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THE TECHNICAL ASSISTANCE PROVIDED BY THE AGENCY IN 1963

CONTENTS

8. Recipient countries:

   Financial summary: 1963

9. Recipient countries:

   Financial summary: 1958-1963

II - CRITERIA FOR THE EXAMINATION OF REQUESTS FOR THE PROVISION OF TECHNICAL ASSISTANCE IN SCIENTIFIC DOCUMENTATION

LIST OF ABBREVIATIONS

CERN	European Organization for Nuclear Research
ECAFE	Economic Commission for Asia and the Far East
EPTA	United Nations Expanded Programme of Technical Assistance
FAO	Food and Agriculture Organization of the United Nations
IAEA	International Atomic Energy Agency
ICAO	International Civil Aviation Organization
ILO	International Labour Organisation
ITU	International Telecommunication Union
TAB	Technical Assistance Board (of the United Nations)
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPU	Universal Postal Union
WHO	World Health Organization
WMO	World Meteorological Organization

NOTE

All sums of money are expressed in United States dollars.

I. INTRODUCTION

1. In June 1964 the Board of Governors reviewed, pursuant to paragraph 20 of the Guiding Principles and General Operating Rules to Govern the Provision of Technical Assistance by the Agency [1], the technical assistance the Agency had furnished in the previous calendar year. In accordance with a decision taken by the Board at the conclusion of that review, the data on which it was based is reproduced in the present report for the information of the General Conference.

2. The report reviews all elements of the Agency's technical assistance, whether provided from funds voluntarily contributed to it, from resources made available to it in kind or from funds allocated under EPTA; separate reference is also made to assistance provided in connection with Special Fund projects and under a funds-in-trust arrangement. The types of technical assistance referred to are experts and visiting professors (including inter-regional advisers), equipment, fellowships and training courses (including such as were held in connection with the Agency's two mobile radioisotope laboratories and in the Middle Eastern Regional Radioisotope Centre for the Arab countries). In addition the atomic energy activities of the developing countries were also supported by the research contracts programme and by various other activities conducted by the Agency at Headquarters or by Headquarters staff working in the field; these activities are only referred to incidentally, since they are more fully dealt with elsewhere [2].

II. MAIN DEVELOPMENTS

3. The total resources received by the Agency in 1963 to support its technical assistance activities (except those carried out under the auspices of the Special Fund or under a funds-in-trust arrangement) totalled approximately $2 833 000 compared to $2 687 000 available during 1962, which represents an increase of 5.4%. The types and the amount of resources available to the Agency are set forth in Table 1 in Annex I and are discussed in Part III below.

4. With the resources available to it, including such as were carried forward from previous years, the Agency provided technical assistance in an approximate amount of $2 417 300, or 13.7% less than the total of $2 801 200 used in the previous year [3]. The distribution of this assistance is analysed in Tables 5 - 8 in Annex I and is commented on in Part IV below.

A. New features of the programme

5. Requests by Member States made in connection with the 1963 programme, and consequently also the projects approved and the assistance provided, reflect the advances in and the increased diversification of the nuclear energy programmes of many of the developing States. Thus instead of requesting merely assistance in establishing atomic energy programmes or in the elements of radiation safety, the 1963 programme showed a greater shift of emphasis towards the applications of radioisotopes in agriculture, medicine and

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[1] GC(IV)/RES/65, Annex.

[2] See in particular the Annual Report of the Board to the General Conference (GC(VIII)/270).

[3] As explained in paragraph 25 below, this apparent decrease in activity is due to the fact that 1962 was the second year of the 1961-62 EPTA biennium (in which a number of projects planned in 1961 were implemented with the funds of that year), while 1963 was the first year of the 1963 biennium, the results of which will in part be reflected only in the 1964 statistics.

industry. Furthermore, as more and more research reactors in developing countries are approaching or have achieved criticality [4] there are indications that the assistance required will increasingly be in reactor programming, reactor physics, radiochemistry, and irradiation techniques such as radioisotope production. These projects often require the Agency to provide experts or fellowships in very specialized subjects, rather than in the general ones that predominated in earlier years.

6. Since it is now recognized that isotope techniques can make a substantial contribution to the development of water resources, hydrology assumed some prominence in the Agency's technical assistance programme for 1963. Under an EPTA financed regional project (involving the development of the Mekong river basin) the Agency carried out an investigation of the transport of sand in the area of the Great Lake in Cambodia to determine whether silting would pose a problem in the construction of a projected dam. Similarly under EPTA, the Agency helped in setting up a tritium laboratory in Southern Rhodesia which will use naturally occurring tritium in solving local hydrological problems. From its own monetary resources, the Agency commenced a long-term project in Kenya for investigating the hydrology of Lake Chala and the surrounding area. Acting as sub-contractor to the executing agencies of certain Special Fund projects, the Agency assisted FAO in carrying out a radioisotopic investigation of the interconnection between different bodies of water in Greece; similarly in 1963 it started a project for the study, under the auspices of FAO, of the groundwater system in the Antalya region of Turkey; late in 1963 work commenced on the analysis of the tritium content on a number of groundwater samples obtained from the Azraq region in Jordan by the United Nations to develop information on the age of water in different strata for another Special Fund project [5]. Finally, as indicated in paragraph 46, the hydrology of arid and semi-arid regions is one of the two fields in which research is being carried out in the Middle Eastern Radioisotope Centre.

7. In order to help the developing countries in the advancement of their nuclear technology and in view of the limitations of existing nuclear science documentation services, the Agency included in its programme for 1963 the provision of assistance in the form of scientific documentation. This part of the programme was co-ordinated with similar assistance programmes of UNESCO. Seven Member States presented requests to receive such assistance during 1963. After examination in accordance with criteria developed by the Secretariat [6], the requests were approved by the Board. The assistance provided last year included the supply of nuclear energy reference books and of back volumes of scientific periodicals, of documentation equipment such as microfilm cameras, micro-reading equipment and photocopying machines, and three three-month fellowships for in-service training with the Division of Scientific and Technical Information at Headquarters; no expert services were provided under this programme. The cost of these projects was approximately US $41 000, including the cost of the three fellowships ($3096) and the value of two microcard readers (estimated at $1000) donated by the United States Atomic Energy Commission.

8. One field in which the Agency's assistance is increasingly required is that of providing administrative and legal assistance in establishing national atomic energy commissions or equivalent bodies and in drafting legislation and regulations, particularly concerning health and safety. Such assistance can be provided partly from Headquarters by correspondence or by personal contact with national officials, experts, and fellows on visits to Vienna, and partly by sending staff members to the countries concerned; in

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[4] E.g. Indonesia (scheduled in 1964); the Republic of Korea 1962; Philippines 1963; Thailand 1962; Viet-Nam 1963.

[5] Since the Agency incurred no costs in 1963 in connection with this sub-contract, no reference to it appears in paras. 22 and 50 below.

[6] See Annex II.

certain cases the Agency has assigned regular technical assistance experts in the field to work on this type of project for extended periods of time. During 1963 five experts gave assistance in connection with health and safety regulations; their activities varied from the promotion of regulatory systems, to aid in the formulation of texts and to help in implementing and administering established regulations.

9. An interesting new feature of the Agency's technical assistance programme was the appointment, during 1963, of two inter-regional advisers. One of them, whose assignment relates to nine countries in the Middle East, started his advisory work in hospital physics in April 1963. His main concerns have been the physical aspects of the use of radiation for therapeutic purposes, including radiation dosimetry and protection, the training of personnel, the planning of buildings and advice in the selection of equipment; his work has been performed in collaboration with governmental authorities and the staff of radiotherapy centres. Another expert took up his duties in October 1963 in the Far East to assist in the application of radioisotope techniques in various projects involving the cultivation of rice; already in 1963 five countries have sent requests or inquiries concerning his assistance, and his work also includes the provision of scientific expertise in connection with the Agency's co-ordinated research contracts programme concerning rice cultivation. The funds required for both of these experts were provided from regional allocations under EPTA, and each assignment is expected to last at least two years. Though it is too early to evaluate its results, this type of work seems to offer possibilities in husbanding the scarce technical assistance resources of the Agency by permitting one expert in a specialized field to serve practically simultaneously a number of countries.

10. During 1963 the Agency for the first time entered into a funds-in-trust arrangement. A Member State requested that an expert in atomic energy programming and another in uranium prospecting be provided on an urgent basis; since the Agency was unable to include these projects in its programme on short notice, and since the State indicated its willingness to pay for the service, an arrangement based on an established EPTA procedure was made for the State to deposit with the Agency the required funds while the Agency recruited and assisted the experts in accordance with its usual procedures. The final report of the first expert, whose mission was considered most successful, contains not only a complete picture of the needs and possibilities of nuclear energy in the country, but also a plan of the arrangements required to implement the suggested programme; the work of the second expert is still continuing.

B. Administrative innovations

11. In June 1963 the Board adopted several resolutions and made other decisions concerning the fellowship programme and its more complete integration into the rest of the Agency's technical assistance programme. By one resolution it decided in principle and for the guidance of the Director General, subject to later implementation at its direction, that Type I fellowships should thereafter be reserved for students from Member States receiving assistance in the form of country programmes under EPTA during the year in which the fellowships are awarded; if such countries do not require all the fellowships provided for in the applicable budget, any surplus funds are to be re-allocated to other types of assistance. In connection with the award of both Types I and II fellowships the Board asked the Director General to give the Secretariat's Interdepartmental Committee on Technical Assistance wider functions so that the awards might be spread among more of the eligible Member States and to assure a more effective integration of fellowship awards with other forms of technical assistance to these countries; the Board also gave certain guidelines as to arrangements to be made with nominating and host Governments and as to the conditions and limitations of fellowships of special types, such as for the obtaining of advanced degrees, for on-the-job training, for undergraduate studies of fundamental sciences, and for technician training.

12. In response to the above-mentioned decisions and to improve the programming procedures for technical assistance, especially in order to achieve improved co-ordination as proposed by the Long-Term Programme for the Agency's activities [7], the Director General announced to the Board his intention to adjust the structure of the Secretariat so as to combine in a single new Technical Assistance Department all the divisions of the Secretariat concerned directly with the formulation and implementation of the Agency's technical assistance programme. Since this reorganization was only implemented in the early months of 1964 it had no effect on the execution of the 1963 programme.

13. In an attempt to improve the Agency's operational contacts with its Member States in Asia, most of which are recipients of technical assistance from the Agency, the Director General has appointed on an experimental basis a regional officer for Asia and the Far East. The duties of this staff member are to keep in close touch with the national peaceful atomic energy programmes of the 16 Member States in the region (as well as several EPTA eligible non-Member States), to advise on the development of these programmes and especially to help in the formulation and later in the implementation of technical assistance projects to further them. The first incumbent took up his duties in November 1963 and is stationed in Bangkok, Thailand (location of the headquarters of ECAFE and also of the EPTA Regional Representative).

14. Paragraph 3 of the Technical Assistance Guiding Principles [1] foresees that before technical assistance is provided the Agency should enter into an agreement with the Government concerned to specify the terms and conditions under which the project is to be implemented. (For practical reasons this formality has never been held applicable to the grant of fellowships.) Experience in past years had shown that the Agency's practice of addressing a separate letter to Governments with respect to each project, setting forth in each case the relevant provisions supplementing the EPTA Revised Standard Agreement (e.g. provisions concerning health and safety, a commitment against military use of the assistance, and disputes procedures), often did not elicit a timely response from the Government; in other cases the response was not in a form which could be considered as the concluding part of an agreement by exchange of letters within the meaning of the Guiding Principles. Thus numerous technical assistance projects had to be commenced before the related agreement was concluded, and in some cases no agreement has ever entered into force. On the assumption that most of the difficulty lay in requiring Governments to consider and give their approval to a series of special terms separately, with respect to each assistance project, the Agency has attempted to standardize its technical assistance agreements as much as possible. Starting with the beginning of 1963, the Agency has proposed the terms and conditions relating to a particular project by means of a printed letter form containing the standardized clauses, on which only the special provisions relating to the particular project were entered separately; usually these letters were then forwarded to the local EPTA representative for transmission to the Government. This procedure has resulted in a much higher rate of responses from Governments, thus enabling the Agency to comply more frequently with paragraph 3 of the Guiding Principles.

III. RESOURCES AVAILABLE

A. Amount of resources

15. As indicated above, the resources received by the Agency in 1963 to support its technical assistance programme increased to approximately $2 833 000. These come from three sources:

(i) Funds made available from EPTA;

(ii) Funds voluntarily contributed to the General Fund; and

(iii) Gifts in kind of services, such as the provision of cost-free or partly cost-free experts, Type II fellowships and donations of equipment.

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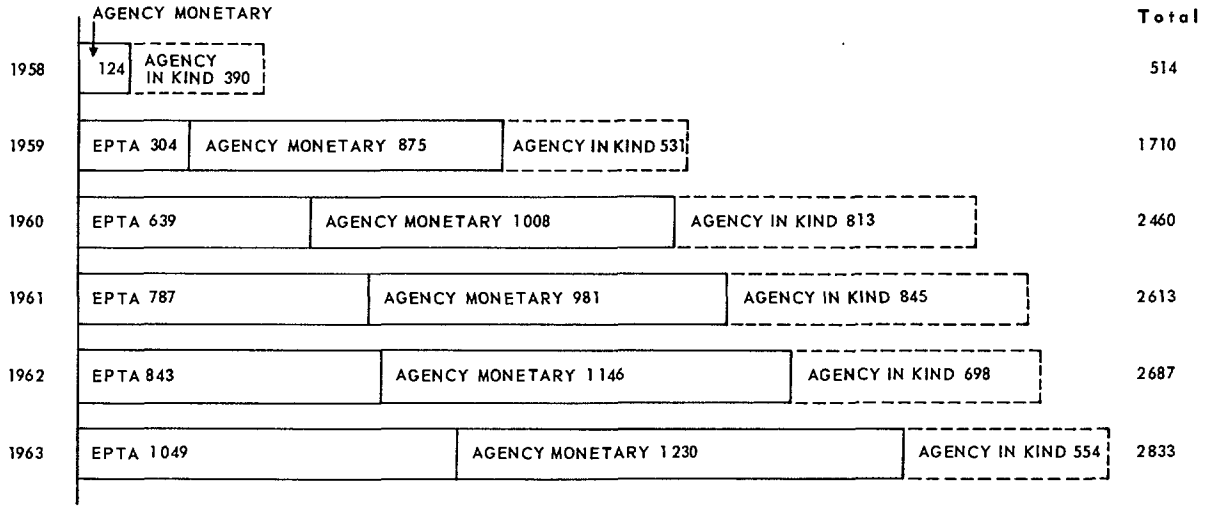
[7] INFCIRC/50, para. 163.

The respective amounts made available to the Agency in each year from each of these sources are shown in Table 1, Annex I, and are illustrated by Graph 1 below. The 5.4% increase of the total resources in 1963 continued the slight but steady upward trend observed each previous year.

GRAPH 1

RESOURCES AVAILABLE FOR TECHNICAL ASSISTANCE ACTIVITIES OF THE AGENCY (1958 - 1963)

(in thousands of dollars)



16. In addition to these "conventional" resources, the Agency also received, as indicated in paragraphs 21 and 22, certain funds in connection with several Special Fund projects and under a funds-in-trust arrangement. If the portion of these additional resources that is applicable to 1963 is added to those referred to in the paragraph above, a total sum of $3 084 000 is reached. Of this amount the Agency received 57.8% from its Member States (in cash or kind) to be distributed as technical assistance, while 42.2% came from outside sources, such as EPTA and the Special Fund, or under a funds-in-trust arrangement.

(i) Expanded Programme of Technical Assistance

17. Under the EPTA biennial programme for 1963-64 a total of $2 089 200 was allocated to the Agency, of which it was authorized to spend last year $1 049 200 (earmarked for the 1963 programme: $870 700; administrative and operational service (AOS) costs: $95 500; and approximate contingency authorization: $83 000) and the balance in 1964. The amount made available for 1963-64 represents an increase of 28.2% over the allocation for the previous biennium, which still compares unfavourably with the 36.3% increase in the resources available to EPTA over the corresponding period [8].

(ii) Voluntary contributions of funds

18. The second source of funds for the technical assistance programme is the voluntary contributions of Member States. The amount allocated to technical assistance in 1963 was $1 230 200, compared to $1 146 300 in 1962, an increase of 7.3%; this reflects on the one hand an increase (from 69.0% to 71.8%) in the extent to which the $2 000 000 target for

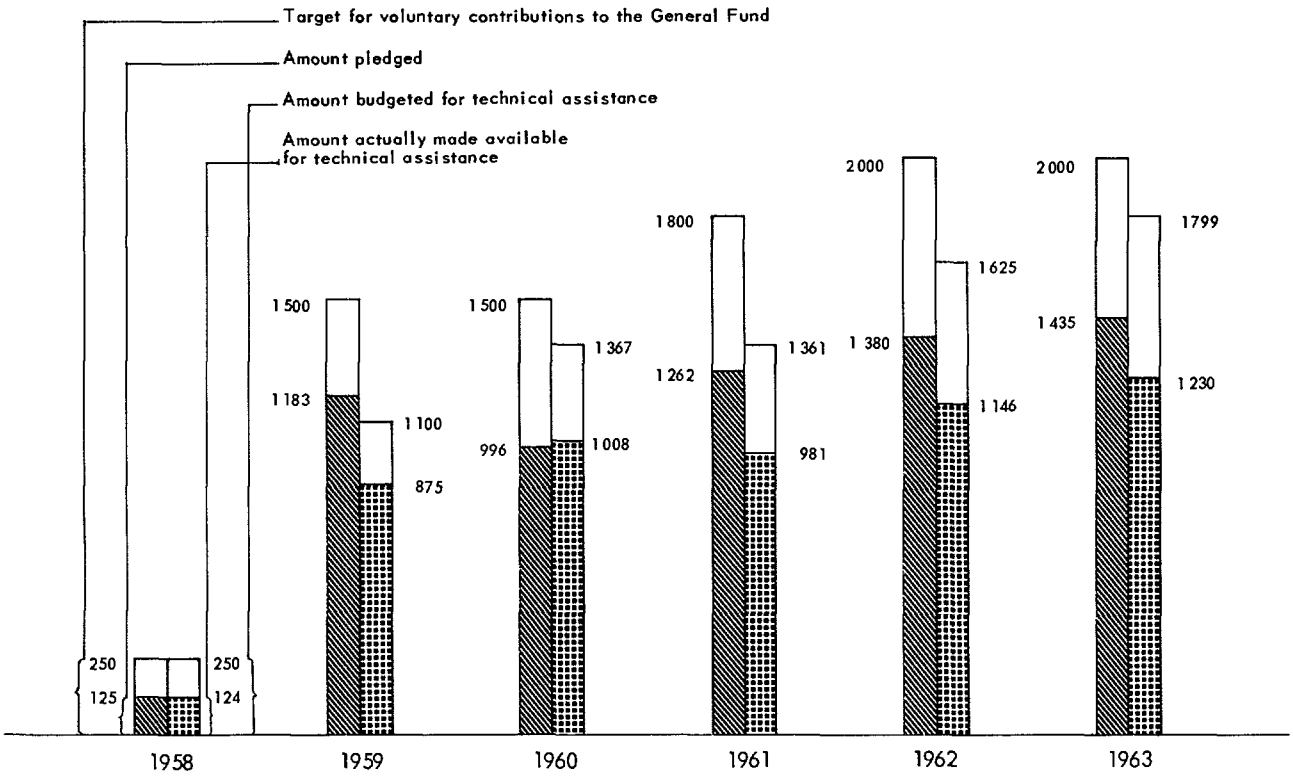
[8] In this connection, see para. 54 below.

voluntary contributions to the General Fund was met, and on the other a slight increase (from 83.0% to 85.7%) in the percentage of these voluntary contributions that were allocated to technical assistance. The relationships since 1958 between the annual target for voluntary contributions and the portion thereof budgeted for technical assistance, and the amounts actually pledged and the part thereof actually made available for this programme, are illustrated by Graph 2 below and analysed in Table 2, Annex I. It should be noted that, while the amounts actually pledged unfortunately still remain considerably below the target figures, the gap decreased slightly in 1963, evidently in partial response to General Conference resolution GC(V)/RES/100 by which Member States were invited to make voluntary contributions in amounts that are at least the same percentages of the target for each year as are their assessed contributions to the regular budget; in 1963 38 Member States pledged contributions (1962: 44), of whom 24 (1962: 22) followed the suggestion contained in that resolution.

GRAPH 2

AGENCY FUNDS FOR TECHNICAL ASSISTANCE (1958 - 1963)

(in thousands of dollars)



(iii) Gifts in kind

19. In the case of gifts in kind it is necessary to establish their estimated value, which has been done for the different types of such contributions in accordance with certain rules set forth in introductory note 4 to the statistical tables (Annex I). On the basis of these estimates it appears that the value of the resources in kind contributed to the Agency in 1963 was $554 400, 20.6% less than the $697 800 contributed in 1962. Thus the declining trend since the $845 000 contributed in 1961 has continued. The 1963 decline was entirely due to the decrease in donations of equipment; in 1963 these donations had an estimated value of only $1000, compared to $197 500 in 1962. The estimated value of Type II fellowships increased from $480 600 in 1962 to $521 000 in 1963, though the actual number of such fellowships decreased from 168 (2077 man-months) to 133 (1654 man-months); this is explicable chiefly by the sharp increase in tuition costs in some countries as well as by higher travel expenses. The value of the free experts provided in 1963 was $32 400 (14 experts for a total of 14 man-months) compared to $19 700 (14 experts for 9 man-months) in 1962.

B. Sources of technical assistance provided

20. It is acknowledged that technical assistance is by no means a question of monetary resources only. The funds received by the Agency under EPTA and from voluntary contributions must be converted by it into the skills and knowledge which the technical assistance programme is designed to provide to the developing countries. The source of such skills and knowledge are on the one hand the experts and visiting professors sent by the Agency to the States it assists (or sometimes supplied to regional training courses or similar activities in which students from developing countries participate) and on the other hand the institutes at which the fellows placed by the Agency are enabled to study. The nationality of these experts and the country of study of fellows is shown for 1963 in Table 3 of Annex I. If this Table is compared with Table 7 it will be observed that 19 of the countries receiving assistance in the form of fellowships and experts were also the source of similar assistance to other developing countries; this shows that technical assistance is by no means only a one-way street from so-called "developed" countries to those still developing, but also represents a substantial interchange of skills among States in various stages of nuclear development.

C. Resources for additional activities

21. Under the funds-in-trust arrangements referred to in paragraph 10 above, the Agency received $28 400 from the State concerned, of which $27 885 was expended or obligated in 1963 in connection with the supply of the required experts.

22. Pursuant to the Executing Agency Agreement it concluded with the United Nations Special Fund [9], the Agency has been appointed the Executing Agency for two Fund projects. One of these is for the extension of research and training facilities at the Institute for Applications of Nuclear Research in Agriculture, Forestry and Veterinary Sciences in Zemun, Yugoslavia. The other is a pre-investment study on power, including nuclear power, on the island of Luzon in the Philippines. In addition, the Agency was acting as sub-contractor to FAO under two other Special Fund projects - one of these is designed to assist in the formulation of a long-term plan for the balanced economic and social development of the Antalya region of Turkey and the other for groundwater investigation in karstic limestones in Greece. The resources involved in these projects are tabulated below.

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[9] INFCIRC/33.

RESOURCES UNDER SPECIAL FUND PROJECTS

(in thousands of dollars)

A. For which the Agency was Executing Agency

COUNTRY	Commencement Date	Duration	PROJECT ALLOCATIONS					1963 ALLOTMENTS	
			Special Fund Contribution for			Governmental Contribution (Counterpart)	Total	Received by Agency	Obligated by Agency
			Preliminary Expenses	Agency Overhead	In-country Expenditure				
Philippines	February 1964[a/]	27 months	0	38	440	262	740	6	6
Yugoslavia	April 1963	36 months	3	32	511	1246	1792	215	196
Totals			3	70	951	1508	2532	221	202

a/ Although the Plan of Operation formally entered into force only in February 1964, with the approval of the Special Fund some steps in the actual implementation were already undertaken beginning in October 1963 (see para. 49 below).

B. For which the Agency was sub-contractor

COUNTRY	EXECUTING AGENCY	TOTAL SUB-CONTRACT	COST OF AGENCY WORK IN 1963
Greece	FAO	17	b/
Jordan	UN	1	0
Turkey	FAO	6	2
Totals		24	2

b/ Less that $100 was expended by the Agency in connection with this sub-contract in 1963, since it had been almost fully executed in previous years.

23. Because of the special nature of the activities referred to in the two paragraphs above, neither the resources related to them nor their utilization or distribution is reflected in the various tables in Annex I.

IV. ASSISTANCE PROVIDED

A. Amount of assistance

24. The technical assistance programme approved for a given year depends on the resources made available in that year. However, it is impossible to implement the entire approved programme at once, since certain delays inevitably occur in the actual rendering of the assistance. In the case of an expert it is necessary to recruit a qualified person and then to make arrangements for him to visit the country to be assisted at a time

convenient both to him and to the local institutions, such as at a time when national counterparts are available to work with him; in the case of fellows, delays are frequently experienced first in receiving a reply from the host Government to the Agency's inquiry with respect to placement and then in receiving the acceptance of the fellow and of the nominating Government with respect to the placement arrangements made. While the length of the delay in implementing an approved project differs for the various parts of the programme, it should be recognized that the assistance actually provided in any given year reflects, to a considerable extent, the amount of resources available and the types of requests made and approved in previous years, rather than those of the current year. Correspondingly, a great deal of preliminary work will inevitably be done on projects in the year in which they are approved without being reflected in the statistics for that year, since the formal arrangements for carrying them out may not have been completed. It is in the light of these considerations that both the amounts and the distribution of the technical assistance rendered in 1963 must be analysed. As indicated above, the total value of such assistance amounted to approximately $2 417 300 in 1963; if Special Fund activities and the funds-in-trust arrangement are included, an amount of $2 648 800 would be reached.

25. Last year was the first of the 1963-64 EPTA programming biennium. Under the procedure adopted in 1960, a greater flexibility in EPTA programming has been achieved by permitting short-term technical assistance projects approved for implementation during the biennium to be initiated at any time during such period. Thus the first year of such a biennium tends to be characterized by preparatory work in connection with the various projects, such as the recruitment of experts and the securing of fellowship posts, while the actual implementation frequently commences during the second year. This could be observed in respect of the 1961-62 biennium, when only $416 600 of EPTA funds were spent in 1961 out of an allocation of $786 000 and compared to $1 082 200 expended in 1962; similarly in 1963 only $666 900 of the total EPTA allocation of $1 049 200 was spent. It is foreseen that the balance of the 1963 EPTA funds will be used during 1964, together with funds allocated for that year. In accordance with current EPTA procedures, any funds not obligated by the end of 1964 must be returned to the United Nations Special Account, but it is expected that such non-utilization of funds can again be kept to a minimum, depending primarily on the possibility of making use of certain inconvertible currencies. It is due to the fact that only 32%of the 1963-64 EPTA programme was actually implemented during 1963 that the total technical assistance activities of the Agency appear to have decreased from 1962 to 1963.

26. The technical assistance rendered by the Agency from its own monetary resources increased from $1 021 200 in 1962 to $1 196 000 in 1963 (see Table 5 in Annex I). Even if account is taken of the lesser amount of assistance rendered from resources contributed to the Agency in kind, the assistance rendered by the Agency from its resources in money and kind increased by about 1.8%to $1 750 400. Unlike in the case of EPTA, where funds not obligated by the end of a programming biennium automatically revert to the United Nations, projects to be financed from the Agency's own monetary resources do not automatically lapse even if they cannot be implemented for several years after their approval. However, to avoid the necessity of setting aside indefinitely funds earmarked for projects that for unforeseen reasons cannot be implemented for a long period, and which therefore may not even have the same usefulness for the country that they would have had at the time when the assistance was first requested and approved, the Board, in February 1963, authorized the Director General to release, after consultations with the Governments concerned, funds earmarked but not obligated for technical assistance projects that had not been carried out during a period of at least two years after their approval, so that these funds might be made available for other approved assistance projects. As a result of this authorization $71 250 were released in 1963 in respect of three projects that had been approved under the 1959 and 1960 programmes; in addition another project for which an amount of $17 400 had been approved under the 1962 programme was cancelled at the request of the Government. The $88 650 thus released were made available to finance projects approved under the 1963 programme.

27. Table 4 of Annex I shows the extent to which disbursements were actually made in each fiscal year with respect to technical assistance projects approved since 1958; it also indicates both the unliquidated obligations and the unobligated earmarkings that still remain from programmes of previous years. A comparison with the corresponding information in the 1962 report [10] indicates the extent to which the unobligated earmarkings have been reduced, partly due to the implementation of outstanding projects and partly due to cancellations under the Board's decision referred to above. Of the 54 projects, involving the provision of experts and/or equipment, approved by the Board for 1963, 28 were fully implemented in that year; in the same year 19 projects which had been approved in previous years were completed. As a result, on 31 December 1963 there were 42 projects that had been approved in 1963 or earlier but whose implementation had not yet been completed; this compares with 39 such projects at the end of the previous year.

B. Classification of assistance

(i) Fields of assistance

28. The technical assistance rendered by the Agency in 1963 is classified in Table 6 of Annex I by the fields of activity to which the assistance relates. To permit easy comparisons the same classifications have been used for describing the assistance rendered by experts, the use made of equipment, and the subjects of study of fellows. For visual comparison of the changing importance of these fields, Graph 3 below presents some of this information in comparable form for the years 1962 and 1963. It will be observed that the relative amount of assistance rendered in the application of isotopes and radiation has increased in the last year, while other assistance, such as in the fields of health, safety and waste disposal, has correspondingly decreased.

[10] GC(VII)/INF/61, Tables 5 and 6.

GRAPH 3

DISTRIBUTION OF TECHNICAL ASSISTANCE BY FIELD OF ACTIVITY

(1962 and 1963)

A. *General atomic energy development*
B. Nuclear science
C. Prospecting, mining and processing nuclear raw materials
D. Nuclear technology
E. Applications of isotopes and radiation
F. Health, safety and waste disposal.

The numbers following the letters indicate the numbers of fellowships or experts or the dollar value (in thousands) of equipment.

FELLOWSHIPS

1962

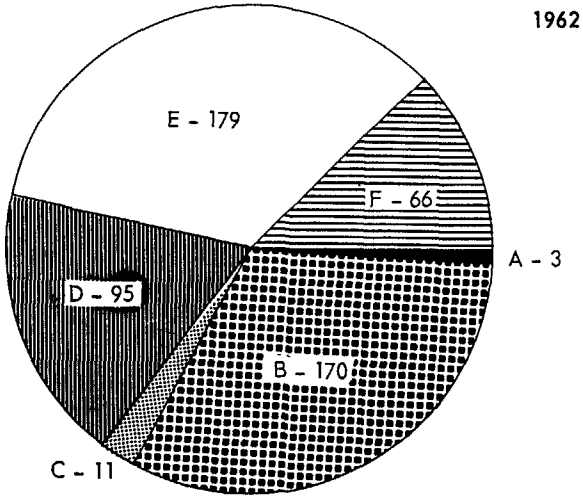


Fig. 1

EXPERTS

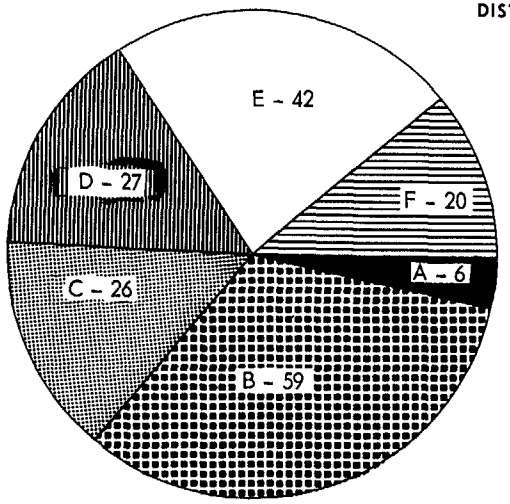


Fig. 2

1963

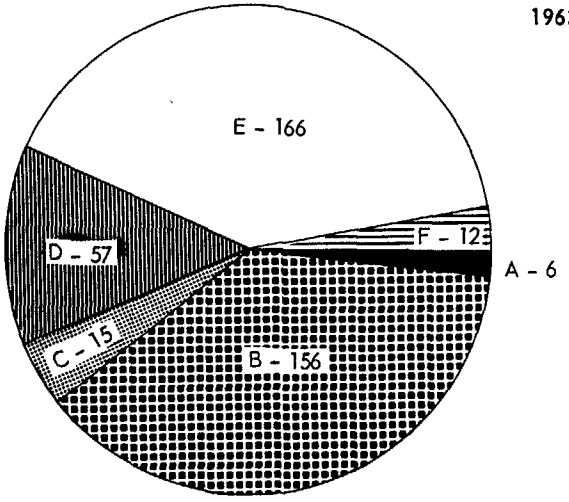


Fig. 3

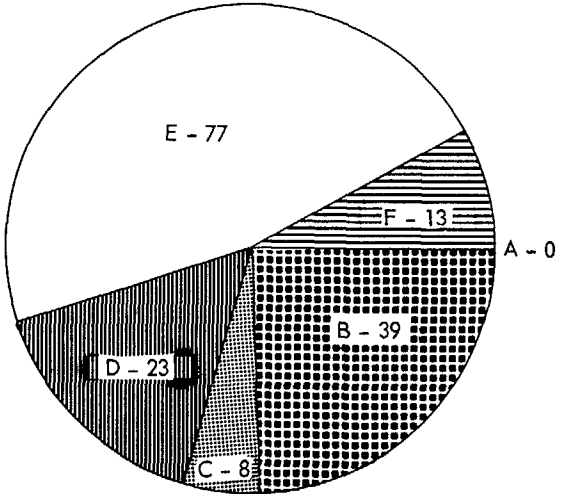


Fig. 4

EQUIPMENT

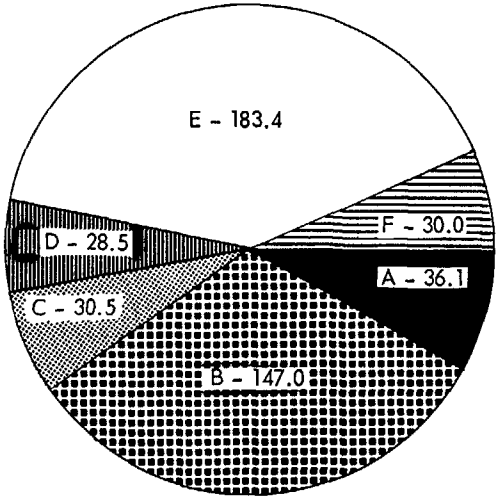


Fig. 5

(ii) Recipient countries and regions

29. Tables 7-9 in Annex I indicate respectively the number of experts and fellowships made available to various countries and regions in 1963, the financial value of all the various types of assistance rendered to such recipients in that year and similar cumulative data covering the Agency's technical assistance since its beginning in 1958. Graph 4 below summarizes this information by classifying the recipient countries in accordance with the EPTA regional classification. Although this distribution has remained relatively stable it will be observed, by comparing the data for 1963 with the cumulative figures, that the assistance rendered to African States has increased to 10.7%in 1963 alone, from 8.4%for all previous years; these figures reflect the fact that the Agency's membership still includes only a fraction of all African countries and that many of the Members from Africa joined the Agency only in the past few years.

GRAPH 4

DISTRIBUTION OF TECHNICAL ASSISTANCE BY REGIONS

(1962, 1963 and 1958-63)

1962

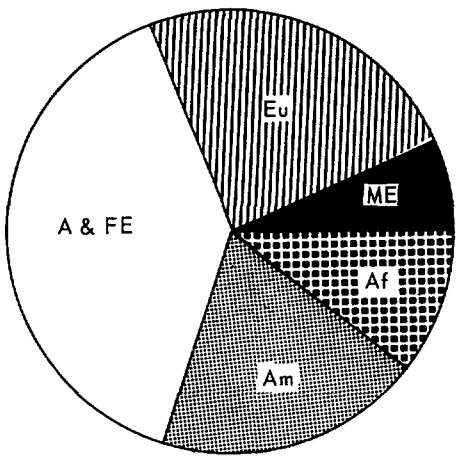


Fig. 1

1963

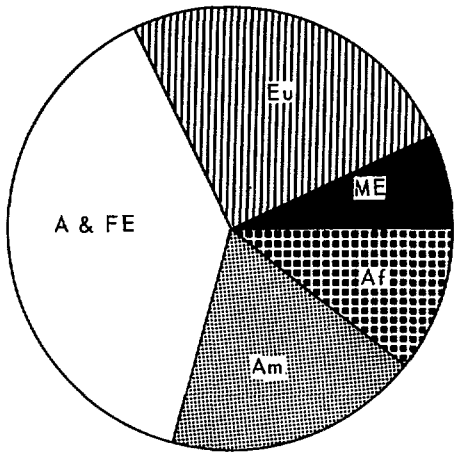
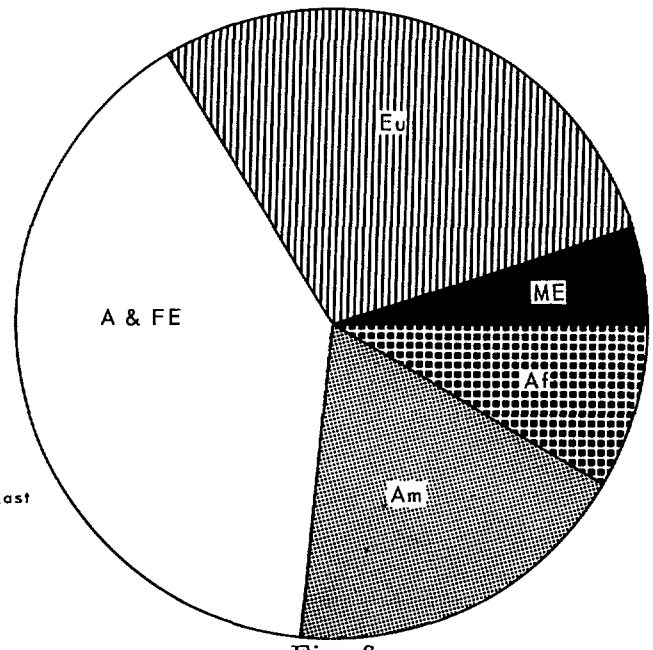


Fig. 2

1958-63



EPTA Regions:

Af:	Africa
Am:	The Americas
A & FE:	Asia and the Far East
Eu:	Europe
ME:	Middle East

Fig. 3

30. From Tables 8 and 9 of Annex I it appears that the Agency rendered assistance to 59 countries in 1963 and that during the period 1958-63 73 countries were recipients. Of these 73 countries, 23 are in Europe, 17 in the Americas, 16 in Asia and the Far East, 13 in Africa and 4 in the Middle East. It might also be noted that more than half of these countries received assistance during only a few years; it should be noted that the 32 countries receiving assistance during as many as five of these six years are all included among the 34 countries who have or are scheduled to receive EPTA assistance through the Agency during the 1963-64 biennium. This latter figure might be compared to the 113 countries receiving some assistance from EPTA during that biennium, and especially to the number of countries assisted by each of the other participating organizations during that period:

Number of countries assisted under EPTA (1963-64)

Organization	Number of countries
WHO	103
FAO	99
UN	95
ILO	93
UNESCO	93
WMO	60
ICAO	59
ITU	54
IAEA	34
UPU	8
Total assisted under EPTA through all organizations:	113

Thus, in spite of the number of countries listed in our statistical tables, the Agency's technical assistance programme does not have the territorial scope of the programmes of the other organizations, a fact which is easily explicable in view of the relatively high degree of technological development required for a country to benefit from assistance in the nuclear energy field.

(iii) Types of assistance

31. The three basic elements of technical assistance are: the services of experts; equipment; and training of fellows. The classifications of assistance by fields of activity and by recipient countries (Tables 6-9 in Annex I) accordingly reflect these three elements, whose relative importance appears from Graph 5 below with reference to the years 1962 and 1963 and cumulatively for 1958-63. From the tables summarized by the graphs it can be established that the percentage of technical assistance monetary resources allocated to fellowships (including research fellowships) has declined from 36.2% in 1962 to 20.0% in 1963 under EPTA and from 40.8% to 37.5% under the programme financed from the Agency's monetary resources (Type I fellowships). Correspondingly, the amount spent on experts and visiting professors has increased minimally from 44.0% in 1962 to 44.6% in 1963 under EPTA and decreased from 48.3% to 39.3% from the Agency's monetary resources. The equipment element has increased considerably from 19.8% to 35.4% under EPTA and from 10.9% to 23.2% from the Agency's monetary resources. In comparing the EPTA figures with those relating to the Agency's programme from its own monetary resources, it should be noted that while under EPTA the distribution of assistance between the fellowship element on the one hand and the expert and equipment elements on the other reflects the direct preference expressed by the Governments in establishing the country programmes, in the Agency's programme the distribution reflects that decided by the General Conference for the operational budget allocations (since the income actually obtained by the operational budget is generally distributed by the Board approximately pro

rata to all activities covered by that budget). However, in considering the equipment element, it should be noted that while under EPTA rules there is a limit on the expenditures by any participating organization for equipment and supplies for within a given country [11], in the case of the Agency no such absolute limit exists, though paragraph 5 of the Guiding Principles [1] provides that the Agency shall be guided by the EPTA criteria.

GRAPH 5

DISTRIBUTION OF TECHNICAL ASSISTANCE BY TYPE OF ASSISTANCE

(1962, 1963 and 1958-63)

1962

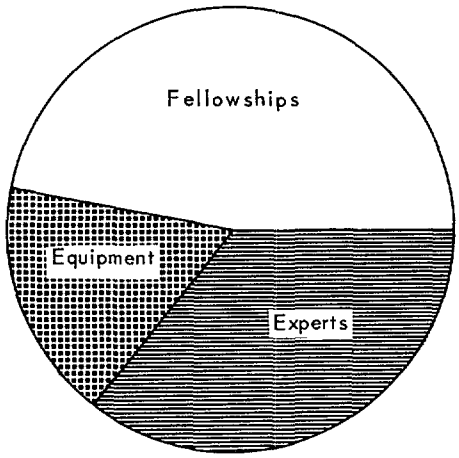


Fig. 1

1963

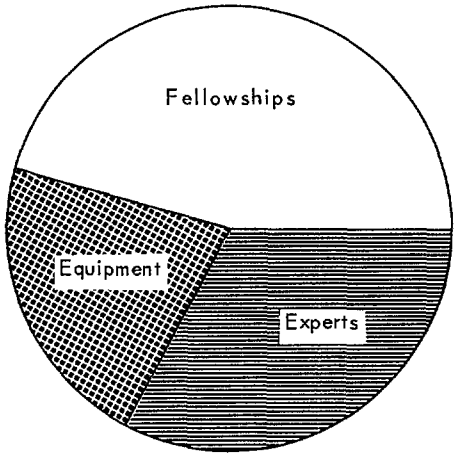


Fig. 2

1958 - 63

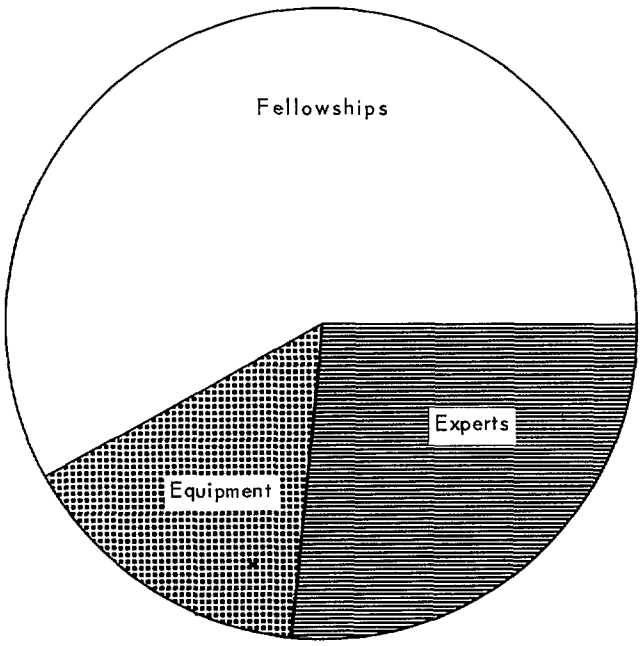


Fig. 3

[11] See GC(IV)/RES/65, Annex, footnote 5.

32. Although for certain purposes a study of the three basic elements of technical assistance suffices, for others a slightly more detailed classification is of value. Such a breakdown is found in Table 5 in Annex I which on the one hand shows a sub-classification of experts under visiting professors and a sub-classification of fellowships under research fellowships, and on the other hand shows the integral nature of certain technical assistance activities, such as regional training courses and the mobile radioisotope laboratories, which contain elements of experts, equipment and fellowships. The various types of assistance granted by the Agency in 1963 are analysed and commented on in paragraphs 33 through 47 below, taking into account both the basic elements and the integral groupings for certain projects.

(a) Experts and visiting professors

33. The value of the services of experts provided in 1963 was $585 400 and of visiting professors $135 500 (Table 5, Annex I); combining these and also taking into account similar services offered in connection with training courses and the mobile radioisotope laboratories, the total value of such services in 1963 was $803 700 (Table 8). These monetary figures correspond to 118 experts who served in 33 countries plus 42 experts who took part in regional projects, making a total of 160 experts who served a total of 548 man-months (Table 7). These experts came from 25 countries (Table 3). Table 6 shows the activities they were engaged in.

34. Experts and visiting professors performed a varied series of tasks for the countries to which they were assigned by the Agency. Some of the most successful assignments are worthy of particular note. Paragraphs 6 and 8 above mentioned the work of experts in hydrology and administrative and legal assistance to Member States. In another line of work, an expert whose services were of particular value was assigned to assist in the development and evaluation of uranium resources in a Member State; his final report contained a complete description of the location of the national uranium deposits as well as an analysis of the organization, proposed techniques and economic implications of prospecting and mining uranium ores in the country. The Government of a Member State has expressed great appreciation to the Agency for having provided the services of an expert for the design of a pilot plant for nuclear fuel reprocessing; the expert provided valuable technical know-how in the design of the last stages of the plutonium refining process and in the technology of plutonium handling. Another expert provided by the Agency served for six months in a Member State and assisted it in performing the pre-criticality and criticality tests on a research reactor which had been provided on a bilateral basis. Finally, mention should be made of the services of an expert who was assigned to assist in the development of the industrial uses of radioisotopes in a Member State; during his four months of service he was successful in establishing, for the first time, close contacts among the various potential users of radioisotopes and between them and the isotope group of the national atomic energy commission; as a result of this stimulation three full-scale investigations with radioactive tracers were performed within a few months and several more were contracted for following the expert's visits to various plants.

35. Agency experts frequently supplement bilateral or other forms of assistance that a State is or has been receiving. They may also help in the development of nuclear energy programmes as well as of related project proposals on the basis of which the country can get additional assistance from either the Agency directly, or under EPTA or from the Special Fund, or from other international, governmental or private sources. In such ways the efficiency of the Agency's assistance is greatly multiplied since beyond its immediate effect it may help to direct national resources and to channel international ones towards the development of a country's or even a region's nuclear potential.

36. In order for the services of an expert to be of value to a developing country it is necessary that there be available adequately trained personnel to acquire the skill, knowledge and general know-how that the expert is qualified and expected to transmit. Even when an expert is assigned to perform a particular task, such as the establishment of a laboratory or the planning of a particular programme, a receiving country can only

derive the maximum benefit from his services by making available one or more persons to act as counterparts to the expert, simultaneously learning from him and relieving him of routine matters and of administrative details of peculiar difficulty to foreigners. It might almost be said that the ultimate success of a project depends as much on the receiving country's ability and co-operation in making available such counterpart personnel as on the qualifications of the experts themselves. Thus, in contrast to the several successful projects described in paragraph 34 above, the Agency's technical assistance programme each year also includes a certain number whose full objectives could not be obtained, mostly due to the lack of such local co-operation. For example, in one case an expert, whose main duties were meant to have been the training of local staff in the use, maintenance and repair of nuclear electronic instruments and to advise on the selection of equipment for the industrial application of radioisotopes, could not fully carry out his assignment because of lack of appropriate counterparts and equipment that were supposed to have been provided by the national atomic energy commission. In the same country another expert, who was assigned to set up a laboratory with a section specialized in research in the applications of radioisotopes, could not accomplish his mission because of the technical insufficiency of the designated building and the shortage of conventional equipment.

(b) Inter-regional advisers

37. The 1963 innovation of appointing inter-regional advisers in certain specialized technical fields has already been referred to in paragraph 9 above. The data relating to them appears in the various statistical tables in Annex I, under EPTA experts provided for international projects.

(c) Equipment

38. The value of equipment provided by the Agency to 32 countries from all sources in 1963 was $468 600; taking into account additional equipment made available to certain regional and inter-regional projects, the total value of the equipment element was $513 400 (Table 8, in Annex I). Unlike in previous years, free equipment made available to the Agency for distribution as technical assistance in 1963 had an estimated value of only $1000 as compared to $197 500 in 1962. However, Table 5 shows that the equipment element of the Agency's programme financed from its own monetary resources rose to 22.0% (from 7.5% in 1962 and 14.4% in 1961) and under EPTA to 28.7% (compared to 18.7% in 1962 and 7.5% in 1961) - not including the equipment element of the training courses and of the mobile laboratories. This increase reflects the desire of many Member States to receive more equipment as part of the technical assistance granted to them by the Agency and the Board's recognition, reflected also in paragraph 5 of the Guiding Principles [1], that because of the special character of work with nuclear energy such a substantial equipment component may be more justified in the case of the Agency's technical assistance operations than they would be in the case of assistance by other organizations participating in EPTA.

39. Though the Agency has in general, following the principles established by EPTA, granted assistance in the form of equipment only to the extent that equipment was necessary in order to supplement the services of experts, in 1963 seven projects involving the supply of scientific documentation were implemented [12] with which no expert services were associated - though in three of those fellowships were granted for in-service training at the Agency's Headquarters.

(d) Fellowships

40. The value of regular fellowships awarded by the Agency in 1963 was $1 006 500 while the value of research fellowships was $17 000 (Table 5, Annex I). Combining these figures and adding the followship element of the training courses, the total value of fellowships

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[12] See para. 7 above.

awarded by the Agency in 1963 was $1 100 400 (Table 8). Corresponding to these monetary figures, Tables 3 and 7 show that 295 fellows from 49 countries were awarded a total of 3219 man-months of study in 29 Member States and in five long-term international training programmes, and that in addition short-term awards were made to 104 fellows to attend Agency-sponsored training courses and also to 13 research grantees. The subjects of study of these fellows is shown in Table 6.

41. Reference has already been made in paragraphs 11 and 12 to the Board's decision and the Director General's consequent administrative action to integrate the fellowships programme as far as possible with the other technical assistance activities of the Agency. In planning a total technical assistance programme for a country's nuclear energy development, it is always useful to consider in advance how to co-ordinate the grant of fellowships with the assignment of experts and the provision of equipment. Thus, in order to enable a country to make available counterpart experts, it may be necessary that the Agency first enable students from the country to obtain instruction abroad so that upon their return they will be able to receive maximum benefit from joint work with Agency experts and from any equipment made available by the Agency.

(e) Training courses

42. During 1963 the Agency conducted nine training courses as part of its technical assistance programme [13]. These varied in length from 6 to 22 weeks and took place in eight countries, including one in the Agency's Laboratory at Seibersdorf and two in the Middle Eastern Radioisotope Centre [14]. Four were financed from EPTA regional allocations and five from the Agency's own monetary resources, one of which was co-sponsored by FAO. A total of 139 students attended these courses, of whom 104 from outside the host countries received Agency fellowships to enable them to participate. In addition, the Agency also conducted six courses in connection with its mobile radioisotope laboratories, as described in the paragraph below.

(f) Mobile radioisotope laboratories

43. During 1963 the Agency's first mobile radioisotope laboratory spent five months in Singapore, during which 82 students were trained in three courses which lasted from three to seven weeks. The second unit spent three months in Bolivia, during which 64 students were trained in three courses lasting from two-and-a-half to four weeks. The total cost to the Agency of the use of these laboratories was $16 200 (see Table 5, Annex I), which is distributed partly to the expert and partly to the equipment element (Tables 6, 8 and 9). It would appear that the principal reason for the low rate of use of these facilities was the relatively high cost of transporting them from country to country, a cost which the Board decided is to be charged largely to the user Government. Efforts are now being made to establish, on the basis of expressions of interest by Member States, itineraries and schedules for the use of these two units in 1964 which will permit their maximum use with a minimal transport cost to the Agency (for inter-regional transport) and to the recipient countries (for intra-regional transport).

(g) Middle Eastern Radioisotope Centre

44. The Agreement for the Establishment in Cairo of a Middle Eastern Regional Radioisotope Centre for the Arab countries entered into force on 29 January 1963 [15]. During 1963 the Centre received through the Agency a total of $28 558 from regional EPTA funds,

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[13] A full tabulation of the Agency's technical assistance training courses appears in the Annual Report of the Board to the General Conference, GC(VIII)/270, para. 144.

[14] Described more fully in para. 45 below.

[15] INFCIRC/38 and Add.1/Rev.1.

$10 093 of which was spent for visiting professors, $7110 for equipment and $11 355 for fellowships. In addition, the host State (the United Arab Republic) contributed $25 000 Egyptian Pounds (approximately $80 500), while six participating Arab States pledged a total of $13 500.

45. In 1963 the Centre organized two training courses in agriculture, each attended by 18 students from seven of the participating countries (two-thirds of whom received fellowship assistance to attend from outside the host State). The first one covered general agricultural methods and was held from 1 June to 25 July; the second course dealt with more specialized problems and was held from 5 October to 25 November. The instruction was given by the staff of the Centre, members of the faculties of the local universities, staff of the United Arab Republic Atomic Energy Establishment and visiting professors assigned by the Agency. In each case practical work formed an important part of the courses.

46. The Centre also started research on a number of problems, using radioisotopes as tracers or as radiation sources, in two inter-related fields of crucial importance to the region, i.e. hydrology and life sciences (soil-plant relationships, entomology, animal nutrition and medicine) in arid and semi-arid conditions. Some of the fellows who had taken part in one of the training courses later participated in this research work [16].

(h) Follow-up missions

47. During 1963 the Agency dispatched two "follow-up" missions, each of a duration of approximately five weeks, to six countries in Latin America and to five countries in Africa, in order to renew direct contacts with national atomic energy authorities and to advise them in preparing requests for assistance under the Agency's own programme in 1964 and under the EPTA 1965-66 biennium. Each of these missions consisted of two staff members from Headquarters; their costs were charged to the Regular Budget and are not reflected in the tables in Annex I.

C. Special Fund activities

48. In April 1963 the Agency entered into a Plan of Operation with the Yugoslav Government for the execution of a Special Fund project on nuclear research and training in agriculture. This project deals with the application of isotopes and radiation to research in soil, plant and animal science, and with the use of radiation for the improvement of crop plants. With the resources made available by the Special Fund the Agency has engaged the first Project Manager and has arranged for the purchase of nearly all of the equipment (worth approximately $300 000) required for the project. A laboratory building at Zemun has been reconstructed and equipped and research is already in progress there. The recruitment of the 16 experts for whom posts are provided under the project is under way and several have already assumed their duties.

49. During 1963 the Agency completed the negotiation of the Plan of Operation for the pre-investment study on power, including nuclear power, on Luzon for which it is acting as Executing Agency in the Philippines. The purpose of the project is first of all to assess the indigenous conventional energy resources as well as to project the electric load demand on the island of Luzon; secondly, if this assessment indicates the need to import fuel, comparisons will be made between the relative costs of nuclear and conventional power plants to determine the most economical system expansion programme for the Luzon grid for 1965-75. Although the Plan of Operation was signed only in February 1964, in anticipation of its entry into force the Agency, in 1963, undertook, with the approval of the Government and of the Special Fund, some preliminary steps in the implementation of this project. In particular, two Philippine engineers were sent on three months' fellowships to

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[16] More complete information on the work of the Centre is contained in the first report of the Agency's laboratory activities, Technical Reports Series No. 25 (STI/DOC/10/25), pp. 99-111.

receive training in the making of power market surveys. A sub-contract was given to a commercial firm to carry out such a survey with the assistance of these former fellows, and another sub-contract was awarded to the United Nations to conduct investigations relating to conventional power sources.

50. The Agency's work in hydrology as sub-contractor for two Special Fund projects for which FAO is the Executing Agency in Greece and Turkey has been described in paragraph 6 above. The resources associated with this work are tabulated following paragraph 22.

V. CONCLUSIONS

51. The Agency has now had about five years' experience in administering its technical assistance programme to develop peaceful uses of atomic energy. While this period is too short to permit any conclusive evaluation of the Agency's contribution to the nuclear development of the assisted countries, or even of the more distant potentialities of this programme, some trends have by now become apparent and seem worthy of attention. In making such an appraisal based on its brief experience, the Agency can draw on that gained by other organizations in the United Nations family whose technical assistance programmes are much older.

52. A study of the over-all annual statistics concerning the Agency's technical assistance programme (see in particular Table 5, Annex 1) indicates that while the programme is still growing (disregarding the annual fluctuations caused by the biennial nature of the EPTA programme), it has to a certain extent stabilized in that the annual rate of increase is now of the order of 5% to 10%, which is probably less than the general rate of growth of the peaceful nuclear energy industry. In some areas of the programme even a slight decrease is noticeable.

53. In establishing the reasons for the slow rate of growth of the Agency's technical assistance programme, a number of possible limitations should be taken into account. The most obvious of these are those on the resources made available to the Agency by the "donor" or "developed" countries. As pointed out in paragraph 20 above, these resources are basically of two types: general, i.e. monetary resources, especially those received by the Agency as voluntary contributions to its General Fund (see Table 2, Annex I); and specific, i.e. services of experts (both paid and free) and fellowships (both Types I and II). It appears, however, that at present the Agency's technical assistance programme is not seriously limited by any lack of such specific resources. In particular, experts can in general be obtained for most approved projects, though in some cases where the request involves a particularly narrow speciality it may prove to be difficult to secure the services of one of the few persons who meet the strict requirements of the project; alternatively a considerable delay may have to be accepted in securing the services of the right expert. This, for instance, is true of certain medical specialists (particularly those possessing particular language abilities), of experts in the medical and agricultural uses of radioisotopes and of electronics specialists. Fellowship posts too can in general be found for all fellows within the resources now available to the Agency, and it appears that even more could be placed in institutions of high standards. Thus from the point of view of resources, the principal limitation is clearly a monetary one.

54. Another kind of restrictive factor that seems of significance at the present time is reflected in the planning priorities established by the "receiving" or "developing" countries themselves. Their Governments are taking into account the urgency of their most pressing developmental needs as well as their possibly limited capacity to derive immediate full benefit from assistance in the nuclear field. Thus several countries are planning to receive and use such assistance at a somewhat later stage of their development; for example, at present preference may be given to building up educational facilities and to the basic advancement of agriculture and of health services by conventional means. For this reason the initially great and urgent interest in atomic energy, sometimes expressed in the creation of special high-level organizations for its advancement, has in some

countries been replaced by a more conservative attitude in which nuclear energy is primarily a factor in long-term planning. An illustration of this attitude is given by the governmental requests under EPTA. In accordance with the procedures existing for the distribution of available EPTA resources, each country in effect decides how much of the funds available to it should be used for programmes proposed by each of the various participating organizations; a choice in favour of one programme reduces the funds available for others. In recent years the Agency's experience with the proposals it has made to Governments has been the following:

EPTA COUNTRY ALLOTMENTS TO AGENCY

Period	Agency proposals		Requests received		Reduction in amounts (%)
	Number of countries	Amount ($1000)	Number of countries	Amount[a] ($1000)	
1960	30	600	24	515	14
1961-62	39	1423	34	1283	10
1963-64	49	1780	34	1230	31

a/ The amounts requested and initially approved were later increased by contingency allocations.

55. Finally, some attention should be paid to possible limitations on the specific ability of developing countries to benefit immediately from particular types of assistance. Thus note might be taken of the slight but marked decline in the number of fellowship nominations received by the Agency in the most recent years:

Year	1958	1959	1960	1961	1962	1963
Number of nominations	287	577	649	648	582	580

In addition, as pointed out in paragraph 36, Agency experts are sometimes handicapped by the inability of the receiving country to make available properly qualified counterpart experts as the primary recipients of the information to be transmitted; though sometimes this is due merely to a lack of local preparations, frequently the number of possible counterpart personnel is so limited that none can be made available in connection with nuclear technical assistance projects.

56. In view of the above-described limits on the capacities of both donor and receiving countries, it behoves the Agency to pay special attention to the quality, i.e. the usefulness, of its programme. In this connection the importance of co-ordination cannot be over-emphasized:

(a) First of all co-ordination is required within the recipient States themselves in order to ensure that the maximum benefit is derived from assistance actually made available; i.e. requests should be limited to projects really necessary for the over-all development of the country and of sufficiently high priority, and once assistance is granted the necessary local support must be made available to permit its optimum utilization.

(b) Similarly, there must be co-ordination within the Agency itself, with respect to the various types of technical assistance granted to a given country and naturally also with respect to assistance granted from different sources. Thus, as indicated above, those projects are the most useful where the elements of experts, equipment and fellowships are fully integrated - for example, if fellowships are granted whose holders can upon their return

become the counterparts of experts assigned by the Agency at a later time and are trained to make maximum use of any technical equipment supplied as part of such projects. It is expected that such intra-Agency co-ordination will be the primary benefit of the establishment of the new Technical Assistance Department [17].

(c) Finally, there must be full co-ordination among the various organizations supplying assistance to a country or a region, in order to develop programmes of maximum benefit.

57. It may be assumed that one result of co-ordination on all these levels will be a gradual shift of emphasis towards a few important projects of a more continuing nature. For instance, one promising method of husbanding scarce resources is the substitution of regional projects (such as short-term training courses, semi-permanent training centres and the Agency's newest experiment with regional advisers) for merely national ones; by this means a number of countries can benefit from the same Agency assistance and a potential waste of resources can be eliminated. In nuclear energy work the spreading of limited resources widely and thinly should be avoided in order to accomplish more substantial development.

58. Co-ordination, co-operation and careful planning and programming should help reduce the effect of the primary restriction on the Agency's technical assistance programme, i.e. the limitation on monetary and sometimes on specific resources. This prudence in management should have an equally beneficial effect with respect to the second main limitation on the growth of the programme - the restricted capacity of the developing countries to benefit immediately from certain types of assistance. However, it should be recognized that here another challenge is presented which the Agency should be prepared to respond to: the Agency has a function and a responsibility to help increase the ability of all its Member States to benefit from nuclear energy. This task should be undertaken with energy and imagination by the Agency itself and wherever possible in co-operation with other international organizations.

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[17] See para. 12 above.

ANNEX I

STATISTICAL TABLES

General introductory notes

1. In general, all figures relating to the distribution of assistance in the tables of this Annex reflect obligations entered into during the year indicated, regardless of the time when the funds were made available, the projects approved or the money actually expended. In particular:

(a) In the case of experts hired from the Agency's own monetary resources, the obligation is incurred when the Letter of Appointment is entered into; all the statistics regarding experts in this category therefore reflect appointments made during the indicated period and not necessarily experts in the field. In the case of EPTA, however, the statistics indicate experts who actually started their assignments during the indicated period;

(b) In the case of equipment, the obligation is incurred when the equipment is contracted for, and the statistics therefore reflect orders placed and accepted rather than actual deliveries during the indicated period; and

(c) In the case of fellowships, the obligation is incurred at the time the fellowship is awarded, i.e. at the time when a decision is officially made by the Agency to place the fellow but before placement arrangements are made.

2. As indicated in paragraph 23 of the report, none of the statistics relate to Special Fund activities nor to the funds-in-trust arrangement.

3. The heading "Agency monetary" relates to allocations for technical assistance activities from the General Fund and Operating Fund II.

4. All monetary values appearing under the headings "Agency resources in kind", or "free experts" or "Type II fellowships" are estimated in accordance with the following rules:

(a) Experts. The value of the services of each cost-free expert is estimated on the basis of the average salary of an equivalent expert engaged by the Agency, the applicable daily subsistence allowance as established by TAB plus the cost of a round-trip air ticket;

(b) Equipment. The value of equipment is estimated according to information received from the donor Government; and

(c) Fellowships. The value of Type II fellowships is estimated on the basis of the monthly stipend, either as proposed by the host country or as established currently by TAB, multiplied by the duration of the award in months. The estimated travel costs have been added if they were paid by the host country.

These values and the totals in which they are included must therefore be considered as approximations.

5. Throughout the tables, except in Table 5:

(a) "Experts" include visiting professors and also the expert services element of various training courses;

(b) "Equipment" includes the equipment element of various training courses and in the case of the mobile radioisotope laboratories also the emoluments of the drivers; and

(c) "Fellowships" include research fellowships. However, in the tables showing the distribution of fellowships by place of study (Table 3) and nationality (Table 7) the numbers indicated for countries do not include fellows participating in short-term training courses outside their countries or those holding short research grants, since their inclusion would substantially distort the statistics relating primarily to the holders of one-year fellowships; the numbers thus excluded appear separately at the end of the respective tables. Moreover, none of the tables include any reference to local participants in training courses (approximately 35) or to the 146 trainees of mobile radioisotope laboratory courses, since no individual expenses were incurred with respect to them.

6. The heading "International projects" refers to regional, inter-regional and fully international projects.

7. Due to the rounding-off of monetary amounts to the nearest hundred or thousand dollars, the totals indicated in various tables may differ slightly.

A. TECHNICAL ASSISTANCE RESOURCES

Table 1

Resources available: 1958-1963[a/]

(in thousands of dollars)

Year	EPTA	Agency		Sub-totals		Total[b/]
		Monetary	In kind[b/]	Monetary	Agency[b/]	
	(1)	(2)	(3)	(1) + (2)	(2) + (3)	(1) + (2) + (3)
1958	-	124	390	124	514	514
1959	304	875	531	1179	1406	1710
1960	639	1008	813	1647	1821	2460
1961	787	981	845	1768	1826	2613
1962	843	1146	698	1989	1844	2687
1963	1049	1230	554	2279	1784	2833
1958-63	3622	5364	3831	8986	9195	12 817

a/ Some of the figures contained in the corresponding tables in earlier reports included unused funds carried over from previous years. In order to sum up the figures relating to the years 1958-63 it was necessary to eliminate this apparent duplication of resources and some of the earlier figures had to be revised to avoid such carry-over values.

b/ Estimated - see Introductory Note 4 to this Annex.

Table 2

Agency funds for technical assistance: 1958-1963

(in thousands of dollars)

Item		1958	1959	1960	1961	1962	1963	1958-63
Target for voluntary contributions to the General Fund	$	250	1 500	1 500	1 800	2 000	2 000	9 050
Budgeted for technical assistance[a]	$	250	1 100	1 367	1 361	1 625	1 799	7 502
Percentage of target	%	100.0	73.3	91.1	75.6	81.3	90.0	82.4
Amount pledged	$	125	1 183	996	1 262	1 380	1 435	6 381
Percentage of target	%	50.0	78.9	66.4	70.1	69.0	71.8	71.1
Actually made available for technical assistance from the General Fund and Operating Fund II[a]	$	124	875	1 008	981	1 146	1 230	5 364
Percentage of budget	%	49.6	79.5	73.7	72.1	70.5	68.4	72.3
Percentage of amount pledged	%	99.2	74.0	101.2	77.7	83.0	85.7	83.8

a/ The use of funds from voluntary contributions is not restricted to technical assistance activities only but also covers other operations of the Agency like the Monaco and Seibersdorf Laboratories and certain research contracts.

Table 3

Sources of technical assistance: 1963

Number of experts classified by nationality and fellowships classified by place of study

Source	Number of experts classified by nationality				Number of fellowships classified by place of study			
	EPTA	Agency		Total	EPTA	Agency		Total
		Paid	Free			Type I	Type II	
Country Programmes								
Argentina	1	1	-	2	-	-	2	2
Australia	2	1	-	3	2	1	-	3
Austria	1	3	-	4	1	16	-	17
Belgium	2	3	1	6	-	3	7	10
Brazil	-	-	-	-	1	-	3	4
Canada	3	2	-	5	2	6	-	8
Chile	1	-	-	1	-	-	-	-
China	-	1	-	1	-	-	-	-
Czechoslovak Socialist Republic	1	2	-	3	-	-	2	2
Denmark	3	1	-	4	-	2	4	6
Finland	-	-	-	-	-	-	1	1
France	8	3	3	14	6	22	1	29
Germany, Federal Republic of	1	8	-	9	2	10	-	12
Hungary	-	1	-	1	-	-	2	2
India	1	2	-	3	-	-	2	2
Israel	-	1	-	1	1	-	5	6
Italy	-	-	-	-	-	-	18	18
Japan	2	-	-	2	-	3	12	15
Netherlands	-	1	-	1	1	1	1	3
New Zealand	-	1	-	1	-	-	-	-
Norway	2	5	-	7	-	2	-	2
Pakistan	-	-	-	-	-	-	2	2
Poland	-	-	-	-	-	-	3	3
Romania	-	-	-	-	-	-	1	1
Spain	2	-	-	2	-	-	2	2
Sweden	2	2	-	4	1	5	-	6
Switzerland	-	-	-	-	-	1	-	1
Turkey	-	-	-	-	-	-	1	1
Union of Soviet Socialist Republics	-	3	-	3	-	-	12	12
United Arab Republic	2	1	-	3	-	-	-	-
United Kingdom of Great Britain and Northern Ireland	15	16	2	33	4	34	-	38
United States of America	14	22	8	44	8	11	48	67
Yugoslavia	1	2	-	3	1	-	4	5
International Projects								
CERN, Switzerland					-	3	-	3
IAEA, Austria					-	6	-	6
International Rice Research Institute, Philippines					-	1	-	1
NORA Project, Norway					-	2	-	2
Uppsala International Seminar Course, Sweden					-	3	-	3
Short-term training courses[a/]					46	58	-	104
Research grantees[b/]					-	13	-	13
TOTAL	64	82	14	160	76	203	133	412

a/ Four of these regional and inter-regional courses were financed under EPTA and were held in Argentina, Turkey and the United Arab Republic (two in the Middle Eastern Regional Radioisotope Centre); five were financed from the Agency's monetary resources and were held in Austria (at the Agency's Laboratory), India, Israel, the United Kingdom and the United States.

b/ The holders of these research grants studied in 27 countries.

B. ALLOCATIONS AND DISBURSEMENTS OF AGENCY MONETARY RESOURCES FOR TECHNICAL ASSISTANCE: 1958-1963

Table 4

Status of allocations and schedule of disbursements for technical assistance activities from the General Fund and Operating Fund II as at 31 December 1963

(in thousands of dollars)

Year of allocation	Monetary resources made available	Year of disbursement						Total cash disbursements (1958-63)	Unliquidated obligations	Unobligated earmarkings[a/]	Savings (deficit)
		1958	1959	1960	1961	1962	1963				
1958	124	6	76	38	4	-	-	124	-	-	-
1959	875	-	100	366	152	30	18	666	9	22	178
1960	1008	-	-	248	468	195	46	957	41	4	6
1961	981	-	-	-	252	433	162	847	51	52	31
1962	1146	-	-	-	-	299	489	788	213	138	7
1963	1230	-	-	-	-	-	436	436	554	333	(93)
TOTAL	5364	6	176	652	876	957	1151	3818	868	549	129[b/]

a/ For experts and equipment only.

b/ This total covers all technical assistance activities of the Agency and can be divided into savings on:
Experts and equipment . . . . . $50 000; and
Fellowships . . . . . $79 000.

C. DISTRIBUTION OF TECHNICAL ASSISTANCE

Table 5

Types of technical assistance: 1958-1963[a]

(in thousands of dollars)

YEAR / Type of Resource	Experts		Visiting Professors		Equipment		Fellowships		Research Fellowships		Training Courses		Mobile Radioisotope Laboratories		TOTAL	
	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%
1958																
EPTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Agency																
Monetary	-	-	-	-	-		124.0	100.0	-	-	-	-	-	-	124.0	100
In kind[b]	6.4	1.6	-	-	-	-	383.7	98.4	-	-	-	-	-	-	390.1	100
TOTAL[b]	6.4	1.2	-	-	-	-	507.7	98.8	-	-	-	-	-	-	514.1	100
1959																
EPTA	26.2	9.8	1.5	0.6	15.0	5.6	224.0	84.0	-	-	-	-	-	-	266.7	100
Agency																
Monetary	13.1	2.9	24.1	5.5	6.1	1.4	360.5	81.0	12.6	2.8	15.9	3.6	12.6	2.8	444.9	100
In kind[b]	3.8	0.7	-	-	-	-	527.0	99.3	-	-	...	-	...	-	530.8	100
TOTAL[b]	43.1	3.5	25.6	2.0	21.1	1.7	1111.5	89.5	12.6	1.0	15.9	1.3	12.6	1.0	1 242.4	100
1960																
EPTA	193.6	38.1	2.0	0.4	78.4	15.4	234.2	46.1	-	-	-	-	-	-	508.2	100
Agency																
Monetary	223.3	22.4	98.9	9.9	88.1	8.9	532.9	53.6	14.7	1.5	8.0	0.8	28.6	2.9	994.5	100
In kind[b]	2.9	0.4	-	-	192.0	23.6	618.0	76.0	-	-	...	-	...	-	812.9	100
TOTAL[b]	419.8	18.1	100.9	4.4	358.5	15.5	1385.1	59.8	14.7	0.6	8.0	0.4	28.6	1.2	2 315.6	100
1961																
EPTA	254.9	61.2	2.3	0.6	31.3	7.5	76.9	18.4	-	-	49.0	11.8	2.2	0.5	416.6	100
Agency																
Monetary	209.1	23.0	102.9	11.3	130.7	14.4	346.3	38.1	30.7	3.4	68.5	7.5	20.5	2.3	908.7	100
In kind[b]	16.0	1.9	-	-	80.0	9.5	749.0	88.6	-	-	...	-	...	-	845.0	100
TOTAL[b]	480.0	22.1	105.2	4.9	242.0	11.2	1172.2	54.0	30.7	1.4	117.5	5.4	22.7	1.0	2 170.3	100
1962																
EPTA	379.8	35.1	80.8	7.5	202.9	18.7	376.7	34.8	-	-	42.0	3.9	-	-	1 082.2	100
Agency																
Monetary	382.9	37.5	90.7	8.9	76.2	7.5	381.3	37.3	5.3	0.5	65.7	6.4	19.1	1.9	1 021.2	100
In kind[b]	19.7	2.8	-	-	197.5	28.3	480.6	68.9	-	-	...	-	...	-	697.8	100
TOTAL[b]	782.4	27.9	171.5	6.1	476.6	17.0	1238.6	44.2	5.3	0.2	107.7	3.9	19.1	0.7	2 801.2	100
1963																
EPTA	226.3[c]	33.9	1.6	0.2	191.3	28.7	101.2	15.2	-	-	146.5	22.0	-	-	666.9	100
Agency																
Monetary	326.7[c]	27.3	133.9	11.2	263.2	22.0	384.3	32.1	17.0	1.4	54.7	4.6	16.2	1.4	1 196.0	100
In kind[b]	32.4	5.8	-	-	1.0	0.2	521.0	94.0	-	-	...	-	...	-	554.4	100
TOTAL[b]	585.4[c]	24.2	135.5	5.6	455.5	18.9	1006.5	41.6	17.0	0.7	201.2	8.3	16.2	0.7	2 417.3	100
1958-1963																
EPTA	1080.8	36.8	88.2	3.0	518.9	17.6	1013.0	34.4	-		237.5	8.1	2.2	0.1	2 940.6	100
Agency																
Monetary	1155.1	24.6	450.5	9.6	564.3	12.0	2129.3	45.4	80.3	1.7	212.8	4.6	97.0	2.1	4 689.3	100
In kind[b]	81.2	2.0	-	-	470.5	12.3	3279.3	85.7	-		...		...		3 831.0	100
GRAND TOTAL[b]	2317.1	20.2	538.7	4.7	1553.7	13.6	6421.6	56.0	80.3	0.7	450.3	3.9	99.2	0.9	11 460.9	100

a/ Data as at 31 December 1963. Several figures from previous years have been brought up to date due to adjustments resulting from the liquidation during 1963 of unliquidated obligations carried forward from previous years; these figures therefore differ slightly from those appearing in the corresponding table in last year's report (GC(VII)/INF/61, Table 3).

b/ Estimated - see Introductory Note 4 to this Annex.

c/ The 1963 figures for "Experts" include miscellaneous and bank charges amounting to 0.6 thousands of dollars under "EPTA" and 4.5 under "Agency monetary".

Table 6

Fields of activity of technical assistance: 1963

Field[a/]	Number of experts	Value of equipment (in thousands of dollars)	Number of fellowships[b/]
General atomic energy development	0	36.1	6
Nuclear science[a(i)/]	39	147.0	156
Prospecting, mining and processing of nuclear raw materials	8	30.5	15
Nuclear technology[a(ii)/]	23	28.5	57
Application of isotopes and radiation	77	183.4	166
Health, safety and waste disposal	13	30.0	12
TOTAL	160	455.5	412

a/ In order to make it possible to compare the fields of activity of experts with the fields of study of fellows, the classifications relating to these two types of assistance have been made uniform. In particular:

(i) "Nuclear science" includes both physics and chemistry. Thus, in comparison with last year's figure for experts, this heading includes both "nuclear research laboratories and centres" and "nuclear research, scientific studies and laboratory services" in document GC(VII)/INF/61, Annex III; with reference to fellows, this heading includes both "nuclear physics" and "nuclear chemistry" in document GC(VII)/INF/61, Table 4.

(ii) "Nuclear technology" includes fuel fabrication and processing, reactor technology and nuclear electronics. Last year's corresponding headings for experts were "fabrication and reprocessing of nuclear fuels" and "nuclear reactors", and for fellows "nuclear reactor engineering".

b/ These figures include 104 participants in nine regional and inter-regional training courses and 13 holders of research grants.

Table 7

Recipient countries

Number of experts classified by place of assignment and fellowships classified by nationality of the recipients: 1963

Recipient	Number of experts classified by place of assignment								Number of fellowships classified by nationality of recipient							
	EPTA		Agency				Total		EPTA		Agency				Total	
			Paid		Free						Type I		Type II			
	Number	Man-months	Number	Man-months	Number	Man-months	Number	Man-months	Number	Man-months	Number	Man-months	Number	Man-months	Number	Man-months
Country Programmes																
Afghanistan	1	12	-	-	-	-	1	12	-	-	2	14	-	-	2	14
Albania	-	-	-	-	-	-	-	-	-	-	-	-	3	180	3	180
Argentina	5	11	5	24	1	1	11	36	-	-	7	68	4	46	11	114
Austria	-	-	3	18	-	-	3	18	-	-	-	-	2	18	2	18
Bolivia	-	-	-	-	-	-	-	-	-	-	1	10	-	-	1	10
Brazil	2	14	4	20	-	-	6	34	6	49	2	18	2	24	10	91
Bulgaria	-	-	-	-	-	-	-	-	-	-	5	56	10	75	15	131
Burma	-	-	1	6	1	1	2	7	-	-	-	-	-	-	-	-
Ceylon	-	-	2	11	-	-	2	11	-	-	-	-	-	-	-	-
Chile	-	-	2	3	-	-	2	3	1	12	1	10	-	-	2	22
China	-	-	-	-	-	-	-	-	-	-	-	-	9	90	9	90
Colombia	1	3	2	2	-	-	3	5	-	-	-	-	2	18	2	18
Congo (Leopoldville)	-	-	-	-	3	4	3	4	-	-	-	-	-	-	-	-
Cuba	-	-	-	-	-	-	-	-	-	-	2	22	-	-	2	22
Czechoslovak Socialist Republic	-	-	-	-	-	-	-	-	-	-	5	54	5	31	10	85
Ecuador	-	-	-	-	-	-	-	-	1	12	-	-	-	-	1	12
Ghana	-	-	3	29	-	-	3	29	-	-	2	24	-	-	2	24
Greece	2	6	7	22	2	2	11	30	-	-	2	18	2	21	4	39
Hungary	-	-	-	-	-	-	-	-	-	-	3	26	10	77	13	103
Iceland	-	-	1	2	-	-	1	2	-	-	-	-	1	12	1	12
India	-	-	1	1	-	-	1	1	6	45	3	20	11	124	20	189
Indonesia	1	1	4	22	-	-	5	23	-	-	4	26	7	190	11	216
Iran	3	29	1	7	-	-	4	36	-	-	9	101	6	60	15	161
Iraq	-	-	3	33	-	-	3	33	-	-	1	12	1	12	2	24
Israel	1	1	3	9	1	1	5	11	1	6	2	7	-	-	3	13
Italy	-	-	-	-	-	-	-	-	-	-	2	20	1	10	3	30
Ivory Coast	1	2	-	-	-	-	1	2	-	-	-	-	-	-	-	-
Japan	-	-	-	-	4	2	4	2	-	-	4	31	2	20	6	51
Korea, Republic of	2	18	2	10	-	-	4	28	-	-	4	41	8	87	12	128
Lebanon	-	-	1	1	-	-	1	1	-	-	1	12	1	12	2	24
Malaysia	-	-	-	-	1	2	1	2	-	-	-	-	-	-	-	-
Mexico	2	8	2	11	1	1	5	20	-	-	-	-	1	12	1	12
Morocco	1	5	1	6	-	-	2	11	-	-	5	43	1	8	6	51
New Zealand	-	-	-	-	-	-	-	-	-	-	1	6	-	-	1	6
Pakistan	1	12	3	18	-	-	4	30	-	-	4	40	8	88	12	128
Paraguay	-	-	1	7	-	-	1	7	-	-	1	21	1	12	2	33
Peru	-	-	-	-	-	-	-	-	-	-	1	12	-	-	1	12
Philippines	3	3	2	6	-	-	5	9	1	12	5	51	2	13	8	76
Poland	-	-	-	-	-	-	-	-	-	-	10	101	2	14	12	115
Portugal	-	-	2	5	-	-	2	5	-	-	-	-	-	-	-	-
Rhodesia and Nyasaland	-	-	-	-	-	-	-	-	2	12	-	-	-	-	2	12
Romania	-	-	-	-	-	-	-	-	-	-	2	24	5	42	7	66
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	1	12	4	150	5	162
South Africa	-	-	-	-	-	-	-	-	-	-	2	21	1	12	3	33
Spain	-	-	-	-	-	-	-	-	-	-	2	24	-	-	2	24
Sudan	-	-	-	-	-	-	-	-	-	-	2	27	-	-	2	27
Thailand	3	12	3	23	-	-	6	35	2	24	8	79	3	32	13	135
Tunisia	1	7	-	-	-	-	1	7	-	-	5	48	-	-	5	48
Turkey	-	-	8	33	-	-	8	33	1	12	9	78	5	50	15	140
Uganda	-	-	-	-	-	-	-	-	1	8	-	-	-	-	1	8
United Arab Republic	-	-	4	14	-	-	4	14	-	-	3	11	2	18	5	29
Uruguay	-	-	-	-	-	-	-	-	-	-	-	-	1	6	1	6
Venezuela	-	-	-	-	-	-	-	-	-	-	2	22	3	33	5	55
Viet-Nam	-	-	-	-	-	-	-	-	-	-	-	-	2	19	2	19
Yugoslavia	-	-	3	2	-	-	3	2	8	93	7	70	5	38	20	201
TOTAL	30	145	74	344	14	14	118	503	30	285	132	1280	133	1654	295	3219
International Projects																
Americas	6	2	5	3	-	-	11	5	-	-	-	-	-	-	-	-
Asia and Far East	8	14	1	1	-	-	9	15	-	-	-	-	-	-	-	-
Europe	10	5	2	2	-	-	12	7	-	-	-	-	-	-	-	-
Middle East	10	16	-	-	-	-	10	16	-	-	-	-	-	-	-	-
Short-term training courses	-	-	-	-	-	-	-	-	46	116	58	144	-	-	104	260
Research grantees	-	-	-	-	-	-	-	-	-	-	13	46	-	-	13	46
TOTAL	34	37	8	6	-	-	42	43	46	116	71	190	-	-	117	306
GRAND TOTAL	64	182	82	350	14	14	160	548	76	401	203	1470	133	1654	412	3525

Table 8

Recipient countries

Financial summary: 1963

(in thousands of dollars)

Recipient	Experts[a]	Equipment[a]	Fellowships[a]	TOTAL[a]	From EPTA	From Agency	
						Monetary	In kind[a]
Country Programmes							
Afghanistan	14.5	29.1	5.6	49.2	14.5	34.7	-
Albania	-	-	24.7	24.7	-	-	24.7
Argentina	27.4	19.6	40.9	87.9	27.3	42.4	18.2
Austria	10.8	-	5.8	16.6	-	10.8	5.8
Bolivia	3.1	8.3	3.0	14.4	-	14.4	-
Brazil	66.6	22.3	42.8	131.7	49.0	68.7	14.0
Bulgaria	-	-	30.3	30.3	-	14.1	16.2
Burma	18.9	-	-	18.9	-	17.1	1.8
Cambodia	0.1	5.9	-	6.0	-	6.0	-
Ceylon	9.3	6.8	-	16.1	-	16.1	-
Chile	26.0	10.3	7.8	44.2	14.1	30.0	-
China	10.2	-	31.3	41.5	-	10.2	31.3
Colombia	25.7	4.5	7.9	38.1	6.3	23.9	7.9
Congo (Leopoldville)	8.7	-	-	8.7	-	-	8.7
Cuba	-	-	6.4	6.4	-	6.4	-
Czechoslovak Socialist Republic	-	-	21.6	21.6	-	13.3	8.3
Ecuador	-	-	2.4	2.4	2.4	-	-
Ghana	17.3	8.1	6.0	31.4	8.1	23.3	-
Greece	47.4	9.7	13.3	70.4	15.4	40.6	14.4
Haiti	-	0.1	-	0.1	-	0.1	-
Hungary	-	-	25.7	25.7	-	8.0	17.7
Iceland	4.5	3.7	7.0	15.2	-	8.2	7.0
India	6.9	1.1	95.1	103.1	21.7	13.4	68.0
Indonesia	31.6	0.2	53.9	85.7	5.2	40.8	39.7
Iran	53.8	-	54.7	108.5	53.8	30.0	24.7
Iraq	17.7	-	10.1	27.8	-	20.8	7.0
Israel	21.3	11.8	8.4	41.5	8.2	30.7	2.6
Italy	-	-	9.1	9.1	-	6.2	2.9
Ivory Coast	2.1	-	-	2.1	2.1	-	-
Japan	7.8	-	26.3	34.1	-	16.5	17.6
Kenya	-	16.4	-	16.4	-	16.4	-
Korea, Republic of	52.7	10.9	43.0	106.6	22.1	55.7	28.8
Lebanon	8.1	4.3	10.3	22.7	-	15.7	7.0
Malaysia	3.2	4.8	-	8.0	-	4.8	3.2
Mexico	20.4	35.4	1.4	57.1	20.1	34.2	2.9
Morocco	17.1	14.3	13.5	44.9	8.8	34.3	1.8
New Zealand	-	-	2.0	2.0	-	2.0	-
Pakistan	33.6	42.3	62.0	137.9	17.2	72.3	48.4
Paraguay	-	-	2.9	2.9	-	1.5	1.4
Peru	0.1	-	4.0	4.1	0.1	4.0	-
Philippines	25.0	33.2	23.3	81.5	32.7	46.4	2.4
Poland	-	54.3	41.0	95.3	54.3	37.0	4.0
Portugal	29.1	-	-	29.1	-	29.1	-
Rhodesia and Nyasaland	-	18.0	5.4	23.4	23.4	-	-
Romania	-	-	17.0	17.0	-	5.4	11.6
Saudi Arabia	-	-	24.9	24.9	-	3.4	21.5
Senegal	0.3	-	-	0.3	0.3	-	-
South Africa	-	-	12.8	12.8	-	5.8	7.0
Spain	-	-	6.6	6.6	-	6.6	-
Sudan	-	1.8	5.8	7.6	1.8	5.8	-
Thailand	31.2	19.3	54.2	104.7	41.6	44.5	18.6
Tunisia	7.8	9.1	12.4	29.3	7.8	21.5	-
Turkey	31.4	24.8	44.1	100.3	21.6	57.0	21.7
Uganda	-	11.5	4.0	15.5	15.5	-	-
United Arab Republic	25.5	19.6	7.3	52.4	-	47.9	4.5
Uruguay	-	-	0.9	0.9	-	-	0.9
Venezuela	-	-	22.7	22.7	-	7.5	15.2
Viet-Nam	-	7.1	5.5	12.6	-	7.1	5.5
Yugoslavia	1.7	-	56.6	58.3	24.5	24.3	9.5
TOTAL	718.9	468.6	1023.7	2211.2	519.9	1136.9	554.4
International Projects							
Americas	11.5	11.3	21.5	44.3	29.2	15.1	...
Asia and Far East	30.0	19.8	5.9	55.7	50.7	5.0	...
Europe	11.6	2.8	37.9	52.3	17.7	34.6	...
Middle East	26.6	10.9	11.4	48.9	48.9	-	...
TOTAL	79.7	44.8	76.7	201.2	146.5	54.7	...
Miscellaneous charges	5.1	-	-	5.1	0.6	4.5	-
GRAND TOTAL	803.7	513.4	1100.4	2417.5	667.0	1196.1	554.4

a/ Estimated - see Introductory Note 4 to this Annex.

Table 9

Recipient countries

Financial summary: 1958-1963[a]

(in thousands of dollars)

Recipient	Number of years in programme	Experts[b]	Equipment[b]	Fellowships[b]	TOTAL[b]	From EPTA	From Agency	
							Monetary	In kind[b]
Country Programmes								
Afghanistan	5	35.4	81.2	49.0	165.6	48.4	70.6	46.6
Argentina	6	190.9	113.2	245.4	549.5	190.5	165.9	193.1
Austria	6	55.1	13.8	86.0	154.9	-	109.3	45.6
Albania	1	-	-	24.7	24.7	-	-	24.7
Bolivia	1	3.2	8.2	3.0	14.4	-	14.4	-
Brazil	6	241.6	154.8	154.1	550.5	186.7	274.4	89.4
Burma	6	72.9	26.6	55.3	154.8	89.2	29.5	36.1
Bulgaria	4	-	-	135.6	135.6	-	88.9	46.7
Cambodia	2	0.1	5.9	3.0	9.0	-	6.0	3.0
Ceylon	5	84.2	34.2	20.3	138.7	58.5	58.2	22.0
Chile	4	42.1	27.7	45.3	115.1	63.6	35.7	15.8
China	6	87.4	22.1	216.1	325.6	74.1	102.2	149.3
Colombia	3	42.6	4.5	52.6	99.7	32.7	38.2	28.8
Congo (Leopoldville)	1	8.7	-	-	8.7	-	-	8.7
Cuba	1	-	-	6.4	6.4	-	6.4	-
Czechoslovak Socialist Republic	6	-	-	148.1	148.1	-	97.6	50.5
Denmark	4	12.9	-	29.6	42.5	-	31.2	11.3
Ecuador	5	-	-	61.2	61.2	7.6	23.6	30.0
El Salvador	2	-	-	22.7	22.7	10.0	1.7	11.0
Finland	4	0.3	-	31.4	31.7	1.8	7.2	22.7
France	2	-	-	12.5	12.5	-	2.5	10.0
Germany, Federal Republic of	2	-	1.6	1.4	3.0	-	3.0	-
Ghana	2	42.0	8.1	9.5	59.6	11.6	48.0	-
Greece	5	179.4	45.1	147.0	371.5	139.1	128.4	104.0
Guatemala	2	5.8	2.7	19.6	28.1	20.8	-	7.3
Haiti	3	-	5.8	18.1	23.9	-	5.8	18.1
Hungary	6	-	-	184.1	184.1	-	141.0	43.1
Iceland	5	16.9	45.4	12.0	74.3	-	30.3	44.0
India	5	6.9	1.1	226.2	234.2	60.7	54.6	118.9
Indonesia	6	129.8	29.9	568.9	728.6	82.9	158.0	487.7
Iran	5	178.0	4.6	212.4	395.0	145.9	141.4	107.7
Iraq	4	71.6	12.4	195.5	279.5	41.8	103.5	134.2
Israel	5	69.6	81.7	55.4	206.7	71.7	63.5	71.5
Italy	6	9.0	-	155.7	164.7	-	91.3	73.4
Ivory Coast	1	2.1	-	-	2.1	2.1	-	-
Japan	6	35.0	-	303.0	338.0	51.7	111.5	174.8
Kenya	2	-	18.7	-	18.7	2.3	16.4	-
Korea, Republic of	6	135.4	44.9	334.9	515.2	98.1	217.2	199.9
Lebanon	3	8.1	4.3	10.3	22.7	-	15.7	7.0
Malaysia	1	3.2	4.8	-	8.0	-	4.8	3.2
Mali	1	2.8	-	-	2.8	2.8	-	-
Mexico	5	94.7	52.5	84.8	232.0	58.8	130.8	42.4
Monaco	3	-	-	4.2	4.2	-	4.2	-
Morocco	4	23.5	18.5	47.6	89.6	19.4	38.9	31.3
Netherlands	3	-	-	15.7	15.7	-	10.7	5.0
New Zealand	4	-	-	25.2	25.2	-	15.0	10.2
Nicaragua	1	-	-	5.8	5.8	-	5.8	-
Norway	3	-	-	8.1	8.1	-	5.2	2.9
Pakistan	6	169.5	103.1	170.1	442.7	143.5	193.8	105.4
Paraguay	4	10.5	4.7	15.2	30.4	-	26.0	4.4
Peru	5	0.1	-	36.6	36.7	14.3	4.0	18.4
Philippines	5	93.0	121.5	220.4	434.9	183.1	131.9	119.9
Poland	6	10.0	54.3	325.5	389.8	65.7	208.0	116.1
Portugal	3	31.0	46.0	18.1	95.1	-	38.7	56.4
Rhodesia and Nyasaland	1	-	18.0	5.4	23.4	23.4	-	-
Romania	4	-	-	81.2	81.2	-	34.1	47.1
Saudi Arabia	1	-	-	24.9	24.9	-	3.4	21.5
Senegal	3	4.7	31.1	2.6	38.4	38.4	-	-
Spain	6	-	-	41.5	41.5	-	19.3	22.2
South Africa	5	-	-	96.6	96.6	-	40.7	55.9

Recipient	Number of years in programme	Experts[b]	Equipment[b]	Fellowships[b]	TOTAL[b]	From EPTA	From Agency	
							Monetary	In kind[b]
Sudan	3	7.4	12.6	11.9	31.9	5.3	26.6	-
Sweden	1	-	-	8.8	8.8	-	8.8	-
Switzerland	5	-	-	18.2	18.2	-	11.7	6.5
Thailand	6	248.7	36.8	282.9	568.4	216.7	234.8	116.9
Tunisia	4	44.0	27.2	37.3	108.5	38.8	51.0	18.4
Turkey	6	197.0	109.3	203.1	509.4	102.9	246.1	160.4
Uganda	2	3.4	14.2	7.0	24.6	24.6	-	-
United Arab Republic	6	82.2	121.3	311.8	515.3	63.6	219.4	232.3
Uruguay	2	-	2.2	6.7	8.9	8.0	-	0.9
United States of America	1	-	-	2.6	2.6	-	2.6	-
Venezuela	5	21.6	30.7	83.3	135.6	15.8	67.2	52.6
Viet-Nam	4	-	24.3	25.0	49.3	10.4	20.4	18.5
Yugoslavia	6	41.5	19.1	417.5	478.1	179.3	173.8	125.0
TOTAL		2855.8	1650.7	6501.9	11 008.4	2706.6	4470.8	3831.0
International Projects[c]								
Africa	1	...	...	...	4.2	-	4.2	- [d]
Americas	4	...	...	...	100.2	29.2	71.0	-
Asia and Far East	3	...	...	...	71.0	50.7	20.3	-
Europe	3	...	...	...	152.1	56.8	95.3	-
Middle East	3	...	...	...	123.0	100.9	22.1	-
TOTAL		...	...	...	450.5	237.6	212.9	-
GRAND TOTAL		...	...	...	11 458.9	2944.2	4683.7	3831.0

a/ Several figures from previous years have been brought up to date due to adjustments resulting from the liquidation during 1963 of unliquidated obligations carried forward from previous years.

b/ Estimated - see Introductory Note 4 to this Annex.

c/ Breakdown by types of assistance not available for international projects.

d/ No estimate can be made of the values of contributions in kind to international projects.

RESOURCES UNDER SPECIAL FUND PROJECTS

(in thousands of dollars)

A. For which the Agency was Executing Agency

COUNTRY	Commencement Date	Duration	PROJECT ALLOCATIONS					1963 ALLOTMENTS	
			Special Fund Contribution for			Governmental Contribution (Counterpart)	Total	Received by Agency	Obligated by Agency
			Preliminary Expenses	Agency Overhead	In-country Expenditure				
Philippines	February 1964[a]	27 months	0	38	440	262	740	6	6
Yugoslavia	April 1963	36 months	3	32	511	1246	1792	215	196
Totals			3	70	951	1508	2532	221	202

a/ Although the Plan of Operation formally entered into force only in February 1964, with the approval of the Special Fund some steps in the actual implementation were already undertaken beginning in October 1963 (see para. 49 below).

B. For which the Agency was sub-contractor

COUNTRY	EXECUTING AGENCY	TOTAL SUB-CONTRACT	COST OF AGENCY WORK IN 1963
Greece	FAO	17	b/
Jordan	UN	1	0
Turkey	FAO	6	2
Totals		24	2

b/ Less that $100 was expended by the Agency in connection with this sub-contract in 1963, since it had been almost fully executed in previous years.

ANNEX II

CRITERIA FOR THE EXAMINATION OF REQUESTS FOR THE PROVISION OF TECHNICAL ASSISTANCE IN SCIENTIFIC DOCUMENTATION

The Secretariat is guided by the following criteria in evaluating requests for technical assistance in the form of scientific documentation and in implementing such projects [1]:

A. The scope of the State's nuclear energy programme;

B. The existence of a national scientific documentation or information centre, whether established by UNESCO or otherwise, and the extent to which it meets the requirements of the nuclear energy programme;

C. The location of the national documentation centre with respect to that of the atomic energy commission;

D. The importance and priority accorded to the project by the Government in relation to the other requests it has made to the Agency for technical assistance;

E. The standard of the library and documentation facilities at the atomic energy commission;

F. The availability of nationals trained in techniques of scientific documentation;

G. The effective co-ordination of the assistance requested from the Agency with the fellowships for study in scientific documentation which the country is receiving;

H. The avoidance of duplication in the assistance in scientific documentation being provided by UNESCO or other organizations;

I. The proportion of the funds for such a project which may be devoted to the provision of current periodicals shall not exceed 20%.

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[1] See para. 7 of the report.