-	-	158 390	98 500	44 000	15 000	-	-	890	-	-
-	-	55 300	55 300	32 900	14 800	2 600	-	-	5 000	-	-
26 400	72 600	-	157 100	112 400	43 600	1 000	-	-	100	-	-
-	-	187 100	187 100	121 000	53 100	12 000	-	-	1 000	-	-
-	-	54 320	135 840	77 400	31 400	26 400	-	-	640	-	-
-	-	94 900	110 400	65 300	27 800	1 500	-	15 500	300	-	-
-	-	218 900	218 900	153 700	63 000	2 100	-	-	100	-	-
-	-	106 200	106 200	73 600	30 500	2 000	-	-	100	-	-
-	-	-	49 200	30 600	12 500	6 000	-	-	100	-	-
99 300	86 300	671 100	995 200	390 200	145 500	900	296 500	-	100	162 000	-
115 800	239 100	53 700	592 100	437 200	154 800	-	-	-	100	-	-
241 500	398 000	1 441 520	2 607 340	1 494 300	577 000	54 500	296 500	15 500	7 540	162 000	-
245 000	398 000	1 572 020	8 356 000	3 151 000	1 235 000	506 000	409 500	1 132 000	32 500	305 000	1 585 000

ANALYSIS OF THE CONSOLIDATE

A. By Regular Budget estimates anc

Budgetary appropriation section or allocation	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 Informa- and technical services
	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
TOTAL	311 030	352 460	555 590	603 430	1 117 390	774 490	385 210	895 960
OPERATIONAL BUDGET								
Laboratory facilities	-	-	-	-	-	205 600	-	
Monaco project	-	-	-	-	40 000	-	-	-
Exchange and training	-	935 000	-	-	-	-	-	-
Technical assistance	864 000	-	-	-	-	-	-	-
Research contracts	-	-	-	180 000	-	-	-	-
TOTAL	864 000	935 000	-	180 000	40 000	205 600	-	-
TOTAL 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

X III

D BUDGET ESTIMATES FOR 1963

proposed Operational Budget allocations

The General Conference	The Board of Governors	General direction and administrative services	Total estimates and proposed 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
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

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. Informa and technical services
	A. Technical assistance	B. Exchange and training						
Office of the Director General	-	-	-	-	-	-	-	-
Internal Audit	-	-	-	-	-	-	-	-
Department of Training and Technical Information								
Office of the Deputy Director General	-	27 450	-	-	-	-	-	27 450
Exchange and Training	-	1 173 700	-	-	-	-	-	-
Scientific and Technical Information	5 000	5 000	99 000	81 000	105 000	78 000	-	534 960
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	-	-	-	-	-	-	-	15 000
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	14 550	20 700
Sub-total	66 080	81 310	17 450	17 450	114 770	14 550	38 620	260 340
TOTAL Agency funds	1 175 030	1 287 460	555 590	783 430	1 157 390	980 090	385 210	895 960

The General Conference and Board of rnors		General direction and administrative services	Total estimates and proposed 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										
-	-	109 100	109 100	56 600	23 500	19 000	-	-	10 000	-	-
6 000	-	41 300	47 300	29 000	12 300	-	-	6 000	-	-	-
-	-	-	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	1 660	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	196 600	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	-	-	680	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	-	-
,34 500	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	-	-
06 800	92 800	671 460	1 026 900	421 400	153 900	1 000	316 000	-	100	134 500	-
27 700	246 000	58 950	662 800	490 800	171 900	-	-	-	100	-	-
69 000	395 000	1 521 540	2 796 110	1 656 900	619 400	47 040	316 000	15 000	7 270	134 500	-
75 000	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

ANNEX IV

Draft Resolutions

A. REGULAR BUDGET APPROPRIATIONS FOR 1963

The General Conference,

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

1. Appropriates an amount of US $7 337 500 for the administrative expenses of the Agency in 1963 as follows:

Section		United States dollars
1.	The General Conference	275 000
2.	The Board of Governors	395 000
3.	Panels and committees	170 000
4.	Special missions	70 000
5.	Seminars, symposia and conferences	188 000
6.	Distribution of information	245 000
7.	Scientific and technical services and laboratory charges	1 110 000
8.	Salaries and wages	3 063 000
9.	Common staff costs	1 220 000
10.	Duty travel of staff	178 000
11.	Representation and hospitality	32 500
12.	Common services, equipment and non-technical supplies	391 000
		7 337 500

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

(a) US $125 000 from miscellaneous income;

(b) US $90 000 from the Special Account of the United Nations; and

(c) US $7 122 500 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 1960; 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(VI)/200.

[2] INFCIRC/8 and Add.1.

B. OPERATIONAL BUDGET ALLOCATIONS FOR 1963

The General Conference,

(a) Accepting the recommendations of the Board of Governors [1], and

(b) Noting that funds from various sources, estimated at US $152 071, are expected to be available for the Agency's operational programme in 1963,

1. Notes that the Director General proposes to use US $72 529 from the balance available in the General Fund for the Agency's operational programme in 1963;

2. Decides that for 1963 the target for voluntary contributions to the General Fund shall be US $2 million;

3. Allocates the following funds for the operational programme:

	United States dollars	
Operating Fund I		
Laboratory facilities	205 600	
Monaco project	40 000	245 600
Operating Fund II		
Exchange and training	935 000	
Technical assistance	864 000	
Research contracts	180 000	1 979 000
		2 224 600

4. Urges Member States to make voluntary contributions to the General Fund in 1963 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

5. Authorizes the Director General to employ staff for the Agency's laboratory facilities in addition to that for which provision is made in the budget for 1963, provided that the salaries and other costs of such staff are met from revenues arising out of work performed in the laboratory facilities for Member States, research grants, special contributions which may be made for such purposes and other sources extraneous to the Regular and Operational Budgets for 1963.

---

[1] GC(VI)/200.

C. USE OF THE WORKING CAPITAL FUND IN 1963

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 1963; and

(b) That the Fund shall be financed, administered and used in 1963 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 US $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(VI)/200.

[2] INFCIRC/8/Add.1.