



International Atomic Energy Agency

PROGRAMME AND BUDGET FOR 1960

Budget estimates submitted by
the Board of Governors to
the General Conference under
Article XIV. A of the Statute

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LIST OF ABBREVIATIONS

ACABQ	Advisory Committee on Administrative and Budgetary Questions of the United Nations General Assembly
ACC	Administrative Committee on Co-ordination
Agency	International Atomic Energy Agency
ECOSOC	Economic and Social Council of the United Nations
EPTA	Expanded Programme of Technical Assistance
FAO	Food and Agriculture Organization of the United Nations
ICRP	International Commission on Radiological Protection
IMCO	Inter-Governmental Maritime Consultative Organization
TAB	Technical Assistance Board
TAC	Technical Assistance Committee of the Economic and Social Council
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
UNTAA	United Nations Technical Assistance Administration
WHO	World Health Organization
WMO	World Meteorological Organization
<hr/>	
BOARD	Board of Governors of the International Atomic Energy Agency
DG	Director General
DDG	Deputy Director General
GS	General Service category personnel
IG	Inspector General
M&O	Maintenance and Operatives personnel
P	Professional category personnel

NOTE

All sums of money are expressed in United States dollars.

CHAPTER I. INTRODUCTION

A. 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 1960.
2. These estimates were originally prepared by the Director General. On the basis of a first progress report, the Board supplied general policy guidance during its meetings in April 1959, and instructed its Administrative and Budgetary Committee [1] to review and examine in detail each budgetary item and the justification for the estimates prepared by the Secretariat. This review took place during the second half of May, and on the basis of the report submitted by the Committee the Board, at meetings held between 16 and 30 June 1959, gave final consideration to the programme and budget estimates.
3. Some of the principal parts of the scientific programme of the Agency, such as the programme of conferences, symposia and seminars; research contracts; the Agency's safeguards procedures and the schedule of scientific publications have been reviewed by the Scientific Advisory Committee which the Board established on 4 November 1958.[2] The Committee met in Vienna from 4 to 6 June 1959.
4. The preparation of the programme and budget for each year during the early part of the preceding year presents special difficulties. This is particularly true of a young organization which necessarily has not yet acquired much operating experience.
5. The 1959 programme, based essentially on the recommendations of the Preparatory Commission, has provided, in the opinion of the Board, a sound basis for the Agency's initial operations, and it is not proposed to make any major changes of substance or emphasis in 1960. The activities foreseen under the 1959 programme required careful preliminary planning and the selection and recruitment of the scientific staff needed could for obvious reasons be only gradually accomplished. Before any changes are made in the general balance of the programme or any substantial expansions in scope are considered, the initial operations should, in the view of the Board, be developed in full and be consolidated.

[1] For composition and terms of reference of the Committee, see GOV/INF/30.

[2] The Scientific Advisory Committee consists of seven eminent scientists serving in their individual capacities and nominated on grounds of broad experience in, and responsibilities for, the development of atomic energy for peaceful purposes. Its members are:

Professor H. J. BHABHA	(India)
Sir J. COCKCROFT	(United Kingdom of Great Britain and Northern Ireland)
Professor V. S. EMELYANOV	(Union of Soviet Socialist Republics)
Professor B. GOLDSCHMIDT	(France)
Dr. B. GROSS	(Brazil)
Dr. W. B. LEWIS	(Canada)
Professor I. I. RABI	(United States of America).

6. The programme set forth in chapter II therefore represents in essence a continuation of the 1959 programme, taking into account the views expressed thereon during the second regular session of the General Conference and the growing momentum of many of the activities initiated in 1959. The operation of the Agency's laboratory will begin in 1960 as envisaged in the 1959 programme and it is designed to undertake the functions laid down by the General Conference in resolution GC(II)/RES/25, part B, paragraph 3, on the implementation of which the Director General has had consultations with the Scientific Advisory Committee. The Board has again endeavoured to present a programme balanced between those activities that should yield immediate benefit to the less developed areas of the world and those activities that are in the general interest of all Member States. The main areas of work and their relationship to each other are described in the introductory section of chapter II.

7. The Board recommends the adoption of the programme and budget by the General Conference. It wishes specifically to express the hope that the voluntary contributions required for the implementation of the operational part of the programme will be forthcoming to the full extent, since the budget is the financial expression of an integrated programme which should be maintained at its present balance.

B. COMPARISON OF THE BUDGET ESTIMATES FOR 1959 AND 1960

8. The total of the regular (administrative) budget for 1959 amounted to \$5 225 000, whereas the estimate for this part of the budget in 1960 shows a total amount of \$5 843 000, or an increase of \$618 000. The requirements for the operational budget have increased from \$1.5 million to approximately \$2.4 million.

9. It is proposed that the regular budget should allow for increased expenditure on certain activities which, as experience has shown, benefit all Member States. The operational budget provides for a considerable increase, more particularly in the programmes of fellowship and training and of technical assistance: \$2 000 000 as compared with the 1959 estimate of \$1 100 000 for these two items.

10. The enhanced activities of the Agency will demand the creation of a certain number of new posts in the Secretariat, but the experience gained this year and the consequent improvement in methods of work should make it possible to accomplish the additional tasks with a relatively modest increase in staff.

11. It is proposed that in 1960 the Secretariat should comprise under the regular budget 239 Professionals (an increase of 18 posts) and 271 General Service staff (an increase of 27). Of the 18 Professional posts 12 are in the technical departments, and only two of the remaining six are not directly related to the proposed increase in the technical programme. The Director General's authority to make transfers of staff between divisions, to accommodate any shifts of emphasis in the development of the Agency's programme, is another factor in keeping staff increases to a minimum.

12. In following the recommendation of paragraph 13 of the Programme and Budget for 1959, the staff of the Agency is being recruited gradually after careful selection and only after the need for a particular specialist has been fully established. The recruitment of scientific and technical staff must in any event be a slow process since there is a shortage of qualified candidates and considerable difficulty is being experienced in obtaining their release from their current employment. Recruitment will therefore continue to be gradual in 1960 and some lag in the engagement of staff will again occur.

13. The proposed manning table for 1960 does not provide for all the areas of activity in which a potential demand may exist for the Agency's services, and it may therefore become necessary to have recourse to consultants for certain purposes. Reliance on consultants for work of a continuing nature is, however, not deemed advisable since the value of the Agency as a technical organization derives from full-time employment of highly qualified scientific staff.

C. ORGANIZATIONAL STRUCTURE OF THE SECRETARIAT

14. In keeping with the concept mentioned previously that 1960 should be a year of consolidation [3] during which working procedures should be tested and refined, the Board and the Director General consider that no major structural changes in the organization of the Secretariat should be considered at this stage. The present over-all organization has the merit of structural clarity, but it may have to be revised in the light of future demands on the Agency.

15. The post of Special Adviser in the Office of the Director General, established on a temporary basis in accordance with paragraph 34 of the Programme and Budget for 1959, will not be maintained in 1960 owing to the fact that the initial and major problems connected with the establishment of the Agency's headquarters in Vienna have been largely and satisfactorily solved. The Board wishes to take this opportunity of expressing its gratitude to the Special Adviser for the valuable service he has given during the period of the initial establishment of the Agency's headquarters in Vienna. The relations with the Host Government will now be included among the regular functions of the Division of External Liaison.

D. CONDITIONS OF SERVICE

16. A provisional salary scale for staff employed in the General Service category was established in November 1957, following an interim survey by the Secretariat of the best rates then prevailing in Vienna. It is now known that the increasing cost of living has caused a number of important employers in Vienna to increase the emoluments of those of their staff performing work equivalent to that of the General Service staff. The Secretariat is therefore studying the changes introduced by a representative group of employers, to determine what increase in the salaries of the General Service staff is necessary so as to keep them in line with the best prevailing local rates.

17. For reasons connected with the achievement of greater economy and better utilization of staff resources, the Director General decided early in 1959 to employ directly the maintenance staff which had previously performed its services under contract with a commercial firm. A new category of staff called "Maintenance and Operatives Service" was created for that purpose, to which certain staff members formerly employed in the General Service category were also transferred. The staff assigned to the new service is being paid in accordance with a provisional salary scale approved by the Board of Governors. The Board recommends that these arrangements should continue in 1960.

[3] See paragraph 5 above.

E. FORM OF THE BUDGET

18. ACABQ, in its report on the Agency's Programme and Budget for 1959, has noted

"with appreciation that the programme and budget document presents a clear and concise picture of the main lines of the Agency's work programme for 1959, as well as the proposed organization of that programme." [4]

19. The form of the Programme and Budget for 1960 therefore follows closely the pattern of its predecessor, while at the same time an attempt has been made to introduce further refinements and improvements in chapter III - The Budget. Although the budget continues to be basically presented by objects of expenditure, a further effort has been made to group the estimates for major functional activities under specific sections to the extent that the costs of carrying out these functions are reasonably separable and identifiable. Those estimates for functional activities which are segregated in order to give a better picture of the operational programmes under the regular budget do not, however, reflect the full costs of the respective programmes since salaries and wages, common staff costs and common services and supplies cannot be accounted for on a functional basis in a Secretariat which is working as an integrated team. An approximate breakdown of the total budget by broad functions is, however, given in annex I.

20. The following refinements in the presentation of the budget by sections are also deemed practicable in the light of present operating experience:

- (a) By analogy with the practice of the majority of the specialized agencies, the costs of the General Conference and the Board of Governors are shown in separate sections;
- (b) The title of the section "Ad hoc Scientific Advisory Panels" has been changed to "Panels and Committees" in order to avoid the restrictive implication created by the use of the word "scientific", and to facilitate the funding of expenses of the Scientific Advisory Committee under this section;
- (c) A new section "Distribution of Information" is established in order to identify the Agency's programme of technical and non-technical publications;
- (d) The former separate sections "Scientific Supplies and Equipment" and "Contractual Scientific Services" are amalgamated in a new section of "Scientific and Technical Services, Supplies and Equipment";
- (e) The estimates previously presented in the separate section "Temporary Assistance" are, in conformity with the budget of the United Nations, included as a separate item under "Salaries and Wages", with the exception of estimates for the temporary assistance required for sessions of the General Conference and the Board of Governors, and for certain functional activities; and
- (f) Library costs are no longer set forth in a separate section but are shown as an individual item under the new section "Distribution of Information".

21. As to terminology, ACABQ, after noting that, in accordance with Article XIV.B.1 of the Statute, the so-called "administrative" budget covers certain activities of an operational character, has suggested that

[4] United Nations document A/4016, paragraph 11.

- "it would be useful to draw a distinction between
- (a) the regular budget which includes some operational expenses, and
 - (b) a special, extra-budgetary operating fund,
- rather than between 'administrative' and 'operational' expenses." [5]

In order to take account of this suggestion to express the distinction made in Article XIV between the two parts of the budget, in a way which is not misleading, the short title "regular budget" is used in the present document for the full expression "estimates of administrative expenses under Article XIV. B. 1 of the Statute", and the short title "operational budget" for the full expression "estimates of expenses and costs under Article XIV. B. 2 of the Statute". The term "consolidated budget" is used for the budget as a whole.

F. FINANCING OF REGULAR BUDGET EXPENSES

22. The regular administrative expenses are financed from contributions for which Member States are assessed in accordance with the Statute and the Financial Regulations. The scale of Members' contributions was again established for 1959 on a provisional basis by the General Conference, [6] subject to retroactive adjustment by the General Conference during its third regular session in the light of the decision of the United Nations General Assembly on the United Nations scale of assessments for 1959, and in accordance with any increase in the Agency's membership between the second and third regular sessions of the General Conference. The Director General will submit to the General Conference proposals for the revised 1959 scale of contributions, which will also form the basis for the 1960 scale. The 1960 scale will, in accordance with the recommendation made by the General Conference, be definitive and not subject to retroactive adjustments. [7] The Director General will also report on the collection of contributions and of advances to the Working Capital Fund for the year 1959. At the close of the last financial period, 9.4 per cent of contributions to the 1957/58 regular budget and 6 per cent of advances to the Working Capital Fund were still outstanding.

23. An additional source of revenue is expected to develop from the sale of publications and the sale or rental of visual media developed or acquired by the Agency. It is proposed to credit the proceeds to a publications revolving fund which would be used in the financing of reprints of Agency publications and for the promotion of the Agency's publications programme. A draft resolution to establish such a fund and the rules which would govern its use are included in annex IV.

G. FINANCING OF OPERATIONAL BUDGET EXPENSES

24. The principal source of funds for the Agency's operational expenses are voluntary contributions by Member States to the General Fund. At its second session the General Conference approved the recommendation of the Board that the target for 1959 should be fixed at \$1 500 000 and urged Member States to make voluntary contributions of

[5] United Nations document A/4016, paragraph 8.

[6] GC(II)/RES/32.

[7] GC(II)/RES/33.

funds for this purpose. [8] The General Conference also established a Special Committee on Pledges and Voluntary Contributions to the General Fund. [9] At the meeting of this Committee during the second regular session, 23 Member States announced pledges totalling \$853 370, while the representatives of eight additional Member States announced their support in principle without being able to indicate specific amounts. By 30 June 1959, six of these and seven additional Member States had announced further pledges, bringing the total to \$1 122 294. The dependence of the operational programme of the Agency on voluntary contributions introduces an element of uncertainty, as is apparent from the figures given above. Since the Agency's programme represents an attempt to group different types of activities in a balanced way, it must, necessarily, suffer if funds are not forthcoming to finance some of them. Furthermore, since the regular budget is drawn up each year in conjunction with the budget for the operational part of the programme, a full and economical utilization of the staff and facilities approved under one part of the budget cannot be achieved if the other part falls short of the approved target. For these obvious reasons the Board hopes that approval by the General Conference of a specific target for contributions to the General Fund in 1960 will also reflect the willingness of the Member States to make voluntary contributions up to that amount. Furthermore, it is recommended that the programme should be so devised as to permit the gradual accumulation of a reserve in the General Fund in order in part to provide some means of mitigating the element of uncertainty in the flow of voluntary contributions, and of temporarily financing operational projects in advance of the receipt of pledged payments.

25. A second source of funds for the operational budget is EPTA. Through the implementation of a resolution adopted by the General Conference at its second regular session [10] the Agency has become a fully participating organization in this programme.

26. Finally, some revenue to the General Fund might accrue in 1960 from charges levied in connexion with the supply of materials by the Agency or the rendering of scientific services to other bodies or Member States, by the Agency's laboratory which is expected to begin operations in the latter part of 1960. No specific amount can, however, be estimated at this stage.

27. The criteria set forth in paragraph 23 of the Programme and Budget for 1959 for the classification of expenditures as "administrative" or "operational" retain their validity; in particular, operating experience with the fact-finding survey teams has shown that these missions were considered as preparatory to the undertaking of Agency projects and thus financed under Article XIV.B.1(a) of the Statute. Following the visit of each preliminary assistance mission, Member States so visited submitted a number of requests to the Agency for assistance which were formulated with the advice and assistance of the members of the mission during their stay in the requesting Member States.

28. Another group of activities of the Agency, properly chargeable to the regular budget, are those of its laboratory - which will come into operation in the latter part of 1960 - concerned with work, the cost of which would under Article XIV.B of the Statute be defined as administrative expenses (for example research and analysis in connexion with health and safety and safeguards). Other activities of the laboratory would fall

[8] GC(II)/RES/25, part B.

[9] GC(II)/RES/18.

[10] GC(II)/RES/34.

under the operational budget. Only operating experience will permit determination of the proper distribution of costs between the two parts of the budget. The costs of operating the laboratory, including the salaries and wages of its staff, are therefore budgeted at this stage in full under the operational budget. To the extent to which functions financed under the regular budget are performed by the laboratory, the operating fund will be reimbursed through transfers from the appropriate section in the regular budget.

H. PARTICIPATION IN THE UNITED NATIONS EXPANDED PROGRAMME OF TECHNICAL ASSISTANCE

29. Taking into consideration the requests for technical assistance in the field of the peaceful uses of atomic energy which the Agency had received from Governments by the beginning of the present year and the trend they indicate, TAB, at its forty-fourth session in March 1959, decided to raise the global planning share of the Agency from \$200 000 allocated for 1959 to \$600 000 for 1960. To find the additional amount of \$400 000 required for the Agency in 1960, TAB added \$300 000 to the EPTA global planning target for 1960, on the recommendation of its Executive Chairman, and agreed to the transfer of \$100 000 from the Executive Chairman's planning reserve. During the same session of TAB the Agency submitted, within its global planning share of \$600 000, sub-totals for inclusion in the country planning targets of 30 countries, thus bringing the Agency's programming under EPTA into line with the established country-programming procedures. TAB and the executive heads of the participating organizations during the session in May 1959 of ACC recognized that the planning figure of \$600 000 might fall far short of the needs to meet urgent requests, and decided to draw the attention of ECOSOC to the serious problems which might arise if the financial situation of EPTA should not be improved to meet the additional demands made on its resources.

30. The amount of \$600 000 represents the Agency's provisional share in the field programme and it does not include the Agency's administrative and operational services costs for expanded programme activities in 1960. With regard to these costs the Board at its meeting on 22 June 1959 noted that the General Conference had already approved the budget for 1959 prior to the Agency's entry into the expanded programme as a fully participating organization. It also took into account the fact that the 1960 budget included provision of an amount of \$84 000 estimated to cover the identifiable administrative and operational services costs to the Agency for carrying out projects under EPTA. It therefore decided to authorize the Director General:

- (a) To inform TAC that no funds are required to be allocated by EPTA to cover the administrative and operational services costs incurred by the Agency under EPTA in 1959;
- (b) To express the hope that the administrative and operational services costs incurred by the Agency in carrying out EPTA projects for 1960 will be repaid from EPTA funds; and
- (c) To advise ECOSOC that the Agency is willing to consider any long-term proposals which the Council may make to the participating organizations on the question of the allocation of the administrative and operational services costs between the regular budgets of the organizations and the EPTA budget.

31. In communicating the above decision to TAC, its attention has been invited to the fact that the Agency's technical assistance programme is only just beginning and that,

with a growing demand on the Agency's technical assistance, its administrative and operational services costs will also increase. The sum of \$84 000 cannot, therefore, be considered as a ceiling, but will have to be appropriately adjusted if and when the allocation of EPTA funds for project costs to the Agency should vary by more than ten per cent from that for 1960 (\$600 000). The decision of the Board has been before TAC, ECOSOC and TAB at their sessions in Geneva in July. When this sum is allotted to the Agency, it will be credited to the Administrative Fund to offset administrative overhead expenditures in connexion with the Agency's participation in EPTA.

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

32. In accordance with Article XVI of the Relationship Agreement with the United Nations, and in implementation of the policy expressed in paragraph 24 of the Programme and Budget for 1959, the administrative part of that budget was reviewed by ACABQ. The Committee's report was submitted to the General Assembly on 1 December 1958.[11] The General Assembly took note of this report, inviting the attention of the Agency to the observations and suggestions contained in the report of ACABQ and to the views expressed in the Fifth Committee at the thirteenth session of the General Assembly.[12] In developing the Programme and Budget for 1960, the Board has carefully noted these considerations.

33. Following the practice of some of the specialized agencies and with the Board's concurrence, the Director General invited ACABQ to visit Vienna in March 1959 in order to gain a direct insight into the Agency's operations and to continue at headquarters its review of the Agency's administrative and financial practices. The Committee's report on its visit will be submitted to the General Assembly at its fourteenth session in September 1959.

34. The Programme and Budget for 1960, after its adoption by the General Conference, will again be submitted to the United Nations in accordance with the practice which has now been established.

J. USE OF THE WORKING CAPITAL FUND

35. The level of the Working Capital Fund was originally fixed at \$2 million by the General Conference at its first special session,[13] on the basis of a recommendation by the Preparatory Commission that the experience of other international organizations indicated that the size of the Working Capital Fund should amount to approximately 50 per cent of the amount of the annual regular budget.[14] The Working Capital Fund was maintained at the same level in 1959 despite the increase in the regular budget and the authorization for an additional use to be made of this fund in the form of advances up to \$25 000 for projects or activities of a strictly self-liquidating character.

[11] United Nations document A/4016.

[12] General Assembly resolution 1336 B (XIII).

[13] GC.1(S)/RES/7, appendix I.

[14] GC.1/1, paragraph 177.

36. Experience with the rhythm of the collection of contributions on the one hand and the rate of expenditure on the other cannot yet be considered conclusive. The Working Capital Fund remains fixed at \$2 million for 1960, and its ratio to the regular budget has dropped to approximately 34 per cent. This obviously represents a minimum and an increase may have to be considered in future years. It also highlights the necessity for Member States to take any measures which are possible in order to effect payment of their contribution in the early part of the year.

37. No change is suggested in the authorized use of the Working Capital Fund and the text of the corresponding draft resolution is set forth in annex IV.

K. EXTERNAL AUDIT

38. During its series of meetings in June 1959, the Board reviewed the external audit procedures of the Agency, and particularly the need for a Board of Auditors consisting of three persons.

39. On the grounds of economy and administrative simplicity, the Board decided to amend the Agency's Financial Regulations in such a way that the present Board of Auditors would, through the lapse of existing appointments, be automatically reduced to one auditor after October 1960. This will bring the external audit procedures of the Agency into line with those of the specialized agencies.

CHAPTER II. THE PROGRAMME

A. MAJOR PROGRAMME AREAS

I. GENERAL OBSERVATIONS

40. The basic statutory objective of the Agency is to accelerate and enlarge the contributions of atomic energy to peace, health and prosperity throughout the world under safe conditions. The continued growth of the Agency's membership illustrates the widespread interest in making the fullest possible use of the Agency as an effective means of international action. The fact of the Agency's broad membership, embracing all regions of the world and comprising countries at all stages of technical and economic development, affords wide scope for international co-operation in the peaceful utilization of atomic energy.

41. The peaceful uses of atomic energy at the present stage of technological development fall into two broad categories, the application of radioisotopes and radioactive sources to industry, agriculture and medicine and the use of nuclear power for the generation of electricity, heat or for propulsion purposes. All of the Agency's activities are related to the promotion of these applications through the spreading of knowledge and the supply of scientific advice, material and equipment, and through the establishment of regulations ensuring safe conditions for their use.

II. RADIOISOTOPES

1. General

42. Since isotope and radiation sources have a very wide range of social and economic uses, the Agency's work in promoting these uses tends to consist of a large number of diversified activities, each of which may be of relatively limited scope. These activities are somewhat less easy to analyze and classify than, for instance, the Agency's work in the reactor field. It may, therefore, be useful to illustrate in general terms the results which can be achieved in industry, medicine and agriculture by the use of isotopes and radiation sources. In reading the following paragraphs it should be recalled that the various types of help which the Agency is now giving its Member States in each of the fields described, comprise a standard range of activities such as the provision of technical assistance, the distribution of information, the award of research contracts and the supply of equipment. The types of activities are analyzed more fully in part IV of this chapter under the title "Major programme activities". Since radioisotope techniques are used in economic and social fields in which other international organizations play an active role - such as FAO in agriculture and WHO in medicine - Agency projects are being developed, where appropriate, in close consultations with the specialized agencies concerned, and with other interested international bodies.

2. Industry

43. The use of isotopes in industry has already led to very considerable savings, which have been estimated to be many hundreds of millions of dollars. The introduction of isotope thickness gauges has resulted in savings of \$50 million in one country alone.

Industries like the oil industry are benefiting greatly from isotopes and radiation sources through the introduction of oil-well monitors, radioactive go devils, physical cracking and many other devices. Whilst the use of isotopes is giving better or cheaper products by such methods, as well as by the use of penetrating radiation for gamma-ray analysis, radioactivation analysis and the use of tracers in many industrial processes, the knowledge of these applications is still not widespread. The Agency, through its activities, is trying to bring these benefits to more countries, and at the same time to widen the use of isotopes in other industrial fields.

3. Medicine

44. Radioactive isotopes have in recent years been applied in medicine on an ever increasing scale. They have proved particularly useful in clinical research. Insight has been gained into a number of metabolic processes under physiological and pathological conditions which could not have been obtained in any other way. Through the use of radioisotopes new hormones have been found and their chemical structure established. The pathogenesis of a number of diseases is now understood, resulting in considerable gains towards finding effective methods of treatment. In general, isotopes have been found so particularly useful because they permit the clinician to obtain a dynamic picture of life processes, which previously appeared to be of a rather static nature. The whole concept called "dynamic state of body constituents" is based on results obtained with the use of radioactive isotopes.

45. Radioactive isotopes play an equally important role in routine diagnostic work. A number of diagnostic techniques have been worked out and are now so well advanced that they can be used on a routine basis even in a small hospital. A proper diagnosis of thyroid disease cannot be made without the use of radioactive iodine. There are particular disorders of thyroid function which were only recognized after radioactive iodine had been added as a tool to the clinician's armamentarium. An estimation of the blood flow through the liver can be easily made with radioactive gold, and much more elaborate and troublesome procedures have thus been supplanted. The same is true for the estimation of the cardiac output, which can now be done without any loss of blood by using radioiodine-labelled human serum albumin. Great progress has been made in the detection and localisation of certain malignant tumours, and in the case of brain tumours isotope techniques, because of their greater reliability and the smaller risk they entail for the patient, are increasingly replacing older diagnostic techniques. The past few years have also seen a rapid development and improvement of equipment, and instruments are now on the market which are more reliable, more sensitive, easier to operate and less expensive.

46. In therapy there are a few methods of treatment where isotopes are now considered to be the best remedy. There is no better method of treating polycythaemia vera than with radioactive phosphorus. Certain types of thyroid cancer can be cured with radioactive iodine, and irradiation with colloidal radioactive gold can prolong for many years the lives of patients suffering from malignant effusions. It is now possible to destroy completely the hypophysis in patients suffering from breast cancer, during a fifteen minute procedure, whereas previously this involved a dangerous operation of many hours duration.

47. Great progress has also been made in the development of teletherapy machines using large radiocobalt or radiocaesium sources. It is generally believed that conventional X-ray machines for radiotherapy may become obsolete and may be replaced by small caesium units. It is certain that this field of work will greatly expand in the forthcoming years. Not only will established research and diagnostic methods using

radioactive isotopes be applied on an increasing scale, particularly in less developed countries, but it can also be confidently expected that radioactive isotopes other than those tried up to now will be found of value for either research diagnosis or therapy. The use of isotopes in medicine is one of the areas where the less developed Member States can derive immediate benefit from even relatively limited assistance by the Agency.

4. Agriculture

48. The development of isotopes in biological and agricultural research is very interesting. Experiments on corn and tobacco indicate that as a result of studies with radioisotopes a 1 per cent increase in fertilizer efficiency can be realised with these two crops alone which would mean annual savings of ten million dollars.

49. Radioisotopes can accelerate the development of new insecticides and fungicides by assisting in understanding the metabolism of the insect or fungus, and thus determining with considerably greater precision the most suitable point of attack. The loss from plant diseases and pests is estimated at billions of dollars a year. In less developed countries, agricultural losses, particularly in storage, are proportionately much greater than in other parts of the world. The use of radioisotopes, such as cobalt-60, which upon decay give off penetrating gamma radiations, holds promise as a means of disinfecting stored grain by killing the destructive insects.

50. The successful eradication of screw worm fly in one country by sterilization of the males with radiations from cobalt-60 has led to an effort to use the same method to rid other parts of the world of this livestock pest. If successful, savings of millions of dollars can be anticipated.

51. The induction of genetic changes with radiation holds unusual promise in that beneficial mutations, once established, become permanent additions to the improved heredity of the plant or animal. The incorporation of leaf rust resistance in wheat through the use of radiation was recently accomplished and commercial varieties with this improved character are now being developed in seven different countries.

52. Radiation has great potential use in the food and the drug industry, and can be expected to be the first radically new method of preservation in over half a century.

53. Radioactive tracers have been particularly effective tools in unravelling basic problems in animal and plant physiology as, for example, pathways of intermediary metabolism in ruminant biochemistry and in photosynthesis. It has been demonstrated for the first time from beginning to end how plants, by utilizing the energy of sunlight, are able to absorb carbon dioxide, reduce it to form sugar, and regenerate further materials. The elucidation of the complete cycle of carbon reduction in photosynthesis, demonstrable only with radioactive isotopes, may turn out to be one of the most significant economic achievements of the tracer technique.

54. An encouraging beginning is being made in the Agency's work of introducing and spreading these and other benefits of the use of isotopes and radiation. The results of the Agency's work should become more obvious in the next year or two.

III. NUCLEAR POWER

55. The Second United Nations International Conference on the Peaceful Uses of Atomic Energy provided an excellent means of evaluating the stage of development of nuclear

reactors, especially those meant for production of power. Power reactors have come to a stage where their operation is sufficiently reliable for normal operating practice. Accidental shut-down periods have been restricted to very low values and no serious accident has taken place during normal operations. From the technical angle, some types of reactors appear already to be most promising in the short run and a certain selection in the degree of advancement of the different reactor concepts is now possible although it should be clearly stated that it would be meaningless to try to determine at the present stage what will be the best reactor types for power generation in the future. (A good example is that of organic moderated reactors which are now regarded as promising and the concept of which did not exist a few years ago.)

56. Some of the early forecasts of the economics of nuclear power have proved to be somewhat optimistic. While the technology of nuclear power is still rapidly advancing, construction costs are necessarily influenced by the need to make changes in design as more data become available, and by the lack of opportunity to make use of the techniques of mass production. This latter handicap applies, for example, to the manufacture of fuel elements. Much effort is being devoted to securing an improvement in the "burn-up" or in the operation of reactors by changes in the design of fuel elements. Moreover, the design of these elements varies materially from reactor to reactor. When some stability in the design of reactors has been obtained and variations in the types of fuel elements have been considerably reduced, it should be possible to bring costs well below the estimates accepted for the next few years. Changes in the availability and prices of coal and oil also affect significantly the comparative economics of nuclear power. These various considerations have necessarily an important bearing on the appraisal of potential nuclear power programmes by Member States.

57. In the present stage of technology the comparative costs of nuclear power are most favourable where the power unit is large and the load factor high, and where the capital can be secured under advantageous conditions. Under these circumstances it was to be expected that the expansion in the use of nuclear power would first occur in those highly industrialized areas which have practically exhausted their resources of conventional power and where a large distribution grid permits the early construction of a power station of substantial size providing the base-load for a large distribution network. Certain Member States in which these conditions apply have sought assistance and expert advice from the Agency. In other less industrialized areas where the total demand for electricity is comparatively smaller the approach to the use of nuclear power will inevitably be different. It is conceivable, however, that in some situations where the cost of generating power by conventional means may be particularly high, it may be economically feasible to use small or medium power reactors of the types at present available. With these considerations in mind the General Conference at its second regular session recommended that the Board should make a special study of the possibilities of making use of small and medium nuclear power reactors to determine to what extent they could contribute to a solution of the power needs of the less developed countries. [15] In the light of these considerations, the Agency will have to consider the whole range of sizes of power reactors, bearing in mind the long-term aspects of generation and distribution of power.

58. Power reactors should not be thought of as capable of generating only electricity; industrial and space heat production must also be considered. Much technological

[15] GC(II)/RES/27.

progress is still needed for production of industrial heat at high temperatures (for instance, more than 500 degrees centigrade). As regards low temperature heat, the technical problems appear to be solved and the choice between conventional and nuclear installations will have to be made on economic grounds.

59. The development of the use of nuclear reactors for marine propulsion necessarily lags behind the development of land-based reactors. However, the technical reliability of a particular design of nuclear reactors as a marine propulsive unit has been demonstrated by the recent cruises of nuclear submarines; a powerful nuclear propelled ice-breaker is almost completed; and a merchant ship is also being built and will be in service some time in 1961. Furthermore, six Member States have announced that they are considering plans for building nuclear propelled merchant ships. At this juncture, however, it would seem that the comparative economics of a nuclear propulsion unit in relation to existing methods of propulsion are likely to preclude the use of the former in a commercially operated merchant vessel for some years to come. It is possible, however, that certain states may wish to acquire experience in the use of nuclear propulsion units in vessels likely to provide the most favourable economic conditions, such as a large tanker which can be kept at sea for a high proportion of its working life. The Agency will have a major part to play in the development of economic nuclear propulsion units and in the technical studies relating to the safe operation of such ships.

60. The safety of land-based nuclear reactors is obviously a question of major concern to the Agency. Although nuclear reactors have up to now proved very reliable, and, in the very few cases in which accidents have occurred, outside contamination has been limited, an accident in a major nuclear plant could have incomparably more serious consequences than almost any conventional plant accident. A nuclear accident might result in contaminating the atmosphere, the land, rivers, and even the sea. In many cases international problems could arise calling for immediate decisions in order to cope with emergencies and this points to the need for agreements as far as liability is concerned. At present, however, the most urgent problem is that of safety of research reactors. As is well known, the number of such facilities installed all around the world is increasing rapidly, and it is clear that many countries, especially those with less experience in reactor operation, are looking towards the Agency for guidance.

61. Some Member States may wish to secure the advice of outside experts before building and operating nuclear reactors within their territory, especially from the point of view of safety. The main fields in which an expertise may be needed are in siting the reactor, in ascertaining that the design of the reactor meets the requirements of safety and in establishing measures and procedures for safe operation. The ultimate aim is to minimize the risk of an accident and any damage to life and property which may arise. The Agency may be called upon to give advice on safety in the above respects without, however, assuming any legal responsibility.

62. Nuclear reactor construction is but one part of the large cycle of industrial activities needed to develop nuclear power. These extend from the mining of uranium and thorium ores to the fabrication of nuclear fuel elements and their re-processing after irradiation including the safe containment of radioactive wastes. They also include production of other specific materials such as heavy water, beryllium, zirconium, etc., and the manufacture of all types of nuclear equipment. In all these fields, the Agency must be active in promoting exchange of information and in assisting Member States by providing advice and experts, as well as by facilitating international transactions.

IV. MAJOR PROGRAMME ACTIVITIES

63. The means by which the Agency can promote the peaceful uses of atomic energy, both with respect to isotopes and to nuclear power, can be grouped under the five major programme activities described below. The present budget attempts to maintain a proper balance between them, giving due priority to those activities which are of most immediate interest to the less developed Member States without, however, neglecting work which will benefit the membership of the Agency as a whole, and which are urgent because they will help to create, on an international basis, safe conditions for the further development of atomic energy programmes.

64. The Board believes that the suggested programme of the Agency for 1960 comprises in a balanced manner all the various types of assistance that the Agency can with its present resources render to the less developed countries for the promotion of the peaceful uses of atomic energy, and fulfils the mandate given by the General Conference at its first special session [16] on the basis of the guiding principles contained in the report of the Preparatory Commission.

1. Technical assistance activities

65. The Agency's programme embraces all the standard types of technical assistance. Because the vast majority of countries are only in the early stages of development of atomic energy for peaceful purposes, a special approach was chosen by the Agency to make an initial and broad assessment of requirements through the despatch to various regions of the world of preliminary assistance missions which are composed of experts as well as technical assistance administrators. At the request of the Member States visited, these missions review their facilities and advise on the programmes for which Agency assistance could most profitably be provided. The reports of these missions provide the Secretariat with background material which facilitates the evaluation of specific projects when they are submitted. As an alternative approach the Agency is also despatching individual experts for preliminary appraisals of specific projects in Member States.

66. In addition to these general preliminary assistance missions, the Agency is also organizing smaller missions covering a single field - such as isotopes, power or training - to groups of Member States that wish to receive a preliminary appraisal of their facilities or their programmes by an international team of experts.

67. Emphasis will now rapidly shift to the second stage in the Agency's technical assistance programme which consists of meeting specific requests for experts to assist Member States in initiating and executing atomic energy projects. These experts who will have to be recruited with the help of the more advanced Member States are expected to take up assignments ranging from a few months to a year or longer.

68. In connexion with requests for experts, increasing demands are made on the Agency for equipment, and a policy is being elaborated to meet such requests with due regard to the Agency's financial limitations.

69. As the third stage in its technical assistance work, the Agency will endeavour to arrange for international evaluations for Member States wishing to have scientists of international eminence review, for instance, the health and safety aspects of advanced national projects or facilities.

[16] GC.1(S)/RES/5.

70. The training programme of the Agency has expanded rapidly with the help of the substantial funds made available for it and the offers of free places made by a number of Member States possessing specialized schools and training institutions. As a result of this programme a nucleus of qualified atomic scientists and technicians will exist in a few years in most of the Member States of the Agency.

71. The training programme is not limited to providing opportunities for students from less developed countries to study in advanced centres. It is being expanded to render assistance by creating training facilities in the less developed Member States themselves. This assistance takes the form of exchanges of teaching staff and locally organized courses as well as help in the establishment of national or regional training centres. The two mobile isotope laboratories are proving useful in arranging local training courses.

2. Distribution of information

72. The Agency is playing an active role in collecting scientific information and in spreading it among Member States. This is done through a central atomic energy library as well as by the publication of bibliographies, scientific surveys and monographs and the standardization of terminology. The Agency has already published a number of scientific and technical papers including the first volumes of a directory of nuclear reactors and of an international directory of radioisotopes.

73. Another important means of spreading knowledge is the holding of scientific conferences, seminars and symposia. As a general rule, instead of organizing large conferences of broad scope, the Agency is concentrating its efforts on the promotion of smaller meetings dealing with specific subjects. This policy reflects the fact that atomic sciences are becoming increasingly specialized. Through this programme it is hoped to carry forward the valuable work of the Second United Nations International Conference on the Peaceful Uses of Atomic Energy in Geneva.

3. The supply of materials and equipment

74. The Agency's role as a supplier of special fissionable and source materials is gradually taking shape. Basic supply agreements have been concluded with the three Member States that have offered special fissionable materials. The extent to which this function will develop depends on the specific terms and conditions that can be negotiated for individual transactions as and when requests are received from Member States. The first such transaction involves the supply to Japan of three tons of natural uranium which were donated to the Agency by Canada. In soliciting offers for the sale of this material, the Agency conducted the first international bidding in this field.

4. Regulatory activities

75. A most important programme of the Agency which is of benefit to its membership as a whole, concerns the establishment of international standards and regulations to govern operations involving radiation and radioactive materials. Many of the health and safety problems arising from the peaceful uses of atomic energy are inherently international in character. Although the Agency can only promulgate binding regulations with respect to its own operations or projects carried out under its aegis, the impact of its work is much broader. Internationally recognized standards can provide a valuable guide in a field where national legislation is still in a preparatory stage, or exercise a harmonizing influence whenever national regulations are being revised. The manuals which the Agency publishes are receiving wide circulation and the recommendations contained therein are being increasingly applied by users of radioactive materials in all Member States.

76. The first such manual concerns the safe handling of radioisotopes and plans for a manual on the safe operation of research reactors are being studied. Regulations are now being elaborated for the transportation of large radiation sources and of irradiated fuel elements, and for the disposal of radioactive wastes. All of these problems are international in scope and the need for international action on them was frequently stressed during the Second United Nations International Conference on the Peaceful Uses of Atomic Energy in Geneva.

77. An important ancillary problem is the organization of emergency aid in the event of nuclear incidents. The Agency is also studying the question of third party liability and state responsibility. An eventual international agreement in this field would materially advance the development of atomic energy programmes.

78. As the Agency is not the only organization concerned with these problems, care has to be taken to develop its activities in the regulatory field in co-ordination and co-operation with other organizations. In providing machinery for work on a world-wide scale the Agency will usefully complement national or regional activities in this field. It draws on the experience of bodies such as UNSCEAR and ICRP.

79. By the terms of the statute the Agency is required to develop safeguards procedures to ensure that assistance made available by the Agency is not used in such a way as to further any military purposes.

80. The Agency is also working on standardization problems, in particular those of radiation measurements. In this respect it maintains close co-operation with the International Bureau of Weights and Measures, the International Organization for Standardization, and the International Commission on Radiological Units and Measurements.

5. Research and scientific services in support of the operational programme

81. Provision is made in the budget for contractual scientific services to enable the Agency to promote research on specific questions deemed necessary for the fulfilment of its statutory functions. Research contracts are also awarded as a form of technical assistance to institutions in less developed Member States desirous of expanding their research work in the field of atomic energy.

82. The establishment of the Agency's laboratory facilities will permit it to carry out analytical and standardization work. These facilities will also be available for services to Member States or to international bodies such as UNSCEAR.

B. PROGRAMME OF WORK OF THE SECRETARIAT

83. In the following section the programme of work of each division of the Secretariat is described in relation to the main functions of the Agency. The paragraphs about each division show its present work, and in greater detail the expected development of its activities in 1960 as a justification of its staff requirements for that year. To facilitate comparison, the initial manning table of each division, as well as its staff in 1958 and approved 1959 manning table, are also given. The need for flexibility in the recruitment and assignment of staff, to which attention was called in paragraph 30 of the Programme and Budget for 1959, continues to be felt; the tabulation of staff by divisions in this chapter is therefore not repeated in chapter III, but is set forth, for information, in annex II.

I. OFFICE OF THE DIRECTOR GENERAL

1. Office of the Director General

Table 1

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
DG		1	1	-	1
D-1/2	a/	2	2	(1)	1
P-3		1	1	-	1
Subtotal		4	4	(1)	3
GS		2	2	-	2
Total		6	6	(1)	5

a/ No detailed budgetary provision.

2. Office of Internal Audit

Table 2

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
P-5	1	1	1	-	1
P-3	-	-	-	1	1
P-1	1	-	-	-	-
Subtotal	2	1	1	1	2
GS	1	2	2	-	2
Total	3	3	3	1	4

(a) Functions and responsibilities

84. The functions of the office are to review financial and other transactions in order to ensure:

- (a) The regularity of the receipt, custody and disposal of all funds and other financial resources of the Agency;
- (b) The conformity of obligations and expenditures with the appropriations and the financial rules and regulations; and
- (c) The economic use of the resources of the Agency.

(b) General statement

85. In order to safeguard its full independence, the office is attached directly to the Office of the Director General.

86. It is expensive and uneconomic to conduct an audit of all the financial transactions. It is therefore proposed to apply a percentage check to cover as wide an area as possible with the limited staff available. This is in conformity with normally accepted auditing standards.

(c) Programme of work for 1960

87. The programme of work for 1960 will be the same as for 1959, except that since total expenditures are expected to increase, the number of transactions is also likely to grow.

(d) Explanatory statement on staff

88. The staff estimate for 1959 was necessarily tentative. Operating experience has shown that a single Professional staff member cannot conduct a satisfactory test check of all the financial transactions of the Agency. Accordingly, it is proposed in 1960 to add one additional Professional position at the P-3 level. The incumbent of this new position will also, as a part-time duty, act as secretary of the Agency's Staff Pension Committee, preparing documentation for the consideration of the Committee and the United Nations Joint Staff Pension Fund.

II. DEPARTMENT OF TRAINING AND TECHNICAL INFORMATION

3. Office of Deputy Director General for Training and Technical Information

Table 3

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
DDG		1	1	-	1
P-3	a/	-	1	-	1
P-1		-	1	-	1
Subtotal		1	3	-	3
GS		1	1	-	1
Total		2	4	-	4

a/ No detailed budgetary provision.

4. Division of Exchange and Training of Scientists and Experts

Table 4

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	2	2	2	-	2
P-4	5	5	6	1	7
P-3	1	1	1	-	1
P-2	-	-	1	-	1
Subtotal	9	9	11	1	12
GS	9	9	9	5	14
Total	18	18	20	6	26

(a) Functions and responsibilities

89. The responsibilities of the division are:

- (a) To establish and direct the Agency's fellowship programme;
- (b) To arrange the exchange of scientific and technical personnel between Member States;
- (c) To assist Member States in developing or establishing training programmes for the peaceful uses of atomic energy; and

- (d) To establish, whenever deemed necessary, training courses and related activities, and to study the need for establishing co-operatively financed regional training centres.

(b) General statement

(i) Fellowship programme

90. In 1958 the Agency received 287 applications from 30 countries and awarded 210 fellowships in 20 host countries. Of these 102 were type I and 108 were type II fellowships. By 31 December 1958, 94 fellows had been accepted by host countries, 23 of whom had started their studies and one had completed his studies.

91. During December 1958, the Agency sent out nomination forms to all Member States and requested governments to submit their fellowship requests for 1959. While applications for special training courses are received throughout the year the deadline for applications for the normal university academic year is 31 March. It is expected that far more applications will be received in 1959 than in the previous year.

(ii) Exchange of scientists

92. This continuing programme will provide for the exchange of visiting professors to give special courses in the theoretical and experimental aspects of nuclear physics, radiochemistry, etc.; the exchange of visiting scientists, engineers and other specialists to give courses in special techniques applied to specified research problems; and the sending of experts and consultants, at the request of Member States, to advise on problems of training technical and scientific personnel in their universities and institutes. The above programme was not in operation in 1958 because no funds were available in the budget for this purpose. The exchange unit of the Division of Exchange and Training, however, is to start work in 1959.

(iii) Training courses and related activities

93. It is the division's responsibility to organize, on request, training courses open to trainees from all Member States in the peaceful uses of atomic energy and, if requested by interested Member States, to study the need for establishing co-operatively financed regional training centres, and to consider taking an active part in the planning or operation of such centres. A study group of six experts was sent to Latin America in 1958 to make a survey of:

- (a) The need for establishing a regional training centre or centres in Latin America;
- (b) The existing facilities that are being or could be used for training; and
- (c) The scientific, technological and industrial conditions of the countries visited, in relation to their needs and possibilities for training.

It is expected that the Agency will receive further requests for similar surveys to be made in other areas of the world in 1959 and 1960.

(c) Programme of work for 1960

94. As mentioned above, only 23 fellows started their studies in 1958. The average duration of a fellowship is approximately ten months which means that 70 to 80 per cent of the 1958 fellows will still be studying in 1960. The bulk of applications were received

and most of the candidates for the 1959 programme were selected between March and May, but from the experience of the Agency and other international organizations, there is a lapse of about six months between the date an application is received and the time a candidate takes up the fellowship. Thus, under the 1959 fellowship programme, most of the fellows will only begin their studies in 1960, and all of them will be studying during that year.

95. It is expected that in 1960 the fellowship programme will be further expanded and the Agency will receive a much larger number of nominations than in 1959, and will award no less than double the number of fellowships. This will increase the work involved in the study of candidates' dossiers; the drafting of study programmes; the distribution and placing of candidates in training centres and laboratories; the supervision of the activities of fellows; periodical consultation with the deans of the institutes and with the scientists with whom the fellows are working; and in the receipt and analysis of the periodical and final reports submitted by fellows. The experience gained during the first two years of the fellowship programme will enable the division to refine the criteria, which it applies in selecting candidates. [17] The degree of care exercised in selecting candidates has of course an important bearing on the number of openings made available to students holding Agency fellowships.

96. The exchange unit only began its work in 1959 and it is not yet possible to foresee the amount of work involved, though an exchange of scientists and professors should be effectively under way by 1960 and budgetary provision is being made for 25 exchanges. The Agency has received further requests in 1959 to study the need for establishing regional training centres and more requests are expected in 1960. As a result of the studies already made the Agency may be asked in 1960 to help organize training courses and to plan and operate regional training centres, co-operatively financed by Member States.

[17] The main criteria are as follows:

1. The qualifications of the candidate
 - (a) Academic records
 - (b) Scientific activities and/or professional experience
 - (c) The extent to which the candidate has clearly defined the training programme he wishes to follow
 - (d) The candidate's need of the proposed training
 - (e) Linguistic proficiency
 - (f) Reference letters
2. The nominating Member States' needs
 - (a) The relation of the training requested to the states' programme and projects in the field of the peaceful uses of atomic energy
 - (b) The manner in which the candidate will be employed after the completion of his training
 - (c) The extent to which the nominating government is prepared to assure that suitable employment in the peaceful uses of atomic energy will be offered to the candidate for a period of not less than two years when he has finished his course
3. The availability of training opportunities in host countries that match the training requested.

97. The division is planning to organize several symposia and conferences on education and training. A regional symposium on education is planned for South East Asia in 1960 to follow up the Saclay meeting on the training of specialists held in July 1959.

(d) Explanatory statement on staff

98. The number of new fellows in the 1960 programme, and the large carry-over of fellows from 1958 and 1959, will necessitate additional staff. One additional Professional Officer at the P-4 level is needed to assist in the study of candidates' dossiers, the drafting of programmes, and the distribution and placement of candidates in training centres and laboratories. He will also assist in supervising the activities of fellows selected under the 1958 and 1959 programmes, and especially in consultations with the tutors and in the analysis of periodical and final reports submitted by fellows.

99. As the exchange unit has only started its work in 1959, the Professional staff approved for that year will be sufficient to begin with. There is little doubt that in 1960 the work of this unit will expand, but at present it is not possible to assess the additional staff that may be required. Should the unit need help in the second year of its operation, it is proposed to let the additional P-4 requested above devote part of his time to this work as well.

100. In addition to their normal duties, some Professional staff of the division will also serve as members of the various missions that are being sent abroad by the Agency.

101. Judging by the experience of other United Nations agencies as well as that of the division, not more than 100 fellowship cases can be successfully handled each year by a single staff member in the General Service category; in fact the Geneva office of UNTAA limits this number to 70. Therefore, to deal with more fellows in 1960, as well as to handle fellowships carried over from 1958 and 1959, the fellowship office of the division will require eight General Service staff in 1960. In addition three secretaries are needed, one for the Director of the division and one each for the two senior officers. Finally one post in the General Service category is needed for the exchange unit, and two for the training unit. The total number of General Service posts required for the division in 1960 is thus 14.

5. Division of Scientific and Technical Information

Table 5

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	3	1	1	-	1
P-4	9	7	7	2	9
P-3	4	7	7	-	7
P-2	-	1	3	-	3
P-1	-	-	4	-	4
Subtotal	17	17	23	2	25
GS	24	24	29	4	33
Total	41	41	52	6	58

(a) Functions and responsibilities of the division

102. In addition to the general responsibilities set forth in the report of the Preparatory Commission and in paragraph 73 of the Programme and Budget for 1959 the division has now undertaken the task of collecting information for legal annotations and bibliographies on the peaceful uses of atomic energy to be prepared in co-operation with the Legal Division. The division has also been assigned certain co-ordinating tasks, for instance, the co-ordination of the Agency's scientific and technical conferences and panel meetings and of technical publications.

103. It was found convenient in 1958 to divide the work of the division into four main units, namely, library, scientific documentation, conferences, and editing and publications. The functions and responsibilities of each unit in 1960 are set out in detail below.

Library

(a) Functions and responsibilities

104. The functions and responsibilities of the library are:

- (a) To acquire as much pertinent material as possible and to arrange it into a usable collection of information for the Member States and for the staff of the Agency;
- (b) To develop ways and means for the rapid diffusion and exchange of information to Member States and to assist Member States in solving their library problems; and
- (c) To assist in the production of bibliographies and reports, and to help the research work of the Agency by maintaining files and collections in the library, and by liaison with other libraries whose collections contain materials not found in the Agency's library.

(b) General statement

105. The work of acquiring material for the library collection started in 1958, and has now increased to a substantial level. The average intake of books and documents per month is:

	<u>1958</u>	<u>1959</u>
Books	45	360
Documents	450	900
Total	<u>495</u>	<u>1 260</u>

106. The legal documentation in the library is being increased in 1959 so as to enable it to provide information on the legal aspects of the peaceful uses of atomic energy, and jointly with the Legal Division, to issue annotations or abstracts of new legislation on subjects of topical interest.

107. The reference collection of the library (abstracts, indices, glossaries, dictionaries, directories, etc.) is being expanded to the level necessary to enable the Agency to produce scientific and technical publications, answer technical enquiries and to assist in carrying out its normal technical work. Arrangements have been made to enable the Agency's staff to have access to other libraries such as the library of the Institute of Physics of the University of Vienna.

108. Requests for copies of reprints, documents, charts, etc., are increasing both from the Secretariat and from Member States, and equipment is available for reproduction of books or documents in full or reduced size.

109. The library subscribes to some 134 periodicals, and Member States are providing free of charge a further 94, while the United Nations and its agencies donate 47, and private sources five.

(c) Programme of work for 1960

110. The activities of 1958 and 1959 will continue and further efforts will be made to increase the usefulness and efficiency of the library. It is expected that the number of technical reports received from Member States will continue to increase; at the same time the amount of commercially produced technical literature bought by the Agency will continue to grow to ensure that the Secretariat is informed of the latest methods, theories and regulations regarding the peaceful uses of atomic energy.

111. The outward flow of technical information from the Agency is also expected to expand. Information will be diffused to Member States through the distribution of bibliographies, lists of new materials and by the reproduction of pages of technical publications in full size or in microcopy. The demand for the latter is expected to be extremely heavy, and microfilm facilities have been set up jointly with the unit of documentation. In addition the library will continue to service the Secretariat of the Agency. As indicated in paragraph 106 above, it is expected that there will be a particular increase in the documentation of atomic energy legislation.

(d) Explanatory statement on staff

112. The increased work involved in handling the documentation on atomic energy in general and the legal aspects of atomic energy problems in particular, as well as in the provision of full-size and microfilm copies of publications, requires a small increase of staff in the General Service category. A total of three persons will be needed, one for legal bibliographical work, one for the full-time operation of the copying service and the third for assistance in circulating and controlling materials lent by the library.

Documentation

(a) Functions and responsibilities

113. The documentation unit is responsible for:

- (a) The classification of selected scientific and technical information received by the Agency;
- (b) The preparation of reports, bibliographies and abstracts of articles on subjects of special interest to Member States both upon request and within the framework of the Agency's working plans;
- (c) The preparation of resumés and surveys of subjects of special interest (possibly in co-operation with other divisions or under contract with external organizations); and
- (d) The preparation of a bulletin of scientific and technical information containing reviews, abstracts, news and notes, which is now under consideration.

(b) General statement

114. The unit was established in 1958 by the recruitment of scientists versed in the general fields of nuclear physics, biology, chemistry and engineering. In 1959 scientists in the fields of raw materials, reactors and electronics also joined the unit. During these two years, appropriate methods of work for the section were established and put into effect and a system for the classification of scientific publications was drawn up and introduced. A reference catalogue was started. Plans were made for the publication of a bulletin of scientific and technical information and a list of subjects to be reviewed and included in the bulletin was prepared and arrangements made with leading scientists to contribute to it. The first number of the bulletin is expected to be published later in 1959. Bibliographies on the uses of high-energy radiation in therapy, small and medium-sized reactors, fuel elements and reactor components were prepared. The unit also established relations with other leading centres of scientific documentation.

(c) Programme of work for 1960

115. In 1960 the programmes described above will be further expanded. Particular attention will be given to:

- (a) Arrangements for the preparation of additional reviews on some of the most important problems of the peaceful uses of atomic energy, six issues of a bulletin of scientific and technical information and other bibliographies;
- (b) The preparation of a unified international classification system in the field of applied atomic energy and further studies of methods to mechanize the work of dealing with scientific and technical information; and
- (c) Assistance to less developed Member States, by arranging exchanges of specialists or by other means, to create centres of information on the peaceful uses of atomic energy.

Conferences

(a) Functions and responsibilities

116. The functions and responsibilities of the conference unit are:

- (a) To prepare, in co-operation with interested divisions, the programme of scientific symposia and conferences for submission to the Director General and the Scientific Advisory Committee, and to organize scientific symposia and conferences in co-operation with the technical divisions primarily concerned and to co-ordinate technical conferences and panel meetings of the Agency;
- (b) To develop liaison on organizational matters concerning scientific conferences, with appropriate international and national organizations;
- (c) To compile and issue to Member States, at regular intervals, a register of films on the peaceful uses of atomic energy, arrange for their acquisition by the Agency and make them available to Member States;
- (d) To maintain a register of world conferences, etc. in the field of atomic energy and collect all relevant documentation for such meetings, and to distribute it to Member States;

- (e) To foster the exchange of information on the peaceful uses of atomic energy inter alia through the use of a coupon scheme; and
- (f) To develop co-ordination and liaison on scientific and technical matters of concern to the division, such as scientific terminology.

(b) General statement

117. In 1958 most of the work of the unit consisted of planning and making preliminary arrangements for the conference programme for 1959. Valuable experience was gained through the association of certain members of the staff of the division with the planning and holding of the Second United Nations International Conference on the Peaceful Uses of Atomic Energy in Geneva.

118. A programme of conferences and symposia for 1959 has been prepared in co-operation with the scientific and technical divisions of the Agency. The programme was submitted for approval to the Scientific Advisory Committee, and was later approved by the Board.

119. The following scientific meetings have already taken place in 1959:

- (a) Medical Radioisotopes Scanning Seminar (co-sponsored by WHO), Vienna;
- (b) Symposium on Radioactivation Analysis (jointly sponsored by the Agency and the Joint Commission on Applied Radioactivity of the International Council of Scientific Unions), Vienna;
- (c) Seminar on Training of Specialists in the Peaceful Uses of Atomic Energy (co-sponsored by UNESCO), Saclay, France; and
- (d) Conference on Application of Large Radiation Sources in Industry and Especially to Chemical Processes, Warsaw, Poland.

It will be seen that two of the Agency's scientific meetings have been held outside Vienna at the invitation of the governments concerned and in conformity with wishes expressed by the General Conference at its second regular session. [18]

120. The further meetings scheduled for this year are a symposium in Vienna on the metrology of radionuclides and a conference on the disposal of radioactive waste to be held in Monaco, at the invitation of the Principality, in November 1959. Lists of forthcoming technical meetings of interest to Member States are being prepared and issued to all Member States.

121. A register of films available on loan from the Agency has been issued. The films were acquired for the Agency during the Second United Nations International Conference on the Peaceful Uses of Atomic Energy from nine producing countries, and 82 films are in the possession of the Agency. Films have been loaned to some eight Member States.

122. A contract was awarded in 1958 for a survey of present work on terminology in the atomic energy field. The survey has since been circulated to interested organizations in Member States, and discussions are in progress to plan further work in which the Agency would have the role of co-ordinator.

(c) Programme of work for 1960

123. The work of this unit in 1960 will be a continuation of previous activities:

[18] GC(II)/RES/28.

- (a) The unit will plan and organize conferences and symposia in accordance with a programme based on the recommendations of the Scientific Advisory Committee;
- (b) Plans will also be made for a programme of scientific conferences and symposia for 1961. One of the conferences has already been considered by the Scientific Advisory Committee, namely that on radioisotopes in biological science and medicine; and
- (c) The work of the unit in connexion with the issue of a register of world conferences, the acquisition and lending of films, co-ordination of scientific meetings organized by the Agency and co-ordination of work in the field of terminology will continue.

Editing and publications

(a) Functions and responsibilities

124. The functions and responsibilities of the unit are:

- (a) To act as secretariat of the Publications Committee which has the function of co-ordinating all publication work including compilation of the annual publications programme and preparation of the initial budget estimates for technical publications;
- (b) To edit scientific and technical publications arising from activities of the Agency, to collate master copies with other language editions, and to prepare specifications for the publishing of each manuscript;
- (c) In co-operation with the Division of Conference and General Service, to co-ordinate the production of scientific and technical publications, their distribution and sales publicity; and
- (d) To safeguard, in consultation with the Legal Division, the Agency's interests in publication rights, translations of its publications, etc.

(b) General statement

125. The scope of the publications programme is directly related to the Agency's whole programme of work. Whereas in 1958 only one scientific publication and two programme brochures were produced, the 1959 programme includes the production of at least 20 publications in one language only; the number would be much larger if the various other language editions were taken into account. The Director General has therefore set up, within the Agency, a Publications Committee to advise him on all publication matters and to co-ordinate all necessary arrangements for carrying out the programme.

126. The 1959 programme includes the manual on "Safe Handling of Radioisotopes"; the proceedings of the conference on nuclear electronics organized by the Société des Radio-électriciens, Paris; the proceedings of the symposium on "Medical Radioisotope Scanning"; the "Directory of Nuclear Reactors"; the "International Directory of Radioisotopes"; and various brochures like "Technical Assistance"; "Nuclear Science Fellowships"; bibliographies and reviews, many of which were produced in more than one language.

(c) Programme of work for 1960

127. The publications programme for 1960 will consist of the scientific and technical publications produced by the Agency and indicated in section 6 of Chapter III - The Budget - and which have been approved for publication.

(d) Explanatory statement on staff

128. Because of the unexpectedly rapid expansion of the Agency's programme in 1959 a number of temporary posts had to be established. The 1960 publications programme involves even more work; it will be necessary, therefore, to establish as a permanent post one additional scientific editor at the P-4 level for the editing of publications listed in the annual publications programme, and one scientific editor specialized in thermonuclear physics, assisted by one General Service staff member, to be responsible for the editing of the international journal on thermonuclear fusion and plasma physics recommended by the Scientific Advisory Committee.

III. DEPARTMENT OF TECHNICAL OPERATIONS

6. Office of Deputy Director General for Technical Operations

Table 6

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
DDG	a/	1	1	-	1
P-3		-	1	-	1
P-1		-	1	-	1
Subtotal		1	3	-	3
GS		1	1	-	1
Total		2	4	-	4

a/ No detailed budgetary provision.

7. Division of Economic and Technical Assistance

Table 7

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	2	2	2	1	3
P-4	1	1	2	4	6
P-3	3	3	4	-	4
P-2	-	-	-	2	2
P-1	-	-	-	-	-
Subtotal	7	7	9	7	16
GS	7	6	6	3	9
Total	14	13	15	10	25

(a) Functions and responsibilities

129. The division has two major responsibilities, namely:

- (a) Technical assistance; and
- (b) Economic studies and evaluation.

130. In the technical assistance field, the responsibilities are:

- (a) To provide technical assistance to requesting Member States under the Agency's regular technical assistance programme and EPTA;

- (b) To plan and organize missions for carrying out general or special technical assistance projects, such as preliminary assistance missions [19] and special survey missions;
- (c) To assist Member States in making arrangements to receive technical assistance from other Member States; and
- (d) To co-ordinate the substantive aspect of the work relating to technical assistance in consultation with the relevant divisions of the Agency.

131. The responsibilities in the economic field are:

- (a) To undertake economic evaluation of technical assistance programmes;
- (b) To assist Member States, where possible, in making arrangements to secure external financing for projects sponsored or aided by the Agency;
- (c) To undertake studies relating to the economic aspects of peaceful applications of atomic energy including the collection of relevant information and statistics;
- (d) To conduct or arrange economic surveys relating to the Agency's projects and technical operations; and
- (e) To provide economic and statistical service to the Secretariat as necessary.

132. The studies and surveys referred to in paragraphs 130 and 131 above were undertaken, where appropriate, in co-operation with the United Nations and the specialized agencies.

(b) General statement

133. The initial programme and budget and the Programme and Budget for 1959 recognized that one of the most important of the Agency's tasks is the provision of technical assistance. This has been fully borne out by the experience acquired so far and the number and nature of technical assistance requests received during 1958 exceeded earlier expectations.

134. While the small 1958 programme was more than fulfilled in certain respects, it was not possible to process all requests during that year and there was a certain amount of carry-over to 1959. Many further requests have been received during the first half of 1959 and it must be assumed that they will continue to arrive throughout the year. It is expected therefore that, subject to the availability of adequate funds, the 1959 programme will also be completed, although there may be a lag of 20 to 25 per cent.

135. In view of the importance of the technical assistance programme, top priority has been given to it. Indeed, as the technical assistance work of the division increased, it absorbed the entire staff of the division, and it became necessary to borrow staff from other divisions. As a result, it has not been possible to complete certain economic studies contemplated or started in 1958 at the suggestion of Members of the Board. Amongst these are studies of the nuclear energy potential in the various regions of the world and an estimate of the present and future demand and supply of source and fissionable materials and the factors affecting the production costs and market prices of such materials.

136. Nevertheless in studies relating to the economic aspects of atomic energy and in particular the production of nuclear power, the Agency has a definite responsibility. This work involves detailed analysis of cost factors of a wide range of items in relation to nuclear power compared with conventional power. In this connexion it will be noted that the Agency is presently being approached by some of its Member States for advice and help in the economic appraisal of nuclear power plants which they plan to instal.

[19] The terminology "preliminary assistance missions" will be used throughout this paper in place of the expression "fact-finding teams" used in the 1959 Programme and Budget.

137. A considerable amount of work is also entailed in the implementation of resolution GC(II)/RES/27 of the General Conference, which recommended a continuing study of the economics of small and medium scale nuclear power reactors best suited for the economic development of less developed countries. In view of the need to begin work in implementing the resolution as quickly as possible, consultants are being recruited for short-term assignments in 1959 to assist the Secretariat in analyzing elements of nuclear power costs. This is however clearly only a temporary solution and it will be necessary to make permanent arrangements within this division; appropriate arrangements are suggested below.

(c) Programme of work for 1960

(i) Technical assistance

138. The discussions during the second regular session of the General Conference indicated that Member States wished to see a further expansion of the Agency's technical assistance programmes to enable it to meet the increasing requirements of less developed countries in the peaceful uses of atomic energy. The participation of the Agency in EPTA will help to make such an expansion in 1960 possible.

139. The number of formal requests and enquiries for technical assistance increased during the last six months of 1958 from 8 to 25. The number of requesting countries increased from 8 to 18. Requests for preliminary assistance missions were received from 11 countries. By the end of June 1959, 62 requests and enquiries from 23 countries concerning the provision of technical experts and equipment by the Agency had been received. According to present indications, it is expected that about 25 additional requests for technical assistance will reach the Agency in the course of 1959. The implementation of a certain number of these projects will naturally begin in 1960.

140. In 1958 small preparatory missions were sent to Pakistan, Thailand and the United Arab Republic and in early 1959 one such mission was sent to Greece. Three preliminary assistance missions were also sent out in 1959; the first visited Burma, Ceylon, Indonesia and Thailand; the second China, Japan, the Republic of Korea, the Philippines and Viet-Nam; and the third Brazil and Venezuela. Three members of the Latin American mission also visited Argentina. It is planned to send a fourth mission into the field towards the end of the year.

141. On completion of this programme it is felt that South-East Asian and Far Eastern Member States will have been adequately covered by visits of preliminary assistance missions and no further missions will be needed for that region during 1960.

142. Only three of the 14 Member States in Latin America will be visited in 1959. It is expected that by 1960 the total membership of the Agency in that region will increase substantially. It is therefore planned to send two preliminary assistance missions to Latin America in 1960, one to Central America and the other to South America.

143. At present, the Agency has ten Member States in the Middle East and Africa and it is assumed that this number will increase as more knowledge becomes available of the Agency's programmes. The establishment of the United Nations Economic Commission for Africa may assist in this connexion.

144. No preliminary assistance missions are planned for the Middle East and African region in 1959, but interest in receiving such missions in 1960 has been indicated. It is therefore planned to send two such missions to the region in 1960.

145. The 1960 programme thus envisages four preliminary assistance missions, two for the Middle East and Africa, one for Central America and one for South America.

146. A large number of Member States have now indicated that they wish to participate in the surveys to be carried out in implementing resolution GC(II)/RES/27. The work on this resolution is likely to call for some expansion of the Agency's technical assistance activities and it is planned that three special power survey missions be sent out in 1960, probably one to the region of South-East Asia, one to the Middle East and Africa, and one to Latin America.

147. In addition, a few short preparatory missions are likely to be needed in connexion with specific technical assistance requests. It is estimated that these missions will require the services of 18 experts, involving 12.5 man-months in 1960, as compared with 12 experts and six man-months in 1959. To the extent possible, staff members or experts made available free of charge by Member Governments will be sent on such missions so as to reduce the cost of paid consultants.

148. The visits of preliminary assistance missions to Member States in different regions during 1959 are expected to result in the development of Agency projects in many fields. The present indications are that as a result of the activities of the 1959 preliminary assistance missions and better knowledge of the Agency's potentialities as a supplier of technical assistance, the Agency will receive requests for technical assistance in specific fields involving the services of about 80 experts for an estimated total period of 450 man-months, compared to 32 experts and 148 man-months for the 1959 programme. Taking into account possible delays in implementation, it has been assumed, however, for budgetary purposes, that the Agency may have to provide in 1960 an estimated 400 man-months of expert assistance involving the services of 70 experts. These requests are to be considered under the operational budget of the Agency.

149. Requests for scientific and technical supplies and equipment, received by the end of June 1959, add up to an estimated value of \$500 000. On the basis of experience gained so far and bearing in mind the financial limitations of the Agency's budget, it may be assumed that the equipment and supplies component of technical assistance expenditure in 1960 would be of the order of \$250 000. Much of the Agency's share of the costs of such equipment will, of course, come under the operational budget. Evaluation of requests for equipment and supplies, and arrangements for their procurement and distribution will be undertaken in consultation with the divisions concerned, particularly the Division of Technical Supplies.

150. The Board has established a Technical Assistance Committee to ensure the speedy review of technical assistance requests and similarly, the Director General has established within the Secretariat an inter-departmental co-ordination committee for technical assistance, with the task of reviewing and co-ordinating all the technical assistance activities of the Agency. The work of servicing these two committees falls to a considerable extent on the Division of Economic and Technical Assistance and is expected to increase in 1960.

(ii) Economic evaluation and studies

151. The Second United Nations International Conference on the Peaceful Uses of Atomic Energy focussed attention on the need for early action to close existing gaps in the knowledge of nuclear economics. Informal consultations with other organizations and with Member States have led to the conclusion that the Agency should undertake such action as soon as possible.

152. This general need was also reflected in resolution GC(II)/RES/27 of the General Conference. In order to implement it, the Board has approved a plan of work which calls for intensive economic studies in relation to the installation of small and medium power reactors in specific locations in the less developed countries. These studies will include:

- (a) Economic studies of available reactors:
 - (i) Systematic analysis of the elements of nuclear power costs;
 - (ii) Collection of economic data on small and medium power reactors;
 - (iii) Preliminary analysis of suitable reactor systems from the economic point of view; and
 - (iv) Consultations with manufacturers and other interested persons, if needed;
- (b) Selection of potentially suitable sites:
 - (i) Preparation of a comprehensive questionnaire relating more specifically to those situations which the Member States concerned think potentially fit for nuclear power installations;
 - (ii) Analysis of all published information as well as information obtained from questionnaires on the demography, economic progress, financial structure, capital market, interest rates, foreign exchange situation, power needs, power plans and projects, etc. of the interested Member States; and
 - (iii) Collection and checking of information on the spot through visits to countries, if considered necessary; and
- (c) Application studies:
 - (i) Cost of nuclear power including evaluation of elements of nuclear power costs characteristic of the situation in question; and comparison of available nuclear power systems from the point of view of their power production cost in that area; and
 - (ii) Comparison of cost of nuclear and conventional power including evaluation of possible sources of conventional power which might meet the needs of the situation in question and evaluation of the cost of production of the most economical of such conventional power.

153. These studies will be undertaken as appropriate in co-operation with the Division of Reactors and with the United Nations and its regional economic commissions. The first series of studies will be undertaken over a two-year period but it is likely that the work involved in the implementation of resolution GC(II)/RES/27 of the General Conference will continue much longer.

154. The Division of Economic and Technical Assistance will also be associated with the other divisions concerned in the preparation of a conference in 1960 on small and medium power reactors.

(d) Explanatory statement on staff

155. It is estimated that the work involved in carrying out the Agency's technical assistance programme in 1960 will be more than three times as much as that undertaken in 1959. Some increase of staff above the 1959 level is therefore unavoidable on this score.

156. It may be explained that in the present stage of the Agency's operations, technical assistance requests often require a good deal of initial screening before presentation to

the Board, to ensure that they are properly formulated, adequately substantiated and can be effectively carried out. To deal with the increase in this part of its work, the Division of Economic and Technical Assistance will require in 1960 the following Professional staff:

Two P-5's, four P-4's, four P-3's, two P-2's.

157. In the field of economics, it will be necessary to replace the provisional set-up of 1959, based principally on the use of consultants, by a more permanent and closely integrated economic evaluation unit within the division.

158. The unit, to be called the Economic Evaluation and Planning Section, will be set up in 1960, and will among others carry out the studies required for the implementation of resolution GC(II)/RES/27. When proceeding with the staffing of the unit, the Director General will hold further consultations with the Board. The section will consist of:

- (a) A senior economist, capable of evaluating the economic and financial structures and resources of requesting Member States. He should, if possible, have experience in long-term forecasting of nuclear energy programmes;
- (b) A costing engineer, with special experience in the domain of power plants, either conventional or nuclear, as well as with other industrial installations;
- (c) A nuclear engineer with a fair knowledge of economics; and
- (d) The necessary clerical staff.

159. It would also be desirable to have a power engineer experienced in electric transmission, distribution and forecasting as part of this section, but initially it is hoped that assistance in this field can be provided by the power engineers on the present staff of the Division of Reactors. At a later stage, it may be necessary to complete the structure of the section by the inclusion of a power engineer.

160. The section will ensure that the Agency keeps abreast of the changes in economic factors affecting the production of nuclear power as well as of studies made by other organizations concerned with economic questions, and will service the Agency in all matters where the need arises for evaluating projects and programmes from the economic point of view.

161. To sum up, the following increase in Professional staff is anticipated in 1960 for the Division of Economic and Technical Assistance:

Table 8

Grade	Technical Assistance	Economic Evaluation	Total
P-5	-	1	1
P-4	2	2	4
P-2	2	-	2
Total	4	3	7

8. Division of Reactors

Table 9

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	5	3	3	-	3
P-4	-	3	3	-	3
P-3	-	1	1	-	1
P-2	4	2	2	-	2
Subtotal	10	10	10	-	10
GS	4	4	6	-	6
Total	14	14	16	-	16

(a) Functions and responsibilities

162. The division's responsibilities are:

- (a) To provide advice and assistance to Member States, concerning their reactor programmes or projects and encourage reactor construction;
- (b) To evaluate the technical feasibility, design, technology, safety and economics of various reactor systems and study their application to meet given needs;
- (c) To collect and distribute information on the design, technology, safety and costs of reactors; and
- (d) In collaboration with the Division of Health, Safety and Waste Disposal to conduct reactor hazards evaluations.

(b) General statement

163. The division's initial work in the field of reactors has consisted mainly of collecting data on reactors in operation or under construction in various Member States, and of preparing the ground to enable the Agency to discharge its statutory functions in regard to reactors.

164. During 1959 two of the three volumes of the "Directory of Nuclear Reactors" dealing with design, cost and operating characteristics of power, research, experimental and test reactors respectively, will be published. The third volume will appear in 1960, during which year the work of keeping the directory up to date will be continued and it will be supplemented from time to time.

165. The Division of Reactors co-operates closely with other divisions of the Agency by providing expert advice on the evaluation of reactor projects, supply of reactor materials, and on matters relating to reactor safety and to the legal aspects of reactor construction and operation. In collaboration with the Division of Economic and Technical Assistance it evaluates requests for assistance to reactor programmes, participates in the preliminary assistance missions and studies the special needs of the less developed countries for reactor applications; together with the Division of Health and Safety it assists in evaluating reactor hazards, and with the Division of Technical Supplies it evaluates requests for reactor materials.

166. This co-operation extends to other organizations within the United Nations family and international organizations whose fields of activity are related to those of the Agency. Thus for example, the Division of Reactors followed closely the Second United Nations International Conference on the Peaceful Uses of Atomic Energy held at Geneva, and in 1959 assisted the United Nations in editing the papers of this conference concerning reactors. It also participated in some special meetings on reactors and reactor applications, held in various countries during 1959.

167. The reports of the World Power Conference are under study by the Division of Reactors and further co-operation with it is in view. Contact is being maintained with the International Bank for Reconstruction and Development in regard to its activities in the field of nuclear power.

168. The Division of Reactors and the Division of Economic and Technical Assistance are primarily responsible for the implementation of resolution GC(II)/RES/27 dealing with the needs of the less developed countries for nuclear power. The programme of work, which will be carried out in 1960 is described in (c) below.

169. Action was begun on resolution GC(II)/RES/27 immediately after its adoption and a progress report on the subject is to be presented to the General Conference at its third regular session. [20] This report will be prepared jointly by the Division of Reactors and the Division of Economic and Technical Assistance.

(c) Programme of work for 1960

170. The work of the Second United Nations International Conference on the Peaceful Uses of Atomic Energy and the relevant discussions at the second regular session of the General Conference of the Agency have been of great value to the Division of Reactors in helping it to ascertain the needs of the Member States in the field of reactors. The 1960 programme has been designed with a view to meeting some of these needs. The recommendations of the Scientific Advisory Committee have also been taken into account.

171. Most of the projects undertaken or initiated during 1959 will continue through 1960 and requests by Member States for assistance in their reactor programmes are also expected to increase.

172. The work of keeping the "Directory of Nuclear Reactors" up to date and complete will be continued in 1960. This will involve revision of existing information, inclusion of data on new reactors and inclusion of other information such as notes on the operating records of various reactors.

173. The programme approved by the Board for the implementation of resolution GC(II)/RES/27 is described in paragraph 152 above insofar as economic studies are concerned.

174. The Division of Reactors will have major responsibility for two parts of the programme, namely, the studies to be made of the technical suitability of available reactors, and the final implementation of the programme. The first task involves the collection of technical data and the survey of various reactor systems of small and medium power output (up to 50 MW E) and, in consultation with experts, a preliminary assessment of their suitability in regard to their technical performance, operational ease, reliability and safety, size, effects of environment, fuel cycles and fuel availability. After potentially

[20] GC(III)/76.

suitable locations for power reactors have been selected the second task will be undertaken. It will consist of detailed studies to ascertain the precise technical characteristics which the reactors should have to meet site conditions, and to compare the various reactor systems available.

175. In addition the division will work closely with the Division of Economic and Technical Assistance in connexion with its tasks. These include the collection of relevant information from governmental and industrial sources, and thereafter in consultation with experts, a systematic analysis of the elements of nuclear power costs of suitable reactor systems; and evaluation of the relevant data on potentially promising locations for the installation of nuclear power reactors.

176. It is expected that a few such sites will have been selected for further studies by September 1959 and after that, intensive and detailed analysis of each site can be carried out.

177. The division will assist Member States in planning their programmes for training personnel to operate nuclear reactors.

178. As recommended by the Scientific Advisory Committee a technical conference will be convened in late summer of 1960 to bring together reactor specialists and experts on nuclear power to discuss the technical feasibility, the economics of operation, and the suitability in special situations in less developed areas of small and medium sized reactors.

179. The Division of Reactors will prepare in co-operation with the Division of Economic and Technical Assistance much of the documentation for the conference on each of these topics. The proceedings of this conference will be published and its main conclusions should be available to the fourth regular session of the General Conference in September 1960.

180. The Second United Nations International Conference on the Peaceful Uses of Atomic Energy has shown the need for establishing close international co-operation and exchange of information in some specialized fields, such as reactor physics constants, reactor safety, experimental and test reactors and nuclear ship propulsion.

181. Many delegates to the second regular session of the General Conference of the Agency indicated that they would welcome any initiative taken by the Agency to organize such collaboration. The Scientific Advisory Committee has also recommended that the Agency should organize international symposia on nuclear ship propulsion and experimental and test reactors.

182. In the field of reactor physics constants, it is proposed first to call together a group of experts in Vienna in order to determine the areas in which international correlation of nationally obtained data would be most useful. The experts would also prepare the ground for organizing larger international meetings and the publication of monographs or reviews on special topics.

183. The problems connected with reactor safety were also stressed at the Geneva Conference and at the second regular session of the General Conference of the Agency. The Division of Reactors, in collaboration with the Division of Health, Safety and Waste Disposal will organize, in 1960, panels for discussing the subjects of siting and containment of reactors. A report on this subject will be prepared before the meeting by the division. It is expected that requests for the hazards evaluation of their reactor projects will be made to the Agency by Member States. The Division of Reactors, in collaboration with the Division of Health, Safety and Waste Disposal, will perform such evaluations.

184. The progress in design, construction and operation of reactors for ship propulsion will be studied by the Division of Reactors and a seminar on nuclear ship propulsion with special reference to safety will be organized in 1960. The particular importance of this subject for the Agency arises from the truly international character of the operation of these reactors. The problems relating to their safety must obviously be solved at the international level at an early date.

185. The subject of experimental and test reactors will be reviewed in 1960 at another international symposium.

186. The division will also work with the Division of Technical Supplies in preparing for a seminar on the subject of metallurgy with special reference to fuel cladding. This subject is of special interest, since new developments in fuel element technology are bound to have an important effect on the design of reactors with corrosion-resistant and long-life cores.

187. Owing to the highly technical nature of the activities of the Division of Reactors, it is most important for the staff members to keep abreast of the recent developments in the more advanced Member States. It will therefore be necessary to arrange for frequent contacts with the nuclear energy experts of these countries.

188. Members of the staff will, in 1960, visit various Member States in connexion with the preparatory scientific and technical work for the conferences, symposia and panels; attend technical conferences and scientific meetings on subjects relevant to the work of the division and take part in discussions on the specific reactor projects at the request of the Member States.

189. The division will participate in four preliminary assistance missions to be organized by the Division of Economic and Technical Assistance in 1960. In addition, the division will send some special reactor missions, probably three in number, depending upon the reports of the preliminary assistance missions and requests from Member States.

190. The division will also perform the scientific secretariat work in editing and publishing the proceedings of the various conferences, symposia and panels in the reactor field which are to be sponsored by it in 1960.

(d) Explanatory statement on staff

191. It is proposed to organize the staff of the division in accordance with the projects in hand, and to assign to each a project officer who will be assisted by other officers as the need arises. In this manner it is expected that the present staff will be sufficient to carry out the increased work which is to be expected in 1960.

9. Division of Technical Supplies

Table 10

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	2	2	2	1	3
P-4	-	-	1	-	1
P-3	-	-	-	-	-
P-1	-	-	1	-	1
Subtotal	3	3	5	1	6
GS	3	3	3	-	3
Total	6	6	8	1	9

(a) Functions and responsibilities

192. The division's responsibilities are:

- (a) To deal with the substantive aspects of procurement of scientific and technical materials, equipment, facilities and services offered to the Agency;
- (b) To arrange for the receipt from, and supply to, Member States of such materials, equipment, facilities and services made available to the Agency; and
- (c) To provide information and advice to Member States in connexion with the supply of such materials, equipment, facilities and services.

(b) General statement

193. The approved programme for 1958 and 1959 involved activities in the following fields:

- (a) Procurement of fissionable materials;
- (b) Procurement of source and other materials;
- (c) Procurement of scientific instruments and equipment; and
- (d) Compilation of technical information about equipment and materials.

194. Two P-5 officers were appointed for performing the first two tasks, one P-4 for the third and, in lieu of a P-3, a P-1 was appointed to perform the last. This staff constitutes the minimum necessary to discharge the division's initial duties.

(c) Programme of work for 1960

195. All the activities mentioned above will be continued and expanded during 1960.

196. It is possible that the importance of the Agency's role as a supplier of materials and instruments will increase and that several project agreements involving the supply of fissionable and source materials will be concluded and implemented.

197. On this assumption negotiations will have to be conducted for the processing of these materials so as to adapt them to the particular requirements of the projects or for their fabrication into fuel elements. It is expected that staff members of the division will be responsible for the analysis and technical control of the materials delivered. In some cases consultants will be required for the local control of such processing operations and for the final approval of the finished products. The Agency will also make the necessary arrangements for the shipment of these materials.

198. It is not expected that the division will be concerned with problems of transport of irradiated fuel during 1960, but it is likely that advice will have to be provided on the local establishment of reprocessing facilities.

199. Early in 1960 a seminar on metallurgy of fuels, with special reference to cladding, will be organized by the Agency. The need for this seminar arises from the fact that the economic operation of reactors is largely dependent upon the degree of fuel burn-up, working temperature and reprocessing possibilities, in all of which fuel cladding is of importance. The Division of Technical Supplies will help the Divisions of Scientific and Technical Information and Reactors in organizing this seminar.

200. The experience so far acquired and the requests already received from Member States have shown the need to expand the division's work so that it may provide help and advice to Member States in regard to prospecting, mining and ore processing. These are important activities and of primary interest to less developed countries.

201. In regard to equipment, the division will continue the compilation of catalogues and classification of nuclear instruments in accordance with their technical characteristics. This task, which is being carried out in collaboration with the Division of Scientific and Technical Information will permit the division to provide advice to Member States on technical problems concerning proper instrumentation. It will also help when the Agency itself procures equipment for technical assistance projects. A substantial increase of such activities is expected in 1960. Furthermore, several contributions in kind are likely to be received. The equipment donated will have to be tested and adapted to the particular needs of the specific projects in which it will be used.

202. It is also expected that the Agency should be in a position to help less developed countries in procuring, with a minimum of delay, spare parts for scientific equipment. The possibility of using the UNESCO coupon scheme for this purpose is being explored.

203. In co-operation with the Division of Exchange and Training, a programme for supplying universities of Member States with information on the special instrumentation or materials needed for the teaching of nuclear engineering is under study.

204. It is envisaged that a handbook explaining the advantages of different types of atomic instrumentation for various nuclear applications will be prepared during 1960.

(d) Explanatory statement on staff

205. The contemplated increase of staff is one Professional officer who should be an expert in the field of prospecting and mining. The Agency has at present no specialist in this work, which is the subject of several requests from Member States. Consequently, the appointment of a senior mining engineer will be necessary.

206. With the suggested addition the division will have one officer to deal with each of its present fields of work, except analytical chemistry in connexion with the verification and analysis of materials supplied by the Agency to Member States. It is believed that such work as may be needed in this field in 1960 can be done by the Agency's laboratory staff. The staff is thus held to a minimum.

207. Should the Agency receive a considerable number of requests, a further increase of staff may be necessary.

10. Division of Health, Safety and Waste Disposal

Table 11

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	3	3	5	-	5
P-4	2	2	5	-	5
P-3	2	2	3	-	3
Subtotal	8	8	14	-	14
GS	5	8	8	-	8
Total	13	16	22	-	22

(a) Functions and responsibilities

208. The division's responsibilities are:

- (a) Evaluation of health and safety hazards associated with projects submitted to the Agency;
- (b) Establishment of standards of health and safety for operations by the Agency or under Agency auspices;
- (c) Studies in connexion with the establishment of international standards or regulations for health and safety, and co-operation with other international organizations to achieve harmonization and co-ordination of international action in this field;
- (d) The provision of health and safety services to Member States with special reference to the needs of the less developed areas; and
- (e) Studies and associated tasks in the field of waste disposal with special reference to problems arising in the less developed areas or requiring international action.

(b) General statement

209. The present plans of the division embrace the following work:

- (a) All proposals for Agency operations, Agency supported operations, and projects are examined to see whether they meet Agency approved health and safety standards. In general this function is on an ad hoc basis and an evaluation is possible at the inception of the project but in addition, a continuing study must be maintained in many cases. Included in this task is examination of proposals for use of radioisotopes, and the study of reactor projects from the health and safety point of view with respect to siting, operation, discharge of radioactive wastes and plans for dealing with emergencies;

- (b) Experience of Member States in the application of the Agency's "Safe Handling of Radioisotopes" is being followed closely. Two addenda, one on medical applications and the other a technical addendum, are being issued. The evaluation of proposed projects in paragraph (a) is to be followed up by assistance in establishing the standards called for, and the application of appropriate health and safety safeguards. In some cases this will be accomplished by advisory visits;
- (c) The division is giving special attention to the drafting of codes for the transportation of radioisotopes and two panels have been set up, one dealing with radioisotopes in general, and the other with the special problem of irradiated fuel elements and similar large sources;
- (d) Active participation has continued in the work of international and regional bodies, and their specialized committees concerned with health and safety problems. In addition, Member States and national bodies have been informed of conditions and views prevailing in other countries;
- (e) A survey of the health and safety needs of the less advanced countries is being carried out and related to those services which can be provided by the more advanced countries. The best means for the Agency to assist in having these needs met is being explored; and
- (f) The collection and examination of information from advanced countries on waste disposal, with a view to adapting the existing findings to the needs of less developed countries, is being carried out. The division is continuing its studies and collection of data about the most acceptable methods of waste disposal into the sea, geological structures, special storage, etc. Provision for discussion of such problems at appropriate panels and symposia is being made.

(c) Programme of work for 1960

- (i) Evaluation of health and safety hazards associated with Agency projects

210. Projects presented to the Agency in 1959 and evaluated on the basis of proposed operating conditions will have to be followed up in 1960 to verify that operating conditions do not introduce significant unanticipated hazards. The Japanese reactor project will fall in this class and it is assumed that about two other projects of equivalent complexity from the health and safety viewpoint will be dealt with in 1960. Visits by health and safety staff will be necessary, but these visits will be combined with visits to the same area for other purposes in the field of health and safety.

211. It is assumed that a number of projects presented to the Agency for approval in 1960 will offer special problems and that several visits will be needed for evaluating associated health and safety hazards and these also should be combined with visits for other health and safety purposes. On this assumption the work of hazards evaluation will call on the skills of all specialist staff of the division.

- (ii) The establishment of standards of health and safety for operations by the Agency or under Agency auspices

212. The Agency's publication, "Safe Handling of Radioisotopes", will have been in use for a sufficient time by 1960 to permit a survey of comments of users and of operational experience which may point to the need for considering revisions. It is expected that only minor revisions will be called for, permitting the Secretariat to carry out most of the work by correspondence with an outside panel of experts.

213. The division will continue to supplement the above manual by specialized addenda. Useful material in various fields will be collected and it is believed that the issue of an additional manual dealing with accidents and emergencies arising from the use of radioisotopes should be possible in 1960. Experience in the application of the recommendations of the Agency's "Safe Handling of Radioisotopes" and the application of the ICRP revised recommendations should make it possible to propose (in conjunction with the Legal Division and in consultation with other interested international bodies) regulations for health and safety standards in the Agency operations and for consideration by Member States.

214. The establishment of adequate health and safety standards in individual Agency-supported operations will be carried out by the setting up of reporting techniques, the examination of reports, examination of operations in conjunction with safeguards inspections and visits by staff qualified to offer advice to users on how to meet their individual health and safety problems.

(iii) Studies leading to the establishment of international standards or regulations for health and safety

215. Experience in the application of Agency sponsored recommendations for safe transport of radioisotopes and for safe transport of irradiated fuel will be assembled and evaluated. The Secretariat will prepare material, and a panel will be set up to recommend standards for safe disposal of radioisotopes in international rivers.

216. A panel study of the possibility of setting standards for safe operation of research reactors is proposed, taking particularly into account the needs of less advanced countries for operational regulations dealing with this type of reactor of which many are being built in the less developed countries.

217. The Secretariat will also study the problem of setting health and safety standards for the operation of power reactors with a view to eventual discussion by a panel. Particular attention will be given to the setting of standards to protect the general public and neighbouring countries with special regard to siting problems. This work will be closely associated with studies by the Division of Reactors.

218. Studies will be made of the special requirements for safety standards in connexion with mobile reactors (ship propulsion in consultation with IMCO as appropriate).

219. In conjunction with ICRP, UNSCEAR, WHO and certain departments of the Agency as appropriate, staff studies, contractual studies and research will be directed to elucidating basic problems of radiation safety and its application to the development of appropriate health and safety standards. It is expected that profitable study by staff members may be carried out to improve existing formulation of recommendations from the point of view of practical application. It is assumed that non-operational bodies such as UNSCEAR and ICRP will request technical services and contractual studies on selected topics. However, it is expected that this form of request will develop slowly.

(iv) Harmonization and co-ordination of international work in health and safety

220. The collection, study and correlation of national or regional recommendations and regulations in the field of health and safety will be a continuing task. The use by Member States of the data collected by the Agency in this field is increasing. As a result of the practice of governments to submit proposed legislation for comment, an increasing degree of harmonization is possible. It is expected that the Agency will be asked to submit comments on several such documents in the coming year.

221. Agency staff are invited to meetings and panels of international and regional bodies, set up to consider special aspects of the health and safety problem, and in which the Agency can exert a harmonizing influence.

(v) Health and safety services to Member States

222. Health and safety advisory services will be provided to those Member States which request assistance because of their limited experience in this field.

223. The survey of the health and safety needs of the less developed countries and of the facilities available in the more advanced countries continues. Requests for aid will be sent to the most effective supplier. Methods of most efficiently meeting the needs of less advanced countries will be evaluated. Those findings will determine future fields of work of the Agency's health and safety laboratory facilities. Studies continue concerning the most effective means of providing international aid in the event of major atomic incidents.

224. The provision of technical advice on health and safety matters will reach considerable proportions and it is expected that a great number of queries will be received each year. The Agency's staff should be able to answer the majority of these but a few will have to be referred to outside specialists. Similar technical advice will be provided to other international bodies and other divisions of the Agency. The effective working of the Legal Division in drafting regulations will be dependent on sound technical advice in the health and safety field.

(vi) Waste disposal studies

225. With the completion of the first report of the Panel on Radioactive Waste Disposal into the Sea, this panel enters a new phase of work in which further results will be slower in emerging. If anything, however, the work of the Secretariat will increase in view of the need to set up and maintain an international register of sea disposals. In addition to continuation of the initial work of this panel, studies of the waste disposal problems from nuclear powered ships will be started.

226. The contractual studies set up to support work on unsolved waste disposal problems of significance to the less developed countries, will be continued on a full scale for these problems which are strictly related to the problems of the less developed areas, and at a somewhat reduced scale in fields where the advanced countries might reasonably be expected to carry out work. The associated work of the staff will be somewhat reduced.

227. Sufficient knowledge will be available at this stage to justify a panel study of the pre-treatment of wastes of all descriptions. In addition, the staff will carry out an intensive study directed towards providing a handbook on waste disposal techniques of special application to small-scale isotope users in less advanced areas.

228. The division will prepare materials for a symposium on waste disposal in geological structures.

229. It is expected that it will be necessary for the Agency itself to examine certain disposal problems in less advanced areas and to propose solutions. It is planned to analyze samples in the Agency's laboratory and to have a number of locations examined at site by staff members and by consultants as appropriate.

230. Three types of meteorological studies in connexion with waste disposal will be undertaken, namely:

- (a) Estimates of public safety in connexion with postulated or real disasters;
 - (b) Advice as to the safety of reactor effluent installations in normal operations;
and
 - (c) Advice as to the safety of exhaust stacks on isotope operations.
- (d) Explanatory statement on staff

231. The major change in work between 1959 and 1960 will be that arising from the need to provide surveillance over a steadily increasing number of Agency projects. No new special skills will be needed for this work and every effort will be made to carry out this task with the existing staff.

IV. DEPARTMENT OF RESEARCH AND ISOTOPES

11. Office of Deputy Director General for Research and Isotopes

Table 12

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
DDG		1	1	-	1
P-3	a/	-	1	-	1
P-1		-	1	-	1
Subtotal		1	3	-	3
GS		1	1	-	1
Total		2	4	-	4

a/ No detailed budgetary provision.

12. Division of Research

Table 13

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	6	4	6	-	6
P-4	-	-	1	-	1
P-3	-	2	4	-	4
Subtotal	7	7	12	-	12
GS	4	4	6	2	8
Total	11	11	18	2	20

13. Division of Isotopes

Table 14

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	9	6	7	1	8
P-4	-	3	4	-	4
Subtotal	10	10	12	1	13
GS	7	7	7	2	9
Total	17	17	19	3	22

(a) Functions and responsibilities

232. As has already been stated in paragraph 142 of the Programme and Budget for 1959, it has not been found possible to draw a sharp line between the functions and responsibilities of the Division of Research and those of the Division of Isotopes. It has seemed more appropriate to divide the work between physical science activities and biological science activities, both activities being carried out by the technical staff from the two divisions. The staffing plan for both divisions should, therefore, be considered together, and so should their functions and responsibilities which are more closely inter-related than before. These are:

- (a) to assist Member States in assessing their needs for research in the field of peaceful uses of atomic energy, promote co-ordination and further development of existing research, and initiate new research whenever results of such work might be of assistance to these States;
- (b) to provide Member States with advice on the use of nuclear research tools such as radioisotopes, in all fields of their practical applications, with particular emphasis on industry, medicine and agriculture;
- (c) to undertake research programmes and place research contracts, where appropriate, in support of the Agency's statutory functions;
- (d) to carry out studies within the fields of research and isotopes, with particular emphasis on the needs of less developed countries; and
- (e) to organize and supervise the work performed by the Agency's functional laboratories.

(b) General statement

233. On account of the extreme complexity of the science of atomic energy the activities of the department in 1958 and 1959 could not possibly cover the whole field. The available scientific manpower had to be concentrated on certain tasks, the importance of which had been particularly stressed in the Preparatory Commission's report and in the programme for 1959, and on work suggested by a number of Member States during the Second United

Nations International Conference on the Peaceful Uses of Atomic Energy, in Geneva, and the second session of the General Conference of the Agency. Some important work had also to be neglected initially because of the difficulties in recruiting scientists with the required qualifications who would be willing to leave their laboratories for short-term appointments.

234. At the beginning of 1959, the provisional laboratory in the basement of the headquarters building, consisting of a small chemical laboratory, a counting room for low activities such as standard samples, an electronics shop and a workshop, had been installed and was equipped with the major part of the necessary apparatus. Work was started on setting up and calibrating the equipment, the first inter-comparisons were made between calibrated samples provided by various national laboratories issuing standard radioactive samples. A start was also made with some analytical work for other international organizations which do not have their own laboratory facilities, such as UNSCEAR. At the same time, detailed plans were being developed, in close co-operation with the other technical divisions concerned, for the functional laboratory as recommended by the Scientific Advisory Committee. This laboratory will be situated adjacent to the site of the Austrian Studiengesellschaft atomic energy facilities, thereby permitting not only a close and complementary collaboration with the scientists of this institution but also substantial savings in construction and operating costs. A contract has been placed for the construction of several wings housing an analytical-chemical, physical-chemical and health physics laboratory, an electronics shop, a workshop and some supporting office area. Construction will be carried out as speedily as possible so as to permit an early transfer of functions from the present provisional facilities which, because of increasing work, will soon become inadequate.

235. The first mobile isotope training laboratory has been put to almost continuous use, and the second one is being modified without cost to the Agency in the light of experience gained with the first unit. Arrangements will be made to send it directly to a less developed area. A special inter-departmental committee has been established which, by taking into account the views of the technical divisions concerned, ensures a balanced policy for the most efficient utilization of these facilities. After an initial trial in collaboration with Austrian universities, one unit has been employed in the training of industrial isotope users in Greece and Yugoslavia.

236. An inter-departmental committee has also been established to advise the Director General on the selection of suitable subjects for small research contracts. A number of such contracts have been placed in 1958 and 1959 with various institutions and universities in the fields of:

- (a) Safeguards - the non-destructive analysis of spent fuel elements which directly relates to the Agency's safeguard functions;
- (b) Radiation safety and protection - contracts on subjects such as the mechanism of radiation damage to living tissue and of the action thereupon of certain protective substances, the response of living tissue, especially nerve cells, to low doses of radiation, and the development of small neutron dosimeters, all of which are of importance in determining the Agency's future programme and recommendations with regard to safety measures and regulations; and
- (c) Health - the support of medical research using rare radioisotopes not regularly produced on a commercial basis and of radioisotope research into diseases prevalent in less developed, especially tropical, countries.

237. In selecting research centres to perform such work, careful consideration is given to requests from Member States; in the case of development contracts, within the framework of technical assistance projects, particular attention is paid to the information contained in the reports of the preliminary assistance missions.

238. The department has explored, with the aid of consultants, the feasibility of a world-wide study of rain, river and ocean water using tritium and oxygen 18 as tracers. The Scientific Advisory Committee has recommended such a study and the department will continue its work on the subject without, however, requiring an additional budgetary allotment in 1960. It is believed that the study which will provide valuable information on the extent and direction of the movement of water in the biosphere, would be an important contribution to the Agency's research programme on the problems of waste disposal, and help to ascertain the water turnover rate in semi-arid areas.

239. A series of studies has been undertaken within the department on practical applications of atomic energy of particular interest to less developed countries. These studies include an evaluation of the present status of the use of high-energy radiation sources in radiotherapy, a collation of data on geochemistry, and a status report on the use of ionizing radiations for the sterilization of food. Should the results of such studies so warrant, they will be published, in certain cases, however, only after taking into account the opinion of specially convened panels of experts to review specific recommendations the report might contain.

240. The advisory work of the department has mainly been carried out through its participation in missions to Member States. This has been done in several ways. Members of the department have taken part in the preliminary assistance missions of the Agency such as those which visited a number of countries in South-East Asia and the Far East; they have participated in small missions, for instance, to Thailand, to Greece and to the United Arab Republic to help these countries in assessing their needs for technical assistance and to formulate specific technical assistance requests. They have organized special isotope investigation teams such as that to Brazil to advise Member States on the scientific, technical and economic aspects of the production of radioisotopes and their medical, agricultural and industrial applications.

241. In order to keep abreast of the latest developments in the field of atomic energy, members of the department have participated in various scientific meetings organized by international, national and non-governmental bodies. These included the Second United Nations International Conference on the Peaceful Uses of Atomic Energy, an international meeting of experts on metrology of radioisotopes, the International Congress of Radiology, the annual congresses of the American and the Italian societies of nuclear medicine, the FAO European Meeting on the Use of Ionizing Radiations for Food Preservation, and meetings of UNSCEAR. In addition to the attendance at conferences of immediate interest to the Agency's work, visits to individual research centres have been an essential preliminary to the department's programme of promoting co-ordinate research on an international basis. A much needed extension of this activity as well as of other important activities of the department, such as the closer co-operation at working level with other specialized agencies, will be required in 1960.

242. The "International Directory of Radioisotopes" has been prepared for publication in 1959 and will be kept up to date.

243. Members of the department have advised and assisted the Division of Economic and Technical Assistance in the evaluation of technical assistance requests and in the selection of experts, equipment, etc.; the Division of Exchange and Training in the selection of

suitable fellowship applicants and of institutions where these could be most profitably placed; the Division of Scientific and Technical Information by preparing manuscripts of articles for publication in the Agency's technical bulletin and of small booklets in simple language on various uses of radioisotopes; and have provided scientific secretaries for various scientific meetings organized by the Secretariat in the light of the recommendations of the Scientific Advisory Committee. The Deputy Director General is at present serving as the secretary of the Scientific Advisory Committee.

(c) Programme of work for 1960

244. It is envisaged that the functional laboratory at Seibersdorf will be in operation by late summer 1960. It will then be capable of performing its functions approved by the second session of the General Conference which are:

- (a) Standardization of radioisotopes and preparation of radioactive standards. There is a pressing need for carrying out this type of work on an international level and close co-operation will be required with national laboratories and international bodies concerned with this problem, in particular, the International Bureau of Weights and Measures;
- (b) Methods of measurements and calibration of measuring equipment. In conjunction with the Division of Technical Supplies, equipment will have to be stored, checked, calibrated and, in some cases, adapted to particular needs before it is despatched to Member States;
- (c) Quality control of special materials for nuclear technology. This work is closely related to the Agency's safeguard functions which require control measurements to be performed on, and records to be kept of, materials such as fuel elements received, shipped or on inventory;
- (d) Measurements and analysis in connexion with the Agency's safeguards and health and safety programme. This will involve analysis of contaminated materials, whole body counting and the determination of the radioactivity of human excreta, in case such services should be requested by Member States. In addition, an attempt will be made to develop uniform apparatus and procedures for dosimetry for occupationally exposed personnel; and
- (e) Services for Member States which can be undertaken with the facilities needed for the aforementioned activities. These might include the isotopic analysis of heavy water, uranium and uranium compounds, the definition of properties of soil, the chemical analysis of ores, the determination of impurities in fuel materials and moderators, and others. It is expected that requests for certain measurements will continue to be received from international organizations which lack the necessary facilities, such as UNSCEAR.

245. The Programme and Budget for 1959 stressed how important it would be for the Agency to undertake activities in relation to the question of disposal of radioactive wastes. It was indicated that it would not be sufficient to prepare recommendations and regulations, and to undertake studies on specific applications but also that, because of the lack of scientific knowledge in the field, it would be necessary to initiate fundamental research. These views were supported by the second session of the General Conference and substantial funds were allotted in the regular 1959 budget to carry out the waste disposal activities. This problem is one of major concern to many countries and will become one of an even greater significance with the increasing number of research reactors and nuclear power plants to be erected in the near future. The department, therefore, intends to devote a substantial part of its work in 1960 to fundamental research

related to the question of disposal and utilization of radioactive wastes. In so doing it will maintain close co-operation with the Division of Health, Safety and Waste Disposal, particularly in determining in what field research would be most profitable. In 1959, the posts which are still available will be filled with scientists having particular experience in this field. In addition, one specialist will be needed to cover the field of geology. The work of this specialist will take various forms (taking into account guidance provided by the Scientific Advisory Committee), namely:

- (a) Collecting and evaluating research data already available;
- (b) Co-ordinating research at present carried out on a national basis and providing for exchange of information in order to avoid duplication of work as far as possible and to facilitate co-ordinated studies on certain special problems;
- (c) Stimulating and promoting new research work, for instance by continuing to place research contracts with various institutions interested in, and being capable of, doing such work; and
- (d) Proposing international research programmes in co-operation, as appropriate, with other international organizations, such as the United Nations, FAO, UNESCO, WHO, WMO and the newly-created IMCO.

246. The department will continue to place research contracts in the field of safeguards, safety and protection, and health, under the regular budget. There will be other research contracts, however, which will be placed within the framework of a complex technical assistance project; these will be financed from the operational budget. Some contracts placed in 1959 will be extended into 1960 provided the results achieved are considered satisfactory and continuation of work is deemed necessary. Members of the department will supplement this work by carrying out studies on subjects directly related to the research contract programme, and by collecting and evaluating data already available and by serving as a clearing point for laboratories which have accepted contracts on related subjects. This will be an essential preliminary to a programme of research co-ordination on an international level on which emphasis was placed in the Preparatory Commission's report [21] and which is envisaged for future years.

247. The department will continue to carry out its advisory functions, particularly by sending out special isotope investigation teams which will, upon request, advise Member States on the scientific, technical and economical aspects of the production of radio-isotopes and their medical, agricultural, industrial and scientific applications. Wherever possible, groups of countries will be visited and an endeavour will be made to follow up these visits by a concerted technical assistance programme. Members of the department will also continue to take part in the preliminary assistance missions which are expected to visit other regions of the world than those covered in 1959. Thirdly, there will again be a need for short visits of staff members to individual countries to assist them in assessing their needs for technical assistance and to formulate specific technical assistance requests. In addition it is expected that an increasing number of requests for advice will be received which can be answered on the basis of information available at headquarters.

248. One of the most important activities of the department in 1960 will be the scientific preparation of the Agency-sponsored conferences and symposia to be held in 1960 and 1961. This department will have to provide many of the scientific secretaries who will be responsible for the selection of speakers and the development of a well-co-ordinated scientific programme. This particularly applies to the two large conferences on radio-isotopes, one of which, dealing with applications in the physical sciences, is planned for

[21] See GC.1/1, paragraphs 24 and 29.

1960, the other, dealing with applications in biological sciences, for 1961. It is doubted whether the scientific staff available in the department will be sufficient to carry out this complex and difficult work and it is likely that temporary assistance will be required for some months prior to and some weeks after the conference.

249. It is expected that a sufficient number of requests for the services of the two mobile isotopes training laboratories will be received to make their full utilization possible. An information booklet describing in detail the syllabus of the courses which can be given in these units will be of assistance to all Member States in determining their needs for such courses. In view of the fact that Member States, where such needs are likely to exist, often have adequate facilities where the very basic type of training which the mobile units can provide, can be given, it is intended to adapt one or both units in such a way as to permit training on a more specialized level. In particular, it is hoped that by slightly altering the equipment, it will be possible to devote one unit entirely to the training of the medical profession in radioisotope techniques well established in routine diagnostic work as well as in clinical research - a most pressing need for many less developed areas.

250. In 1960, there will be a number of conferences and symposia which the department's specialists concerned will have to attend. These will include meetings organized by FAO, UNESCO, WHO, UNSCEAR, some of which may be co-sponsored by the Agency, and other international congresses. There will also be meetings on a national basis such as those organized by national societies dealing with radioisotope aspects. It is expected, as was the case in 1959, that members of the department will be invited to deliver papers on their own behalf during such meetings. The programme of the department will also involve visits to research institutes, particularly to those carrying out work on behalf of the Agency, in order to ascertain that satisfactory progress is made, and to give advice, provide exchange of information and co-ordinate efforts so as to avoid duplication of work.

251. The department will continue to provide scientific assistance to other divisions of the Secretariat. It is not expected that the nature of this work will differ greatly from that in 1959 although the work will certainly increase. The Division of Economic and Technical Assistance will again rely on the scientific advice the department's specialists are able to provide on the evaluation and preparation of technical assistance projects; the Division of Exchange and Training will need some help in selecting candidates for training and research fellowships and for visiting professors, and the Division of Scientific and Technical Information will be provided with manuscripts for its technical publications. In particular, it is hoped that the department will be able to follow suggestions put forward by some Member States to prepare a bibliography of literature on the practical applications of radioisotopes, provided that sufficient funds and manpower will be made available.

(d) Explanatory statement on staff

252. The additional staff requested falls into two categories. Firstly, the department will need an additional expert of the P-5 grade in the field of geology in order to carry out fundamental studies and supervision of research in the field of disposal and utilization of radioactive wastes, to which repeated emphasis was given during the second session of the General Conference. Secondly, since some of the available General Service posts in 1958 and 1959 had to be used for work in the provisional laboratory, there is now an acute shortage of secretarial staff. For this reason, an increase of two General Service posts in each of the two divisions is necessary.

V. DEPARTMENT OF SAFEGUARDS AND INSPECTION

14. Office of the Inspector General

Table 15

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
IG	a/	1	1	-	1
P-1		-	1	-	1
Subtotal		1	2	-	2
GS		1	-	-	-
Total		2	2	-	2

a/ No detailed budgetary provision.

15. Division of Safeguards

Table 16

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	2	4	4	-	4
P-4	2	2	2	-	2
P-3	3	1	1	-	1
Subtotal	8	8	8	-	8
GS	4	4	4	-	4
Total	12	12	12	-	12

(a) Functions and responsibilities

253. The division's responsibilities are:

- (a) To develop safeguards procedures for the accounting, measurement, inventory control and storehousing, in all phases of the use of source and special fissionable materials and equipment;
- (b) To provide technical assistance to Member States in setting up and improving their own safeguards methods; and

- (c) To conduct and sponsor research in conjunction with the Division of Research to improve safeguards procedures, techniques and instrumentation.

(b) General statement

254. The staff of the division was recruited during 1958 and 1959 and work was started on the preparation of safeguards procedures for use by Member States and by the Division of Inspection. The division is selecting and developing the most satisfactory methods of accounting, measurement, inspection and storehousing of source and special fissionable material, appropriate to each type and size of atomic energy installation. As the safeguards procedures are prepared, they are being tested and improved in plants of suitable types being operated by Member States of the Agency. Technical assistance is being given to some Member States, e.g., Japan, by aiding them to set up their internal accounting procedures for source and special fissionable materials. Several countries are now engaged in research sponsored by the Agency which will develop and improve safeguards measurement techniques.

(c) Programme of work for 1960

255. The staff of the division will continue their work of preparing safeguards procedures. The division will study the safeguards procedures now used by Member States and endeavour to make use of their experience to develop procedures which are universally applicable and incorporate the most satisfactory methods and techniques now in existence. These procedures will be used for the following purposes:

- (a) As the methods used throughout the Agency for maintaining records, storehousing and shipping of source and special fissionable materials;
- (b) As the methods used by the Division of Inspection for safeguards control of material or equipment supplied under Agency projects or for safeguards controls that the Agency has been or may be requested to apply to material or equipment supplied under bilateral agreements; and
- (c) As a guide and source of information for all countries or regional groups required to set up accounting, control, and storehouse procedures for these materials.

256. The procedures developed by the Agency during 1959 will be improved on the basis of operating experience. Safeguards procedures for large reactors and other types of nuclear facilities will be prepared to the extent that such work is needed and that opportunities exist for undertaking it.

257. The Agency may possibly be required during 1960 to undertake safeguards inspection of materials supplied under several Agency projects and under several bilateral agreements. The division will develop the details of the reports and inspection required for each specific installation.

258. The division will provide technical assistance to Member States at their request, in establishing and improving their internal safeguards procedures. This assistance will be provided by correspondence and when necessary by visits of members of the division to assist the countries in establishing the procedures to meet the requirements of each of their atomic energy installations.

259. Consultations will be held with Member States which are co-operating in atomic energy programmes on a regional or bilateral basis to try to ensure that the same standards of safeguards control procedures are followed by all organizations or countries. It is desirable to have universal safeguards control procedures in order to prevent the confusion, duplication and dissension that would occur if several methods of controls were applied.

260. In conjunction with the Division of Research, the division will endeavour to develop improved methods of safeguards measurement techniques and equipment. This development work will be done partly by the Agency staff and partly by personnel of Member States working on research sponsored by the Agency. This research will include the following aspects of safeguards:

- (a) Selection and improvement of the most satisfactory chemical quantitative analytical techniques required for measurement of source and special fissionable materials;
 - (b) Selection and improvement of techniques for determining uranium-235 burn-up and plutonium production in fuel elements in a reactor;
 - (c) Development of non-destructive analysis techniques for these materials; and
 - (d) Statistical evaluation of various types of accounting and measurement methods.
- (d) Explanatory statement on staff

261. The programme of work envisaged for 1960 can be carried out by the staff authorized in the 1959 budget. As the work of preparing safeguards procedures for less complex installations diminishes, the staff will be able to begin work on procedures for the more complex installations that will be required in the future. As the staff acquire experience in providing technical assistance on safeguards matters, they will be able to do more of this kind of work - which is expected to increase - without additional personnel.

16. Division of Inspection

Table 17

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	1	1	1	-	1
P-4	2	2	2	-	2
Subtotal	4	4	4	-	4
GS	2	2	2	-	2
Total	6	6	6	-	6

(a) Functions and responsibilities

262. The division's responsibilities are:

- (a) To apply the appropriate safeguards to Agency projects;
- (b) To apply, at the request of participating countries, safeguards controls for materials and equipment supplied under bilateral agreements or at the request of a Member State to any of that State's activities in the field of atomic energy; and

- (c) In connexion with (a) and (b), to report for correction any condition constituting a health and safety hazard or which might indicate that satisfactory control was not being exercised. This activity will be carried out in close collaboration with the Division of Health, Safety and Waste Disposal.

(b) General statement

263. The staff of the division is only being recruited and trained gradually to the extent that a need can be anticipated. This training comprises:

- (a) Direct instruction by the staff of the Division of Safeguards who developed the safeguards procedures; and
- (b) Operational training that the staff will obtain by assisting in the tests of the new procedures that are to be developed.

(c) Programme of work for 1960

264. During 1960 the staff of the division may be required to apply safeguards controls to several Agency projects and to materials and equipment supplied under bilateral agreements.

265. The division will set up at Agency headquarters an inventory control procedure for the source and special fissionable materials used in conjunction with Agency projects and applicable bilateral agreements. These records will be maintained from the reports provided by the governments concerned.

266. During their inspection visits to atomic energy installations, the representatives of the Division of Inspection and of the Division of Health, Safety and Waste Disposal may advise the responsible authorities on methods of improving their health and safety precautions and may provide assistance to those authorities for the improvement of their methods of accounting, measurement and storage of source and special fissionable materials.

267. Jointly with personnel of the Division of Safeguards, the staff will test the safeguards procedures as they are developed. These tests will be conducted at existing atomic energy installations of Member States and will not only serve to improve these procedures by putting them to the test under working conditions, but will also provide training for the personnel of the division.

(d) Explanatory statement on staff

268. The number of staff authorized in the 1958 and 1959 budgets will be sufficient to perform the work of the division anticipated in 1960. As the work of applying safeguards controls increases, staff will be transferred from the programmes of training of personnel and the testing of procedures that are to be conducted by the Division of Safeguards.

269. One of the General Service staff will serve as secretary for the professional personnel. The other will serve as an accountant and maintain the inventory control records of the materials and equipment subject to control by the division.

VI. DEPARTMENT OF ADMINISTRATION, LIAISON AND SECRETARIAT

17. Office of Deputy Director General for Administration,
Liaison and Secretariat

Table 18

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
DDG	a/	1	1	-	1
P-5		-	1	-	1
P-2		1	1	-	1
Subtotal		2	3	-	3
GS		1	2	-	2
Total		3	5	-	5

a/ No detailed budgetary provision.

18. Secretariat of the General Conference and the
Board of Governors

Table 19

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	-	-	-	1	1
P-5	1	1	1	(1)	-
P-4	2	5	5	-	5
P-3	-	-	-	-	-
P-2	1	1	1	-	1
Subtotal	4	7	7	-	7
GS	4	4	4	-	4
Total	8	11	11	-	11

(a) Functions and responsibilities

270. The division's responsibilities are:

- (a) To serve all meetings of the General Conference and the Board and of their committees, and to co-ordinate the provision by other branches of the Secretariat of the additional services needed for such meetings;

- (b) To undertake the continuing functions of ensuring that all decisions taken by the General Conference and the Board are brought to the attention of the officers responsible for their implementation, and of co-ordinating the timely preparation and issue of all documents required for these two organs;
- (c) To collaborate with the Division of Scientific and Technical Information in the preparation and co-ordination of the schedule of meetings of all types which the Agency is to sponsor or co-sponsor; and
- (d) To provide the Agency with interpretation services.

(b) General statement

271. As the Agency's operations develop, the work of the Board and the General Conference is becoming wider in scope and more technical than in the past and the task of the division in servicing meetings will correspondingly become more complex in character. Its co-ordinating function in the preparation of meetings will increase with the diversity of the documentation required, and the fact that the Board has established a greater number of committees to cope in a preliminary way with certain categories of topics.

272. The calls on the division for interpretation services are now extending beyond the needs of the General Conference and the Board, for which these services have been virtually limited until recently. In 1959 the Agency is to organize six international meetings of various types, and at the secretariat level some eight advisory panels are to be convened; and the provision of interpretation for these meetings and panels will add considerably to the division's work.

(c) Programme of work for 1960

273. The trends of the division's work in 1959 are likely to continue in 1960 as the Agency's operational activities are further expanded and diversified. A larger programme of scientific meetings is planned, and this will add to the demands for interpretation services; beyond this, the work which the division will have to undertake in 1960 is expected to be essentially the same in character, if somewhat greater in volume, as its work in 1959.

(d) Explanatory statement on staff

274. The responsibilities of the post of Secretary of the Board have grown with the increase in the diversity and complexity of the Board's activities. Moreover, much of the responsibility for co-ordinating the preparations for and the work of the annual sessions of the General Conference has now been assigned to this post. It has thus increased its scope since it was established at the P-5 level in 1957, and the Board consequently proposes that it should be regraded at the D-1/2 level, bearing in mind the grade of similar posts in the United Nations Secretariat.

275. In 1959 the division has only four posts for interpreters although eight interpreters are needed to provide a meeting with full interpretation into the Agency's four working languages. At present this nucleus of staff is supplemented by the temporary engagement of the four additional interpreters required for meetings of the Board and some of its committees. Although this practice gives rise to considerable difficulties in engaging temporary interpreters of suitable calibre, it has in the past been justified on economic grounds. However, in the present schedule of Board meetings, the General Conference and the extension of the Agency's activities in organizing scientific meetings for which interpretation will be required, the economic break-even point, as between employing interpreters as part of the permanent staff or as temporary assistance, has been reached. Any increase in the scheduled meetings in 1960 will make it more economic to add four interpreters to the Agency's staff.

19. Division of External Liaison and Protocol and Office of the Representative of the Director General at the United Nations Headquarters

Table 20

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	2	2	2	-	2
P-5	-	2	3	-	3
P-4	1	1	1	-	1
P-3	1	1	1	1	2
P-2	-	-	-	1	1
Subtotal	4	6	7	2	9
GS	4	5	10	1	11
Total	8	11	17	3	20

External Liaison (Headquarters Office)

(a) Functions and responsibilities

276. The division's responsibilities are:

- (a) To maintain liaison with Member States and international organizations;
- (b) To maintain liaison with the United Nations, and with the specialized agencies in implementation of the relationship agreements between the Agency on the one hand and the United Nations and the specialized agencies on the other, and maintain liaison with specialized agencies where agreements have not yet been reached;
- (c) To advise on external policy aspects of the operations of the Agency;
- (d) To prepare and participate in negotiations with Member States and international organizations;
- (e) To provide liaison with the Host Government;
- (f) To compose and edit the internal and external periodical reports of the Agency;
- (g) To provide protocol services to the General Conference, the Board and the Director General;
- (h) To arrange and co-ordinate representation of the Agency at meetings of the United Nations and other international organizations and arrange notification of representation at other meetings; and
- (i) To assist in the provision of secretariat services to the General Conference and the Board.

(b) General statement

277. In 1958 and 1959 the division devoted an important part of its work to the establishment of communications between the Agency and its Member States, and other organizations. Thus, close working relations were developed with the United Nations; relationship

agreements were negotiated with certain of the specialized agencies; rules and procedures to govern the Agency's relations with non-governmental organizations were formulated, and informal working relations were established with regional inter-governmental organizations active in the field of the peaceful uses of atomic energy.

278. The division was also responsible for developing the relationship with delegations, Members of the Board and Resident Representatives. In implementing the Headquarters Agreement with the Government of Austria, arrangements were made for the registration and issue of identity cards to Governors, Resident Representatives, members of delegations, and the Secretariat.

279. The division drafted and edited the periodical reports of the Director General to the Board; the Board to the General Conference; and the Agency to the General Assembly and ECOSOC. The division helped to prepare numerous other documents of the Board, the General Conference and the Secretariat, and helped to service the committees of the Board and General Conference. For the effective discharge of its duties the division followed closely the work of the Board and its committees, and it provided briefing material to the Director General or Deputy Director General concerned on questions of external liaison. Finally, the division provided advice and exercised editorial control over formal communications from the Agency to Member States.

280. The work of the division, because of its central function in connexion with reports, proved considerably greater than appeared to have been envisaged in the initial programme and budget, and the Board accordingly approved an expansion of its staff in 1959.

(c) Programme of work for 1960

281. In 1960 the division will continue to provide central supporting services of various types. It is expected that as the Agency's technical operations continue to expand there will be a concomitant increase in the division's work of developing liaison and communications with Member States, of assisting in the negotiation of arrangements and agreements relating to the technical operations of the Agency and of maintaining contacts with other organizations concerned with the peaceful uses of atomic energy. It is thus becoming an important task to promote closer liaison with scientific and technical bodies and authorities.

282. While most of the task of negotiating agreements with other organizations has been completed, the implementation of these agreements involves a good deal of liaison work both within the Agency and with the organizations concerned. It is also expected that there will be an increase in the Agency's contacts with non-governmental and regional inter-governmental organizations, and that agreements with one or more of these bodies will be concluded.

283. Relations with delegations and the increasing number of Resident Representatives of Member States at the headquarters of the Agency call for the performance of protocol functions by the division, and this task will be substantially increased by the elimination of the post of Special Adviser who heretofore, in the Office of the Director General, assumed the major part of the responsibility for dealing with the Austrian authorities. While no staff increase is suggested for this purpose at the present stage, these protocol services may develop into an important additional task for the division.

284. The development of the Agency's technical operations and the decision of the General Conference at its second regular session that a report should be submitted annually to ECOSOC have also caused a considerable increase in the size and complexity of the reports to be prepared by the division. The reports for which the division is primarily responsible now include:

- (a) Reports by the Director General to the Board (every two months);
- (b) The Annual Report of the Board to the General Conference;
- (c) The Annual Report of the Agency to the General Assembly of the United Nations;
- (d) The Annual Report of the Agency to ECOSOC; and
- (e) Any papers required from the Agency for ACC.

285. The number of meetings of the United Nations, the specialized agencies, regional organizations and non-governmental organizations which the Agency is invited to attend, or in which the Agency has an interest, has grown, pari passu, with the broadening of the Agency's technical activities. It has therefore been necessary to set up a reports and conferences section within the Division of External Liaison which, in addition to serving as a central point for the preparation of the reports mentioned above, has the task of ensuring that all such meetings are brought to the attention of the technical or non-technical offices concerned, and that in appropriate cases notifications of attendance at meetings are sent and other arrangements for attendance are made. The section also receives and distributes all reports prepared by the Agency's representatives at external meetings. The division's role is thus that of ensuring, in close co-operation with the Division of Scientific and Technical Information, that the Director General's decisions, taken on the advice of the department or departments concerned, in regard to the Agency's representation at external meetings, are effectively carried out.

(d) Explanatory statement on staff

286. The present staff will be sufficient for the regular work of the division and for most of the new activities foreseen above. However, increased work in two fields will require the recruitment of additional junior officers, namely:

- (a) The amount of work of the reports and conferences section has already made it necessary provisionally to recruit an additional junior officer and it will be necessary to maintain this post, which has been established by transfer from another division. The work of the post consists of assembling and collating material to be incorporated in reports and of assistance in arranging representation at meetings and conferences and in reproducing and circulating reports on such meetings. The post is therefore classified at the P-2 level;
- (b) The establishment of consultative relations with non-governmental organizations involves a considerable amount of routine correspondence in both English and French, as well as the study and handling of material received from the bodies concerned. The volume of work cannot be foreseen accurately at this moment, but it will be necessary to recruit one additional staff member at either a senior General Service or junior Professional level according to the experience of the coming months.

Office of the Representative of the Director General at United Nations Headquarters

(a) Functions and responsibilities

287. Within the framework of the general responsibilities of the Division of External Liaison, and in particular the maintenance of close liaison with the United Nations, the specific functions of the Representative of the Director General at United Nations Headquarters are:

- (a) To assist the Director General and the Secretariat in implementing the Relationship Agreement between the Agency and the United Nations;

- (b) To represent the Director General at meetings of the main organs of the United Nations, and to give assistance to any representative of the Agency designated to attend those meetings;
- (c) To ensure the prompt and complete exchange of documents and information on matters of interest to the Agency at the United Nations;
- (d) To report promptly on all activities of the United Nations in which the Agency may have an interest, taking the necessary measures to ensure the Agency's association with, or participation in, those developments;
- (e) To assist the Secretariat and, in particular, the Division of External Liaison in preparing and transmitting reports which the Agency is required to submit to different organs of the United Nations;
- (f) In general to seek to develop and maintain a close working relationship between the Agency's Secretariat and the United Nations in all fields of mutual interest, and particularly in the fields of technical assistance, effects of atomic radiation, economic studies and surveys related to energy resources, scientific conferences and administrative matters; and
- (g) To advise the Director General on policy matters pertaining to relations between the Agency and the United Nations family.

(b) General statement

288. The Office of the Representative of the Director General at the United Nations was opened in March 1958. In the ensuing nine months, close working relations were established with the Executive Office of the Secretary-General, the Office of the Under-Secretary for Atomic Energy Matters, the Department of Economic and Social Affairs, the Secretariat of UNSCEAR, the Secretariats of ACABQ, TAB, the United Nations Special Fund as well as with the administrative divisions of the United Nations Secretariat.

289. In 1958 the head of the office and his deputy covered over 200 formal meetings of the United Nations organs, including those of the Preparatory Committee of the Special Fund, the twenty-fifth session of ECOSOC, the thirteenth session of the General Assembly, and those of TAC and others. In addition to these scheduled meetings, the staff members of the office participated in a number of informal conferences and meetings with members of the United Nations Secretariat and with heads of the liaison offices of the specialized agencies.

290. For the year 1959, the participation of the Agency in EPTA and in the Special Fund will further affect the number of meetings to be covered and reported upon, and will also necessitate a close day-to-day working relationship with the secretariats of these bodies. Close relations have also to be maintained with the Secretariat of UNSCEAR, whose work is of great concern to the Agency.

(c) Programme of work for 1960

291. It is anticipated that the programme of work of the office will continue along much the same lines as in 1959, although at an increasing tempo. There is, however, another activity which the liaison office has not been in a position to deal with, namely, public information. The facilities in the field of public information at the United Nations Headquarters are of great potential value but the present staff is too small to permit the office to make full use of them. Moreover, a large press corps representing all regions of the world is accredited to the United Nations. In addition there is close collaboration on information through the press, radio, television and films between the Agency and the United Nations Office of Public Information. This co-operation could be broadened by a day-to-day liaison between the two organizations.

292. A public information officer in the Office of the Representative could provide valuable service by giving personal briefings to supplement the news releases and other public information material reaching the United Nations Headquarters and by other forms of direct personal contact with the public information media.

293. A great number of representatives of non-governmental organizations are also stationed at the United Nations. These groups can do much to spread information about and mobilize support for the Agency.

(d) Explanatory statement on staff

294. The initial manning table of the office provided for two Professional posts (one Director and one P-3), and two General Service posts. Subsequently, it became necessary to up-grade the P-3 post to P-5 and to establish an additional General Service post. The office staff provided for in the programme and budget of the Agency for 1959 has proved to be adequate, except for the period during the General Assembly sessions when the work of this office greatly increases. To enable the office to undertake the public information activities mentioned above, it will be necessary to transfer a competent Professional officer at the P-3 level to the Office of the Representative, who would receive technical guidance from the Division of Public Information. The post will be created by transfer from the established posts of the Division of Public Information; in other words, no addition to the total establishment will be necessary. The public information officer, apart from his principal functions, would assist the head of the office in public information work, and in covering numerous meetings of the General Assembly and its committees. Such assistance is greatly needed during the General Assembly's busy period.

20. Legal Division

Table 21

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	1	2	2	-	2
P-4	1	-	-	1	1
P-3	1	1	1	-	1
Subtotal	4	4	4	1	5
GS	4	4	4	1	5
Total	8	8	8	2	10

(a) Functions and responsibilities

295. The division's responsibilities are:

- (a) To prepare draft legal instruments as required by the Agency;
- (b) To provide for the registration of all agreements pursuant to Article XXII, B of the Statute;

- (c) To answer current questions concerning the legal aspects of procedural, financial, budgetary, personnel and related problems;
- (d) To give legal advice to all technical divisions on their activities, including drafting of operational legal instruments such as research contracts, supply agreements, project agreements and other contracts on technical assistance;
- (e) To undertake studies on the legal aspects of the regulatory functions of the Agency;
- (f) To undertake studies on comparative legislation in the field of atomic energy; and
- (g) To perform any other legal work and carry out such studies of a legal nature as the Agency requires.

(b) General statement

296. The development of Agency activities requiring legal assistance has shown that the Legal Division was considerably understaffed. In conformity with the recommendations in the Programme and Budget for 1959, the time of the senior officers, including the head of division, has been fully absorbed in current legal work on international agreements and Agency projects, and in providing legal advice on the formulation of health and safety standards and of safeguards provisions. It has, however, been possible to collect and evaluate all available documentation on international co-operation in the atomic field, especially the documentation concerning supply of fissionable materials and legislation on third party liability and financial protection. These legal studies recommended in the programme for 1959, had to be carried out with the help of temporary assistance. Only thus was it possible to prepare working materials including a secretariat draft for a panel of experts to advise the Director General on possible action by the Agency in the latter field.

(c) Programme of work for 1960

297. The prospective increase of technical activities will involve a proportionate increase of legal work. In 1960, additional supply and project agreements are expected to be concluded; research contracts which up to now were drafted on an ad hoc basis will need a more standardized form, especially with respect to the problems of international patent law; the establishment of the Agency's research facilities will necessitate additional legal instruments; the convening of international conferences will involve juridical work in the formulation of opinions and standards, and work of a legal character to ensure that experts attending conferences held away from the headquarters of the Agency are legally protected. The work involved in the Agency's participation in symposia and conferences of regional organizations and of the specialized agencies, on subjects connected with the Agency's activities (maritime insurance, air and river transportation, radiation protection) requires the full-time services of a competent legal officer.

298. The growing number of legal publications and reference books in the field of atomic law and international organizations will necessitate more systematic work with respect to extracts, digests and surveys of legal documents which will have to be prepared by a legal officer.

299. It is expected that the Panel of Experts on Civil Liability and State Responsibility for Nuclear Hazards will have accomplished its work in late 1959. The Agency may then wish to consider preparations for an international convention on civil and state responsibility in the atomic field, possibly in 1960, which would involve further detailed work on the elaboration of a prospective draft convention. Several steps might become necessary to promote acceptance of such a convention, and the division might wish to continue work on certain special topics such as liability and financial protection for nuclear-propelled

forms of transport, and possibly the entire problem of international insurance of the transportation risk of special fissionable materials. It will also have to service additional panel meetings in the field of third party liability.

(d) Explanatory statement on staff

300. In 1959 the regular Professional staff of this division has not been able to deal with special tasks such as research for the preparation of legislative activities. The Secretary of the Panel of Experts on Civil Liability and State Responsibility for Nuclear Hazards had, therefore, to be engaged on a special consultant contract. The expansion of Agency activities in the legislative field will continue in 1960 and additional Professional posts will be needed. The Board therefore considers that an additional P-4 post should be established and that one post in the General Service category should be added to the division's manning table, considering that some of the established General Service posts are filled by law clerks doing substantive work.

21. Division of Public Information

Table 22

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
P-5	1	1	1	-	1
P-4	-	3	3	-	3
P-3	1	1	2	-	2
P-2	-	-	1	(1)	-
Subtotal	2	5	7	(1)	6
GS	2	6	8	(1)	7
Total	4	11	15	(2)	13

(a) Functions and responsibilities

301. The division's responsibilities are:

- (a) To provide information to the general public on the aims and activities of the Agency; and
- (b) To provide information to the general public on aspects of nuclear science and the peaceful applications of atomic energy.

(b) General statement

302. During 1958 the staff of the division had to concentrate its efforts on publicizing the aims and activities of the Agency, but in the course of 1959 it has become possible to begin the second of the activities mentioned above.

303. In 1958 the necessary arrangements were made for distributing the Agency's releases throughout its Member States. The division also took an active part in the public information work of the Second United Nations International Conference on the Peaceful

Uses of Atomic Energy. The number and frequency of documents issued to information media has increased as the Agency's technical programmes have got under way. Thus 70 press releases were issued in 1958; it is expected that double that number will be issued in 1959 and still more in 1960. The demand for special articles is also growing.

304. In 1959 the division is also starting work of an educational nature. It is improving its documentation service and is doing more work in the field of television and radio. The services offered to non-governmental organizations have been expanded, and liaison with them is increasing. The division has continued to receive help from and co-operates closely with the information services of the United Nations and specialized agencies.

(c) Programme of work for 1960

305. Although all the members of the division work as a well integrated team and none of its various activities can be regarded in isolation, its work can be grouped under five headings:

(i) Information bulletins and press releases

306. To the greatest extent possible use is made of the existing channels of communication in Member States for the diffusion of the Agency's bulletins and releases. These channels include news agencies, newspapers and periodicals, radio and television networks, educational authorities and non-governmental organizations.

307. The releases are distributed in Vienna to Member Governments and information media. Information media in Member States are reached direct from headquarters or through the United Nations information centres which are of considerable help to the Agency as distribution agents. Releases are normally issued in the four working languages, and in German. A limited number of photographs are distributed in the same manner.

308. The provision of adequate facilities and services to the representatives of information media is of particular importance during conferences and meetings, both at headquarters and at the venue of conferences and meetings held away from Vienna. The scientific meetings organized by the Agency are of special interest and must always be well covered wherever they may be held.

309. One paper of some interest which was issued in 1958 was a leaflet dealing with the aims and work of the Agency, similar to leaflets which have been prepared by all other members of the United Nations family. It was issued in the four working languages in 1958 and in some other languages of Member States in 1959. The demand for the leaflet continues and it is necessary to revise it and keep it in print.

310. Publication of the non-technical bulletin was begun in 1959. The bulletin is designed primarily to serve representatives of information media who are invited to make free use of the material it contains and to reach persons and institutions who direct policies and influence opinion in Member States. The aim of the bulletin is to give journalists, newspapermen, radio commentators, educators and non-governmental organizations an account of the activities of the Agency and a summary of the more important discussions and decisions of its governing bodies. The bulletin is not intended to be just another periodical but rather a source of information to be diffused more widely by other persons engaged in information work; it is thus hoped to reach a much larger reading public than that which could be reached by a periodical designed for direct distribution to the public.

(ii) Liaison with the public

311. In addition to issuing releases and bulletins the division maintains direct and close liaison with representatives of information media by personal contact in Vienna and by correspondence and occasional visits away from headquarters.

312. The division also prepares, on request, articles for magazines, journals, year-books and encyclopaedia and tries to promote the writing of articles and the holding of lectures and talks about the Agency. It answers inquiries of the public, arranges for lectures and assists visiting groups of students, etc.

313. As pointed out above, the United Nations Headquarters offers excellent opportunities for public information work, and it is proposed to follow the example of other agencies within the United Nations family and station an information officer in New York.

(iii) Documentation

314. In 1959 the division started a small documentation service to survey the leading and daily newspapers of Member States and the more important semi-technical periodicals. The division also receives some information direct from Member States and private sources. Clippings containing atomic energy news are filed, and data from periodicals and other information material are extracted, classified and filed. This work is carried out in co-operation with the Division of Scientific and Technical Information, and it is planned to issue periodically a simple mimeographed review containing the information collected and to circulate the review to Member States as well as to use it for internal purposes. At this stage, of course, the review is necessarily selective rather than comprehensive.

(iv) Education

315. Some work to educate the public in Member States about the peaceful uses of atomic energy will be a permanent task of the division. For this purpose contact has been established with UNESCO and with educational authorities in Member States and non-governmental organizations with a view to furnishing teaching material. Some consultants will be needed to assist the division in the preparation of such material.

316. In co-operation with UNESCO a basic manuscript is being prepared for adaptation and use by Member States as a teaching aid in schools. Work has already begun on the manuscript and it will be completed in 1960. In connexion with the manuscript it is proposed to produce a series of film strips as teaching aids. The material will also be used to prepare a short pamphlet about the peaceful uses of atomic energy for distribution to the general public. This would meet a need often voiced by non-governmental organizations and United Nations associations.

(v) Special media

317. In 1958, still photographs were taken and distributed and some exhibits were displayed. In 1959, as more equipment has been acquired and the Agency's activities have become of greater general interest, more work is being done to publicize the Agency by radio and television. A radio studio has been set up at headquarters and a sound camera has been bought for this purpose. The division also co-operates with the Division of Scientific and Technical Information in promoting the use of the Agency's film library.

318. It is planned, to the extent possible, within budgetary limitations, to co-operate with the United Nations Visual Services Board and other agencies in the production of films of interest to the Agency.

(d) Explanatory statement on staff

319. A decrease of one post on the headquarter's manning table is proposed for 1960 in order to permit the stationing of an information officer at the Agency's liaison office at the United Nations. As a consequence of this transfer one General Service post can be abolished.

22. Division of Budget and Finance

Table 23

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	2	2	2	-	2
P-4	1	1	2	1	3
P-3	3	3	4	-	4
P-2	2	2	2	-	2
P-1	1	1	1	-	1
Subtotal	10	10	12	1	13
GS	12	12	14	6	20
Total	22	22	26	7	33

(a) Functions and responsibilities

320. The division's responsibilities are:

- (a) To provide financial services and controls for the Agency in relation to expenditure and receipts under the regular, operating and EPTA programmes;
- (b) To prepare the annual budget of the Agency, make budgetary estimates of the Agency's operations and provide other budgetary services to the Agency; and
- (c) To provide management and planning services to the Agency.

(b) General statement

321. During 1959 the finance branch is continuing to provide financial services with the same number of Professional staff as in 1958 despite a steady increase in its work. This was possible because, as was foreseen in the 1959 programme of work, the existing staff has gained in experience and efficiency. However, from mid-1958, the work in connexion with pay-rolls and pay-roll changes and audit of vouchers grew at a much faster pace than had been expected, and it became necessary during 1958 to employ additional General Service staff to handle this mounting load and to keep finance activities on a current basis.

322. Besides the usual fiscal control of allotments, obligations, disbursements, etc., the division contributes to the economy of the administration by its work in the Contract Review Committee and the Travel Co-ordination Committee, for both of which it provides

the chairman and various secretarial services. The main tasks of the Contract Review Committee are to examine and approve all proposals for purchases of between \$1 000 and \$5 000 in value, to decide on the acceptance of tenders and to ensure that contracts are in accordance with the Financial Regulations and Rules, are legally enforceable, and protect the interests of the Agency. Purchases to a value of \$5 000 or more are also examined by the committee but are forwarded with recommendations to higher authority for decision. The Travel Co-ordination Committee reviews the plans for future travel arrangements submitted to it by departments and makes recommendations to the Director General on the necessity for such trips and the possibilities of effecting economy in the manner in which the trips are planned.

323. In addition, the division is represented on other standing committees of the Agency in order to ensure that the decisions of those committees take full account of the Agency's financial policies and practices. Among the other committees in which the division takes an active role are the Technical Planning Committee, of which the budget officer is secretary and to which advice on budgetary matters is given, the Technical Assistance Co-ordinating Committee, the Publications Committee and others, in which both budgetary and financial matters frequently arise. For the Publications Committee the divisional representatives, besides their normal advisory functions, make inquiries on the pricing of publications and the costing of translation and printing services. This places a heavy burden on the Professional budget officers and accountants of the division, with the result that a disproportionate amount of the routine financial operations has to be performed by staff in the General Service category, some of whom are carrying out work which would generally be considered appropriate to the junior Professional grades.

(c) Programme of work for 1960

324. It is expected that in 1960 financial services in connexion with the operating and EPTA programmes will increase considerably the work of the finance branch. Services for fellowships, technical assistance and Agency projects will account for only a part of the increased work. In addition, correspondence on accounting matters with resident representatives of TAB and banking arrangements for the payment of fellowship stipends will have their impact, as will the work of handling a far larger number of bank accounts for the various currencies in which funds for the operating and EPTA programmes are expected to accrue.

325. The finance branch will also be responsible for the administration of any coupon scheme which the Agency might use or establish to facilitate the purchase by Member States of publications and equipment in the atomic energy field.

326. The budget and management branch in 1960 will continue to be responsible for the development of techniques and policies for the preparation of the programme and budget proposals, including their form and presentation, for the establishment of budget standards, for computing estimates, and in general for other aspects of the preparation and execution of the budget, including control of allotments.

327. The management staff will provide part-time assistance in peak periods during the preparation of the budget estimates, and will also engage in 1960 in activities such as: completion of the Agency's administrative manual in co-operation with all divisions concerned; study for the establishment of a system of work reports; perfection and control of a system of manning tables for the purpose of procuring the most effective utilization of the authorized staff; the institution of a programme for the improvement of forms; organizational studies; development of standards for determining staffing requirements, etc.

(d) Explanatory statement on staff

328. The increase of six General Service posts shown in the manning table for this division is, in so far as 1960 is concerned, actually an increase of only two, since four of the posts had to be added provisionally to the division's staff during 1958 and 1959 to cope with the mounting work. The need for the increase in 1960 is due principally to the growth of the operating and EPTA programmes and to the fiscal services required for the Agency's laboratory. The fellowship programme places a particular burden on the division, it being necessary to make numerous individual disbursements, and to maintain separate accounts for each fellow.

329. One additional Professional position at the P-3 level is also required. This post will be filled by a cost accountant and the incumbent will do cost accounting work for the Agency's laboratory, such as the determination of proper charges against the regular budget and the costing out of services rendered to Member States. Cost accounting work will also be done for the apportionment of the costs of the Agency's publications programme and of all document services provided for the General Conference, the Board and the Secretariat. Finally, the responsibilities attached to the second post in the budget branch have grown sufficiently to warrant its upgrading from P-3 to P-4.

23. Division of Personnel

Table 24

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	1	1	1	-	1
P-5	1	2	2	(1)	1
P-4	-	1	1	1	2
P-3	2	1	1	-	1
P-2	1	-	-	-	-
P-1	-	-	1	-	1
Subtotal	5	5	6	-	6
GS	10	10	12	1	13
Total	15	15	18	1	19

(a) Functions and responsibilities

330. The division's responsibilities are:

- (a) To carry out the personnel policy of the Agency;
- (b) To recruit, in consultation with the heads of the departments, the staff of the Agency, including registration and handling of applications;
- (c) To administer the staff under the Provisional Staff Regulations and the Staff Rules; and
- (d) To develop personnel policies.

(b) General statement

331. The day-to-day work of the Division of Personnel is steadily increasing as a consequence of the increasing number of staff of the Agency and the creation of new posts. In 1959 and the following years emphasis will gradually shift from the immediate problems of initial recruitment of a fairly large international staff and of settling it at the headquarters of the Agency, to the long-term problems of establishing and implementing policies covering all fundamental aspects of personnel work devised to meet the particular and distinct needs of the organization.

332. Experience gained so far indicates that some of the main problems which will merit particular attention in the future are:

- (a) That of improving the geographical distribution among the staff while maintaining high standards of qualifications, particularly in the scientific field;
- (b) That of applying a reasonable policy of rotation, especially among the scientific and technical personnel, while preserving the necessary degree of continuity in the work. It will be necessary to expand recruitment sources and create conditions which will attract highly qualified and specialized candidates for fixed-term service with the Agency; and
- (c) That of keeping the regular establishment of the office as small as is consistent with the expanding activities of the organization and at the same time of meeting the growing needs for temporary staff of all kinds - consultants, experts, and staff serving conferences and meetings, etc.

333. The solution of these and other problems will require not only a great deal of forethought and effort but also the elaboration of detailed administrative rules and procedures designed to cover the different employment conditions and needs of a staff which is unusually varied in terms of nationality, specialization, nature of employment, type and duration of contract and even location of work. The experience of other international organizations will only be of limited help in solving these problems. The Agency is unique in that it will not have the same high proportion of permanent staff as other organizations and in that it has a greater need for scientific and technical specialists in a field in which they are extremely scarce.

(c) Programme of work for 1960

334. In 1960, as in 1958 and 1959, recruitment will be one of the most important functions of the division. A considerable number of appointments will be made in 1960 to fill:

- (a) Certain posts approved in 1959 which, because of cautious recruitment were not filled by the end of the year;
- (b) Additional posts provided in the 1960 budget;
- (c) Posts vacated in the turnover of staff on expiration of fixed-term contracts or on separation for other reasons; and
- (d) Posts falling vacant when staff members, at the end of the probationary periods, are not found suitable for permanent appointments.

In addition, the division will be engaged in recruitment of a large number of temporary staff for meetings of the Board, the General Conference and other meetings and conferences (in 1958 close to 600 temporary short-term contracts were granted). Finally, a considerable increase of work will result from the engagement of consultants and experts.

335. Efforts to improve the geographical basis of recruitment will continue. In particular, it is hoped to increase the number of nationalities represented among the staff (at the beginning of 1959 the number of nationalities was 32).

336. The amount of work in connexion with recruitment cannot be expected to decrease. At the same time the division's work in connexion with staff administration and staff relations will, with the growth of the Agency's staff, continue to increase considerably; in fact the handling of the day-to-day problems, such as administration of salary entitlements under the Staff Rules, consideration of promotion, review of the records of staff at the end of their probationary periods, renewal of contracts, etc., takes already a major part of the time of the existing Professional staff. The diversity of the staff tends to increase this work.

337. A careful review of the Staff Rules to eliminate inconsistencies, the adaptation of personnel policies to the particular needs of the Agency and the development of new policies in fields which have not been covered at all or only covered insufficiently is being pursued in 1959, but will require continued attention in 1960. In order to begin some of these projects, it has been necessary to borrow staff, on a temporary basis, from other units of the Secretariat. Moreover, a number of other projects in the field of personnel policy have, mainly because of the shortage of staff in the division, been suspended or delayed during 1958 and 1959.

338. The greater experience which will have been gained by 1960 about the special needs of the Agency in respect of its personnel policy makes it essential to continue the review of the Staff Rules and also of the Provisional Staff Regulations. Refinements and innovations may have to be introduced in the administrative rules which may entail certain deviations from those of other international organizations.

339. It is intended to improve procedures and arrangements for recruitment and promotions in 1960. In this connexion it should be kept in mind that the Agency requires staff with varied educational background and experience - scientific and technical personnel, staff for the various administrative services covering a wide range of professions, linguistic staff, and clerical and secretarial personnel.

340. For these reasons flexible administrative arrangements for appointments and promotions for the different groups of appointees may be needed. It is planned to increase the use of special panels or committees within the Secretariat to give advice on appointments and promotions and the servicing of these bodies will involve more work. Improved methods of testing the qualifications of different categories of staff are being considered.

341. In order to better compare and evaluate the qualifications of the different staff members, it is planned to arrange a periodic reporting system on the performance of individual staff members.

342. New procedures to ensure proper organization and maintenance of personnel records (including applications, the number of which the Agency had received as of the beginning of 1959 was approximately 7 000) and for processing all personnel actions will be put into effect.

(d) Explanatory statement on staff

343. As the limited number of personnel officers of the division is fully occupied with the essential day-to-day problems and as the arrangements for borrowing staff from other divisions cannot be continued in 1960, a new Professional post at the P-4 level for an additional personnel officer is required. The main duties of the incumbent will be the continuous review of personnel policies, and of the Provisional Staff Regulations and the Staff

Rules, and the preparation of improved personnel procedures. In this connexion it should be mentioned that most of the other international organizations have found it necessary to establish separate policy sections within their divisions of personnel, to deal with personnel policy and procedures.

344. The budgets for 1958 and 1959 provided in the manning table for the Division of Personnel a post at the P-5 level for a medical officer to be chief of the Agency's health service. Experience has shown, however, that there is no need for a full-time medical officer in the establishment. The present arrangement, whereby a physician provides part-time medical services to the staff of the Agency, under a special contract, is entirely satisfactory. Since this physician does not have the status of a full-time staff member of the Agency and since his duties in the Secretariat are additional to the private practice he maintains in Vienna, it is more proper to charge the cost of his services (which is considerably less than the cost of maintaining a P-5 officer on an international basis) to the appropriation for similar contractual expenses than to an established post. In the circumstances it is proposed to delete one P-5 post from the manning table of the Division of Personnel for 1960.

345. As the section of the division entrusted with the important duties of maintaining personnel records is seriously understaffed, an additional general service post is needed for 1960.

24. Administrative Office of Technical Assistance

Table 25

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
P-5	1	1	1	-	1
P-4	1	1	1	-	1
P-3	-	-	-	1	1
Subtotal	2	2	2	1	3
GS	2	2	2	1	3
Total	4	4	4	2	6

(a) Functions and responsibilities

346. The Administrative Office of Technical Assistance has to provide co-ordinated administrative support for all technical assistance planning and activities of the Agency.

347. It exercises this function in close collaboration with interested technical and administrative divisions, in particular the Division of Economic and Technical Assistance, the Division of External Liaison and the Division of Budget and Finance, in accordance with the Agency's statutory obligations, its Financial Regulations and Rules, its agreements with the United Nations and the specialized agencies and accepted patterns of international practice, and in conformity with the obligations resulting from the participation in EPTA and the membership in TAB. It acts also as channel of communication with the United Nations Special Fund.

348. The responsibilities of the office include:

- (a) Co-ordination of all administrative, financial, legal and personnel aspects of technical assistance within the Agency, in support of the Agency's technical assistance programme and co-ordination of administrative practices with those of the United Nations and the specialized agencies; exchange of information with them concerning programme elaboration under EPTA and jurisdictional questions;
- (b) Preparation for and presentation to TAB and its working parties of detailed information and data required for the elaboration by TAB of the annual technical assistance programme as the basis for the authorization by TAC of the allocation of EPTA funds to the Agency in proportion to its share in the approved over-all programme; and preparation of data for TAB's annual report to TAC on the implementation of the programme;
- (c) Periodic reporting on the financial position of the Agency's technical assistance activities;
- (d) Certifying, within authorized budgetary limits, expenditures on fellowships and technical assistance missions and projects financed under the regular programmes and EPTA;
- (e) In collaboration with the Division of External Liaison, negotiating technical assistance agreements with governments. Developing contractual arrangements with the Agency's technical assistance projects personnel and administrative assistance to that personnel when in the field, and providing arrangements for administrative support of Agency projects by governments receiving technical assistance; and
- (f) Liaison with the resident representatives and other field officers of TAB concerning questions referred to in (b) and (e) above, and all administrative, financial, legal and personnel matters related to the Agency's technical assistance projects personnel in the field.

(b) General statement

349. The experience of over a decade, embodied in a series of legislative texts, rules and regulations, now guides the United Nations and the specialized agencies in the planning and administration of their technical assistance activities. While the Agency is new to this field, its administrative techniques are normally very much the same as those of the United Nations, the specialized agencies and TAB. The specific functions of the Agency and the conditions under which its technical assistance may have to be carried out may nevertheless require some adaptations of established techniques.

350. Where, as in the case of the Agency, a number of divisions in different technical departments are concerned with the development and execution of technical assistance projects, it is important that a central office for administrative co-ordination should ensure uniformity in the application of the Agency and EPTA regulations and procedures. This is particularly important in the initial stages of the Agency's technical assistance activities when numerous precedents are being established. In acting as the central point of contact between the Department of Administration, Liaison and Secretariat, other departments and TAB, the office will be able to co-ordinate most of the administrative work resulting from expanding technical assistance activities. In order to keep its staff to a minimum, the office will draw on the services of the existing housekeeping divisions to the maximum possible extent.

351. In approving the establishment of the Administrative Office of Technical Assistance the Board was also mindful of the Relationship Agreement with the United Nations which,

inter alia, provides for the co-ordination of the technical assistance activities of the Agency with those of the United Nations and the specialized agencies (Article XI), and recognizes explicitly the obligation "to take such action as may be necessary to achieve effective co-ordination of their technical assistance activities within the framework of existing co-ordination machinery in the field of technical assistance". (Article XV).

352. Between July 1958 and the end of that year, priority was given to work in connexion with the two sessions of TAB and its working parties, ECOSOC and TAC, consultations with specialized agencies concerning EPTA-financed technical assistance programmes for 1959, adaptation of the United Nations, EPTA and TAB regulatory texts and administrative procedures to the needs of the Agency, administrative support of the Agency's technical assistance missions, and to obtaining from governments preliminary estimates of their 1960 requirements in technical assistance from the Agency for transmission to TAB in February 1959. It should be noted here that, while in 1959 the Agency is benefiting from a special procedure under which TAB has allotted a lump-sum for its projects, from 1960 onwards the extent of the Agency's participation and the size of its share of EPTA resources will be determined solely by the requests of governments for technical assistance in the atomic energy field.

353. A number of administrative technical assistance tasks have been delayed or postponed as a result of the shortage of staff trained in technical assistance administration. This situation is expected to improve somewhat during 1959.

(c) Programme of work for 1960

(i) Agency financed technical assistance programme

354. As in 1959, the work of the office in 1960 as related to the Agency's regular programme will include:

- (a) Appointment of personnel for technical assistance assignments and missions, (contractual arrangements, salaries, allowance, travel, etc.);
- (b) Administrative support to experts and missions in the field;
- (c) All correspondence with TAB resident representatives concerning projects in preparation or execution;
- (d) Certifying all technical assistance expenditures; and
- (e) Administrative briefing of experts and establishment of standard administrative procedures for projects personnel.

(ii) EPTA

355. The work under EPTA, in connexion with TAB and the participating organizations will be, mutatis mutandis, the same as under the regular programme. In addition to the functions described in (i), the following work is required under EPTA regulations and TAB procedures:

- (a) Development with TAB of Agency sub-totals for technical assistance projects (February/March);
- (b) All negotiations with recipient governments - through resident representatives - on the annual country programme requests to the Agency (April/June);
- (c) Examination of governments requests (July) and their preparation and submission to TAB (August);

- (d) Establishment of preliminary overall programme in TAB Working Party;
- (e) Participating in final programme decisions in TAB (October); and
- (f) Processing all contingency fund applications throughout the year and all requests for EPTA funds for operational purposes.

356. Further, a wide variety of monthly, special and annual reports on technical assistance projects funded under EPTA must be submitted to TAB.

(iii) Special Fund

357. The office will serve as a channel of communication with the Special Fund on questions relating to projects which the Managing Director of the Fund will send to the Director General for comment.

(d) Explanatory statement on staff

358. The expected increase of technical assistance activities will have a bearing on the work of the office. Moreover, the regular procedure which the Agency must henceforth follow for obtaining its share of EPTA funds and which involves detailed programme submissions and periodic reporting to TAB, will cause much more work on the administrative level. The time of one of the existing staff members will therefore be completely absorbed by budgetary control, the preparation of contractual arrangements with recipient governments on the one hand and experts on the other, and with the administrative servicing of the experts, starting with the recruitment and briefing phase and extending through their entire stay in the field. The second staff member provided for under the 1959 budget will be fully occupied with administrative procedures and reports under the EPTA programme, including negotiations of jurisdictional questions with other agencies and preparation of contingency requests. There is therefore a need for an additional post to ensure close co-operation with the Division of Budget and Finance in the current control of expenditures for the technical assistance programme of the Agency, in particular financial arrangements for the experts in the field.

359. A new General Service post will be required to provide secretarial services to an additional Professional officer, and to provide general assistance to the office as a whole by keeping records, preparing reports and making arrangements for travel, etc.

25. Division of Conference and General Services

Table 26

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
D-1/2	-	1	1	-	1
P-5	2	-	-	-	-
P-4	3	1	1	-	1
P-3	6	4	4	1	5
P-2	5	4	4	-	4
P-1	1	1	1	1	2
Subtotal	17	11	11	2	13

Table 26 (continued)

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
Subtotal (c/fwd)	17	11	11	2	13
GS	75	73	63	6	69
Add:					
Commissary and Restaurant	-	-	5	-	5
Subtotal	92	84	79	8	87
M & O	-	-	104	2	106
Add:					
Commissary and Restaurant	-	-	11	-	11
Total	92	84	194	10	204

(a) Functions and responsibilities

360. The division's responsibilities are:

- (a) To provide a centralized administrative support for all conferences and meetings of the Agency including the General Conference and meetings of the Board;
- (b) To provide a buildings management service for the Agency's headquarters;
- (c) To provide a telegraph and cable service, and a diplomatic mail pouch service, and to operate all telecommunication services;
- (d) To provide reproduction facilities for reports and publications of the Agency either by contractual printing or by use of the Agency's own reproduction equipment;
- (e) To provide a distribution and sales service for all documentation and publications, whether produced internally or externally;
- (f) To provide the services for procurement of permanent equipment and expendable supplies required by the Agency, and the maintenance of control records of such equipment and supplies;
- (g) To provide a central registry to process incoming, outgoing and internal correspondence; and
- (h) To provide other general administrative services as required.

(b) General statement

361. Requirements for administrative services in 1959 are much larger than in the early days of the Agency; in particular, the growth of the Agency's technical operations is reflected in a greater need for services for the following activities:

- (a) The Agency's scientific conferences and meetings. In addition to servicing the regular meetings of the Board and the General Conference, it is the division's

responsibility to ensure that adequate technical and other facilities are provided for all meetings, that the dates of the meetings are such as to enable the appropriate service divisions to furnish translation, interpretation, reproduction facilities and other supporting services, that administrative officers are available for assignment to direct these services, and that estimates of the financial needs for budget purposes are prepared;

- (b) Official travel. In particular, this service is needed for special fact-finding teams and members of the Agency's staff attending meetings. The division provides travel and transportation facilities, arranges hotel accommodation and other services such as that of obtaining visas, etc.;
- (c) Reproduction of documents. The demand has greatly increased for reproduction of reports and publications other than the regular publication of records and documentation for the Board and the General Conference. Reproduction services include operation of offset press, mimeograph, ozalid photostat, collating and binding of all publications, reproduction of the reports, maps, charts, and forms required; and contractual printing, copy editing, proof-reading, and related services;
- (d) The registry. The continued growth of all types of communication steadily increases the work involved in maintaining classified file manuals of all subjects, recording incoming communications and despatching them to the appropriate offices for action, reviewing outgoing mail to ensure conformity with established form and procedure, and operating the Agency's system for storage of records and its archives; and
- (e) Telecommunications. The increase in the number of meetings involves more work in planning, maintaining and operating sound recording and simultaneous interpretation equipment.

362. Since most of the procurement of furniture and office supplies was completed in 1958, the staff and work of the procurement office ceased to grow and it may be considered as performing the normal duties of supplying the needs of the various divisions and of maintaining appropriate records. It may be noted that in 1958 several thousand items of stores and equipment were procured and approximately 3 700 invoices were paid.

363. The major building alterations were completed in 1958 and as a result adequate office facilities became available in the premises of the former Grand Hotel. As was foreseen, however, these facilities and the additional office space in the Hofburg will not be sufficient to accommodate all the staff authorized for 1959, and plans for securing new office space are at present under study. Consideration continues to be given to the establishment of a permanent headquarters of the Agency which, it is hoped, would put an end to the present inconvenience of maintaining offices in different buildings. It is expected that planning work on the permanent headquarters will gradually increase. The first step will be the selection of a site, and the division is collecting relevant information.

364. The reproduction and printing facilities of the Agency are operated by documents services. It is expected that in 1959 the amount of work to be done in these facilities will considerably exceed the original estimate, since several new projects are now contemplated.

365. The following table reflects the work expected in 1959 and 1960 and that done in 1958;

	<u>1958</u>	<u>1959</u>	<u>1960</u>
<u>Board and Committees</u>			
Printed pages - mimeo	8 500 000	9 000 000	9 000 000
Printed pages - offset	1 500 000	1 500 000	1 500 000
<u>General Conference and Committees</u>			
Printed pages - mimeo	5 500 000	6 000 000	6 000 000
Printed pages - offset	3 500 000	4 000 000	4 000 000
<u>Secretariat</u>			
Printed pages - mimeo	2 600 000	4 000 000	4 000 000
Printed pages - offset	5 000 000	11 000 000	11 000 000
<u>Publications</u>			
Printed pages - offset	350 000	15 000 000	25 000 000
Total - mimeo	16 600 000	19 000 000	19 000 000
Total - offset	10 350 000	31 500 000	41 500 000
Grand Total	26 950 000	50 500 000	60 500 000

366. The division also helps to negotiate and draft agreements with which governments are hosts for technical conferences and meetings - and which therefore contain provisions dealing with office facilities and equipment - as well as other agreements dealing with administrative services.

367. The division is represented on the Contract Review Committee which advises the Director General on all purchases costing more than \$1 000.

(c) Programme of work for 1960

368. It is expected that most of the increase in work in 1960 will result from the following activities:

- (a) Servicing conferences;
- (b) Sales of Agency publications;
- (c) Copy editing, proof-reading and printing of manuscripts prepared by technical divisions of the Agency;
- (d) Reproduction of conference papers prepared by the technical divisions or by other organizations which co-sponsored the Agency's symposia;
- (e) Collection of technical data and statistics needed for the selection of the new headquarters site and building; and
- (f) Reproduction of a non-technical bulletin and of a scientific bulletin (these are expected to be regular publications in 1960), as well as other types of publications of the Agency requiring art-work, presentation, composition, and offset printing.

(d) Explanatory statement on staff

369. The growth of the Agency's programme of conferences and seminars, in addition to meetings of its executive and legislative bodies, requires the appointment of a conference

officer. The incumbent will have responsibility for the administrative servicing of conferences and meetings, and it will be his duty to ensure that technical facilities, space, language services, reporting, and press and reproduction services are made available as needed. In particular, his assistance will be required for the administrative planning and servicing of meetings and conferences held away from headquarters. For this function a new P-3 post is therefore proposed.

370. To help carry out the publications programme, the establishment of a sales and sales promotion unit is required. Pending further experience, the unit will be established provisionally and with the minimum of staff, namely two financial clerks in the General Service category. The staffing of the unit will be reconsidered when the scope of the Agency's publication programme and the commercial demand for Agency publications are better known. Arrangements will be made with national sales agents and, to the extent appropriate, with those used for United Nations publications. The sales unit will also maintain the necessary inventories and issue invoices, the revenue resulting to be credited to the Publications Revolving Fund.

371. The composing of documentation, forms, letters, etc. in the four official languages and German, and 1 000 pages of publications can be performed with one person and one machine in 1959. However, in view of the growth of the publication programme in the latter half of 1959 and in 1960, one additional varitypist and one more machine will be required.

372. The programme of publications in 1959 involves the printing of 9 000 pages of manuscript. Before manuscripts can be submitted to the printer, copy editing is required and when typeset proofs are received from the printer, they must be read to ensure that all errors in typeset are corrected. Provision is therefore made for this essential service in 1960. On the assumption that a majority of the Agency's publications will be in one language, only one P-1 post is required.

373. In October, November and December 1958, more than 20 800 letters were received in the registry; this compares with 10 400 letters in April, May and June 1958. In January 1958, only 1 500 letters were received and despatched. This figure grew to 6 275 letters in January 1959. A larger proportion of letters is now being received in French and Russian and to assist action on them, summaries in English are prepared in the registry.

374. The volume of communications for 1958 is as follows:

<u>Month</u>	<u>Incoming and outgoing letters</u>	<u>Month</u>	<u>Incoming and outgoing letters</u>
January	1 501	July	7 277
February	1 783	August	6 030
March	1 970	September	6 157
April	2 934	October	6 640
May	3 748	November	7 118
June	4 756	December	7 062

375. The sorting and coding, classification, routing and indexing, and filing and copying of mail of this volume involves considerable work. To cope with the additional work expected in 1960 as a result, in particular, of more correspondence on technical assistance, conferences, technical and scientific subjects and a larger volume of correspondence with the specialized agencies, two additional General Service posts are required.

376. The considerable increase in the use of the Agency's conference and meeting rooms necessitates the use of various additional types of telecommunication equipment. In addition, in the radio studio a 16 mm film projector is being installed. The increase in the telex operations and long-distance telephone calls received also requires special reports and involves extra work in checking invoices for the telex operation and for collecting telephone fees for personal calls. Moreover, tape recorders must be operated throughout all meetings of the Board. For these duties one General Service post is required for the buildings management section.

26. Division of Language Services

Table 27

Grade	1958 Budget	1958 Staffing Plan	1959 Staff	Proposed Change	Proposed 1960 Staff
P-5	1	1	1	-	1
P-4	-	8	12	-	12
P-3	32	22	24	-	24
P-1	-	1	1	-	1
Subtotal	33	32	38	-	38
GS	21	23	33	1	34
Total	54	55	71	1	72

(a) Functions and responsibilities

377. The division's responsibility is to provide language services required by the General Conference, the Board, their committees and the Secretariat of the Agency.

(b) General statement

378. The division is organized in four translation sections and four steno-typing units corresponding to the working languages of the Agency, although translations from and into German and other non-working languages are also performed according to the needs of the Secretariat. The division also contains an editing unit and a terminology unit.

379. The division services both the General Conference and the Board through the preparation, drafting and typing of provisional records, their translation into the working languages and their editing for issue in final form. It provides the translation of all other documents required by the General Conference and the Board.

380. The division also services the Secretariat by translating working papers, documents and correspondence. It is also entrusted with the translation, revision and proof-reading of the texts published in various languages in accordance with the Agency's publication programme. The steno-typing units are also given some specialized typographical work for the internal printing of certain publications.

(c) Programme of work for 1960

381. On the basis of the experience in 1958 and 1959, the work of the Division of Language Services for 1960 can be estimated at approximately 30 000 standard pages. This figure reflects the increase in the documentation required by the Board and the considerable demands for précis-writing service, from the Board's committees and from the colloquia, symposia, seminars and conferences planned by the technical departments of the Agency for 1960. The increased activities of these departments will affect the work of the division, which will be expected to service them with the translation of their correspondence, minutes, agreements, reports, etc. A substantial part of the publications programme for 1960 will also have to be dealt with by the division. Lastly, the complex linguistic structure of the Secretariat, and the fact that German is used in many documents relating to matters concerned with the host country, contributes to the work of the Division of Language Services.

(d) Explanatory statement on staff

382. It is expected that the work of the division in 1960 will increase by 20 per cent over that of 1959 and will require the engagement of temporary staff, particularly at peak periods.

383. The one additional General Service post proposed is needed to reinforce the secretarial and clerical strength of the office of the Chief of the division which has to do a large amount of administrative work in connexion with the frequent employment of temporary staff, double-shift work during meetings of the Board and the General Conference, and the preparation of time and attendance, production, work-load and other reports.

CHAPTER III. THE BUDGET

A. THE CONSOLIDATED BUDGET

Table 28

Expenditures

	1958 Actual ^{a/}	1959 Estimate	1960 Estimate
	\$	\$	\$
Regular Budget			
Preparatory Commission	507 706	-	-
Programme activities and Secretariat	3 360 080	5 225 000	5 843 000
Operating Fund I			
Agency laboratory facilities	-	400 000	333 000 ^{b/}
Operating Fund II			
Fellowship and training programme	124 612	680 000	1 100 000
Technical assistance programme	-	445 000	900 000
Projects under agreements	-	-	pro memoria
Mobile radioisotope laboratories	-	38 000	57 000
Total	3 992 398	6 788 000	8 233 000

Receipts

Regular Budget			
Assessed contributions of Member States	3 858 592 ^{c/}	5 225 000	5 843 000
Application of Agency safeguards	-	pro memoria	pro memoria
Handling and storage of special fissionable material	-	pro memoria	pro memoria
Income from investments	5 137	11 000	11 000
Miscellaneous income	978	1 000	1 000
General Fund			
Voluntary contributions	129 142	1 122 294	1 500 000
Special contributions	-	600 000	pro memoria
Charges for laboratory services	-	-	pro memoria
Charges in connexion with Agency projects	-	106 000	pro memoria
United Nations Expanded Programme of Technical Assistance			
of Technical Assistance	-	400 000	600 000
Total	3 993 849	7 465 294	7 955 000

^{a/} Includes unliquidated obligations as of 31 December 1958.

^{b/} Includes \$200 000 for equipment funded from a special contribution received in 1959.

^{c/} As of 30 June 1959.

384. It should be noted with respect to the foregoing table that because assessed contributions for 1958 had not been received from certain Member States up to 30 June 1959, the Agency, as at that date, had a cash deficit under the regular budget of \$9 194. Assuming that all assessed contributions for 1958 are paid, there will be a gross surplus for that year of \$253 089.

385. With respect to the General Fund, in 1959 as of 30 June it appeared that voluntary contributions (other than those of a special nature) would fall short of the \$1.5 million goal established in the 1959 budget by approximately \$400 000. However, special contributions and funds received as a result of the Agency's participation in EPTA were sufficient to offset this shortfall and make it possible to carry forward a modest reserve into 1960.

386. It will be noted that estimated expenditures in 1960 exceed receipts by \$278 000. Of this amount \$200 000 will be met by a carry-over from one of the special contributions made to the Agency in 1959 and the remaining \$78 000 by part of the reserve created in that year.

B. REGULAR BUDGET ESTIMATES

Expenditures

Summary

Table 29

Budget parts and sections	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
I. General Conference and Board of Governors			
1. General Conference	311 198	332 000	317 000
2. Board of Governors	492 359	529 700	534 000
Subtotal	(803 557)	(861 700)	(851 000)
II. Functional programme activities			
3. Panels and committees	25 828	115 000	133 000
4. Special missions	11 559	200 000	175 000
5. Seminars, symposia and conferences	-	100 000	175 000
6. Distribution of information	22 472	137 000	184 000
7. Scientific and technical services, supplies and equipment	103 000	365 000	400 000
Subtotal	(162 859)	(917 000)	(1 067 000)
III. The Secretariat			
8. Salaries and wages	1 024 111	1 968 800	2 343 000
9. Common staff costs	509 933	867 000	959 000
10. Travel of staff	96 949	199 000	150 000
11. Consultants	56 927	100 000	100 000
12. Hospitality	4 973	7 500	7 500
Subtotal	(1 692 893)	(3 142 300)	(3 559 500)
IV. Common services, supplies and equipment			
13. Common services	212 382	131 000	183 000
14. Printing, office and building supplies	123 142	63 000	107 500
15. Permanent equipment	365 247	110 000	75 000
Subtotal	(700 771)	(304 000)	(365 500)
Total	3 360 080	5 225 000	5 843 000

(a) General

387. The proposed regular budget for 1960 is \$618 000, or 11.8 per cent higher than that for 1959. This compares with an increase between the 1958 actual expenditures and the 1959 budget of \$1 864 920, or 55.5 per cent. The budget for functional programme activities is \$150 000, or 16.4 per cent higher than in 1959. The increase of \$417 200 in the costs of the Secretariat is due mainly to the fact that staff recruited throughout 1959 will be receiving a full year's emoluments for the first time in 1960.

388. The revised presentation of the budget for 1960 has been described in chapter I.[22.] It is important to note at this point, however, that the actual expenditures for 1958 and those budgeted for 1959, which are shown in the foregoing summary table, and in the tables for each section of the regular budget which follow, have been distributed for purposes of comparison in accordance with the presentation for 1960. An additional and less apparent point is that, whereas at the time of the preparation of the regular budget estimates for 1959, accounting limitations and lack of operating experience made it impossible to apportion accurately certain expenses, such as printing, between the General Conference, the Board and the Secretariat, these apportionments have been made in the proposed regular budget for 1960. Again, in order to make the 1958 and 1959 figures comparable, a redistribution of actual and budgeted expenditures has been made in the columns for those years. Finally, transfers between certain sections of the regular budget authorized by the Board during its series of meetings in April 1959 have been reflected in order to provide a more valid comparison with the 1960 estimates.

389. A table reconciling the actual expenditures in 1958 and the appropriations for 1959, by the formats of those years, with the way in which they have been distributed between the budget sections of the 1960 estimates, appears as annex III.

(b) Estimates by section

390. Wherever operating experience has made it possible to do so the several sections of the budget have been broken down to reflect the estimated requirements under each of the activities or expenses under the section. Implicit in the development of budget estimates is the necessity of basing them on certain assumptions. These assumptions have been included in the budget but both they and the breakdown by activity should only be considered as working hypotheses and not as detailed programme determinations. The number of variables which exist in almost every work programme of the Agency make it impossible in most instances to develop assumptions which can do more than attempt to fix a mean for costing activities during a budget year which ends almost 18 months after the estimates have been developed.

[22] See paragraphs 18 to 21 above.

I. SESSIONS OF THE GENERAL CONFERENCE
AND THE BOARD OF GOVERNORS

1. The General Conference

Table 30

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Salaries and wages	67 665	72 000	75 000
Common staff costs	32 885	29 000	31 000
Temporary assistance	115 894	152 000	113 000
Permanent equipment	15 191	-	-
Rental of space and equipment	32 459	27 000	35 500
Common services	21 903	14 500	23 000
Printing and office supplies	25 201	25 000	27 000
External audit	-	12 500	12 500
Total	311 198	332 000	317 000

(a) General

391. The estimates for 1960 provide for all expenses of the fourth regular session of the General Conference which can be identified and costed under usual accounting and apportioning procedures. It will be noted that estimates relating to the General Conference and the Board of Governors, which in the 1959 budget presentation were combined in one section, have been separated in the budget for 1960. In addition, certain items of expenditure, particularly those relating to general services and supplies, which pertain to sessions of the General Conference, are now reflected in this estimate and the 1958 and 1959 columns have been adjusted to provide comparison between the three financial periods.

392. In accordance with the practice of a number of other international organizations, the estimated costs of the external audit of the Agency's accounts have been included in the budget for the General Conference.

(b) Assumptions

393. It is assumed:

- (a) That the General Conference will sit for two weeks in 1959 and 1960, and will hold a maximum of four plenary and committee meetings each day;
- (b) That the costs of the Secretariat of the General Conference and the Board of Governors are allocable in proportions of 20 per cent to the General Conference and 80 per cent to the Board;

- (c) That the provision of documents services for the General Conference will require the equivalent - exclusive of temporary assistance - of five Professional and four General Service posts from the Division of Language Services; and
- (d) That documents reproduction required for the General Conference will total approximately ten million pages. [23]

(c) Explanation of estimates

394.	Salaries and wages	75 000
	1959	72 000
	1958	67 665

395. The estimates for 1960 are based on the assumptions stated above. The slight increase in 1960 as compared with 1959 reflects seniority salary increments and promotions.

396.	Common staff costs	31 000
	1959	29 000
	1958	32 885

397. Common staff costs include provision for staff emoluments other than salaries and wages, and are based on the Agency's approved salaries and allowances system. The assumptions in respect of some of these costs are described in section 9. The increase in 1960 is attributable to home leave entitlements in that year.

398.	Temporary assistance	113 000
	1959	152 000
	1958	115 894

399. The General Conference requires the employment of a large number of temporary staff to serve as translators, interpreters, précis-writers, ushers, reproduction machine operators, messengers, etc. A substantial proportion of this staff is in the Professional category and must be recruited internationally with attendant travel costs. For an estimated maximum conference duration of 21 days in 1958 and 1959, these costs were estimated at \$152 000 for each of these years. A substantial saving was realized in 1958 as a result of the conference lasting only 14 days. The reduction in 1960, as compared to the budget for 1959, is due to the assumption that the 1960 General Conference will last no more than 14 days.

400.	Permanent equipment	-
	1959	-
	1958	15 191

401. No additional permanent equipment is expected to be procured for the General Conference in 1959 or 1960.

402.	Rental of space and equipment	35 500
	1959	27 000
	1958	32 459

[23] The word "page" as used throughout this chapter of the budget means a standard typed page averaging 320 words.

403. The estimate for 1960 covers the cost of renting the space and equipment required to provide the necessary housing and facilities for the plenary and committee meetings of the fourth regular session of the General Conference. These costs were estimated at \$27 000 for the 1958 General Conference and the same figure was used as the estimate for 1959. As will be seen above, the actual costs in 1958 exceeded the estimates by approximately \$5 500. In 1959, it is hoped that sufficient savings can be realized in the cost of temporary staff to cover the deficit. The estimate for 1960 is based on terms recently agreed with the Austrian Government.

404. Common services	23 000
1959	14 500
1958	21 903

405. The estimate covers such items of expenditure as postage, telegram and telex costs, photographic services, removal of furniture, utilities, etc. in connexion with the fourth regular session of the General Conference. On the basis of accounting records and apportioning procedures which did not segregate the cost of the 1957 General Conference, it was estimated that costs of common services for that conference amounted to approximately \$14 500, and a similar amount was estimated for both the 1958 and 1959 sessions. It will be noted that actual costs in 1958 exceeded that estimate by approximately \$7 500. It follows that the estimate for 1959 is likely to prove too low and that unless savings are realized in the budgetary item providing for temporary assistance (as was the case in 1958 by reason of a shorter session than originally budgeted for), a deficit will arise under this item in 1959. The estimate for 1960 takes into account the experience in 1958.

406. Printing and office supplies	27 000
1959	25 000
1958	25 201

407. The estimate covers the cost of paper and other reproduction and printing supplies and services arising in connexion with documents printed or reproduced for or arising out of the fourth regular session of the General Conference, as well as stationery and general office supplies.

408. At the time the budget for 1959 was developed, accounting and apportioning procedures did not permit reasonably accurate segregation of conference expenses from the total expenditure of the Secretariat for these purposes. In consequence, the total cost of printing and reproduction supplies and services in 1959 was funded from the appropriation for common services and supplies. By the time of the second regular session of the General Conference, which was held some five months after the development of the 1959 budget estimates, accounting and apportioning procedures had been established which made it possible to allocate expenses under this heading to the budget for the General Conference.

409. The estimates for 1960 are based on experience in 1958, assume that no significant increase in reproduction volume occurs, and provide \$21 500 for printing and \$5 500 for general office supplies.

410. External audit	12 500
1959	12 500
1958	-

411. These estimates cover the anticipated cost in fees, travel and per diem of the External Audit Board appointed by the General Conference during its second session in 1958. [24]

2. The Board of Governors

Table 31

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Salaries and wages	219 777	246 000	255 000
Common staff costs	117 800	106 000	107 000
Temporary assistance	111 200	133 000	123 000
Official travel	582	1 000	1 000
Common services	18 950	15 700	19 000
Printing and office supplies	24 050	28 000	29 000
Total	492 359	529 700	534 000

(a) General

412. This new budgetary section has been established to separate the estimates relating to meetings of the Board and its committees from those relating to sessions of the General Conference.

413. While it was not possible to develop detailed cost estimates for the Board in the budget for 1959, because no separate provision had been made for the costs of common services and supplies applicable to the Board, separate estimates have been developed for 1960, and comparable figures for the years 1958 and 1959 are shown in table 31.

(b) Assumptions

414. It is assumed:

- (a) That approximately 80 per cent of the cost of the Secretariat of the General Conference and the Board is allocable to the Board;
- (b) That the equivalent of 20 Professional and 16 General Service category posts from the Division of Language Services - exclusive of temporary staff - will be required to provide translation and documentation services for the Board and its committees; and
- (c) That documents reproduction required for the Board and its committees in 1960 will approximate 10.5 million pages. [23]

[24] See GC(II)/OR. 24, paragraph 4.

(c) Explanation of estimates

415. Salaries and wages 255 000
1959 246 000
1958 219 777

416. The cost estimates cover salaries and wages of staff of the Secretariat of the General Conference and the Board of Governors, the Division of Language Services and the Division of Conference and General Services calculated on the basis of the assumptions stated above.

417. Common staff costs 107 000
1959 106 000
1958 117 800

418. Common staff costs include provision for staff emoluments other than salaries and wages, and are based on the existing salary and allowance system of the Agency. The assumptions in respect of these costs are described in section 9. While with the stabilization of the Agency's staffing the percentage of these costs to salary costs may be expected to decline, it must be borne in mind that, beginning in 1960 there will be an offsetting factor in the increased home leave entitlements of internationally recruited staff.

419. Temporary assistance 123 000
1959 133 000
1958 111 200

420. The estimates provide for the temporary employment of four additional interpreters and for strengthening the Division of Language Services by four Professional posts and 16 General Service posts during meetings of the Board and some of its committees. In documents services, telecommunications and in the central registry, additional staff will also have to be provided to service these meetings. A substantial proportion of this staff, especially in language services, has to be internationally recruited, with resultant travel costs. The 1959 estimate was based on an anticipated six series of meetings. The estimate for 1960 assumes continuance of the 1959 pattern of only four meetings. A substantial part of the savings has been offset, however, by anticipated temporary assistance requirements of some of the Board's committees.

421. Official travel 1 000
1959 1 000
1958 582

422. During 1958, the Chairman of the Board undertook certain travel in his official capacity. While the exact requirements in 1959 and 1960 cannot be foreseen, \$1 000 is provided to cover the Chairman's official travel in each of these years.

423. Common services 19 000
1959 15 700
1958 18 950

424. The cost estimates for 1960 are based on experience in 1958 and provide for increases totalling \$3 300 in respect of communications and transport and utility services

because of an anticipated increase in committee meetings. These increases offset a saving resulting from the non-recurrence of expenditure for alterations to the Board's premises during 1958. The 1960 estimates include:

Communications and transport	10 500
Utilities	6 500
Rental and maintenance of furniture and equipment	1 500
Miscellaneous services	500
425. Printing and office supplies	29 000
	1959 28 000
	1958 24 050

426. The requirements of the Board and its committees in respect of reproduction supplies and general supplies are expected to increase in 1959 and 1960, mainly because it is anticipated that more committees will be active. The estimates provide for reproduction supplies \$22 500, stationery and office supplies \$5 000, miscellaneous supplies \$1 500.

II. FUNCTIONAL PROGRAMME ACTIVITIES

3. Panels and Committees

Table 32

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Honoraria	1 800	4 500	5 000
Travel of members	17 635	82 500	95 000
Daily expense allowance	6 231	26 500	30 000
Administrative expenses	162	1 500	3 000
Total	25 828	115 000	133 000

(a) General

427. The estimates cover expenses arising in connexion with meetings of the Agency's Scientific Advisory Committee and meetings of ad hoc scientific and technical panels convened to provide advice to and services for the Director General in the implementation of decisions of the Agency and to act as working parties of experts in the development of international standards, codes and regulations in the peaceful uses of atomic energy.

428. As indicated in chapter II there is an urgent need for the development of a variety of manuals, standards, codes and regulations on such matters as the transport of spent fuel elements, the transport of other less highly radioactive materials, reactor siting and operation, disposal of radioactive wastes, third party liability, safeguards in respect of nuclear propelled ships, etc.

429. Most of this work should be done in conjunction with ad hoc panels of experts not only because of the need to draw upon the best specialists in each field but also in order to facilitate acceptance of the codes by all countries.

430. Already in 1959 it has become apparent that, to implement the programme at the rate which seems called for, approximately \$115 000 will be required instead of the \$51 500 provided. The Board has approved an increase in this amount and has authorized the Director General to effect transfers between sections of the budget in order to meet this requirement.

431. Apart from the Scientific Advisory Committee, which is expected to meet twice during 1960, panels and committees on the following subjects may have to be convened:

- Safeguards procedures
- World wide distribution of oxygen and hydrogen isotopes in water
- Methods of standardization of isotopes
- Radioactive waste disposal in rivers
- Health and safety standards for operating small research reactors
- Pretreatment of wastes
- Disposal of radioactive waste into the sea
- Reactor physics constants
- Reactor siting and containment

Civil liability and state responsibility for nuclear hazards in various fields
Nuclear terminology
Classification systems and techniques of documentation

432. The foregoing list is, of course, tentative and preliminary, and merely indicates fields of activity in which it may be necessary to convene panels of experts for one or more meetings in 1960.

(b) Assumptions

433. It is assumed:

- (a) That a total of approximately 11 panels and committees will be convened in 1960 for approximately 15 meetings, with each meeting lasting approximately eight days inclusive of travel time;
- (b) That except in the case of the Scientific Advisory Committee, honoraria will be paid only in instances of salary loss by reason of service with the Agency or when, as in the case of a university professor, private practitioner or retired person, the panel member ordinarily receives fees for his services;
- (c) That panel and committee members will be drawn from a wide geographic area.
- (d) That a daily expense allowance of \$20 will be paid to each panel member; and
- (e) That certain administrative expenses in the way of interpretation and other temporary assistance services will be incurred in connexion with each panel.

(c) Explanation of estimates

434. In 1958, two panels were convened, one on the safe handling of radioisotopes, which held two meetings, and one on radioactive waste disposal which held its first meeting in that year. As will be noted from table 32, these three meetings cost \$25 828.

435. In the early months of 1959 the Panel on Radioactive Waste Disposal into the Sea held its second meeting incurring costs of approximately \$7 900, and the Panel on Civil Liability and State Responsibility for Nuclear Hazards held the first of three meetings planned for this year. This latter meeting involved costs of approximately \$9 400.

436. On the basis of this experience, which indicates that an average panel meeting costs approximately \$8 600, the estimate will provide for convening 15 panel and committee meetings in 1960 and a small contingency to cover possible increased travel costs and other unforeseen expenses.

4. Special Missions

Table 33

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Consultants' fees	-	30 000	34 000
Consultants' travel costs	5 856	65 000	76 000
Official travel of staff	5 703	52 000	61 000
Administrative expenses	-	3 000	4 000
Contingency	-	50 000	-
Total	11 559	200 000	175 000

(a) General

437. The estimate covers expenses arising in connexion with the despatch of special missions to Member States, at their request, to conduct surveys and to engage in consultations intended to culminate in Agency projects.

438. In 1958 only one special mission was organized - a training survey mission for Latin America. The programme for 1959 and 1960 has been elaborated in chapter II. In brief, it involves three or four preliminary assistance missions, three special power survey missions, one or two training survey missions and from three to four isotope missions.

439. The 1960 programme is, basically, a continuation of that for 1959 although the need for three additional types of missions can now be foreseen.

440. As in 1959, three to four preliminary assistance missions, three special power survey missions and one or two training survey missions appear required.

441. In continuation of the 1959 programme provision is also made in the estimates for up to four missions of isotope specialists intended to assist Member States in developing programmes for the application of radioisotopes in the physical and life sciences, including medical, agricultural and industrial uses.

442. A new activity in 1960, arising in connexion with the implementation of resolution GC(II)/RES/29, will be the despatch of small missions of two to three training experts to Member States to investigate the possibility of organizing in existing scientific training centres appropriate training courses in the use of radioisotopes in agriculture and medicine. Three or four such missions are envisaged.

443. It is anticipated that in 1960 at least two requests will be received from Member States for special missions in connexion with specific research reactor projects and concerning questions of design, power level, siting, etc.

444. Assistance in the exchange and distribution of scientific and technical information is one of the Agency's statutory mandates. The scientific literature pertaining to atomic energy is so vast and diversified that special techniques are required to make it the basis for an effective information service. Primary materials are research reports

by national atomic energy commissions and other governmental publications and documents published by institutions working in various fields of atomic energy. This material represents a special problem to librarians. It is therefore planned to organize library training workshops in two different regions. They will be manned by staff of the Agency's library, assisted by one or two outside experts and would last about three to four weeks. Their programme will include lectures to librarians or information officers of atomic energy establishments on new techniques in documentation, and practical work to demonstrate the handling and processing of the documentation, micro-cards, etc. This practical work will be carried out under supervision, so that primary sources of information, such as the Atoms for Peace collection, and secondary sources, such as abstracting journals, so far as they are available in the country, are fully utilized to provide working tools for atomic energy establishments and for Agency fellows returning after training abroad.

(b) Assumptions

445. It is assumed:

- (a) That, wherever feasible, mixed teams intended to achieve several objectives will be despatched;
- (b) That in composing these teams appropriate use will be made of expert consultants offered on a total or partial cost-free basis to the Agency by Member States;
- (c) That while the composition of special missions will vary with the purpose of the mission, as will the length of time it will be in travel status, the average team membership will be five, of which two will be consultants, and the average duration of work in the field, or in travel, will be between four and five weeks and in Vienna for briefing or report writing two weeks;
- (d) That delays, deferments and cancellations will result in a decrease in actual requirements of approximately 15 per cent; and
- (e) That except in the case of library workshop missions which will serve specific regions, 50 per cent of the subsistence costs and cost of travel within Member States by members of special missions will be borne by host governments whereas international travel costs and consultants' fees will be borne by the Agency.

(c) Explanation of estimates

446. As indicated in assumption (d) above, the 1960 programme has first been costed out on the basis of all planned missions actually being despatched. Each expense item under these costs has then been reduced by approximately 15 per cent to take into account delays, deferments and cancellations which can be anticipated in a programme of this kind.

447. Consultants' fees	34 000	
	1959	30 000
	1958	- [25]

448. The increase of \$4 000 is due to the new training course, library workshop and special reactor missions planned for 1960.

[25] No expenditure was incurred in 1958 since consultants in connexion with the Latin American regional training centre survey were cost-free to the Agency.

exchange of information on the peaceful uses of atomic energy. It also covers the Agency's financial contribution when it co-sponsors scientific meetings conducted by other organizations.

458. The Scientific Advisory Committee has recommended for 1960 a programme of conferences, symposia and seminars as set out hereunder:

- (a) Major conference:
 - Radioisotopes in physical sciences and industry;
- (b) Related subjects symposia:
 - (i) Radio dosimetry, nuclear instruments and techniques and controlled background facilities;
 - (ii) Basic physics in nuclear energy and inelastic scattering of neutrons in solids and liquids;
- (c) Regional symposia:
 - (i) Education and nuclear energy;
 - (ii) Use of radioisotopes in the study of endemic and tropical diseases;
- (d) Symposia and seminars:
 - (i) Nuclear ship propulsion, with special reference to safety;
 - (ii) Medium and small power reactors;
 - (iii) Metallurgy, with special reference to fuel cladding;
 - (iv) Physics of D₂O lattices;
 - (v) Experimental and test reactors;
 - (vi) Fusion results;
 - (vii) Chemical effects of nuclear transformation.

(b) Assumptions

459. It is assumed:

- (a) That within the overall programme outlined above one major conference, two regional symposia and nine other meetings will be held in 1960. Each meeting will last approximately 7 to 14 days, (travelling time included);
- (b) That the Agency on its own initiative or by invitation, will co-sponsor certain seminars or symposia in fields of direct concern to the Agency organized and conducted by the specialized agencies;
- (c) That the costs of travel of discussion leaders and key participants to the place where the seminars, symposia or conferences will be held and of a daily expense allowance for them will be borne by the Agency. Travel and expenses of other participants will be borne by them;
- (d) That the cost of travel and salaries for scientific secretaries needed for some of these meetings will be borne by the Agency;
- (e) That extra costs involved in organizing and conducting conferences held away from Vienna will be borne by the host country;
- (f) That the Agency will bear the costs incident to documentation, translation and interpretation services and the printing and distribution of the proceedings, if this is desirable;

- (g) That the two regional symposia planned for 1960 will be held in one of the less developed Member States and the extra costs will be borne by the Agency; and
- (h) That certain of the seminars, symposia and conferences planned for 1960 will be co-sponsored by one or more of the specialized agencies of the United Nations.

(c) Explanation of estimates

460. On the basis of the above assumptions and the experience of other agencies, the cost of organizing and conducting a major scientific conference is estimated at approximately \$60 000.

461. The cost of a regional symposium to be held outside Europe is estimated at approximately \$20 000, although this would vary with the exact location. The cost of other conferences, seminars and symposia varies from approximately \$8 000 to \$12 500.

462. Since some of the Agency's conferences or symposia will undoubtedly be co-sponsored by one or more of the specialized agencies, no provision has been made in the estimates for Agency co-sponsorship of seminars, symposia and conferences organized by other agencies. It is believed that it will be possible to meet the costs of such co-sponsorship through the savings which will result from co-sponsorship of Agency meetings by other agencies.

6. Distribution of Information

Table 35

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Printing	9 379	79 000	116 000
Author fees	-	4 000	5 000
Scientific editing	400	7 000	10 000
Translation services	-	6 000	8 000
Distribution costs	2 200	7 000	10 000
Contractual film services	-	9 000	10 000
Library acquisitions	10 493	25 000	25 000
Total	22 472	137 000	184 000

(a) General

463. The estimate covers all costs of the Agency's programme of publications and distribution of information including its library except salaries and wages and other expenses of the staff administering the programme and, in the case of publications reproduced or translated internally, the expenses of the documents and language services staff. It does not cover the cost of reproducing documents for the General Conference and the Board nor of the reproduction of documents prepared by the Secretariat and not intended for public distribution.

464. Only \$10 000 was provided in the 1959 budget for publications, it being assumed that all but a fraction of such publications could be produced internally in the Agency's press. Further, no very extensive programme of publications and distribution of information was planned for 1959. However, subsequent developments have indicated the need for a far larger programme than had originally been contemplated, and the Board approved a transfer of \$102 000 from another section of the budget to provide for the enlarged requirements of that year.

465. The programme proposed for 1960 is an extension and expansion of that presently envisaged for 1959. The main classes of Agency publications are:

- (a) Scientific and technical manuals covering subjects of a regulatory character, e.g. "Safe Handling of Radioisotopes", "Health and Safety Procedures in Radioactive Accidents and Emergencies", "Safeguard Procedures", medical and technical addenda to the manual on "Safe Handling of Radioisotopes", etc.;
- (b) Compilations prepared within the Agency from information received from Member States, e.g. "Directory of Nuclear Reactors", "International Directory of Radioisotopes", "Disposal of Radioactive Wastes", "Use of Radioisotope Teletherapy Units and Supervoltage Radiation in Radiotherapy", "Radioisotope Teletherapy Equipment", etc.;
- (c) Results of scientific conferences, seminars, symposia and panels, e.g. "Radioactive Metrology", "Application of Large Radiation Sources in Industry", "Radiation Dosimetry", "Nuclear Instruments and Techniques";
- (d) Periodic publications, e.g. the Agency's non-technical and technical bulletins, the "Journal on Fusion Research and Plasma Physics", etc.;
- (e) Technical reports, to make known the results of research contracts, contractual scientific services or scientific studies carried out by the Agency's staff;
- (f) Reviews and bibliographies, e.g. reviews written by scientists in Member States on selected subjects, or bibliographies, for instance, "Bibliography on Radioisotope Teletherapy Units and Supervoltage Therapy with Accelerators", "Small and Medium Power Reactors", etc.; and
- (g) Miscellaneous publications such as the brochures "Nuclear Science Fellowships", "Technical Assistance", "Research Information Organization in Atomic Energy", "Atomic Energy Conferences, Meetings, Training Courses", etc.

466. It is desirable that all publications of the Agency should be published in the four working languages, but for technical and financial reasons this may not always be possible. For instance, in connexion with the proceedings of seminars, symposia and conferences it is planned to publish the scientific papers in the original language in which they are submitted. Certain specialized publications which are directed to a limited audience may be published in one or two working languages only, the language or languages being chosen so as to provide for the most effective use appropriate to the publication content. Other types of publications such as manuals on safety and safeguard procedures will be published in all working languages.

467. Part of the proposed programme of distribution of information in 1960 is in the field of motion pictures. It is hoped to complete in 1959 the production of a basic film on the Agency for group showings. This film would be made in co-operation with the United Nations Office of Public Information and the cost would be shared with it. Some footage for such a film already exists and it could be supplemented as needed with footage acquired from Member States or through additional shootings. Some language versions and prints would have to be made in 1960.

468. It is hoped that it will be possible in 1960 for the United Nations Visual Services Board to undertake the production of an educational film on some major aspect of nuclear energy. This will depend on the interest shown by other members of the United Nations Visual Services Board, and the funds made available for such a project by the United Nations Office of Public Information and the specialized agencies, as this Agency's financial contribution can only be a modest one.

469. The United Nations Film Board, applying the policy of joint productions, has approved advanced plans for a film on "water". Since the treatment will involve subjects of special concern to the Agency, it is proposed that the Agency contribute to its production.

470. The production of one educational film strip of approximately fifty frames in connexion with the project of supplying Member States with prototype educational material on the peaceful uses of atomic energy should be made in 1960.

471. The scientific conferences of the Agency provide good opportunities to place short television films in the programmes in Member States. It is not enough, however, to have footage from the conference itself. This material must be supplemented with footage dealing with the substantive matters to be discussed. Such footage might either be acquired free from Member States, purchased, or arrangements could be made to have it shot.

472. Finally, this section of the budget provides for expenses required for acquisitions by the Agency's library, binding of periodicals, etc.

(b) Assumptions

473. It is assumed:

- (a) That the 1960 programme of publications and distribution of information will involve approximately 10 000 pages [23] of manuscript and an average tirage of 3 000 copies;
- (b) That approximately 7 500 pages of manuscript will be reproduced by commercial facilities and approximately 2 500 pages of manuscript will be reproduced by the Agency's press;
- (c) That approximately 500 pages of manuscript will be procured under contractual arrangements with appropriate authors.
- (d) That approximately 2 400 pages of manuscript will be translated, of which approximately 800 will be translated under contract with external translation services;
- (e) That approximately 2 500 pages of manuscript will be edited under contract with external scientific editors;
- (f) That approximately one-half of all publications produced will be distributed by bulk freight shipment and the remaining one-half by mail or parcel post shipments; and
- (g) That in 1960 the Agency will participate with the United Nations and perhaps other international agencies in the production of certain moving picture films related to its activities.

(c) Explanation of estimates

474. Printing	116 000
	1959 79 000
	1958 9 379

475. The estimate of printing costs is derived from two sources - costs of paper and reproduction supplies for publications produced internally and the total of labour and all other costs of publications printed externally. The cost of internal printing, exclusive of salaries and wages, common staff costs and administrative overhead, is estimated at \$2.25 for the first one thousand pages of a document and \$1.45 for each additional thousand. The average cost of external printing is currently \$10.75 for the first one thousand pages and \$1.50 for each additional thousand. In the case of external printing the cost of the first one thousand pages is variable depending on the language, number of statistical tables, pictures, etc. The estimate for 1960 is the arithmetic result of the application of these estimated costs to the stated assumptions as to the 1960 publications programme.

476. Authors' fees	5 000
	1959 4 000
	1958 -

477. In general, the costs under this item will be comparatively small, since most published material, including scientific papers presented at seminars, symposia or scientific conferences, will be provided at no cost to the Agency. There are, however, some titles in the 1960 programme which will probably have to be drafted by specialists at a fee, for example, the master manuscript of a secondary textbook on atomic energy, the medical applications of radioisotopes, the handbook on waste disposal for small-scale users of radioisotopes, procedures in radioactive accidents and emergencies, terminology in nuclear science, etc. In addition, fees will be payable for technical articles and reviews planned for release to Member States on current developments in the peaceful uses of atomic energy.

478. Authors' fees vary greatly depending on whether or not the manuscripts are reviews or original papers as well as on the prominence of the scientist, and may therefore vary from \$5.00 per page for reviews to \$15.00 per page for highly technical, original works. An average of \$10.00 per page has been used in arriving at the above estimate which takes into account assumption (c).

479. Scientific editing	10 000
	1959 7 000
	1958 400

480. All scientific works must be edited and this is particularly difficult when they are translated into other languages. Although a greater part of the scientific editing of Agency publications will be done by permanent staff, certain specialized texts will have to be edited externally by specialists in the subject. Outside experts will also have to be used in the preparation of synthesis reports on the proceedings of seminars, symposia and scientific conferences. It is estimated that the average cost of scientific editing will be \$4.00 per page. The estimate is the result of the application of this cost to assumption (e).

481. Translation services	8 000
	1959 6 000
	1958 -

482. Although only a selected number of publications will be published in more than one language it is estimated that in 1960 approximately 2 400 pages will require translation, of which no more than 1 600 can be handled by the permanent staff of the Division of Language Services. External translation costs are estimated at \$10.00 per page.

483. Distribution costs	10 000
	1959 7 000
	1958 2 200

484. The estimate takes into account the number and tirage of the proposed publications programme for 1960 and the assumption that approximately one-half of all shipments will be by bulk freight.

485. Contractual film services	10 000
	1959 9 000
	1958 -

486. The cost of the basic film on the Agency and its activities, which it is planned to produce in 1959, is estimated to be \$18 000, of which the Agency's share would be \$9 000. However, provision is made in the 1960 estimate for \$2 000 to cover additional prints and language versions.

487. Provision is also made for \$3 500 as the Agency's contribution to an educational film on nuclear energy in case the United Nations Visual Services Board decides to embark upon this project.

488. The United Nations Film Board's film on "water" will cost an estimated \$40 000, of which the Agency would contribute \$1 500.

489. Finally, \$3 000 has been budgeted to provide for an educational film strip (\$750) and for television footage (\$2 250).

490. Library acquisitions	25 000
	1959 25 000
	1958 10 493

491. The amount provided for the acquisition of books and periodicals for the library remains unchanged in 1960. With the Agency becoming the primary centre for legal work in the field of the peaceful uses of atomic energy, the collection of annotated laws, regulations and legislative histories to support the work of the Legal Division, must continue to grow. Demands from technical divisions of the Secretariat for periodicals and abstract journals, necessary for the work of the Agency, are steadily increasing, as are prices of subscriptions. The need for dictionaries is great in the Agency because of language differences between individuals and because exact terminology is of such importance in interpreting and technical translation work which must be done daily. Text and reference book collections must continue to be augmented by the latest publications, both in the original language and in translation. In 1960, a provision of approximately \$3 000 is also necessary for the binding of periodicals, the intake of which will be considerable in 1959.

7. Scientific and Technical Services, Supplies and Equipment

Table 36

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Studies and research contracts	67 532	309 000	325 000
Technical contracts	2 000	6 000	10 000
Scientific services	33 468	50 000	65 000
Total	103 000	365 000	400 000

(a) General

492. The estimate covers all costs of scientific and technical services, supplies and equipment required by the Agency in carrying out its statutory functions particularly those concerning health and safety, safeguards and the distribution of scientific information on atomic energy.

(b) Assumptions

493. It is assumed:

- (a) That a number of the research contracts placed in 1959 will show sufficient promise to warrant continuance on the same or an expanded scale in 1960;
- (b) That studies will be initiated in connexion with the implementation of resolution GC(II)/RES/27 which called for a broad programme of work and study in the field of small and medium scale power reactors suitable for the needs of less developed countries;
- (c) That the requirements for technical services in the field of nuclear information will increase in 1960 with the expansion of the library and the programme of information distribution;
- (d) That the requirements for studies in the field of radioactive waste disposal will be approximately the same as in 1959;
- (e) That there will be increased need for research on radiation safety, protection and health with particular emphasis on health and safety problems most likely to be encountered by less developed countries;
- (f) That research in the field of safeguards will not exceed the 1959 level; and
- (g) That the Agency's permanent laboratory will continue, on an expanded scale, work under the regular budget inaugurated in its provisional laboratory in 1959 on health, safety and safeguards.

(c) Explanation of estimates

494. Studies and research contracts		325 000
	1959	309 000
	1958	67 532

495. A comparison of the planned research programmes for 1959 and 1960 is given, according to subjects, by field of research in the following table:

Table 37

Field	1959 Budget	1960 Estimate
	\$	\$
Waste disposal studies	165 000	150 000
Radiation safety, protection and health	94 000	105 000
Safeguards	50 000	40 000
Small and medium power reactor studies	-	30 000
Total	309 000	325 000

496. Although the 1960 estimates for waste disposal studies and safeguards are lower, there is a planned total increase of \$16 000 over 1959, the principal reason for which is the requirement of \$30 000 in connexion with small and medium power reactor studies called for under resolution GC(II)/RES/27 which requests the Board to adopt "measures so that a continuing study be made of the technology and economics of small and medium scale power reactors which may be best suited for the economic development of less developed countries".

497. The exact nature of the contractual work which should be undertaken in 1960 in connexion with small and medium power reactors will be determined only after studies of the matter during 1959 by the Secretariat with the help of consultants and by the directions which will be given by a conference on this subject, proposed for 1960. The contracts may deal with problems of particular interest to less developed countries such as adaptation of cooling systems to conditions in arid areas, use of reactors in the special conditions of tropical areas, operation and maintenance of reactors by a small staff, etc. Since the intent of resolution GC(II)/RES/27 appears to be that the Agency's studies in the field of small and medium power reactors will lead eventually to an Agency project in this field, the studies planned for 1960 are considered as expenses incident to the preparation of such a project. Although the scope of this contractual service is estimated at \$30 000, a more exact estimate will not be possible until a more precise plan of action is arrived at in 1960.

498. In general, the research contracts on waste disposal which were initiated in 1959 will be followed up at a somewhat lower level of effort in 1960. The general trend will be to support work which shows the most promise of benefiting the less advanced countries. Work in the following areas will be continued and expanded or contracted as needed:

- (a) Collection and evaluation of information available on waste disposal;
- (b) Methods of isotope disposal;
- (c) Marine studies in relation to waste disposal; and
- (d) Disposal of wastes in fresh water and soil contamination.

499. Similarly, a number of contracts in the field of safeguards placed in 1958 and 1959 will be followed up but at about the same level of effort. Work will continue in:

- (a) Non-destructive analysis of fuel elements;
- (b) Safeguards instrumentation; and
- (c) Analytical techniques for measurement of source and fissionable materials.

500. Because of the usefulness to less developed countries of research in the field of radiation safety, and protection as well as health, work on these subjects will be continued in 1960 and provision is made for an increase of \$11 000.

501. Technical services contracts	10 000
	1959 6 000
	1958 2 000

502. Increases in library services and information distribution in 1960 are expected to require an increase of \$4 000 in contracts for technical services such as procuring catalogue cards, microfilm processing services, contracts with co-operating libraries that furnish the Agency with services which otherwise have to be duplicated by the Agency at much greater expense, support of terminology studies, contracts for the preparation of an accessions list of all governmental and semi-governmental reports in the field of the peaceful uses of atomic energy and for the preparation of abstracts or annotations of patents in the same field.

503. Scientific services	65 000
	1959 50 000
	1958 33 468

504. Expenditures for scientific services performed in the Agency's provisional laboratory in the headquarters building in 1958 and 1959 were principally in connexion with supplies and equipment. The estimate for 1960 is of a different character. It is expected that the Agency's permanent laboratory facilities will be completed and in operation in the fourth quarter of that year. All scientific services performed in the provisional facilities in 1958 and 1959 were in connexion with activities under the regular budget. It is likely that these activities will continue, and that the regular budget will, therefore, continue to bear part of the laboratory expenses. However, rather than to make any specific assumption as to what portion of the operational costs of the laboratory will be borne by the regular budget and what by the operational budget, all operating expenses of the laboratory in 1960 are shown in a separate section of the operational budget.

505. The determination of what expenses are to be charged against the regular budget will be made on the basis of standard cost accounting procedures and credits, as appropriate, will then be transferred from the regular to the operational budget using funds provided under the above estimate, which must be considered as provisional, with exact requirements depending on actual operating experience.

III. THE SECRETARIAT

8. Salaries and Wages

Table 38

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Established posts	917 760	1 840 800	2 213 000
Overtime and night differential	26 543	28 000	30 000
Temporary assistance	79 808	100 000	100 000
Total	1 024 111	1 968 800	2 343 000

(a) General

506. The estimate covers the salaries and wages of all staff of the Secretariat, less those salaries and wages costs properly chargeable:

- (a) To the General Conference;
- (b) To the Board;
- (c) To the operational budget; or
- (d) To profits from commissary and restaurant sales.

507. A tentative manning table for each office and division of the Secretariat for 1960 appears as annex II.

508. The 1959 regular budget authorized 278 General Service posts. However, 34 of these have been transferred to the new Maintenance and Operatives Service category approved by the Board early in 1959. The remaining posts in this category under the regular budget perform services which were paid for under contract in 1958.

509. In developing the estimate for salaries and wages in 1959 it was assumed:

- (a) That approximately 90 per cent of the positions provided in the approved staffing plan for 1958 would be filled by the end of that year; and
- (b) That a recruitment lag factor of 10 per cent would be applicable to the additional Professional and General Service staff to be employed in 1959.

510. In the case of staff in the Professional category neither of the above assumptions has proved altogether valid. As of 31 December 1958, 130 Professional staff members were on duty rather than the 156 which had been assumed.

511. This lag in recruitment was caused by a policy of maintaining high standards in the recruitment of staff and of recruiting only as developments made the need to do so

clearly evident. This same policy is creating in 1959 more than the 10 per cent recruitment lag factor which was assumed in developing the 1959 estimates. The result of the 1958 recruitment lag and that taking place in 1959 will make for a substantial saving in the 1959 appropriation for salaries and wages. Part of these savings (\$165 500) has already been utilized in providing needed increases in other sections of the 1959 budget.

512. As will be noted in the assumption below, a more conservative recruitment lag factor of 25 per cent is assumed for 1960.

(b) Assumptions

513. It is assumed:

- (a) That all of the General Service and all but ten of the Professional posts under the approved 1959 staffing plans will have been filled as of 31 December of that year; and
- (b) That a recruitment lag factor of 25 per cent will be applicable to new and replacement recruitment actions in 1960.

(c) Explanation of estimates

514. Salaries and wages	2 213 000
	1959 1 840 800
	1958 917 760

515. The justifications for staff increases have been set forth in chapter II. The cost estimate, therefore, represents the salaries and wages of this additional staff after taking into account the above assumptions.

516. Much of the increase in 1960 is due to the fact that staff members appointed during 1959 receive pay for only part of that year, whereas a full year's charge occurs in 1960. Other factors, as shown in the table which follows, are seniority salary increments and post adjustment allowance costs.

Table 39

1958	1959	1960	Position	1958	1959	1960
				\$	\$	\$
1	1	1	Director General	20 000	20 000	20 000
4	5	5	Deputy Director General	60 000	75 000	75 000
18	18	18	Director (D-1/2)	211 500	211 500	211 500
42	48	51	Senior Officer (P-5)	367 500	420 000	446 250
53	61	74	First Officer (P-4)	386 900	445 300	540 200
42	62	71	Second Officer (P-3)	252 000	372 000	426 000
13	15	21	Associate Officer (P-2)	62 400	72 000	100 800
3	13	14	Assistant Officer (P-1)	10 800	46 800	50 400
Subtotal				1 371 100	1 662 600	1 870 150
176	223	255	General Service staff	448 800	426 700	513 400
-	117	122	Maintenance and Operatives staff	-	114 660	119 560
Total				1 819 900	2 203 960	2 503 110
<u>Add:</u> Special post and other allowances				39 370	42 000	45 000
Post adjustment				52 800	84 000	102 000
Seniority salary increments				44 150	91 840	135 000
Total				1 956 220	2 421 800	2 785 110
<u>Less:</u> General Conference				67 665	72 000	75 000
Board of Governors				219 777	246 000	255 000
Laboratory staff				-	-	41 100
Mobile Radioisotope Laboratory staff				-	13 500	23 700
Commissary and Restaurant staff				-	19 000	19 550 ^{a/}
Recruitment lag				751 018	230 500	157 760
Net cost				917 760	1 840 800	2 213 000

a/ Salaries and wages paid from profits on sales.

517. Overtime and night differential 30 000
1959 28 000
1958 26 543

518. Certain peak work periods arise from time to time throughout the year, particularly in connexion with the General Conference and meetings of the Board and its committees, which necessitate overtime work on the part of the General Service and Maintenance and Operatives personnel. In accordance with usual custom a small pay differential is given to staff members (porters and char service personnel) who are required to work at night. The 1960 estimate provides for a small increase in this expense, reflecting the additional office space the Agency will occupy in that year and the general expansion of the Agency's staff which will occur consequent upon increased work in the production of documents, publications, etc.

519. Temporary assistance 100 000
1959 100 000
1958 79 808

520. Requirements for temporary assistance arise in a variety of ways, including peak work periods in the documents and language services, vacation, extended illness and maternity leave replacements, etc. Requirements for 1960 are estimated to be approximately the same as budgeted for in 1959.

9. Common Staff Costs

Table 40

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Pension Fund contribution	74 887	210 000	221 000
Medical benefits contribution	24 234	30 000	40 000
Dependency allowance	62 057	125 000	151 000
Education grant	7 845	38 000	44 000
Non-residents' allowance	74 975	103 000	132 000
Travel on recruitment	102 996	63 000	38 000
Assignment allowance	80 526	178 000	173 000
Installation expenses	148 533	69 000	35 000
Removal of household goods and excess baggage	50 878	65 000	37 000
Travel on home leave	9 364	30 000	130 000
Other costs	24 323	91 000	96 000
Subtotal	660 618	1 002 000	1 097 000
<u>Less:</u> General Conference	32 885	29 000	31 000
Board of Governors	117 800	106 000	107 000
Total	509 933	867 000	959 000

(a) General

521. The estimate covers the common staff costs of the staff of the Secretariat excluding operational budget activities less costs chargeable to the General Conference and the Board.

522. The level of common staff costs bears a close relationship to the level of expenditures for salaries and wages, although account must be taken of the fact that during the early years of the Agency's existence in which it is rapidly growing, common staff costs will constitute a higher percentage of salaries and wages than later when employment levels would have become more stable. In 1958 common staff costs were 53.6 per cent of salaries and wages; the estimate for 1959 is 45.8 per cent and for 1960 42.6 per cent.

(b) Assumptions

523. It is assumed:

- (a) That during 1960, 40 per cent of the Professional staff and 70 per cent of the General Service and Maintenance and Operatives staffs will hold permanent appointments;
- (b) That the average costs of travel on initial recruitment, dependency allowance, etc., incurred on Professional staff recruited during 1960 will be no more than the average of such costs in 1958 and 1959; and
- (c) That approximately 40 per cent of the General Service staff will be eligible for non-residents' allowance and approximately 50 per cent of the General Service and Maintenance and Operatives staffs will be entitled to language allowance.

(c) Explanation of estimates

524. In general, common staff costs are calculated in accordance with allowances and benefits prescribed in the Provisional Staff Regulations as approved by the Board, and the Staff Rules promulgated by the Director General to implement the regulations. Common staff costs not specifically covered by the Staff Rules and Regulations include those on language training and medical services.

525. Pension Fund contribution	221 000
	1959 210 000
	1958 74 887

526. The Agency became a participating organization in the United Nations Joint Staff Pension Fund in the latter part of 1958. Its contribution to the Fund is 14 per cent of the pensionable pay of permanent staff and 4.5 per cent of that of staff having fixed-term appointments in the Professional and General Service categories.

527. The increase in 1960 over the requirements for 1959 is actually somewhat greater than appears above. The slow and careful pace of recruitment throughout 1958, the policy of making permanent appointments only after thorough trial, and the conversion of a large block of staff from the General Service to the Maintenance and Operatives category, have considerably reduced the costs estimated for this purpose in 1959.

528. Medical benefits and social security contribution	40 000
	1959 30 000
	1958 24 234

529. In addition to the Agency's contribution in connexion with the staff medical insurance plans, the estimate includes contribution by the Agency to the Austrian social security system for staff in the Maintenance and Operatives category, since personnel in this category do not participate in the United Nations Joint Staff Pension Fund. It also includes the employer's contribution to the Austrian unemployment insurance in the case of General Service staff on fixed-term or probationary appointments. The estimate for 1960 takes into account these new expense items as well as the increased requirement for medical benefits contribution which will accompany the increase in staff in 1959 and 1960.

530. Dependency allowance	151 000
1959	125 000
1958	62 057

531. The increase in 1960 is due to the increased staff planned for that year and the fact that staff recruited throughout 1959 will be receiving the allowance for a full year in 1960. The average dependency allowances in 1958 were \$540 in the case of Professional staff and \$55 in the case of staff members in the General Service and Maintenance and Operatives categories.

532. Education grant	44 000
1959	38 000
1958	7 845

533. Expenses under this common staff cost were small in 1958 because of the fact that for most of the staff's children only one semester of school tuition was involved and few children had been receiving education away from Vienna for a period of time sufficient to acquire the eligibility of a round trip to Vienna at the conclusion of the 1957-8 scholastic year. The situation in 1959 and 1960 is quite different. In the early months of 1959 there were 28 children eligible for travel under education grants. This travel will cost an estimated \$8 500. The \$400 educational grant to which each is entitled amounts to a total of \$11 200, making a combined total for these children of nearly \$20 000. To be added to this are the tuition costs of children residing in Vienna. The budgetary provision for 1960 takes into account the additional staff to be employed in that year.

534. Non-residents' allowances	132 000
1959	103 000
1958	74 975

535. The estimate for 1960 takes into account the assumption that 40 per cent of the General Service staff on duty in that year will be internationally recruited and entitled to the \$1 200 per annum non-residents' allowance. Much of the increase is due to the fact that staff recruited throughout 1959 will be receiving the allowance for a full year in 1960.

536. Travel on recruitment	38 000
1959	63 000
1958	102 996

537. Travel on recruitment during the first 18 months of the Agency's existence has averaged \$700 each in the case of Professional staff and \$150 in the case of internationally recruited General Service staff. The estimate for 1960 represents the application of these averages to the additional and replacement staff it is estimated will be recruited in that year.

538. Assignment allowance	173 000
1959	178 000
1958	80 526

539. The estimate for 1960 takes into account the assumption that in that year 60 per cent of the Professional staff will be employed under fixed-term appointments and entitled to an assignment allowance in lieu of reimbursement for removal of household effects. Because of the slower than anticipated recruitment rate in 1958 the budgetary provision for 1959 is greater than what will actually be required.

540. Installation expenses		35 000
	1959	69 000
	1958	148 533

541. In the early part of 1959 the Director General reduced the number of days for which per diem is paid during the period in which a new Professional staff member is establishing himself in Vienna from 45 to 30 in the case of members with dependents and from 25 to 15 in the case of members without dependents. The 1959 budgetary provision was computed on the former entitlement and is, therefore, considerably in excess of actual requirements. The estimate for 1960 provides for the internationally recruited staff scheduled for employment in that year.

542. Removal of household goods		37 000
	1959	65 000
	1958	50 878

543. The estimate for 1960 is based on the assumption that 40 per cent of the Professional staff and 70 per cent of the General Service staff will be serving under permanent appointments. Conversion of fixed-term to permanent appointments automatically grants to internationally recruited staff the privilege of being reimbursed for the shipment to Vienna of their household goods. The average cost of such shipment in 1958 was \$1 900 per Professional staff member and \$480 per internationally recruited General Service staff member. The estimate also provides for an average of \$100 in excess baggage costs for each staff member recruited internationally under fixed-term appointments.

544. Travel on home leave		130 000
	1959	30 000
	1958	9 364

545. Since a majority of the Agency's staff was recruited in 1958, expenses of travel on home leave will be high in even numbered years in the future. The estimate for 1960 provides for home leave for all staff recruited in 1958 less a lapse factor of 10 per cent.

546. Other common staff costs		96 000
	1959	91 000
	1958	24 323

547. Other common staff costs include miscellaneous and relatively minor cost items such as staff language training \$2 000, staff medical services \$13 000, and language allowance \$8 000, and also items of expense about which there has been little, if any, cost experience. These items are - termination indemnity, commutation of annual leave, repatriation grants, service benefit allowance and reimbursement of national income tax. After taking into account the total of \$23 000 in known expenses under this heading, a provision of \$73 000 has been made to cover those items of expense in which the Agency has had insufficient cost experience to warrant the projection of any valid estimates. As in the case of the budget for 1959, the cost experience of the specialized agencies has been used in arriving at the estimate. Recent budgets of these agencies disclose that annual expenses for such items as termination indemnity, etc. amount to approximately 2.8 per cent of salaries and wages.

10. Travel of Staff

Table 41

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Transportation	42 299	120 000	90 000
Per diem	28 508	79 000	60 000
Per diem of seconded staff	26 142	-	-
Total	96 949	199 000	150 000

(a) General

548. The estimate covers the expenses of all official duty travel of staff members of the Secretariat except those arising in connexion with special missions [27] or activities under the operational budget. It does not, of course, cover travel chargeable to common staff costs, [28] such as travel on home leave, on initial recruitment, separation, etc.

(b) Assumptions

549. It is assumed:

- (a) That in 1960 there will be visits to Member States by staff members for the purpose of discussing the Agency's programme and the manner in which the Agency can serve them. Preliminary assistance missions and isotope teams will require in certain cases follow-up visits by Agency specialists to assist in the development of an Agency project;
- (b) That staff members will attend scientific conferences, symposia and seminars to represent the Agency and to keep abreast of the latest developments in scientific disciplines in the peaceful uses of nuclear energy;
- (c) That liaison will be maintained by periodic meetings with the United Nations and those specialized agencies whose activities are related to those of the Agency;
- (d) That staff members will make visits to national and private nuclear research and training institutions of Member States for the purpose of establishing contacts and exploring the possible benefits which could be derived through co-operative efforts particularly in training and the exchange of scientific information.

[27] See section 4 above.

[28] See section 9 above.

- (e) That staff members will visit Member States for the purpose of negotiating specific agreements on Agency projects, supply of equipment and materials, research contracts and technical assistance; and
- (f) That one team will be formed in 1960 and, for the purpose of gaining experience, will conduct a series of inspections on an experimental basis of different types of nuclear energy installations to test safeguards procedures.

(c) Explanation of estimates

550.	Transportation and per diem	150 000
	1959	199 000
	1958	70 807

551. Transportation and per diem are shown separately in table 41 in order to keep the non-recurring 1958 item of expenditure for per diem of seconded staff from being combined with other travel costs and thus distorting the 1958 picture. However, in explaining official duty travel estimates, to treat transportation costs separately from per diem costs would entail needless repetition. This explanation directs itself therefore to the combined estimate.

552. Experience in 1958 has revealed that practically all official duty travel is undertaken by Professional staff in grade P-3 and above. Excluding the junior grade Professionals and the Professional staff of the Division of Language Services, on which virtually no official duty travel requirements are imposed, Professional staff employment in 1957-8 totalled 652 man-months. This staff was in an official duty travel status for 1 756 days, or a total of 58.5 travel months.

553. Experience in the early months of 1959 indicates that, by reason of an awareness within the Secretariat of the need to make the most economical use of travel funds and the establishment of travel controls, costs in 1959 will be somewhat less than had been appropriated although it is still too early to attempt a precise estimate of 1959 needs.

554. In 1958 there was relatively little travel to the less developed Member States, many of which are further removed from the Agency's headquarters than most of the atomically more advanced Members. The 1959 and 1960 programmes emphasize assistance to the Agency's less developed Members and it can be anticipated that a substantial number of visits to these Member States will take place, particularly in connexion with the technical and research assistance, and the fellowship and training programmes. Experience has shown, particularly in the field of technical assistance, that the less developed Member States need the expert advice and guidance of Agency staff or of outside experts in determining which form of technical assistance is best suited to their planned programmes and in drawing up requests for such assistance in sufficient detail and preciseness to permit prompt Agency action.

11. Consultants

Table 42

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Fees	34 198	60 000	60 000
Transportation	12 845	23 000	23 000
Per diem	9 884	17 000	17 000
Total	56 927	100 000	100 000

(a) General

555. The estimate covers the cost of all consultants employed by the Agency except those employed in connexion with special missions [27] or with activities under the operational budget.

(b) Assumptions

556. It is assumed:

- (a) That in 1960, following the policy of keeping increases in permanent staff to a minimum, the technical departments will again rely heavily on the use of consultants; and
- (b) That consultants will be needed to an increasing extent in connexion with the preparation of Agency projects, more particularly technical assistance projects.

(c) Explanation of estimates

557. The extreme degree of specialization which exists in the fields of nuclear science and technology makes it impossible as well as uneconomical for the Agency to have on its permanent staff specialists in all branches and sub-branches of these fields. It is well known, for example, that in certain highly specialized areas of activity, such as the design and use of reactors for medical therapy or thermonuclear fusion, there is only a handful of experts in each of such fields.

558. Experience acquired in 1958 has indicated that consultant services are needed for a wide range of topics concerning such matters as nuclear research, radioactive waste disposal, radiation safety, protection and health, safeguards, specialized applications of isotopes in the fields of medicine and agriculture, the legal liability and economic aspects of nuclear energy, heavy water production research, test and power reactors and reactor materials, education in nuclear science and technology, nuclear electronics instrumentation and the scientific and technical documentation and information services.

559. A requirement which arose in 1958 and which is expected to increase in 1959 and 1960 is for expert services in connexion with the preparation of Agency technical assistance projects. In 1958, four such consultants were engaged on short-term assignments - two for Pakistan and two for the United Arab Republic. The 1959 programme of work

envisages a need for the services of 12 such consultants for an estimated total period of six man-months on short preparatory missions in connexion with specific technical assistance requests, which by reason of their nature indicate the need for expert consultant services. In 1960 it is estimated that for these purposes 18 consultants will be needed for a total of 12 man-months at a cost of approximately \$45 000, including travel and per diem costs of approximately \$32 000 and fees of \$13 000.

560. The remainder of the estimate, amounting to \$55 000 is needed to provide for the fees, travel and per diem in all other areas of the Agency's activities. This is approximately the same as the amount budgeted for consultants in 1959.

12. Hospitality

Table 43

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Hospitality	4 973	7 500	7 500

(a) General

561. The funds budgeted under this section are used to provide for reimbursement, with the approval of the Director General, of staff members who do not receive specific representation allowances for hospitality expenses incurred in the course of their official duties.

(b) Assumptions

562. It is assumed that funds for hospitality purposes will be required in 1960 both at headquarters and at the Agency's liaison office at United Nations Headquarters, in connexion with visits of prominent individuals, meetings of scientific advisory panels and committees, and special missions to Member States and other similar purposes.

(c) Explanation of estimates

563. As shown in the above schedule, expenditures in 1958 totalled \$4 973, or approximately one half of the amount provided in that year's budget. In the light of this expenditure in the first and basically organizational phase of the Agency's operations, at least the same amount as was provided for hospitality expenses in 1959 will be required in 1960.

on account of a greater number of panel meetings, missions and the growth in the fellowship and training and the technical and research assistance programmes.

569. Telex and telegram services are also expected to show an increase in traffic because of scientific operations and such activities as are mentioned above. On the basis of costs during the latter part of 1958 of approximately \$300 per month for 28 000 words, and of telex costs of approximately \$250 per month for 82 000 words, the estimated cost for a total of 50 000 words per month by telegram and 150 000 words by telex is \$12 000.

570. For freight and cartage a total of \$3 000 is estimated.

571. Rental and alteration of premises	25 000
1959	10 000
1958	70 820

572. Costs of alterations to premises which in 1958 amounted to over \$70 000 are estimated at \$23 000 in 1960, since additional premises to be acquired in that year will have to be adapted to the Agency's special needs. In addition, the need for other alterations has become evident. Examples include alterations to the lifts in the headquarters building to increase their safety, expansion of the library space by converting a room now used for paper storage, alteration and fitting out of two rooms in the Neue Hofburg for use by the documents service, major repairs to the water pipes and other plumbing in the headquarters building, etc. The estimate also provides for the cost of a site study in connexion with a permanent headquarters building. Considerably more work in the way of alterations than was anticipated is being required in 1959.

573. An amount of \$2 000 is provided to cover possible cost for renting of storage space for supplies and equipment so that space needed for offices in the headquarters building can be released.

574. Maintenance of premises	-
1959	-
1958	43 198

575. Prior to 1959 the maintenance of the Agency's temporary headquarters was accomplished under contract with a private firm. Studies made it clear that this work could be done more economically by Agency-employed staff.

576. Utilities	49 000
1959	36 500
1958	25 712

577. Taking account of experience during the very mild winter of 1958/59 and the fact that by 1960 the space to be heated at headquarters will have to be approximately 25 per cent greater than at present it is estimated that heating costs at headquarters will amount to \$24 500 in 1960. In the Neue Hofburg building the Agency pays a low proportion of the total heating costs which in 1960 is estimated at \$4 500.

578. The estimates for electricity are \$11 000 for the headquarters building and \$7 500 for the Neue Hofburg where electric light is required in the offices and work space all day throughout the year.

579. For water services \$1 500 is estimated in 1960.

(b) Assumptions

606. It is assumed:

- (a) That up to 35 additional offices will have to be furnished by the end of 1960; and
- (b) That office equipment and machines, as well as telephone instruments will have to be provided for an anticipated increase of approximately 45 in the staff of the Agency, who will require such equipment.

(c) Explanation of estimates

607. Furniture and fixtures 20 000
1959 60 000
1958 132 586

608. It is estimated that of the approximately 35 additional offices to be furnished, ten will be required for staff of the P-5 level and consultants. Cost estimates have been established at \$550 for an office of this type, while for the remainder, standard furnishings at \$225 per office are estimated, making a total of approximately \$11 000.

609. Miscellaneous additional requirements of furniture, rugs, lamps, etc. for meeting rooms are estimated at \$5 000, and \$4 000 is provided for additional filing facilities and shelves for the library, the commissary and the office supplies stock room.

610. Office equipment and machines 49 000
1959 50 000
1958 222 061

611. Major items provided include 35 standard, 12 electric and eight special electric typewriters. The latter, plus eight of the electric machines, are required for the units of the Division of Language Services to provide a reserve of two machines of each type per language pool for rush periods and to replace machines temporarily out of commission for repairs and servicing. The remaining machines are estimated to be required for additional clerical and secretarial staff. The cost estimates for these machines total \$12 350.

612. For reproduction work, the estimates include an additional varityper to prevent a bottleneck in that section (\$4 500); two offset machines in formats 210 x 297 mm and 420 x 594 mm (\$11 500); and a stitching attachment to the collating machine (\$4 000) which will considerably speed up the assembly of documents. With regard to the offset machines, the smaller model does not compare in quality and efficiency with the larger ones, and a new and improved model of the small type is expected to appear in 1960. An additional large format machine will be required to speed up reproduction work which by 1960 is expected to reach a volume of 25 million pages.[23]

613. On the assumption that such single standard telephone instruments as are required will continue to be furnished by the Austrian Government, it is estimated that the requirements of chief/secretary instruments and other types of telephones will be 30 instruments at \$70 each, five instruments at \$130 each and five instruments at \$340 each, or a total of \$4 450.

614. One high-speed electric calculating machine for the processing of scientific data and five standard calculating and/or adding machines for the work of the technical divisions and the Division of Budget and Finance are estimated to cost \$2 500.

C. OPERATIONAL BUDGET ESTIMATES

Receipts and Expenditures

Summary

Table 48

	1958 Actual	1959 Estimate	1960 Estimate
	\$	\$	\$
I. <u>General Fund</u>			
Reserve brought forward	-	4 530	669 824 ^{b/}
Income from voluntary contributions	129 142	1 122 294 ^{a/}	1 500 000
Income from special contributions	-	600 000	pro memoria
Other income	-	106 000	pro memoria
	<u>129 142</u>	<u>1 832 824</u>	<u>2 169 824</u>
Net transfers to Operating Funds I and II	124 612	1 163 000	1 790 000
<u>Reserve carried forward</u>	<u>4 530</u>	<u>669 824^{b/}</u>	<u>379 824</u>
II. <u>EPTA Account</u>			
Allocations by TAB	-	400 000 ^{c/}	600 000
Transfers to Operating Fund II	-	400 000	600 000
III. <u>Operating Fund I</u>			
Transfers from General Fund	-	400 000	333 000
Other income	-	pro memoria	pro memoria
	<u>-</u>	<u>400 000</u>	<u>333 000</u>
<u>Expenditure</u>			
Functional laboratory	-	400 000	333 000
IV. <u>Operating Fund II</u>			
Transfers from General Fund	124 612	763 000	1 457 000
Transfers from EPTA Account	-	400 000	600 000
	<u>124 612</u>	<u>1 163 000</u>	<u>2 057 000</u>
<u>Expenditure</u>			
Fellowship and training	124 612	680 000	1 100 000
Technical assistance	-	445 000	900 000
Mobile radioisotope laboratories	-	38 000	57 000
	<u>124 612</u>	<u>1 163 000^{d/}</u>	<u>2 057 000</u>

a/ Represents pledges made up to 30 June 1959.

b/ Includes \$200 000 earmarked for laboratory equipment in 1960.

c/ Includes allocations from the Executive Chairman's Contingency Fund.

d/ Represents appropriations approved by the Board through 30 June 1959.

621. As will be noted from the summary table, expenditures under the operational budget are made through the two operating funds.

622. The General Fund has no operational characteristics. It is simply the depository of funds received by the Agency in the form of voluntary contributions from Member States and others in accordance with Article XIV.F of the Statute. A portion of the General Fund is, however, considered as a reserve to be carried forward from year to year and used, as needed, to finance the Agency's operational programmes during the early months of a fiscal year before the pledges of voluntary contributions by Member States have been paid and to meet deficits up to a pre-determined fixed amount. This reserve is constituted of funds not allocated from the General Fund in a given year plus any uncommitted balances in the operating funds at the end of the year, such balances being transferred back into the General Fund.

623. Although it is possible that, in 1960, income may be derived from the operation of the Agency's laboratory (Operating Fund I) or from services rendered to Member States (Operating Fund II), it is not considered prudent, in forecasting income needed to sustain the Agency's programmes, to estimate any receipts from these sources in 1960.

624. In addition to voluntary contributions and revenues generated by activities under the operating funds the Agency as a member of EPTA receives funds from that source which aid it in carrying out its programme of technical assistance, including fellowships and training which are part of the operational budget.

625. Although it is conceivable that under certain circumstances the operation of the mobile radioisotope laboratories could be financed by EPTA funds, it is not contemplated that any of these funds will be used for this purpose in 1960. EPTA funds cannot be used to support research assistance and this aspect of the technical and research assistance programme will be financed wholly by the General Fund.

626. The financial condition of all funds and the demands upon them are kept under continuing review by the Director General with the view to making recommendations to the Board concerning the most effective allocation of the funds which they contain. The suggested allotment of funds both within and between the several funds is, therefore, only provisional.

627. In deciding on the allocation of monies from the General Fund the Board's policy is to place first emphasis on funding the requirements of the fellowship and training and of the economic, technical and research assistance programmes (Operating Fund II), taking into account the extent of requests made by Member States for services under these programmes and having regard to the availability of type II fellowships, gifts in kind and funds provided under EPTA. Second emphasis is placed on any expenditures for Agency-owned equipment or for its laboratory (Operating Fund I).

628. The provisional allocations for 1960 reflect a continuance of this policy.

629. Because of income in 1959 which was not anticipated at the time the budget for that year was prepared, a possibility exists for building up a needed reserve in the General Fund for 1960 and future years. The unanticipated income was \$400 000 from EPTA (subsequent developments in 1959 may increase this to \$500 000), an estimated \$106 000 from the sale of natural uranium to Japan - a transaction made possible by the gift of this material to the Agency by Canada - and a special contribution of \$600 000 from the United States of America for the construction and equipping of the Agency's laboratory. In addition, as will be noted, there is a small carry-over into 1959 of funds not obligated in 1958.

630. As regards the Agency's participation in EPTA, a lump sum of \$200 000 has been allocated to the Agency for financing its technical assistance projects in 1959. In its resolution of 23 October 1958 [29] ECOSOC requested the Executive Chairman of TAB "to give sympathetic consideration to requests involving the peaceful uses of atomic energy, for the allocation of funds under his contingency authority", and it is expected that at least an additional \$200 000 will be made available to the Agency under this authority for urgent projects during 1959.

631. At the March 1959 session, TAB, taking into account the trend of government requests in the field of peaceful uses of atomic energy, decided to raise the global planning share of the Agency from \$200 000 allocated for 1959 to \$600 000 for 1960, and to include Agency sub-totals in country planning targets for 1960 in the same way as is being done for the other participating organizations, in order to bring the Agency's programming in line with the established country-programming procedures. The allocation of \$600 000 to the Agency is a preliminary one pending the decision of the countries for which Agency sub-totals have been proposed. Under EPTA procedures governments of the recipient countries may take the sub-totals of the participating organizations into account, but they are not bound to accept them.

[29] See ECOSOC resolution 704(XXVI).

I. OPERATING FUND I

1. Agency Laboratory Facilities

Table 49

Item of expenditure	1958 Actual	1959 Budget	1960 Estimate
	\$	\$	\$
Salaries and wages	-	-	41 100
Common staff costs	-	-	38 100
Scientific supplies	2 713 ^{a/}	11 000 ^{a/}	48 000
Scientific equipment	30 755 ^{a/}	39 000 ^{a/}	190 000
Common services, supplies and equipment	-	-	15 800
Construction	-	400 000	-
Total	33 468	450 000	333 000

a/ Included in the regular budget estimates and shown here for comparison purposes only.

(a) Functions and responsibilities

632. The General Conference recommended [30] that a functional laboratory for the Agency should be established, the functions of which shall not exceed:

- (a) Standardization of isotopes and preparation of radioactive standards;
- (b) Calibration and adaptation of measuring equipment;
- (c) Quality control of special materials for nuclear technology;
- (d) Measurements and analysis in connexion with the Agency's safeguards and health and safety programme; and
- (e) Services for Member States, which can be undertaken with the facilities needed for the aforementioned activities.

(b) General statement

633. In accordance with the request made by the General Conference [31] the proposal for the establishment of the Agency's functional laboratory was submitted for consideration to the Scientific Advisory Committee. The Committee felt that the proposed staff was rather small to carry out all the functions of the laboratory, and it relied upon the judgment of the staff of the Agency to determine which of these functions would in the first instance be of greatest importance. The Committee also urged that the project be carried out without any further delay. It further commented that too much specialization was undesirable in the beginning, but as the Agency grew the scope of the laboratory's functions would become more clearly defined in the light of experience and demand. Accordingly, these comments have influenced the planning of the laboratory and the initial programme of work.

[30] GC(II)/RES/25.

[31] Ibid., para. 4.

634. The supervision of the laboratory will be carried out by the Director of the Division of Research. Although there will be a need for permanent staff to operate the laboratory and ensure continuity of the work, part of the staff directing the activities will be the senior technical personnel already available in the various divisions which will be responsible for relevant technical aspects of the work, according to the project involved. Very close and complementary collaboration will be maintained with the adjacent Austrian atomic energy establishment which will permit mutual use of the available facilities for certain functional work as well as for a certain amount of training for the junior staff of the two establishments. The Austrian reactor, a five megawatt tank type, is expected to become operational in the spring of 1960. It is hoped that the close collaboration envisaged, which will result in considerable savings in operating costs, will also facilitate any future growth of the Agency's laboratory. The Secretariat intends to explore extensively in 1960 the possibilities of such a development into a well-balanced and organized centre which will be capable of catering for all the statutory functions of the Agency with particular emphasis on the needs of the less developed countries.

(c) Programme of work for 1960

635. Since it is expected that the laboratory will not become operational until the later part of 1960, the initial work will of course be mainly concerned with the setting up and equipping of the laboratory.

636. The electronics section will be concerned with the checking, adaptation, calibrating, maintenance and repair of electronic equipment. In view of the fact that some Member States have indicated that they will donate electronic equipment to the Agency and also that a number of countries have requested assistance from the Agency in the setting up of small laboratories for training in the use of radioisotopes and also for their measurement, it is envisaged that a large amount of the work of this group will be concerned with the modification of equipment to suit the recipient country. In some cases, for instance, it may be necessary to adjust the voltage of equipment and add voltage stabilizers and in some cases to tropicalize the equipment.

637. In the early stages the activities of the chemistry group will primarily be of an analytical nature. For example, it is expected that this group will be called upon to carry out umpire analyses of special materials for nuclear technology such as heavy water, plutonium and uranium. The Department of Safeguards and Inspection will require chemical and isotopic analyses of source and special fissionable material in order to measure materials subject to the Agency's safeguards control. The chemistry group will, therefore, be called upon to undertake chemical analysis of uranium in oxides, concentrates and waste and also the chemical analysis for plutonium content. Isotopic analysis will be required of heavy water, enriched uranium and plutonium. This group will also cover the needs for routine analyses required by other sections of the laboratory.

638. The health physics group will be concerned with measurements and analysis in connexion with the Agency's health and safety programme. Provision is being made for the analysis of contaminated materials, whole body counting and the determination of the radioactivity of human excreta. It is planned to provide certain essential basic health physics services to cover requests made by Member States in connexion with radiation accidents.

639. The activities which have commenced in the provisional laboratory at headquarters will be continued in the Agency's functional laboratory. In particular this refers to the standardization of radioisotopes and preparation of radioactive standards. This group will also survey the various methods used for standardization in other countries with a view to promoting standardized procedures.

640. A small workshop will cover the day-to-day needs of the laboratory, such as the building of small pieces of apparatus. It is envisaged that it will also be necessary to construct special chassis, equipment racks and shielding equipment. In addition it may be necessary to change scales into the language of the appropriate country for equipment which has been donated to the Agency and is transferred to another country as part of the technical assistance programme.

(d) Explanatory statement on staff

Table 50

Grade	1959 Staff	Proposed Change	Proposed 1960 Staff
P-5	-	2	2
P-4	-	3	3
P-3	-	5	5
P-2	-	4	4
Subtotal	-	14	14
GS	5	19	24
M & O	-	3	3
Total	5	36	41

641. The work of the electronics group of the laboratory will consist of calibration, adaptation, maintenance, repair and checking of equipment. A storage area including a packing and despatch room will be provided for equipment donated to and bought by the Agency. This section will also design and construct any special equipment required by other sections of the laboratory. A P-4 will be required to lead this section, which will include a P-3, together with five General Service staff. Three technicians will carry out the routine laboratory work while one General Service post will be filled by a store-keeper. One secretary will also be required for this section.

642. The work of the analytical chemistry group will be devoted principally to analysis. Provision will be made for both micro- and macro-analysis. This group will be directed by an analytical chemist (P-5), and staffed by a junior analytical chemist (P-3), a general chemist (P-2), three General Service staff as laboratory technician, laboratory attendant and secretary.

643. The physical-chemistry section of the laboratory which will house the mass spectrometer, will be directed by a physical chemist (P-4) and staffed by two further scientists (P-3, P-2). The P-3 will be mainly concerned with mass spectrometry. General support to this section will be provided by one General Service staff member for operations connected with the mass spectrometer, a laboratory attendant and a secretary.

644. The health physics group will deal mainly with medical aspects and will work in close collaboration with the other groups. This group will be staffed by a health physicist (P-4) and a medical physicist (P-2) together with two laboratory technicians and one health physics surveyor in the General Service category.

645. The standardization of radioisotopes and preparation of standards will be carried out by the standardization group. Three physicists (P-5, P-3, P-2) will be concerned with physical measurements and one P-3 will be responsible for the chemistry involved in the preparation of the sources. Five General Service staff will complete this group.

646. A small workshop will serve the laboratory and be staffed by three mechanics. There will also be a small library of reference books for the day-to-day use of the laboratory staff, and for this a General Service post will be filled. In this section there will also be a secretary.

647. Provision is made for three Maintenance and Operatives staff, who will carry out the general cleaning and routine maintenance of the laboratory building.

(e) Assumptions

648. It is assumed:

- (a) That the laboratory will be completed and come into operation on or about 1 October 1960;
- (b) That certain activities of the laboratory will be chargeable as expenses under the regular budget and that usual cost accounting procedures will be followed in determining these expenses; and
- (c) That common staff costs of the laboratory personnel will not exceed, by grade, the average of such costs of the total staff of the Agency.

(f) Explanation of estimates

649. As explained more fully in section 7 of the regular budget, although it is certain that a portion of the work to be performed in the Agency's laboratory will fall within the definition of administrative expenses under the Statute, it is not possible at this early date to make any specific assumption as to what portion this will be of the operational costs of the laboratory. In consequence, the total operating costs are being budgeted under the operational budget and charges to the regular budget will be made on the basis of standard cost accounting procedures on a month-to-month "after the fact" basis.

650. Table 49, which appears at the head of this section of the operational budget and which sets forth the estimated expenses of the Agency's laboratory in 1960 is, unfortunately, misleading in several ways. First the estimated costs (exclusive of costs of equipment) are for only one-fourth of a year and therefore do not correctly reflect the true picture of operating costs in the future; second, the estimate for scientific supplies provides a distorted picture of future requirements since it includes the cost of initial inventories; third, the item of common staff costs is extremely and unrealistically high in relation to salaries and wages because certain costs such as installation allowance, travel on initial recruitment, etc. are measured against only one-fourth of a year's salaries and wages; and fourth, the items of scientific equipment and office furnishings and equipment relate to the initial equipping of the laboratory and are essentially non-recurring expenses.

651. In order to provide a clearer picture of what the true annual operating costs of the laboratory should be under present plans, the estimated 1961 requirements in comparison with those for 1960 are set forth in table 51 below.

Table 51

Item of expenditure	1960	1961
	\$	\$
Salaries and wages	41 100	140 000
Common staff costs	38 800	50 000
Scientific supplies and equipment	238 000	40 000
Office furnishings and equipment	10 000	1 000
Common services and supplies	5 800	24 000
Total	333 700	255 000

652. The accuracy of the above estimate is dependent on whether or not the staff recruited incurs the average amount of common staff costs which apply to the total staff of the Agency. An error factor of as much as \$10 000 in this item must be taken into account since, with such a relatively small number of posts the Agency averages may be exceeded, or, on the other hand, costs may be less than average.

653. Costs in 1961 and thereafter will tend to rise on account of repatriation and replacement recruitment. However, it appears probable that with no expansion in the functions presently planned, annual operating costs will not exceed \$300 000.

654. An offsetting item insofar as the operational budget estimates are concerned is the income which will be produced from operational services performed in the laboratory for and at the request of Member States. On account of the short period of time in which the laboratory will be in operation in 1960 and the lack of any advance information as to the extent of demands which Member States will place on its facilities, no reasonable estimate of income can be developed for the forthcoming budget year.

655. The details of the 1960 estimates follow.

656. Salaries and wages 41 100

657. The estimate represents the cost of salaries and wages for the following posts:

P-5	2 at \$8 750	17 500
P-4	3 at \$7 300	21 900
P-3	5 at \$6 000	30 000
P-2	<u>4 at \$4 300</u>	<u>17 200</u>
Subtotal	14	86 600
GS	24 at \$1 800	43 200
M & O	<u>3 at \$ 900</u>	<u>2 700</u>
Total	41	132 500
<u>Plus:</u> Post adjustment		5 050
Salary increment (provisional laboratory staff)		400
<u>Less:</u> Recruitment lag		<u>96 850</u>
	Net cost	41 100

658. Common staff costs 38 100

II. OPERATING FUND II

2. Fellowship and Training Programme

Table 52

Item of expenditure	1958 Actual	1959 Estimate	1960 Estimate
	\$	\$	\$
Type I fellowships - regular	107 365	600 000	840 000
Type I fellowships - research	-	20 000	60 000
Type II fellowships	17 247	30 000	25 000
Exchange of scientists	-	15 000	87 500
Training courses	-	15 000	87 500
Total	124 612	680 000	1 100 000

(a) General

666. In 1958, the first year of the Agency's fellowship and training programme, there was transferred from the General Fund, and obligated, a total of \$107 365 for what have been termed type I fellowships - fellowships fully financed by the Agency. In addition, Member States made available 150 fellowship openings (termed type II) varying in duration from six months to six years and also in the extent to which stipends and travel costs would be underwritten. In order to meet certain expenses, principally travel, in connexion with type II fellowships it was necessary to obligate a total of \$17 247.

667. Under the 1958 programme, 65 type I and 108 type II fellowships were awarded. EPTA funds for 1959, which became available early in the year, provided for an additional 37 fellowship awards to applicants under the 1958 programme.

668. Because of financial limitations there were no activities in 1958 pertaining to exchange of scientists.

669. It is estimated that in 1959 the Agency will award between 350 and 400 regular fellowships of which between 220 and 225 will be type I and 150 to 175 type II. In addition it is expected that several research fellowships will be awarded. Requests for fellowships in 1960 are expected to be considerably greater in number than in 1959.

670. In the field of the exchange of scientists it is expected that 1959, the first year of activity, will be devoted mostly to investigating needs and contacting interested persons and institutions. Only a few actual exchanges are expected to be effected.

671. The 1960 programme for the exchange of scientists and technical experts is expected to increase sharply as a result of the preparatory work done in 1959, and a total of 25 exchanges of scientists and experts are planned. This programme will provide for:

- (a) The exchange of visiting professors to give special courses in the theoretical and experimental aspects of nuclear physics, radio-chemistry, etc.;

- (b) The exchange of visiting scientists and other specialists to provide information on specific areas of research; and
- (c) The sending of experts and consultants at the request of Member States to advise on problems related to the development of technical and scientific personnel in the universities and institutes of the respective countries concerned.

672. The development and sponsorship of training courses in the use of isotopes in agriculture and medicine as urged in appendix 2 of resolution GC(II)/RES/29 will be initiated in a modest way in 1959. It is obvious that a more economical and effective procedure would be to bring instruction materials and instructors to the students rather than the reverse, and plans for 1960 embody this concept. It is also apparent that training courses at two levels, preparatory and advanced, should be conducted. In 1960, therefore, a programme of training courses to be held in Member States is proposed.

673. The preparatory training course will include instruction in the fundamentals of radiation and its effects, health and safety procedures, the production, distribution and usages of different radioisotopes, utilization and operation of teletherapy instruments, operation of gamma fields in agricultural research, etc. Three courses of this type are planned for 1960. Tentative plans call for these courses to be conducted in Asia, the Middle East and Africa and Latin America. Each course would be of approximately three months' duration and would involve, in addition to certain preparatory work, the full-time services of two instructors.

674. The advanced training courses will include instruction in such fields as research reactor design, operation and capabilities, raw materials exploration and processing, research techniques in the use of radioisotopes in medicine and agriculture and their uses in industrial processes, advanced health physics, nuclear electronics and instrumentation, etc. It is believed that there are a sufficient number of persons qualified to take these advanced courses to warrant conducting in 1960 two, either in Asia, Latin America or in North Africa. Each course would be of approximately four months' duration and would involve in addition to preparatory work, the full-time services of three instructors.

(b) Assumptions

675. It is assumed:

- (a) That the Agency should be in a position to award 500 fellowships in 1960. It is expected that 300 will be regular type I, six research type I and 185 type II fellowships;
- (b) That approximately 25 scientists for teaching and other assistance to less developed countries will be provided to Member States under the scientist exchange programme;
- (c) That approximately one month of preparatory work will be required for each of five training courses to be conducted in 1960; and
- (d) That Member States where training courses are conducted will defray one half of the subsistence expenses of experts provided by the Agency and will, in addition, supply needed local teaching staff, secretarial help, instruction facilities and any other local facilities required.

(c) Explanation of estimates

676. Type I fellowships - regular	840 000
1959	600 000
1958	107 365

(a) General

686. The estimate covers fund requirements for providing the services of technical assistance experts and for scientific and technical equipment and supplies within the framework of technical assistance projects. It also covers research contracts placed with the nuclear research laboratories of Member States for the purpose of assisting them in carrying forward research of interest not only to the Member State involved but to other Member States as well.

687. By the end of June 1959, 62 requests and enquiries from 23 countries concerning the provision of technical experts and equipment by the Agency had been received. Taking into account the additional requests for technical assistance likely to be received in the remaining part of 1959, it is anticipated that an estimated total of 148 man-months of expert assistance involving the services of 32 experts will be needed in 1959. The total expenditure involved in the implementation of the programme, including the supply of equipment, is of the order of \$445 000 of which \$250 000 will be needed in 1959, the remaining \$195 000 being the estimated cost of implementation carried into 1960.

688. In the first year of the Agency's existence, the full impact of the demand which would be made against its technical assistance programme was neither felt nor realized. The Agency has at the moment no regional representation in Member States. The participation of the Agency in EPTA did not take place until the latter part of 1958. The Agency's link with the country resident representatives through TAB has only just been established.

689. A number of steps have been taken by the Agency which will make possible a gradual expansion of its technical assistance programme. Three preliminary assistance missions have been organized so far which have visited 12 countries in South and South-East Asia, the Far East and Latin America. Four missions are planned in 1960 to visit countries in the Middle East and Africa, Central America and South America. The work of these missions is bound to result in the development of specific Agency projects in many fields. For example, indications have been received that, following the visit of the first preliminary assistance mission, the countries concerned intend to request the Agency for various types of technical assistance which may amount to a total of 23 experts, some equipment, approximately 85 fellowships and one research contract.

690. Subsequent to the visit of preparatory missions to Greece, Morocco, Pakistan, Thailand, Indonesia and the United Arab Republic, the Agency received technical assistance requests for 11 experts, 15 fellowships, some equipment and one research contract. Other missions of this type, which will be organized in the course of 1959, are also expected to lead to the development of further Agency projects in specific fields.

691. Finally, the Director General on 24 December 1958 issued a circular letter to all Member States outlining the technical assistance facilities available within the Agency and from EPTA, and the procedure for obtaining them. Copies of this letter were endorsed to all TAB resident representatives. Already there are indications that requests for technical assistance are taking shape in a number of countries as a result of the receipt of the Director General's circular letter.

692. It is believed that, as a result of the foregoing factors, namely, carry-over from 1959, activities of the preliminary assistance missions and the preparatory missions and the response to the Director General's letter of 24 December 1958, a need will arise in 1960 for approximately 450 man-months of technical assistance, involving the services of 80 experts in various fields concerning the peaceful uses of atomic energy.

Taking into account possible delays in implementation, it has been assumed, however, for budgetary purposes that the Agency may have to provide in 1960 an estimated 400 man-months of expert assistance involving the services of 70 experts.

693. Requests for technical assistance experts are frequently followed by requests for equipment and supplies. Requests received by the end of June 1959 add up to an estimated value of \$500 000. On the basis of experience gained so far and bearing in mind the limited financial resources of the Agency, it may be assumed that the equipment and supplies component of technical assistance expenditure in 1960 would be of the order of \$250 000.

694. TAB's practice is to allocate a very small proportion of its funds to the purchase of equipment. It would, therefore, be unrealistic to expect that large quantities of equipment could be obtained through the Agency's participation in EPTA. EPTA equipment is intended largely for training and demonstration purposes incidental to the work of field experts assigned to specific projects. Although there may be a limited possibility of the Agency receiving some gifts of equipment in kind, it is most important, as has been stressed in paragraph 299 of the Programme and Budget for 1959, that the Agency should have at its disposal adequate funds for the purpose of supplying equipment required in its technical assistance projects.

695. While the criteria of TAB will also apply to the equipment component of projects financed under EPTA, the Board proposes to establish rules for the provision of technical and scientific supplies and equipment from Agency funds. These criteria, taking TAB practice as a starting point, will have to allow sufficient flexibility during this initial stage when operating experience is lacking, and at the same time ensure that the limited funds of the Agency are applied in an equitable way to those situations where the supply of equipment, particularly for demonstration, training or standardization purposes, can have the greatest impact on a technical assistance project. The Board is also keeping in mind the desirability of including as part of the criteria, a matching formula under which a recipient country would contribute some stipulated percentage of the cost of the equipment received.

(b) Assumptions

696. It is assumed:

- (a) That in developing cost estimates for technical assistance (experts' services), the Agency will be guided by TAB experience and the experience of the specialized agencies, to the extent possible;
- (b) That it will make no difference so far as costing is concerned whether a project is financed from the General Fund of the Agency or out of EPTA funds; and
- (c) That Agency funds will be required for the purchase of equipment for technical assistance projects.

(c) Explanation of estimates

697. Technical assistance	810 000
1959	445 000
1958	-

698. The estimates under this heading are combined estimates for field experts and for equipment. So far as 1960 is concerned, the position is as follows:

(a) Cost of approximately 400 man-months of technical assistance on the basis of \$17 400 (average) for one man-year	5 60 000
(b) Estimated cost of the equipment and supplies component of technical assistance expenditure	250 000
	810 000
Total	810 000

699. The estimated average cost of \$17 400 for one man-year of technical assistance requires explanation, and the cost components are therefore set out below:

(a) Average annual salary of an Agency field expert	10 000
(b) Average subsistence cost for one man-year	3 600
(c) Common staff costs, including transportation, for one man-year of technical assistance	3 800
	17 400
Total	17 400

700. Regarding (a), the amount (\$10 000) is somewhat higher than the figure used by the specialized agencies or the combined TAB average. This is because nuclear experts are rather scarce and, therefore, likely to be on the average more expensive than others. In fact the chief difficulty encountered in implementing the Agency's technical assistance programme has been the delays encountered in recruiting experts.

701. As regards (b), the figure used is the same as the TAB average.

702. The figure of \$3 800 in (c) is slightly higher than the TAB average figure. This is because the proportion of Agency experts to be recruited for one year or more is for the time being rather low. This is not so in the case of the technical assistance experts employed by the United Nations or the specialized agencies. The proportion of travel costs to the total costs of an expert is in inverse ratio to the duration of his assignment. The longer the assignment the lower the proportion of the travel costs to the total costs of an expert.

703. Research assistance	90 000
1959	-
1958	-

704. Paragraph 301 of the 1959 Programme and Budget for 1959 mentioned the role of the Agency in encouraging and assisting research on the development and practical application of atomic energy by the placing of research contracts with national and regional institutions. In order to preserve a degree of flexibility in the initial stages of the Agency's programme only one line item was appropriated in 1959 to cover the fellowship, and the economic, technical and research assistance programmes. However, it is felt that in 1960 a specific amount should be earmarked for research assistance.

705. Undoubtedly there will emerge from the results of the preliminary assistance missions and the isotope investigation teams the need for research assistance in the form of small research contracts placed with institutions, particularly in the less developed areas of the world. Requests for two research contracts have already been received through the first preliminary assistance mission and the preparatory mission to Greece.

706. In agriculture, for example, an investigation of specific problems where crop production is limited by the lack of an important genetic characteristic would be of direct interest to the less developed regions. Other possible subjects might include

the effects of fertilisers with particular reference to the chemical composition of latex and dry rubber, protective measures to safeguard agricultural products, and the preservation of food by irradiation. In all such matters FAO will be consulted whenever appropriate.

707. In medicine there is considerable scope to promote for example clinical research, using radioisotopes, on tropical diseases characteristic of particular regions. There are instances where the Agency could be of assistance in developing cheaper methods for the production of radioisotopes which are of promise in medicine but expensive at present. WHO will be consulted, as appropriate, about research contracts touching upon its sphere of interest.

4. Mobile Radioisotope Laboratories

Table 54

Item of expenditure	1958 Actual ^{a/}	1959 Estimate	1960 Estimate
	\$	\$	\$
Salaries and wages	407	13 500	23 700
Common staff costs	77	5 000	5 800
Travel and per diem	-	15 500	22 000
Scientific supplies and equipment	-	500	500
Maintenance supplies and repairs	-	1 500	3 000
Insurance	1 394	2 000	2 000
Total	1 878	38 000	57 000

a/ Expenditures from regular budget.

(a) General

708. The first mobile radioisotope laboratory was received from the United States of America in the fall of 1958. In the early part of 1959 it was put into use on a testing and try-out basis in several places in Austria with Austrian authorities covering all expenses except the salary of the driver and routine minor maintenance expenses. Having completed this "testing" period the laboratory, at the request of the Government of Greece, was despatched to that country early in April 1959. The second laboratory is not expected to be in use until the latter part of 1959.

(b) Assumptions

709. It is assumed:

- (a) That the cost of shipping the laboratories and the fuel, lubricants, etc. used in their movement within a host country will be borne by the recipient countries;
- (b) That recipient countries will bear 50 per cent of the subsistence expenses of the staff;
- (c) That the staff will consist of two P-4 scientists, two General Service laboratory technicians, and two Maintenance and Operatives staff; and
- (d) That the laboratories will be operated for an average of six months in 1959 and for 12 months in 1960.

(c) Explanation of estimates

710. The estimates of the costs of operating the mobile radioisotope laboratories were derived from the above stated assumptions. The cost could be slightly higher or slightly lower depending upon the geographic areas from which the scientist-instructors are drawn.

711. It is virtually impossible to estimate shipping and fuel costs without knowing which countries plan to request the services of these laboratories from the Agency. This is an added reason for requiring the recipient countries to bear the shipping and fuel expenses.

712. Common staff costs are well below the usual percentage because the nature of the assignment of the staff is such as to make it highly desirable to recruit on one-year contracts unmarried Professional and General Service personnel.

713. Costs for per diem are on the basis of \$10.00 per day for the General Service staff and \$12.50 per day for the scientist-instructors.

714. The insurance costs are those now being paid.

715. The estimate for repairs and replacements can be little more than a guess to be refined in the light of operating experience.

ANNEX I

Approximate allocation of proposed expenditure to
the principal activities of the Agency in 1960

	<u>Regular budget</u>		<u>Operational budget</u>	<u>Total</u>
	Administration	Programme activities		
General Conference and Board of Governors	\$ 851 000		\$ 851 000	\$ 851 000
General administrative expenses	1 480 000		1 480 000	1 480 000
Distribution of information including conferences		\$ 1 103 000	1 103 000	1 103 000
Regulatory activities		1 068 000	1 068 000	1 068 000
Technical assistance		1 341 000	1 341 000	3 398 000
Supporting technical activities			333 000	333 000
Total	\$ 2 331 000	\$ 3 512 000	\$ 5 843 000	\$ 8 233 000

ANNEX II

Tentative manning table for 1960A. THE SECRETARIAT

	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			2	2		4
DEPARTMENT OF TRAINING AND TECHNICAL INFORMATION		1				1		1	3	1		4
Division of Exchange and Training of Scientists and Experts			1	2	7	1	1		12	14		26
Division of Scientific and Technical Information			1	1	9	7	3	4	25	33		58
DEPARTMENT OF TECHNICAL OPERATIONS		1				1		1	3	1		4
Division of Economic and Technical Assistance			1	3	6	4	2		16	9		25
Division of Reactors			1	3	3	1	2		10	6		16
Division of Technical Supplies			1	3	1			1	6	3		9
Division of Health, Safety and Waste Disposal			1	5	5	3			14	8		22
DEPARTMENT OF RESEARCH AND ISOTOPEs		1				1		1	3	1		4
Division of Research			1	6	1	4			12	8		20
Division of Isotopes			1	8	4				13	9		22
DEPARTMENT OF SAFEGUARDS AND INSPECTION		1						1	2			2
Division of Safeguards			1	4	2	1			8	4		12
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		5		1		7	4		11
Division of External Liaison and Protocol and Office of the Representative of the Director General at United Nations Headquarters			2	3	1	2	1		9	11		20
Legal Division			1	2	1	1			5	5		10
Division of Public Information				1	3	2			6	7		13
Division of Budget and Finance			1	2	3	4	2	1	13	20		33
Division of Personnel			1	1	2	1		1	6	13		19
Administrative Office of Technical Assistance				1	1	1			3	3		6
Division of Conference and General Services			1		1	5	4	2	13	69	106	188
Division of Language Services				1	12	24		1	38	34		72
Total	1	5	18	49	69	66	17	14	239	271	106	616
Approved manning table for 1959	1	5	18	48	59	62	15	13	221	244	104	569
Difference				1	10	4	2	1	18	27	2	47
B. OTHER ACTIVITIES												
AGENCY LABORATORY				2	3	5	4		14	24	3	41
Approved manning table for 1959				-	-	-	-		-	-	-	-
Difference				2	3	5	4		14	24	3	41
MOBILE RADIOISOTOPE LABORATORIES					2				2	2	2	6
Approved manning table for 1959					2				2	2	2	6
Difference				-	-	-	-		-	-	-	-
COMMISSARY AND RESTAURANT										5	11	16
Approved manning table for 1959										5	11	16
Difference				-	-	-	-		-	-	-	-
Total Other Activities				2	5	5	4		16	31	16	63
Total approved for 1959				-	2	-	-		2	7	13	22
Total Difference				2	3	5	4		14	24	3	41

ANNEX III
RECONCILIATION OF DISTRIBUTION OF 1958 ACTUAL EXPENDITURES AND 1959 BUDGET APPROPRIATIONS BETWEEN SECTIONS OF THE PROPOSED BUDGET FOR 1960 TO PROVIDE A BASIS OF COMPARISON BETWEEN THE THREE YEARS

	1959 Budget	Budget Section under which shown in 1960 Budget														
		General Conference	Board of Governors	Panels and committees	Special missions	Seminars, symposia and conferences	Distribution of information	Scientific and technical ser- vices, supplies and equipment	Salaries and wages	Common staff costs	Travel of staff	Consultants	Hospitality	Common services	Printing, office and building supplies	Permanent equipment
General Conference and Board of Governors	749 000	281 000	468 000													
Ad hoc scientific advisory panels	115 000			115 000												
Special missions	200 000				200 000											
Seminars and scientific meetings	100 000					100 000										
Salaries and wages	1 864 500	14 000	14 000					1 836 500								
Temporary assistance	100 000							100 000								
Consultants	100 000										100 000					
Common staff costs	873 000	3 000	3 000						867 000							
Travel of staff	200 000		1 000							199 000						
General expenses	304 000	34 000	43 700					32 300								
Hospitality	7 500											7 500				
Permanent equipment	110 000															110 000
Scientific supplies and equipment	50 000							50 000								
Contractual scientific services	315 000							315 000								
Contractual printing	112 000						112 000									
Library acquisitions	25 000						25 000									
	\$ 5 225 000	332 000	529 700	115 000	200 000	100 000	137 000	365 000	1 968 800	867 000	199 000	100 000	7 500	131 000	63 000	110 000
General Conference	210 648	210 648														
Seminars and scientific meetings	23 903			23 903												
Salaries and wages	1 231 745	67 665	219 777					944 303								
Temporary assistance, consultants and contractual scientific services	325 648		111 200	1 925	5 856		400	69 532	79 808		56 927					
Common staff costs	656 271	32 885	117 800						505 586							
Travel	103 234		582		5 703					96 949						
General expenses	398 277		43 000				12 693	2 713	4 347							
Hospitality	4 973											4 973				
Permanent equipment	396 002							30 755								365 247
Contractual printing	9 379						9 379									
	\$ 3 360 080	311 198	492 359	25 828	11 559		22 472	103 000	1 024 111	509 933	96 949	56 927	4 973	212 382	123 142	365 247

ANNEX IV

Draft resolutions

A. BUDGETARY APPROPRIATIONS FOR THE FINANCIAL YEAR 1960

I

The General Conference,Accepting the recommendation of the Board of Governors,

1. Appropriates for the administrative expenses of the Agency in 1960 an amount of US \$5 843 000 as follows:

<u>Part</u>	<u>Section</u>	<u>Purpose</u>	<u>US \$</u>
I.		General Conference and Board of Governors	
	1.	General Conference	317 000
	2.	Board of Governors	534 000
		Total part I	851 000
II.		Functional programme activities	
	3.	Panels and committees	133 000
	4.	Special missions	175 000
	5.	Seminars, symposia and conferences	175 000
	6.	Distribution of information	184 000
	7.	Scientific and technical services, supplies and equipment	400 000
		Total part II	1 067 000
III.		The Secretariat	
	8.	Salaries and wages	2 343 000
	9.	Common staff costs	959 000
	10.	Travel of staff	150 000
	11.	Consultants	100 000
	12.	Hospitality	7 500
		Total part III	3 559 500
IV.		Common services, supplies and equipment	
	13.	Common services	183 000
	14.	Printing, office and building supplies	107 500
	15.	Permanent equipment	75 000
		Total part IV	365 500
		Total all parts	5 843 000

2. Decides that the foregoing appropriations shall be financed by assessments on Member States on the basis of a scale of contributions determined by the General Conference; and

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

II

The General Conference,

Accepting the recommendation of the Board of Governors,

1. Resolves that the target for contributions to the General Fund in 1960 shall be fixed at US \$1 500 000 to meet expenditure under operating funds as follows:

Operating Fund I

Agency laboratory facilities	333 000	
Less available balance of special contribution	200 000	133 000

Operating Fund II

Fellowships and training programme	1 100 000	
Technical and research assistance programme	900 000	
	2 000 000	
Less available from the Expanded Programme of Technical Assistance	600 000	1 400 000
Mobile radioisotope laboratories		57 000
Total expenditure		1 590 000
Less available from reserve carried forward		90 000
		1 500 000

2. Urges Member States to provide funds for this purpose by making voluntary contributions to the General Fund in accordance with Article XIV, F of the Statute.

3. Recognizes that it is essential to accumulate a reserve in the General Fund; and

4. Decides:

- (a) That the reserve may be used temporarily to finance important and urgent activities under the authorized operational budget pending the payment of pledged contributions to the General Fund; and
- (b) That in 1960, should adequate funds not be available from other sources to finance the authorized operational budget, the Director General may, with the prior approval of the Board of Governors, draw upon the reserve up to a maximum of US \$100 000 for that purpose.

B. USE OF THE WORKING CAPITAL FUND IN 1960

The General Conference,

Accepting the recommendations of the Board of Governors,

1. Decides:

- (a) That the Working Capital Fund of the Agency shall remain at US \$2 000 000 during 1960; and
- (b) That the Fund shall be financed, administered and used in 1960 in accordance with the relevant provisions of articles VI and VII of the Financial Regulations;

2. Authorizes the Director General to make advances from the Working Capital Fund, not exceeding US \$25 000 at any time, to provide temporary financing for projects or activities of a strictly self-liquidating character which will not necessitate an increase in the amount of the Working Capital Fund in future years;

3. Requests the Director General to submit periodical statements of such advances to the Board of Governors; and

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

C. ESTABLISHMENT OF A PUBLICATIONS REVOLVING FUND

The General Conference,

Considering that the achievement of the statutory objectives of the Agency will be advanced by the distribution of knowledge through publications,

1. Decides to establish a Publications Revolving Fund for the purpose of facilitating the task of the Director General in making the Agency's publications readily available to all who need them;

2. Requests the Director General to operate the Fund in accordance with the Rules set forth in the annex to this resolution; and

3. Authorizes the Director General to transfer to the credit of the Fund on 1 January 1960 revenues that have accrued during the year 1959 from the sources enumerated in Rule 1.

Annex

Rules of the Publications Revolving Fund

1. The Publications Revolving Fund shall come into operation on 1 January 1960. Thenceforth it shall be credited with revenue derived from the sale of the Agency's publications.

2. The Fund may be used for any of the following purposes:
 - (a) To meet the cost of:
 - (i) An increase in the number of copies of the first edition of a publication by the Agency, or
 - (ii) A reprint of any publication by the Agency,
provided that there is a reasonable expectation that 25 per cent of the increase or reprint will be sold;
 - (b) To finance the purchase for distribution of:
 - (i) Publications by commercial publishers derived from manuscripts furnished by the Agency under a contract; and
 - (ii) Publications recording the results of activities in which the Agency has been concerned, when the record thereof has been prepared and published by an organ external to the Agency;
 - (c) To contribute, in any year, up to a maximum of ten per cent of the total receipts from the sale of the Agency's publications in the preceding year, to the cost of publicity which will make better known to distributors, book-sellers and potential customers the existence of the Agency's publications; and
 - (d) To meet the cost of freight or postage on publications financed from the Fund.
3. The balance of the Fund shall be carried forward from year to year, except that any balance in excess of US \$50 000 remaining at the end of a financial year shall be treated as miscellaneous income of the Agency.
4. The Fund shall be operated in accordance with the Agency's Financial Regulations and Rules.
5. The Director General shall submit to the Board of Governors as part of the annual accounts of the Agency a detailed statement of the operation of the Fund.

