



International Atomic Energy Agency



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# THE LONG-TERM PROGRAMME FOR THE AGENCY'S ACTIVITIES

# An estimate by the Director General of the financial implications

When the Board of Governors was discussing the draft of the long-term programme for the Agency's activities which is now before the General Conference in document GC(VII)/227, it had before it an estimate by the Director General of the financial implications of implementing the programme. During the discussion it was suggested that it would be useful if the Director General were to provide the General Conference with similar information for its consideration of the programme. Such a financial estimate is accordingly attached hereto.

# AN ESTIMATE OF THE FINANCIAL IMPLICATIONS OF IMPLEMENTING THE LONG-TERM PROGRAMME

#### INTRODUCTION

1. In preparing the present broad estimate of the financial implications of implementing the long-term programme for the Agency's activities, it has, of course, been necessary to make certain assumptions, the reliability of which may be challenged. Further, if estimates, however tentative, for the period up to and including 1970 are committed to paper as early as 1963, there is a danger that their acceptance in principle may be interpreted as advance approval of budget levels which after all are subject to much greater refinement and scrutiny at the time when annual budgets are prepared and examined.

2. It is hoped therefore that the financial outline in the Annex and the assumptions on which it is based will be taken as no more than general guides to probabilities. The Secretariat would certainly not assume that any of the figures were target figures which should necessarily be aimed at.

### GENERAL

3. In explanation of the estimates contained in the Annex, which are summarized in Table 1 below, some comparisons with the budgets of other organizations and the United Nations Expanded Programme of Technical Assistance (EPTA) over a period of years are given in paragraphs 4 to 10 below.

77	Regular I	Budget	Operational	l Budget	Total	
Year	Estimate	%	Estimate	%	Estimate	%
1963	7 338	-	2 495	<u> </u>	9 833	-
1964	7 445	1.5	2 670	7.0	10 115	2.9
1965	7 786	4.6	2 850	6.8	10 636	5.2
1966	8 033	3.2	3 050	7.0	11 083	4.2
1967	8 341	3.9	3 445	13.0	11 786	6.3
1968	8 689	4.2	3 675	6.7	12 364	4.9
1969	8 863	2.0	3745	2.0	12 608	2.0
1970	9 159	3.3	4 000	6.8	13 159	4.4
Increase over seven years	1 821	24.8	1 505	60.3	3 326	<b>33,</b> 8
Annual average	260	3.5	215	8.6	475	4.8

Table 1

# Summary of estimated percentage increases in Agency resources<sup>a/</sup>

(in thousands of dollars)

a/ Percentages represent increase over the preceding year.

4. It will be seen that, as far as the Regular Budget is concerned, it is estimated that by 1970 requirements will be approximately \$9 159 000. This represents an average annual rate of growth of three and a half per cent which does not appear unrealistic. 5. In this connection, it may also be useful to have a look at the past, and for this purpose an analysis based on reports by the Advisory Committee on Administrative and Budgetary Questions of the General Assembly of the United Nations on the administrative budgets of the specialized agencies of the United Nations is given in Appendix 1. This reflects the annual increases in the budgets of the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) during the period 1953 to 1963 and presents a comparison with the progress of the Agency's budget since 1959 as shown in Table 2 below.

	A	nalysis o	f the gro	wth of buc	lgets
		(in tho	usands of	f dollars)	
		Bud	get		Annual average growth
Organization	1953	1959	1963	1964	(%)
FAO	5 064	10 530	15 754		21.1
WHO	8 113	15 379	29 956	-	26.9
UNESCO	7 973	12 591	19 492	-	14.5
AGENCY	-	4 495	7 338	7 445	13,1

6. The growth of the Agency's budget during the initial five years of its existence appears, therefore, to be considerably smaller both in amount and in percentage than that of the three other agencies at a time when they were already well established. The foregoing comparisons provide, of course, no grounds for the assumption that the Agency's activities and the financial requirements should expand at the same rate as those of the other agencies. The figures are provided solely to underline the conservative nature of the forecast for the Agency's Regular Budget as presented in Table 1 above.

7. With regard to the Operational Budget, reference can be made to the rate at which resources available to EPTA have grown in the past, as demonstrated in the following table:

Table	3
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# EPTA pledges (in millions of dollars)

Year	Amount	Percentage increase (decrease) over preceding year	Number of pledging countries
1950-51	20.0	-	54
1952	18.8	(6.2)	65
1953	22.3	18.7	69
1954	25.0	12.1	73
1955	27.6	10.4	70
1956	28.8	4.4	77
1957	30.8	6.9	84
1958	31.1	0.8	86
195 <b>9</b>	29.5	(5.1)	83
1960	33.8	14.6	85
1961	41.6	22.9	91
1962	45.4	10.9	93
Increase over eleven years	25.4	127.0	
Annual average	2.3	11.5	

8. Similarly, no assumption can be made that a comparable growth in voluntary contributions to the Agency's resources is possible, although, as in the case of EPTA, the number of contributing countries would increase. Nevertheless, it has been assumed that Member States of this Agency, many of which have contributed to the growth of EPTA, will be prepared to support an annual growth in the Operational Budget by approximately seven per cent, and it is on this basis that the figures presented in the Annex and in Table 1 above have been developed. The regular progression of annual increases by seven per cent is interrupted only in the two-year period 1967-68 when, for the reasons given in paragraph 11, section 7(e) below, an extraordinary increase may be foreseen which is, however, assumed to be covered largely by special voluntary contributions.

9. In connection with the Operational Budget, it may also be useful to examine the volume of requests for assistance which the Agency has received in the past. For this purpose, some additional information is provided in Appendix 2.

10. As shown in the Annex and in Table 1 above the total combined regular and operational resources of the Agency are therefore estimated to increase between 1963 and 1970 from approximately \$9.83 million to \$13.16 million, that is by approximately \$3.33 million or 33%, representing an over-all annual growth of 4.83%.

# REGULAR BUDGET

11. Separate estimates for each appropriation section and the assumptions on which they are based are given below:

# 1. The General Conference

The estimates for the General Conference are not expected to change substantially; only marginal increases have been provided for to cover contingent cost increases. The only significant economy which could conceivably occur would be through a decision providing for biennial programmes and budgets, so that the General Conference would need to meet only once every two years.

#### 2. The Board of Governors

It is assumed that costs will remain stable at \$375 000 throughout the whole period. If a decision to hold biennial sessions of the General Conference was taken it could lead to an increase in the number of meetings and expenses of the Board in the years when the General Conference does not meet, thus offsetting part of the possible savings.

# 3. Panels and committees

It is assumed that some increase in the provision for panels will be necessary, but it is envisaged to provide not more than \$200 000 annually for this purpose by 1970. The increase from \$170 000 in 1963 to \$200 000 in 1970 has been staggered to provide for \$10 000 more in each of the three two-year periods 1965-66, 1967-68, 1969-70.

#### 4. Special missions

Only a nominal increase of \$10 000 is provided over the whole period. The assumption is that there will be more follow-up and more power survey missions in the last two two-year periods, but that such need for missions will be counter-balanced by a decrease in preliminary assistance missions which, by that time, will be less required.

#### 5. Seminars, symposia and conferences

It is assumed that the programme of conferences involving expenditure of \$180 000 annually is the maximum that the Agency should attempt and the estimates do not go beyond this figure.

# 6. Distribution of information

The assumption in this case is also that annual expenditure of \$250 000 over the whole period would meet all the Agency's requirements, particularly since the Publications Revolving Fund is expected to meet such additional expenditure as may be necessary for the production of more copies of publications for sale.

# 7. Scientific and technical services and laboratory charges

This appropriation covers five separate items:

- (a) Research contracts;
- (b) Monaco project;
- (c) Technical contracts;
- (d) Health and safety services; and
- (e) Laboratory charges.

#### (a) Research contracts

Bearing in mind the comments made both in the Board and in the General Conference, it is assumed that an expansion of the cost of Agency research contracts under the Regular Budget beyond \$750 000 annually by 1970 will not take place. This would provide for some increase in research on the applications of isotopes and research with reactors and if necessary for some reduction in other research fields. On the other hand, research contracts under the operational programme are expected to increase considerably.

#### (b) Monaco project

It is assumed that the Monaco operation will continue at an annual expenditure level of between \$120 000 and \$125 000 up to and including 1968, a maximum of \$85 000 to be provided from the Regular Budget. No provision has been made beyond 1968.

(c) Technical contracts

With the anticipated necessity to provide for contractual services in respect of nuclear data, the level of these contracts is expected to be at \$100 000 for the whole period.

### (d) Health and safety services

It is assumed that during the biennium 1965-66 annual sums of \$25 000 will be required to provide emergency stand-by equipment, but that only minimal requirements for such equipment need be foreseen after 1966.

# (e) Laboratory charges

In 1965-66 it is assumed that in respect of the Laboratory only statutory increases of salary increments for personnel will have to be provided for and that minor increases only will occur in other items such as common services, supplies, consultants' services and equipment.

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During 1967-68, it may be necessary to face the need for enlarging the building at an estimated cost of \$350 000, half of which sum is included in the estimates for each of the two years. Further, it will be during these two years that additional staff may have to be provided. For the purpose of these estimates, it is assumed that the enlarged facilities will require additional personnel of 12 Professional, 12 General Service and 8 Maintenance and Operatives Service staff at a total cost of \$155 000. Again, half of this sum is provided in each of the two years. In addition, a slightly increased figure of \$75 000 each year is provided for additional equipment.

Only statutory increases in respect of staff costs are provided for in 1969-70, but because of the larger number of staff and expanded premises, the provisions for general services and supplies have been somewhat increased. The sum required for scientific equipment, on the other hand, is reduced to \$50 000.

Assuming that the ratio of charges which falls on the Regular Budget remains substantially unchanged between 1964 and 1970, the breakdown of charges between the Regular and the Operational Budgets would result in the following estimates (in thousands of dollars):

Year	Regular Budget	Operational Budget	Total
1965	371	247	618
1966	378	252	630
1967	477	493	970
1968	552	543	1 095
1969	556	370	926
1970	568	379	947

All construction costs during 1967-68 are included in the Operational Budget. It is hoped to obtain the necessary funds through special voluntary contributions.

The total requirements under this particular appropriation would therefore rise from \$1 110 000 in 1963 to \$1 418 000 by 1970. The increase of \$308 000 equals 28% or an annual rate of growth of four per cent over the period.

# 8. Salaries and wages

It is difficult to forecast a reasonable estimate for this appropriation section. It seems necessary, however, to assume that at some time between now and 1970 some staffing increases may be required, particularly in respect of isotopes, reactors (nuclear power) and, possibly, research. The figures in the Annex are based on the assumption that in 1965 there will be no change in staffing and that therefore no more than statutory increases for salary increments need be provided. In 1966, however, it is anticipated that in respect of the three services cited above, seven Professional and four General Service posts may have to be added and an additional sum of \$75 000 is included. This pattern is repeated in the remaining two biennial periods. In addition, it is assumed that requirements for consultants' services will be \$120 000 in 1970.

# 9. Common staff costs

Experience indicates that common staff costs represent a percentage of salaries and wages and this appropriation therefore rises in the same rhythm as the previous one.

# 10. Duty travel of staff

It is believed that a maximum provision of \$200 000 should be foreseen by 1970. The estimates therefore provide for an annual rise of \$10 000 in this appropriation; the bulk of the increase is estimated to be required for increased travel to provide advisory services to developing Member States.

# 11. Representation and hospitality

A fixed sum of \$35 000 annually has been provided for the whole period.

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

It is not anticipated that requirements by 1970 will exceed \$500 000 per annum. The estimates therefore provide for a staggered increase up to this amount to cover the growth in certain activities and the additional requirements of a slightly increased staff.

# OPERATIONAL BUDGET

12. Under the Operational Budget no attempt has been made to forecast the breakdown of expenditure as between the various programme items financed from this budget. While it is possible to foresee certain general trends in the needs and requests of developing countries as reflected in the relevant parts of the long-term programme, it would be unrealistic to assess, for several years in advance, the relative cost of such programmes which are based essentially on requests by Member States, as for instance fellowships, provision of experts or of equipment. An attempt to introduce detailed evaluations would have to be either arbitrary or based on a straight extrapolation of past and present costs of each programme. Moreover, it is not possible to foresee what part of such programmes may be financed over the years to come, by EPTA or the Special Fund. In the circumstances it seemed sounder to provide only an indication of a desirable growth of total resources to meet the needs of the various programmes financed at present from the Operational Budget, taking as a starting point the evaluation of all voluntary contributions in cash as well as in kind put at the disposal of the Agency by Member States in 1962, and applying to that amount an expected rate of growth of seven per cent as explained in paragraph 9 above.

#### ANNEX

#### ESTIMATED FINANCIAL IMPLICATIONS OF THE LONG-TERM PROGRAMME

	1962												
		1963 Budget	1964 Estimates	Total 1963-64	1965 Estimates	1966 Estimates	Total 1965-66	1967 Estimates	1968 Estimates	Total 1967-68	1969 Estimates	1970 Estimates	Total 1969-70
. REGULAR BUDGET										_			
1. The General Conference	266	275	261	536	275	275	550	280	280	560	285	285	570
2. The Board of Governors	420	395	365	760	375	375	750	375	375	750	375	375	750
Sub-total	686	670	626	1 296	650	650	1 300	655	655	1 310	660	660	1 320
3. Panels and committees	140	170	170	340	180	180	360	190	190	380	200	200	400
4. Special missions	42	70	70	140	70	70	140	80	80	160	80	80	160
5. Seminars, symposia and conferences 6. Distribution of information	95	188	120	308	160	160	320	180	180	360	180	180	360
<ol> <li>Distribution of information</li> <li>Scientific and technical services and</li> </ol>	246	245	223	468	250	250	500	250	250	500	250	250	500
laboratory charges	882	1 110	1 203	2 313	1 281	1 288	2 569	1 362	1 437	2 799	1 406	1 418	2 824
Sub-total	1 405	1 783	1 786	3 569	1 941	1 948	3 889	2 062	2 137	4 199	2 116	2 128	4 244
8. Salaries and wages	2 738	3 063	3 193	6 256	3 264	3 399	6 663	3 537	3 720	7 257	3 836	4 033	7 869
9. Common staff costs	1 093	1 220	1 230	2 450	1 296	1 366	2 662	1 407	1 482	2 889	1 526	1 603	3 129
10. Duty travel of staff	134	178	150	328	150	160	310	170	180	350	190	200	390
11. Representation and hospitality	32	33	32	65	35	35	70	35	35	70	35	35	70
Sub-total	3 997	4 494	4 605	9 099	4 745	4 960	9705	5 149	5 417	10 566	5 5 87	5 871	11 458
<ol> <li>Common services, equipment and non-technical supplies</li> </ol>	358	391	428	819	450	475	925	475	480	955	500	500	1 000
TOTAL REGULAR BUDGET	6 446	7 338	7 445	14 783	7 786	8 033	15 819	8 341	8 689	17 030	8 863	9 159	18 022
I. OPERATIONAL BUDGET					·								
Laboratory	226												
Monaco project	62												
Theoretical physics centre	~												
Exchange and training	1 031												
Technical assistance	735												
Research contracts	278												
TOTAL OPERATIONAL BUDGET	2 332	2 495	2 670	5 165	2 850	3 05 0	5 900	3 445	3 675	7 120	3 745	4 000	7 745
GRAND TOTAL	8 778	9 833	10 115	19 948	10 636	11 083	21 7 19	11 786	12 364	<b>24</b> 150	12 608	13 159	25 767

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# Appendix 1

# COMPARISON OF ANNUAL INCREASES IN THE ADMINISTRATIVE BUDGETS OF OTHER ORGANIZATIONS AND THE AGENCY

	נ	FAO	Ţ	WHO	UNESCO		Agency	
Year	Total budget (\$)	Percentage increase	Total budget (\$)	Percentage increase	Total budget (\$)	Percentage increase (decrease)	Total budget (\$)	Percentage increase
1953	5 064 399		8 112 605		7 972 937	-	~	
1954	5 500 268	8,6	8 134 514	0.3	9 019 408	13.1	-	-
1955	5 974 192	8.6	9 275 300	14.0	9 150 533	1.5	-	-
1956	6 397 561	7.1	9 982 794	7.6	11 437 197	25.0	-	-
1957	7 006 150	9,5	12 091 421	21.1	10 612 728	(7.2)	-	_
1958	9 146 807	30,6	13 960 820	15.5	12 316 482	16.1	-	-
1959	10 530 182	15,1	15 378 981	10.2	12 590 916	2,2	4 494 610	-
1960	10 591 953	0.6	17 121 583	11.3	13 507 868	7.3	5 158 145	14.8
1961	11 105 665	4.9	19 201 885	12.2	16 058 525	18.9	6 030 557	16.9
1962	15 431 010	39.0	24 863 800	29.5	16 497 846	2.7	6 446 139	6.9
1963	15 753 990	2,1	29 956 000	20.5	19 492 000	18.2	7 337 500	13.8
1964 (estimate)	-	_	-	-	-	_	7 444 500	1.5
Increase over ten years (Agency five years)	10 689 591	211.1	21 843 395	269,2	11 519 063	144.5	2 949 890	65.6
Annual average	1 068 959	21.1	2 184 339	26.9	1 151 906	14.5	589 978	13.1

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# Appendix 2

#### OPERATIONAL NEEDS AND RESOURCES IN PAST YEARS

1. The projection into the future of countries' probable needs for assistance in atomic energy is a difficult task, both because of the rapidity with which unpredictable technological facts can change the economic picture and also because Governments' development plans may change in emphasis. In the latter respect, it should be remembered that assistance is provided by the Agency only in response to requests by the countries concerned.

2. Some light may be shed, however, on the order of magnitude of the needs of developing countries and of the resources required to meet them in the future, by the rate of growth in the past years of requests made to the Agency and of the value of assistance approved.

3. The following table gives a comparison of the value of requests for experts and equipment to be met from the Agency's own resources and the corresponding value of assistance approved:

# Table I

# Assistance in the form of experts and equipment

# (in thousands of dollars)

Year	Value of requests as received	Value of assistance approved	Percentage of requests met
1959	690.0	619.4	89.6
1960	1 150.0	599.2	52.1
1961	1 277.6	513.1 ,	40.4
1962	1 530.0	$757.6^{a/}$	49.5
1963	1 750.0	856.7 <sup>a</sup> /	48.9

<u>a</u>/ Past experience suggests that only 80% of this amount will actually become available.

4. It will be noted that there is a significant increase in requests without a corresponding growth in the amount of assistance approved. It might reasonably be assumed that the need for experts and equipment will continue to increase as more Member States will begin to be active in atomic energy; those Member States already engaged in such activities will have a larger number of projects, some of which at higher costs.

5. The needs for training in the form of fellowships are illustrated by the following table:

# Table II

Year <u>a</u> /	Number of fellowships	Numbe	Percentage of			
	requested	Type I	Type II	EPTA	Total	requests implemented
1958	287	65	82	_	147	51.0
1959	577	132	118	64	314	54.4
1960	649	186	141	72	399	61.5
1961	648	148	165	31	344	53.1
1962	563	161	172	77	410	73.0

# Assistance in the form of fellowships

The figures given for the years 1958-1961 are correct as at 31 December a/ 1961; those for 1962 are given as at 15 October 1962.

It can be seen from the table above that, as far as fellowships are concerned, it 6. proved possible in recent years to satisfy a slightly higher proportion of requests than in the case of other types of assistance. This was due to a large extent to Type II fellowships.

As to monetary resources, it would be of interest to show the rate of growth of 7. moneys in the General Fund of the Agency. It must, however, be remembered that the General Fund is being used to finance not only expenditures relating to training, experts and equipment, but also those relating to laboratories and research contracts.

# Table III

	to the General Fund of the Agency	-
Year	Pledges (\$)	Indices
1958	129 140	
1959	1 183 044	100.0
1960	996 103	84.2
1961	1 261 200	106.6
1962	1 355 566	114.5
1963	1 400 000 (estimated)	118.3

Voluntary contributions pledged by Member States

The total means available for experts, visiting professors, training courses, 8. fellowships and equipment, in the form of allocations from the General Fund and resources in kind (gifts and Type II fellowships) as well as EPTA allocations, are given in Table IV below.

#### Table IV

Te	otal resources for the exchange an	Agency's techn d training prog		and
	(in tho	usands of dollar	rs)	
Year	Allocated from the General Fund	Resources in kind	EPTA allocations	Total
1959	798.4	1 316.7 <sup>a</sup> /	304.6	2 419.7
1960	1 044.7	1 206.1	639.4	2 890.2
1961	1 015.7	1 083.3	808.6, ,	2 907.6
1962	1 122.2 ,	897.0	841.4 <sup>b</sup> /	2 860.6
1963	1 319.0 <sup>c</sup> /	<u>d</u> /	1 053.0 <u>e</u> /	2 372.0

 $\underline{a}/$  Includes a contribution of \$600 000 for the construction of the Laboratory from the USA.

b/ Includes an estimated \$130 000 for "contingency" authorizations.

c/ Pledged as at 30 April 1963.

d/ Estimate not possible at time of writing.

<u>e</u>/ Estimate based on 1963 requests, plus \$89 600 probable "contingency" authorizations.

9. Finally, it is also relevant to see what was the rate of growth in past years of the total resources put at the disposal of EPTA and the Special Fund for all technical assistance programmes.

#### Table V

# Total resources for EPTA and Special Fund programmes

# (in millions of dollars)

Year	Resources		Indices	
	EPTA	Special Fund	EPTA	Special Fund
1959	29.5	25.8	100.0	100.0
1960	33.8	38.8	114.6	150.4
1961	41.6	48.1	141.0	186.4
1962	44.1 ,	60.1	149.4 ,	232.9
1963	48.8 <u>a</u> /	<u>b</u> /	165.4 <u>a</u> /	<u>b</u> /

a/ Estimate only.

b/ Estimate not possible at time of writing.