

THE AGENCY'S BUDGET FOR 1976

GC(XIX)/550

Printed by the
International Atomic Energy Agency
in Austria - August 1975



INTERNATIONAL ATOMIC ENERGY AGENCY

CONTENTS

Paragraphs

List of abbreviations

INTRODUCTION

1 - 27

THE CONSOLIDATED BUDGET

THE REGULAR BUDGET

THE OPERATIONAL BUDGET

EXTRABUDGETARY RESOURCES

THE PROGRAMME BUDGET

A.	Policy-making organs	A. 1 - A. 3
B.	Executive management and technical programme planning	B. 1 - B. 5
C.	Technical assistance and training	C. 1 - C. 7
D.	Food and agriculture	D. 1 - D. 10
E.	Life sciences	E. 1 - E. 20
F.	Physical sciences	F. 1 - F. 9
G.	The Laboratory	G. 1 - G. 12
H.	International Centre for Theoretical Physics	H. 1 - H. 8
I.	Nuclear power and reactors	I. 1 - I. 32
J.	Nuclear safety and environmental protection	J. 1 - J. 38
K.	International Laboratory of Marine Radioactivity	K. 1 - K. 8
L.	Information and technical services	L. 1 - L. 20
M.	Nuclear explosions for peaceful purposes	M. 1 - M. 11
N.	Safeguards	N. 1 - N. 18
O.	Administration	O. 1 - O. 12
P.	General services	P. 1 - P. 9
Q.	Service activities	Q. 1 - Q. 12
R.	Adjustment of programme cost estimates	R. 1

ANNEXES

- I. Conferences, symposia and seminars
- II. Technical committees and advisory groups
- III. Organizational chart
- IV. The manning table
- V. Draft resolutions
 - A. Regular Budget appropriations for 1976
 - B. Operational Budget allocations for 1976
 - C. The Working Capital Fund in 1976
- VI. IAEA/UNEP collaboration - status on 1 July 1975

LIST OF ABBREVIATIONS

ACABQ	Advisory Committee on Administrative and Budgetary Questions of the General Assembly of the United Nations
Agency	International Atomic Energy Agency
AGRIS	Agricultural Information System
Board	Board of Governors (of the Agency)
CCAQ	Consultative Committee on Administrative Questions
CINDA	Computer Index of Neutron Data
D	Director
DDG	Deputy Director General
DG	Director General
EURATOM	European Atomic Energy Community
FAO	Food and Agriculture Organization of the United Nations
GS	General Service category (staff)
IAEA	International Atomic Energy Agency
ICSU	International Council of Scientific Unions
IG	Inspector General
IIASA	International Institute for Applied Systems Analysis
INIS	International Nuclear Information System
Joint FAO/IAEA Division	Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture
M&O	Maintenance and Operatives Service (staff)
Monaco Laboratory	International Laboratory of Marine Radioactivity at Monaco
NPT	Treaty on the Non-Proliferation of Nuclear Weapons (reproduced in document INFCIRC/140)
P	Professional category (staff)
PNE	Nuclear explosions for peaceful purposes
SIDA	Swedish International Development Authority
Trieste Centre	International Centre for Theoretical Physics at Trieste
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
WHO	World Health Organization
WMO	World Meteorological Organization

NOTES

1. All sums of money are expressed in United States dollars.
2. Unless otherwise indicated by footnote, round brackets are used in financial tables to indicate decreases, and in other tables to indicate the change in the situation from 1975, as shown in the budget for that year (GC(XVIII)/526 and Mod.1).

INTRODUCTION

General

1. In accordance with Article XIV.A of the Statute, the Board of Governors hereby submits to the General Conference the budget estimates for 1976 and requests it to adopt the draft resolutions set forth in Annex V.

2. The estimates are based on the plans for 1976 in the Agency's Programme for 1975-80 and Budget for 1975[1]. Only changes in the plans for 1976, including the additional activities proposed, are described in the present document, which complements documents GC(XVIII)/526 and Mod.1, to many paragraphs of which there are references in the form "526/..." or "526/Mod.1/..." - for example, "526/A.2 to A.5". Following the established pattern, the detailed plans for 1977-78 will be presented next year in the programme for 1977-82.

Format

3. The structure and presentation of the budget estimates for 1976 are essentially the same as those of the Programme for 1975-80. As a further step towards the objective of showing in all cases the full costs attributable to each programme, an attempt has been made in the present document to apportion the costs of computer services also. In the case of the Laboratory, costs in support of other programmes are shown under "Food and agriculture", "Life sciences" and "Physical sciences". It is planned that ultimately all Laboratory costs will be apportioned to the programmes supported, in a manner similar to the treatment now accorded to the Laboratory's safeguards support activities.

Programme trends

4. In the field of technical assistance an increase in the amount of the General Fund as well as in the number of UNDP projects executed by the Agency has brought about a 40-80% increase during the past two years in the scope of the main activities: fellowships, training courses and procurement of equipment. A strengthening of manpower in the respective Sections of the Division of Technical Assistance was found necessary in order to ensure the continuation of the efficient implementation of these activities.

5. In the "Food and agriculture" programme, the work on nitrogen residues in soil will be further expanded from the point of view of the efficient use of nitrogen as a fertilizer and its polluting effects on the environment.

6. Taking into account the decisive role that the availability of reliable and, if possible, low-cost instruments of sound design may have on progress in the applications of nuclear methods in medicine in developing countries, it is proposed to launch within the "Life sciences" programme a project aimed at the formulation of a set of recommendations addressed to the manufacturers of nuclear instruments and to the nuclear medicine centres in developing countries. It is planned to ensure close co-operation in this project with WHO, with major research and development centres and with manufacturers in Member States.

7. It is also planned in the same programme to initiate a series of projects, each of several years' duration, by which the Agency expects to promote the application of nuclear methods in environmental research. In implementing this new activity, the Agency will concentrate its efforts on cases where nuclear techniques are clearly superior to other methods.

[1] GC(XVIII)/526 and Mod.1.

8. By the end of 1976, the Safeguards Analytical Laboratory, located in the Agency's Seibersdorf Laboratory, will have been in operation one full year. During the period 1975-76, a co-operative system of analytical work in the safeguards verification programme between the Safeguards Analytical Laboratory and the network of analytical laboratories in Member States will be established.

9. The Ad Hoc Consultative Committee set up to review the programme of the International Centre for Theoretical Physics and the Scientific Council of the Centre recommended that particle physics, solid state physics and applicable mathematical sciences should constitute major permanent disciplines of the Centre and that work on these subjects should be financed from those portions of the Centre's budget which are funded by UNESCO, the Agency and the Italian Government. The Director General, after consultations with the Agency's governing bodies, will seek to obtain increased financial contributions from other sponsors for the Centre's expanded programme.

10. In the "Nuclear power and reactors" programme, preparations will continue in 1976 for the large international conference on nuclear power and its fuel cycle to be held in May 1977 in Salzburg, Austria. Contrary to many previous international conferences which concentrated on the promotional aspects of nuclear power, this conference would deal with general guiding policies for the utilization of nuclear power both in developed and developing countries. Those items on the conference's agenda which relate to the integrated fuel cycle will be of particular interest to countries already carrying out a nuclear power programme. As regards the situation in developing countries it is expected that the conference will review factors affecting the successful introduction of nuclear power as well as constraints in its development involving, for example, financing and the availability of trained personnel.

11. A study will be initiated to assess the economic, environmental and selected technical features of regional nuclear fuel centres, including safeguards and physical security aspects. The results of this study should contribute to the formulation by Member States of a fuel reprocessing and waste management strategy based on international co-operation.

12. The activities of the "Nuclear safety and environmental protection" programme will continue to focus on the elaboration of codes and guides for nuclear power plants and on aspects of technology for the treatment, storage and disposal of radioactive wastes from nuclear facilities.

13. It is planned to intensify co-operation with IIASA in regard to risk assessment as well as in quantification and quantified comparison of the environmental impact of alternative energy technologies. Co-operation will also be sought with WHO and UNEP.

14. The positive results achieved in the gradual expansion of subject scope and services of INIS during the five years of its operation have led to a proposal to broaden its functions in 1976 to include the publication of an international nuclear science abstracts journal (INSA), the production and distribution of tapes which would include machine-readable abstracts, and the provision of an economic, reliable and rapid service for the delivery of all documents reported to INIS through the Agency's clearing-house. The implementation of these functions will require a joint effort by the Agency and Member States, since the latter are expected to ensure input to INIS in machine-readable form.

Adjustments made in the budget estimates and manning table for 1975

15. Since the Agency's Programme for 1975-80 and Budget for 1975 were approved, various measures affecting the budget estimates have been taken. To permit meaningful comparison with the budget estimates for 1976, a "1975 Adjusted budget" has been drawn up. The reasons for the adjustments are set out below.

16. The United States dollar-Austrian schilling exchange rate was more favourable at the time when the initial budget estimates for 1975 were being prepared than at the time when they were approved by the General Conference. To compensate for this, an amount of \$2.8 million was appropriated for the adjustment of programme cost estimates[2]. Following the recent changes in the dollar-schilling exchange rate, the "1975 Adjusted budget" has been drawn up on the basis of a United Nations exchange rate of 18.50 schillings to the dollar, the initial budget estimates for 1975 being adjusted by apportionment of the amount of \$2.8 million to various programmes.

17. Upon the establishment of a separate programme dealing with PNE, a P-4 post was transferred from the Division of Nuclear Safety and Environmental Protection for the newly formed Unit for Peaceful Nuclear Explosions Services. All other changes represent shifts between programmes within the overall approved manning table posts and the cost estimates for 1975.

The Regular Budget for 1976

18. The Regular Budget estimates for 1976 in this document are based on an exchange rate of 18.50 Austrian schillings to the United States dollar; they can therefore be compared directly with the "1975 Adjusted budget" which is also based on that rate. However, in order to compensate for an estimated average rate of exchange of 17.00 schillings to the dollar throughout 1976, the amount of \$2.3 million has been included in part R of the programme budget - Adjustment of programme cost estimates.

19. The total of the Regular Budget estimates amounts to \$37 002 000 as shown under "Source of funds" in Table 5 (The Programme Budget) below. It will be seen that this represents a gross increase of 15.0% over the "1975 Adjusted budget", of which 3.5% represents a programme increase and 11.5% a price increase which is due both to inflationary factors and to fluctuation in rates of exchange. However, much larger price increases are shown under the individual programmes which result from rises in costs that have already occurred in 1975 but are not provided for in the 1975 Adjusted budget for the individual programmes where only those cost increases are covered which could be projected from the movement of statistical indices. The substantial additional expenditures resulting from the salary and wage increases that became effective in January 1975, together with increased costs of gas (60%), office supplies (25-30%), paper (55%), photographic plates and chemicals (30-80%) and telephones (25%) were not therefore provided for. Since in the Summary Tables below (e.g. Table 5) the increased costs and the drop in the dollar value are reflected in the 1975 Adjusted budget by adding the \$2.5 million supplementary appropriation which the Board is asking the General Conference to make [3], the gross price increase of 20.9% shown on the Programme budget line level is reduced to 11.5%. By comparison, during 1974 the consumers' price index in the host country showed an increase of about 9.5% and the wholesale price index an increase of 15.1%.

20. Similar considerations apply, but for different reasons, in respect of the data on the assessment of Member States which are given in the last line of Table 5. The assessment for 1975 was \$800 000 lower than it would have been had that amount not been available as a carry-over from 1974 [4], nor will it be increased by the requested supplementary appropriation of \$2.5 million which is to be entirely financed from cash surpluses and miscellaneous income. On the other hand, if these two amounts had had to be included in the assessment for 1975, the percentage figures given in the last line of Table 5 - the increase in the assessment for 1976 of 28.4%, made up of 24.6% for the price increase and 3.8% for the programme increase - would have been considerably lower, namely 14.3%, 10.9% and 3.4% respectively.

[2] See Resolution GC(XVIII)/RES/314, para. 1.

[3] See document GC(XIX)548.

[4] See Resolution GC(XVIII)/RES/314, para. 2(a).

21. There is also provision in the 1976 estimates for meeting the additional expenses resulting from the expansion of some existing programmes - in particular, from the expansion of activities relating to nuclear safety and environmental protection, from the increase in the technical assistance and INIS programmes, from the establishment of the Unit for Peaceful Nuclear Explosions Services and from the increase in the safeguards inspection work load and in the safeguards analytical services performed under contract by laboratories in Member States.

22. As can be seen from Table 3 in Annex IV, the manning table changes for 1976 are made up of an increase of 8 in the number of Professional posts (including an additional post of Director), an increase of 34 in the number of GS posts and a decrease of 15 in the number of M&O posts, resulting in a net increase of 27 posts. The manning table changes for 1976 are explained in the relevant parts of the programme.

23. Collaboration between the Agency and UNEP will continue in 1976. It is foreseen that, in addition to three joint projects extending into 1976, two new project proposals will be submitted: under the "Life sciences" programme, it is planned to carry out activities relating to the use of nuclear methods in environmental research in close co-operation with UNEP, specifically through a joint project on the neutron activation analysis of pollutants in man using research reactors and samples of human hair; the second joint project planned for 1976 involves participation of the Monaco Laboratory in an expanded programme of measurement in the Mediterranean Sea. The status of Agency/UNEP collaboration on 1 July 1975 is shown in Annex VI.

Target for voluntary contributions to the General Fund

24. The provision of technical assistance by the Agency to its developing Member States is financed largely from the General Fund, which receives its income mainly in the form of voluntary contributions for which a target is set each year. In 1974, the Board decided to propose an increase of \$1.5 million in the target - from \$3 million to \$4.5 million.

25. During its deliberations in 1975 the Board recognized the needs of the developing countries for increased technical assistance and accordingly recommends that the target for voluntary contributions to the General Fund for 1976 be established at \$5.5 million.

Working Capital Fund

26. The Board recommends that for 1976 the Agency's Working Capital Fund remain at the same level as for 1975, namely \$2 million. The recommendation is reflected in draft resolution C in Annex V. This level will be adequate to maintain the cash liquidity of the Agency only if Members pay their assessments promptly, as they have for the most part done this year.

Report on the budget to the General Assembly of the United Nations

27. In accordance with Article XVI of the Agency's relationship agreement with the United Nations [5], the budget will be reviewed by ACABQ, which will report on the administrative aspects thereof to the General Assembly of the United Nations. In compliance with a recommendation made by ACABQ extrabudgetary resources available to the Agency are shown in Table 4 below.

[5] INFCIRC/11, part I.

THE CONSOLIDATED BUDGET

Table 1

Item	1974 Actual	1975 Adjusted	1976 Estimate
RECEIPTS			
<u>Regular Budget</u>			
Assessed contributions of Member States	22 735 361	26 660 000	34 237 000
Proposed supplementary appropriation ^{a/}	-	2 500 000	-
Transfer of the balance of the contingent financing appropriation for 1974	(800 000)	800 000	-
Miscellaneous income	2 326 044	2 215 000	2 765 000
<u>General Fund</u>			
Voluntary contributions	3 080 705	4 500 000	5 500 000
Miscellaneous income	169 607	100 000	150 000
<u>Operating Fund I</u>			
Special contributions by Member States	360 077	395 000	420 000
Direct contributions for special projects	467 886	696 500	758 000
Miscellaneous income	10 927	29 500	44 000
Drawings on unobligated balance	19 815	-	-
Savings on prior years' operations	3 657	-	-
<u>Operating Fund II</u>			
Assessed programme costs	94 127	80 000	200 000
Miscellaneous income	11 996	-	-
Additions to unobligated balance	(323 632)	-	-
	28 156 570 ^{b/}	37 976 000	44 074 000
EXPENDITURES			
Regular Budget	23 436 027	32 175 000	37 002 000
Operating Fund I	862 362	1 121 000	1 222 000
Operating Fund II	3 032 803	4 680 000	5 850 000
	27 331 192	37 976 000	44 074 000

^{a/} See document GC(XIX)/548.

^{b/} The difference of \$825 378 between expenditures and receipts represents the provisional cash surplus for 1974.

THE REGULAR BUDGET

Summary of income

Table 2

Item	1974 Actual	1975 Adjusted budget	Increase or (decrease) over 1975	1976 Estimate
Assessed contributions on Member States	22 735 361	26 660 000	7 577 000	34 237 000
Proposed supplementary appropriation ^{a/}	-	2 500 000	(2 500 000)	-
Transfer of the balance of contingent financing appropriation for 1974	(800 000)	800 000	(800 000)	-
Special contributions	56 843	-	-	-
Miscellaneous income				
(a) Attributable to specific programmes				
Publications of the Agency	294 775	300 000	80 000	380 000
INIS publications including micro- fiches	112 361	110 000	140 000	250 000
INIS tapes	4 538	4 000	1 000	5 000
CINDA publications	12 241	14 000	8 000	22 000
Advertising	9 035	10 000	-	10 000
Laboratory income	14 692	50 000	(13 000)	37 000
Sale of surplus property	9 279	7 000	1 000	8 000
IAEA/UNIDO joint services arrangement				
Computer services	243 328	344 000	(44 000)	300 000
Printing services	103 863	115 000	25 000	140 000
Other services	144 724	141 000	34 000	175 000
Amounts recoverable under safe- guards agreements from non- member States	7 320	8 000	(3 000)	5 000
UNDP programme support cost	404 578	330 000	90 000	420 000
Reimbursable services for AGRIS	22 295	95 000	20 000	115 000 ^{b/}
Sub-total	1 383 029	1 528 000	339 000	1 867 000
(b) Not attributable to specific programmes				
Investment and short-term deposits	526 986	157 000	158 000	315 000
Refund from the United Nations Joint Staff Pension Fund	149 738	230 000	-	230 000
Other	266 291	300 000	53 000	353 000
Sub-total	943 015	687 000	211 000	898 000
Total miscellaneous income	2 326 044	2 215 000	550 000	2 765 000
TOTAL	24 318 248	32 175 000	4 827 000	37 002 000

^{a/} See document GC(XIX)/548.

^{b/} In respect of expenditure under the Regular Budget.

THE OPERATIONAL BUDGET

Summary of income, allocations and expenditures

Table 3

Item	General Fund			Operating Fund I			Operating Fund II		
	1974 Actual	1975 Budget	1976 Estimate	1974 Actual	1975 Budget	1976 Estimate	1974 Actual	1975 Budget	1976 Estimate
INCOME									
Voluntary contributions of Member States	3 080 705	4 500 000	5 500 000	-	-	-	-	-	-
Special contributions of Member States:									
Italy	-	-	-	300 000	350 000	350 000	-	-	-
Monaco	-	-	-	48 077	45 000	70 000	-	-	-
Others	-	-	-	12 000	-	-	-	-	-
Direct contributions for special projects:									
UNESCO	-	-	-	195 000	225 000	240 000	-	-	-
UNDP	-	-	-	180 000	280 000	210 000	-	-	-
SIDA	-	-	-	86 006	191 500	308 000	-	-	-
Others	-	-	-	6 880	-	-	-	-	-
Income from investment and short-term deposits	156 897	100 000	150 000	-	-	-	-	-	-
Assessed programme costs	-	-	-	-	-	-	94 127	80 000	200 000
Miscellaneous income	12 710	-	-	10 927	29 500	44 000	11 996	-	-
Additions to unobligated balance	-	-	-	-	-	-	(323 632)	-	-
Drawing on unobligated balance	-	-	-	19 815	-	-	-	-	-
Savings in prior years' operations	-	-	-	3 657	-	-	-	-	-
	3 250 312	4 600 000	5 650 000	862 362	1 121 000	1 222 000	(217 509)	80 000	200 000
Transfers from General Fund to Operating Fund II:	(3 250 312)	(4 600 000)	(5 650 000)	-	-	-	3 250 312	4 600 000	5 650 000
TOTAL	-	-	-	862 362	1 121 000	1 222 000	3 032 803	4 680 000	5 850 000
ALLOCATIONS AND EXPENDITURES									
Operating Fund I:									
Trieste Centre	-	-	-	797 012	1 051 000	1 143 000	-	-	-
Monaco Laboratory	-	-	-	65 350	70 000	79 000	-	-	-
Operating Fund II:									
Technical assistance:									
Experts and equipment	-	-	-	-	-	-	1 881 687	3 180 000	4 000 000
Fellowships and training	-	-	-	-	-	-	1 151 116	1 500 000	1 850 000
TOTAL	-	-	-	862 362	1 121 000	1 222 000	3 032 803	4 680 000	5 850 000

EXTRABUDGETARY RESOURCES

Table 4

	1974 Actual ^{a/}	1975 Estimate	1976 Estimate
UNDP	3 152 000	3 500 000	4 000 000
UNEP	69 000	272 000	269 000
FAO	335 000	363 000	923 420 ^{b/}
SIDA	296 000	384 000	508 000
Other Trust Funds	187 000	544 000 ^{c/}	430 000

^{a/} Rounded up to the nearest thousand dollars.

^{b/} For the biennial period 1976-1977.

^{c/} Includes \$152 453 cash in banks under Special Fellowships offered by the Government of the USSR.

THE PROGRAMME BUDGET

Price and programme changes, 1975-1976

By programme

Table 5

	1975 Budget	1975 Adjusted budget	Price increase		Programme increase		Total change		1976 Estimate
	\$	\$	\$	%	\$	%	\$	%	\$
A. Policy-making organs	958 000	1 134 000	136 200	12.0	(8 200)	(0.7)	128 000	11.3	1 262 000
B. Executive management and technical programme planning	638 000	727 000	64 000	8.8	38 000	5.2	102 000	14.0	829 000
C. Technical assistance and training (Regular Budget)	1 285 000	1 446 000	187 200	12.9	35 800	2.5	223 000	15.4	1 669 000
D. Food and agriculture	1 191 000	1 288 000	166 000	12.9	(18 000)	(1.4)	148 000	11.5	1 436 000
E. Life sciences	1 087 000	1 211 000	148 100	12.2	61 900	5.1	210 000	17.3	1 421 000
F. Physical sciences	1 561 000	1 802 000	239 100	13.3	4 900	0.2	244 000	13.5	2 046 000
G. The Laboratory	1 698 000	1 923 000	327 000	17.0	(14 000)	(0.7)	313 000	16.3	2 236 000
H. International Centre for Theoretical Physics									
Regular Budget	220 000	220 000	85 000	38.6	-	-	85 000	38.6	305 000
Operating Fund I	1 051 000	1 051 000	66 800	6.4	25 200	2.4	92 000	8.8	1 143 000
Sub-total	1 271 000	1 271 000	151 800	11.9	25 200	2.0	177 000	13.9	1 448 000
I. Nuclear power and reactors	1 728 000	1 966 000	238 800	12.1	19 200	1.0	258 000	13.1	2 224 000
J. Nuclear safety and environmental protection	2 309 000	2 527 000	351 700	13.9	242 300	9.6	594 000	23.5	3 121 000
K. International Laboratory of Marine Radioactivity									
Regular Budget	392 000	407 000	49 700	12.2	41 300	10.2	91 000	22.4	498 000
Operating Fund I	70 000	70 000	8 000	11.4	1 000	1.4	9 000	12.8	79 000
Sub-total	462 000	477 000	57 700	12.1	42 300	8.9	100 000	21.0	577 000
L. Information and technical services	2 997 000	2 691 000	277 400	10.3	(77 400)	(2.9)	200 000	7.4	2 891 000
M. Nuclear explosions for peaceful purposes	-	84 000	10 000	11.9	114 000	135.7	124 000	147.6	208 000
N. Safeguards	4 802 000	5 210 000	621 000	11.9	612 000	11.8	1 233 000	23.7	6 443 000
O. Administration	2 976 000	3 763 000	472 200	12.6	57 800	1.5	530 000	14.1	4 293 000
P. General services	2 918 000	3 147 000	597 800	19.0	(64 800)	(2.1)	533 000	16.9	3 680 000
Q. Service activities	115 000	129 000	16 000	12.4	(5 000)	(3.9)	11 000	8.5	140 000
R. Adjustment of programme cost estimates	2 800 000	-	2 212 000	-	88 000	-	2 300 000	-	2 300 000
Proposed supplementary appropriation ^{a/}	-	2 500 000	(2 500 000)	-	-	-	(2 500 000)	-	-
TOTAL Regular Budget and Operating Fund I	30 796 000	33 296 000	3 774 000	11.3	1 154 000	3.5	4 928 000	14.8	38 224 000
Source of funds									
Regular Budget: Programme budget	29 675 000	29 675 000	6 199 200	20.9	1 127 800	3.8	7 327 000	24.7	37 002 000
Supplementary appropriation	-	2 500 000	(2 500 000)	-	-	-	(2 500 000)	-	-
Adjusted Regular Budget	29 675 000	32 175 000	3 699 200	11.5	1 127 800	3.5	4 827 000	15.0	37 002 000
Operating Fund I	1 121 000	1 121 000	74 800	6.7	26 200	2.3	101 000	9.0	1 222 000
Operating Fund II	4 680 000	4 680 000	- ^{b/}	-	- ^{b/}	-	1 170 000	25.0	5 850 000
	35 476 000	37 976 000	3 774 000 ^{c/}	-	1 154 000 ^{c/}	-	6 098 000	16.1	44 074 000
Adjusted Regular Budget	29 675 000	32 175 000	3 699 200	11.5	1 127 800	3.5	4 827 000	15.0	37 002 000
Less: Additional resources to finance a supplementary appropriation for 1975	-	2 500 000	(2 500 000)	-	-	-	(2 500 000)	-	-
Balance of contingent financing for 1974	800 000	800 000	(800 000)	-	-	-	(800 000)	-	-
Miscellaneous income	2 215 000	2 215 000	450 000	20.3	100 000	4.5	550 000	24.8	2 765 000
Assessment on Member States	26 660 000	26 660 000	6 549 200	24.6	1 027 800	3.8	7 577 000	28.4	34 237 000

^{a/} See document GC(XIX)/548.

^{b/} Since the total change of \$1 170 000 is largely due to the raising of the target for voluntary contributions to the General Fund, no distribution between price and programme increases for 1976 has been made.

^{c/} Excluding the pro-rating of the total change in respect of Operating Fund II from 1975 to 1976.

Price and programme changes, 1975-1976

By item of expenditure

Table 6

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) for 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	13 231 033	16 892 000	2 376 000	704 200	3 080 200	19 972 200
Consultants	188 644	371 000	46 700	25 200	71 900	442 900
Overtime	82 657	98 300	11 400	7 400	18 800	117 100
Temporary assistance	322 654	366 100	262 900	116 200	379 100	745 200
Sub-total	13 824 988	17 727 400	2 697 000	853 000	3 550 000	21 277 400
Common staff costs	4 001 098	5 112 800	488 900	212 200	701 100	5 813 900
Travel	588 459	751 700	124 100	(8 200)	115 900	867 600
Meetings						
Conferences, symposia, seminars	551 682	816 600	146 900	(69 500)	77 400	894 000
Technical committees, advisory groups	385 617	826 400	135 300	30 800	166 100	992 500
Representation and hospitality	55 489	80 800	5 000	1 700	6 700	87 500
Scientific and technical contracts	1 133 855	1 616 300	86 100	194 600	280 700	1 897 000
Scientific supplies and equipment	783 450	774 500	80 900	(28 400)	52 500	827 000
Common services, supplies and equipment	3 121 951	3 254 500	526 800	2 900	529 700	3 784 200
Other items of expenditure						
Linguistic services ^{a/}	(311 224)	(438 000)	(250 000)	(115 000)	(365 000)	(803 000)
Printing and publishing services ^{a/}	(27 120)	(62 000)	(13 000)	(15 000)	(28 000)	(90 000)
Data processing services	-	-	-	-	-	-
Other	190 144	335 000	34 000	6 900	40 900	375 900
Adjustment of programme cost estimates	-	-	2 212 000	88 000	2 300 000	2 300 000
Proposed supplementary appropriation ^{b/}	-	2 500 000	(2 500 000)	-	(2 500 000)	-
TOTAL Regular Budget and Operating Fund I	24 298 389	33 296 000	3 774 000 11.3 %	1 154 000 3.5 %	4 928 000 14.8 %	38 224 000
<u>Source of funds</u>						
Regular Budget	23 436 027	32 175 000	3 699 200	1 127 800	4 827 000	37 002 000
Operating Fund I	862 362	1 121 000	74 800	26 200	101 000	1 222 000
Operating Fund II	3 032 803	4 680 000	- ^{c/}	- ^{c/}	1 170 000	5 850 000
TOTAL	27 331 192	37 976 000	3 774 000 ^{d/}	1 154 000 ^{d/}	6 098 000	44 074 000

^{a/} The negative figures shown in the table for linguistic services and for printing and publishing services represent the costs which are attributable to the holding of meetings, since these costs have been transferred from the expenditure lines "Linguistic services" and "Printing and publishing services" of the "Service activities" programme to the expenditure lines "Conferences, symposia, seminars" and "Technical committees, advisory groups" of the programmes in which such services are used.

^{b/} See document GC(XIX)/548.

^{c/} Since the total change of \$1 170 000 is largely due to the raising of the target for voluntary contributions to the General Fund, no distribution between price and programme increases for 1976 has been made.

^{d/} Excluding the pro-rating of the total change in respect of Operating Fund II from 1975 to 1976.

Summary of manpower by grade of post

Table 7

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
DG	1	1	1	-	1
DDG/IG	5	5	5	-	5
D	19	19	19	1	20
P-5	94	100	100	9	109
P-4	129	146	146	7	153
P-3	113	113	113	(1)	112
P-2	50	47	47	(6)	41
P-1	27	24	24	(2)	22
Sub-total	438	455	455	8	463
GS	553	580	580	34	614
M&O	167	170	170	(15)	155
TOTAL	1 158	1 205	1 205	27	1 232

Summary of manpower by Department

Table 8

Department	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
Office of the Director General	8	8	8	-	8
Department of Administration	421	434	434	-	434
Department of Research and Isotopes	232	240	240	8	248
Department of Safeguards and Inspection	136	136	136	2	138
Department of Technical Assistance and Publications	189	191	191	2	193
Department of Technical Operations	172	196	196	15	211
TOTAL	1 158	1 205	1 205	27	1 232

A. POLICY - MAKING ORGANS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table A.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	76 477	93 000	11 000	-	11 000	104 000
Overtime	6 025	4 500	500	(800)	(300)	4 200
Temporary assistance	7 511	8 000	1 300	2 000	3 300	11 300
Sub-total	90 013	105 500	12 800	1 200	14 000	119 500
Common staff costs	23 178	28 300	1 600	-	1 600	29 900
Travel	-	-	-	600	600	600
Common services, supplies and equipment	75 677	56 200	14 800	-	14 800	71 000
Other items of expenditure						
Linguistic services	701 854	792 000	78 000	-	78 000	870 000
Printing and publishing services	118 797	141 000	27 000	(10 000)	17 000	158 000
Other	12 773	11 000	2 000	-	2 000	13 000
TOTAL	1 022 292	1 134 000	136 200 12.0%	(8 200) (0.7)%	128 000 11.3%	1 262 000

SUMMARY OF MANPOWER

Table A.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
P-4	2	2	2	-	2
Sub-total	2	2	2	-	2
GS	3	3	3	-	3
TOTAL	5	5	5	-	5

Distribution of costs between the General Conference and the Board

Table A.3

Organization unit	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
		Price	Programme	Total	
General Conference	528 700	63 500	(8 200)	55 300	584 000
Board of Governors	605 300	72 700	-	72 700	678 000
TOTAL	1 134 000	136 200	(8 200)	128 000	1 262 000

CHANGES IN COSTS AND MANPOWER

Costs

A.1. As will be seen from Table A.1 above, it is expected that the cost of this programme will increase by \$128 000 as a net result of price increases of \$136 200 partly offset by a programme reduction of \$8200.

Manpower

A.2. No changes in manpower are foreseen. It will be noted that, as in 526/Table A.2, the manning table for this programme includes only posts that were exclusively provided for the Policy-making Organs Service. All other posts in the Division of Languages and Policy-making Organs are shown in Table Q.2 under the "Service activities" programme.

THE PROGRAMME

A.3. It is planned to provide the services required by the policy-making organs of the Agency, namely the General Conference and the Board of Governors, in 1976 on the same lines as in the past (526/A.5 and A.6).

**B. EXECUTIVE MANAGEMENT AND TECHNICAL
PROGRAMME PLANNING**

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table B.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	402 484	478 000	46 000	-	46 000	524 000
Consultants	8 314	17 500	2 100	(2 200)	(100)	17 400
Overtime	4 748	4 900	700	(700)	-	4 900
Temporary assistance	599	500	-	(500)	(500)	-
Sub-total	416 145	500 900	48 800	(3 400)	45 400	546 300
Common staff costs	121 968	145 300	7 900	-	7 900	153 200
Travel	47 400	39 200	5 000	300	5 300	44 500
Meetings						
Technical committees, advisory groups	37 823	18 800	2 200	17 000	19 200	38 000
Representation and hospitality	22 650	22 800	100	100	200	23 000
Common services, supplies and equipment	9 919	-	-	-	-	-
Other items of expenditure						
Linguistic services	18 020	-	-	20 000	20 000	20 000
Printing and publishing services	3 300	-	-	4 000	4 000	4 000
TOTAL	677 225	727 000	64 000 8.8%	38 000 5.2%	102 000 14.0%	829 000

SUMMARY OF MANPOWER

Table B.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
DG	1	1	1	-	1
DDG	3	3	3	-	3
D	2	2	2	-	2
P-5	1	1	1	-	1
P-3	1	1	1	-	1
P-2	3	3	3	-	3
P-1	1	1	2	-	2
Sub-total	12	12	13	-	13
GS	10	10	9	-	9
TOTAL	22	22	22	-	22

CHANGES IN COSTS AND MANPOWER

Costs

B.1. As will be seen from Table B.1 above, it is expected that the cost of this programme will be \$102 000 higher in 1976. Of this amount, \$64 000 will be required to cover salary and other price increases and \$38 000 will represent programme increases.

B.2. The main programme increases are \$17 000 in respect of a second meeting of the Scientific Advisory Committee and \$24 000 in respect of linguistic services and printing and publishing services which, as detailed analyses carried out in 1974 showed, will be required in 1976. Small programme increases in respect of travel and hospitality in connection with meetings are offset by reductions in respect of consultants, overtime and temporary assistance.

Manpower

B.3. In Table B.2, the "1975 Adjusted" column reflects the transfer of a P-1 post to the Office of the Director General from "Administration" in exchange for a GS post. No changes in manpower are foreseen for 1976.

THE PROGRAMME

Objective

B.4. The objective of the Office of the Director General is to propose and implement programmes within the scope of the Agency's statutory objectives, pursuant to decisions of the Board and the General Conference and on the advice of the Scientific Advisory Committee; it is also responsible for the efficient conduct and co-ordination of the Agency's work.

B.5. The objective of the Offices of the Deputy Directors General for Research and Isotopes, for Technical Assistance and Publications and for Technical Operations is to advise and assist the Director General in matters concerning the planning and implementation of the Agency's scientific programmes; they are also responsible for the effective execution of approved programmes within their respective Departments.

C. TECHNICAL ASSISTANCE AND TRAINING

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table C.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	746 584	900 000	125 000	31 700	156 700	1 056 700
Consultants	29 332	33 500	4 400	(3 900)	500	34 000
Overtime	520	1 500	200	(200)	-	1 500
Temporary assistance	2 196	5 400	1 100	-	1 100	6 500
Sub-total	778 632	940 400	130 700	27 600	158 300	1 098 700
Common staff costs	226 254	273 000	24 800	9 300	34 100	307 100
Travel	29 664	57 400	7 600	(6 000)	1 600	59 000
Representation and hospitality	614	1 200	100	(100)	-	1 200
Other items of expenditure						
Linguistic services	117 895	141 000	18 000	-	18 000	159 000
Printing and publishing services	35 700	32 000	6 000	4 000	10 000	42 000
Data processing services	812	1 000	-	1 000	1 000	2 000
Other	3 032 803	4 680 000	- a/	- a/	1 170 000	5 850 000
TOTAL	4 222 374	6 126 000	187 200	35 800	1 393 000 22.7%	7 519 000
Source of funds						
Regular Budget	1 189 571	1 446 000	187 200	35 800	223 000	1 669 000
Operating Fund II	3 032 803	4 680 000	- a/	- a/	1 170 000	5 850 000
TOTAL	4 222 374	6 126 000	187 200 b/	35 800 b/	1 393 000 22.7%	7 519 000

a/ Since the total change of \$1 170 000 is largely due to the raising of the target for voluntary contributions to the General Fund, no distribution between price and programme increases for 1976 is made.

b/ Excluding the pro-rating of the total change in respect of Operating Fund II from 1975 to 1976.

SUMMARY OF MANPOWER

Table C.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	7	7	7	-	7
P-4	8	9	9	1	10
P-3	3	3	3	-	3
P-2	1	1	1	1	2
P-1	1	-	-	-	-
Sub-total	21	21	21	2	23
GS	35	35	35	-	35
M&O	-	-	-	-	-
TOTAL	56	56	56	2	58

CHANGES IN COSTS AND MANPOWER

Costs

C.1. As will be seen from Table C.1 above, it is expected that the cost of this programme under the Regular Budget will increase by \$223 000 as a result of price increases of \$187 200 and programme increases of \$35 800. The latter are attributable to an increase of \$41 000 in salaries for established posts and common staff costs due to the addition of two Professional posts. Small programme increases in respect of printing and publishing and data processing services are offset by decreases in respect of travel and consultants.

C.2. The total increase of \$1 170 000 in the Operational Budget is attributable to an increase in the target for voluntary contributions of \$1 million, an increase in miscellaneous income of \$50 000 and an increase in Government contributions in respect of assessed programme cost by \$120 000.

Manpower

C.3. As will be seen from Table C.2 above, two additional Professional posts are envisaged for 1976.

C.4. One P-4 post will be required in the Training Section. In 1974, there was a large increase in the number of fellowship awards, both under the Agency's technical assistance programme and under the UNDP programme. Moreover, the number of training courses organized by the Agency is expected to increase from an annual average of 11 to between 17 and 20 in 1975 and subsequent years, due mainly to the large-scale nuclear power training course and the four technical courses which constitute the expanded nuclear power training programme. It is intended to recruit an engineer with appropriate experience to deal with matters relating to the organization of, and programme for, these courses in co-operation with the Division of Nuclear Power and Reactors.

C.5. The addition of a P-2 post is required in the Asia and Far East Section. At present, the Section, which is responsible for a large part of the technical assistance programme and is engaged in several large-scale and small projects, has only two Professional officers. The recruitment of a junior Professional officer is necessitated by the volume of work involved in planning and implementing the large-scale projects, particularly the work arising out of the reporting requirements and the need to ensure that all project implementation stages are completed.

THE PROGRAMME

Objective

C.6. The objective is to promote the transfer of skills and knowledge relating to the use of nuclear energy for peaceful purposes, to support efforts to carry out nuclear energy activities more effectively and to ensure that the skills and knowledge transferred can continue to be applied after the provision of such assistance by the Agency has been completed.

The original programme

C.7. In 1976 the activities under the programme will continue as outlined in 526/C.4 to C.26.

D. FOOD AND AGRICULTURE

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table D.1

Items of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	323 940	402 000	58 000	18 500	76 500	478 500
Consultants	23 807	22 100	2 900	-	2 900	25 000
Overtime	-	400	100	-	100	500
Temporary assistance	1 968	1 700	200	(100)	100	1 800
Sub-total	349 715	426 200	61 200	18 400	79 600	505 800
Common staff costs	98 169	121 500	11 900	5 900	17 800	139 300
Travel	27 939	29 800	3 900	(700)	3 200	33 000
Meetings						
Conferences, symposia, seminars	27 210	22 200	13 800	10 000	23 800	46 000
Technical committees, advisory groups	28 378	64 200	9 800	(14 000)	(4 200)	60 000
Representation and hospitality	1 065	2 800	300	400	700	3 500
Scientific and technical contracts	320 822	315 000	16 000	(11 000)	5 000	320 000
Common services, supplies and equipment	56	300	100	-	100	400
Other items of expenditure						
Linguistic services	65 689	79 000	9 000	-	9 000	88 000
Printing and publishing services	173 300	212 000	39 000	(30 000)	9 000	221 000
Data processing services	14 230	15 000	1 000	3 000	4 000	19 000
TOTAL	1 106 573	1 288 000	166 000 12.9%	(18 000) (1.4%)	148 000 11.5%	1 436 000
Laboratory services		759 000	129 000	(35 000)	94 000	853 000

SUMMARY OF MANPOWER

Table D.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	- [1] <u>a/</u>	- [1]	- [1]	-	- [1]
P-5	5 [2]	6 [2]	6 [2]	-	6 [2]
P-4	6 [3]	6 [3]	6 [3]	- [1]	6 [4]
P-3	1 -	1 -	1 -	- [1]	1 [1]
Sub-total	12 [6]	13 [6]	13 [6]	- [2]	13 [8]
GS	8 [6]	8 [6]	8 [6]	- [1]	8 [7]
TOTAL	20 [12]	21 [12]	21 [12]	- [3]	21 [15]

a/ FAO staff in brackets

Contribution by FAO towards the financing of the activities of the Joint FAO/IAEA Division

Table D.3

	Budget 1974-75	Estimates 1976-77 <u>a/</u>
Salaries and common staff costs for Professional staff	430 580	585 820
Consultants	38 100	45 000
Duty travel	19 660	32 000
Contractual services and equipment	164 300	222 600
Meetings	<u>b/</u>	<u>b/</u>
Publications	32 900	38 000
TOTAL	685 540	923 420

a/ Subject to approval by the FAO Conference in 1975.

b/ The cost amounting to \$94 500 in 1976-77 and \$83 100 in 1974-75 is included under Salaries and common staff costs and Contractual services and equipment on the basis of CCAQ's expenditure classification.

CHANGES IN COSTS AND MANPOWER

Costs

D.1. As will be seen from Table D.1 above, it is expected that the cost of this programme will increase by \$148 000 in 1976 as a net result of price increases of \$166 000 partly offset by a programme reduction of \$18 000.

D.2. A programme increase of \$24 400 in salaries and common staff costs is foreseen in respect of the filling of a P-3 post in the "Food preservation" sub-programme for which no funds were provided in the 1975 budget. The programme increase in respect of data processing services is more than offset by the decreases in respect of meetings, scientific and technical contracts and printing and publishing services.

D.3. The contribution by FAO towards the financing of the Joint FAO/IAEA Division's activities during 1976-77 will be \$923 420 as shown in Table D.3.

D.4. Activities relating to nitrogen residues and protein development will be supported by Trust Funds totally financed by the Federal Republic of Germany. Contributions to the Joint Fertilizer Project in an amount of about \$143 000 and to the Joint Protein Programme in an amount of about \$197 000 are expected for 1976.

Manpower

D.5. It is expected that FAO will increase its support of the programme by providing two additional Professional posts - one at the P-4 level for a plant pathologist and one at the P-3 level for a soil scientist. Additional secretarial support will be provided from funds to be made available by FAO for contractual services [D.1].

THE PROGRAMME

Objective

D.6. The broad objective is to foster applications of isotopes and radiation in food and agriculture within a joint programme of FAO and the Agency. World production of food is not increasing at a rate commensurate with population growth, and the incidence of drought, crop failures and other natural disasters has resulted in a diminution of food stocks to a level lower than at any time since the second world war. The programme aims at employing nuclear techniques to improve agricultural productivity and the quality of the produce, as well as to protect crops, livestock and food from pests, disease and spoilage. Special attention will be given in the programme to the protection and conservation of the environment.

[D.1] The increases for 1976 are subject to approval by the FAO conference.

Changes in the original programme

D.7. Detailed information on the activities planned for 1976 is provided in 526/D.4 to D.143. The following additions to, or changes in, activities under the sub-programme indicated below are foreseen for 1976.

Animal production and health (526/D.68 to D.79)

D.8. Since a symposium on nuclear techniques in animal production and health is postponed from 1975 to 1976, the seminar on the use of nuclear techniques in parasitic diseases referred to in 526/D.63 and D.76 will not be held in 1976.

Chemical residues and pollution (526/D.105 to D.110)

D.9. The work on nitrogen residue problems carried out jointly under the sub-programme dealing with soil fertility, irrigation and crop production (526/D.14) and the sub-programme on chemical residues and pollution (526/D.107) will be considerably expanded in order to pay particular attention to the conservation of agricultural nitrogen residues as fertilizers and to their potential as pollutants in the form of undesirable nitrates in food, feed or water. Preservation of soil organic matter being recognized as primarily a problem relating to nitrogen behaviour, the emphasis will be on chemical and biological transformations and interactions to which nitrogen is subject in soils. These studies will complement the nitrogen residue programme and should provide invaluable guidance in the effective utilization of crop residues and other organic wastes for soil improvement and erosion control.

D.10. The seminar on terminology and definitions in relation to the study and control of chemical and radioactive contamination of food, agriculture and fisheries which is referred to in para. 526/D.107 has been postponed to 1977.

SUB - PROGRAMMES

Summary of manpower and costs by sub-programme

Table D.4

Sub-programme	1975 Adjusted budget			1976 Estimate		
	Man-years		Costs	Man-years		Costs
	P	GS		P	GS	
Soil fertility, irrigation and crop production	3.2(0.2) ^{a/}	1.4(1.2)	255 000	3.2(2.2)	1.4(1.2)	333 100
Plant breeding and genetics	2.2(1.2)	1.4(1.2)	223 000	2.2(1.2)	1.4(1.2)	193 800
Animal production and health	1.2(1.1)	1.4(1.1)	162 000	1.2(1.1)	1.4(1.1)	252 100
Insect and pest control	2.1(1.2)	1.2(1.2)	256 000	2.1(1.2)	1.2(1.2)	253 700
Chemical residues and pollution	0.2(2.1)	2.4(0.1)	159 000	0.2(2.1)	2.4(0.1)	129 400
Food preservation	4.1(0.2)	0.2(1.2)	233 000	4.1(0.2)	0.2(2.2)	273 900
TOTAL	13.0(6.0)	8.0(6.0)	1 288 000	13.0(8.0)	8.0(7.0)	1 436 000

^{a/} FAO staff in brackets.

Soil fertility, irrigation and crop production

Summary by programme components

Table D.5

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
The use of isotopes and radiation in fertilizer studies of cereals and grasses	1.2(2.0) ^{a/}	0.5 (0.4)	58 200	-	20 000	2 900	81 100
The use of isotopes and radiation in fertilization studies of leguminous and horticultural crops	1.0(0.2)	0.5 (0.4)	49 700	-	30 000	2 500	82 200
The use of isotopes and radiation techniques in studies of soil-water regimes	1.0 (-)	0.4 (0.4)	47 800	-	20 000	2 000	69 800
Cost of meetings not attributable to an individual programme component	- -	- -	-	23 000	-	1 000	24 000
Linguistic, printing and publishing services	- -	- -	-	-	-	66 000	66 000
Data processing services	- -	- -	-	-	-	10 000	10 000
TOTAL	3.2(2.2)	1.4 (1.2)	155 700	23 000	70 000	84 400	333 100

^{a/} FAO staff in brackets.

Plant breeding and genetics

Summary by programme components

Table D.6

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Grain protein improvement through nuclear techniques	1.0(0.5) ^{a/}	0.5 (0.4)	46 300	-	-	1 000	47 300
Development of mutation breeding techniques	0.6(0.3)	0.5 (0.4)	30 900	-	25 000	2 500	58 400
The use of induced mutations for crop improvement	0.6 (0.4)	0.4 (0.4)	29 600	-	30 000	2 500	62 100
Linguistic, printing and publishing services	- -	- -	-	-	-	17 000	17 000
Data processing services	- -	- -	-	-	-	9 000	9 000
TOTAL	2.2(1.2)	1.4 (1.2)	106 800	-	55 000	32 000	193 800

^{a/} FAO staff in brackets.

Animal production and health

Summary by programme components

Table D.7

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Isotope techniques in animal nutrition and physiology	0.6(0.5) ^{a/}	0.7 (0.6)	39 900	-	25 000	2 000	66 900
Isotopes and radiation in animal parasitology and disease	0.6 (0.6)	0.7 (0.5)	40 300	15 500	25 000	2 200	83 000
Cost of meetings not attributable to an individual programme component	- -	- -	-	23 000	-	1 200	24 200
Linguistic, printing and publishing services	- -	- -	-	-	-	78 000	78 000
TOTAL	1.2(1.1)	1.4 (1.1)	80 200	38 500	50 000	83 400	252 100

^{a/} FAO staff in brackets.

Insection and pest control

Summary by programme components

Table D.8

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
The development of the sterile male technique against plant feeding insects	0.8(0.4) ^{a/}	0.4 (0.4)	36 000	-	20 000	3 000	59 000
The development of the sterile male technique against tsetse and other biting flies	0.7 (0.5)	0.4 (0.4)	33 400	-	20 000	3 000	56 400
Use of isotopes and radiation in developing pest management	0.6(0.3)	0.4 (0.4)	33 300	15 500	20 000	2 500	71 300
Linguistic, printing and publishing services	- -	- -	-	-	-	67 000	67 000
TOTAL	2.1(1.2)	1.2 (1.2)	102 700	15 500	60 000	75 500	253 700

^{a/} FAO staff in brackets.

Chemical residues and pollution

Summary by programme components

Table D.9

Programme component	Man-year		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Isotopic tracer-aided studies of the origin, fate and biological significance of foreign chemical residues in food and the agricultural environment	0.1(1.2) ^{a/}	1.4 (0.1)	26 300	14 500	30 000	2 300	73 100
Collection and dissemination of comparative information on the fate and significance of foreign substances (including radioactive substances) in food and agriculture	0.1(0.9)	1.0 (-)	15 300	-	10 000	2 000	27 300
Linguistic, printing and publishing services	- -	- -	-	-	-	29 000	29 000
TOTAL	0.2(2.1)	2.4 (0.1)	41 600	14 500	40 000	33 300	129 400

^{a/} FAO staff in brackets.

Food preservation

Summary by programme components

Table D.10

Programme component	Man-year		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Technological and economic feasibility of food irradiation	2.1(0.2) ^{a/}	- (2.2)	79 500	-	30 000	2 000	111 500
Public health acceptance and legal aspects of the process of food irradiation	2.0 (-)	0.2 (-)	78 600	14 500	15 000	2 300	110 400
Linguistic, printing and publishing services	- -	- -	-	-	-	52 000	52 000
TOTAL	4.1(0.2)	0.2 (2.2)	158 100	14 500	45 000	56 300	273 900

^{a/} FAO staff in brackets.

E. LIFE SCIENCES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table E.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	334 193	400 000	55 000	39 000	94 000	494 000
Consultants	18 028	18 500	2 500	11 000	13 500	32 000
Overtime	104	300	-	(300)	(300)	-
Temporary assistance	406	-	-	1 500	1 500	1 500
Sub-total	352 731	418 800	57 500	51 200	108 700	527 500
Common staff costs	101 276	121 000	12 000	11 400	23 400	144 400
Travel	20 040	18 200	2 800	-	2 800	21 000
Meetings						
Conferences, symposia, seminars	38 693	44 300	13 700	-	13 700	58 000
Technical committees, advisory groups	24 355	41 000	7 000	(4 000)	3 000	44 000
Representation and hospitality	1 512	3 700	400	-	400	4 100
Scientific and technical contracts	280 547	333 000	16 700	9 300	26 000	359 000
Common services, supplies and equipment	36	-	-	-	-	-
Other items of expenditure						
Linguistic services	25 792	30 000	4 000	-	4 000	34 000
Printing and publishing services	104 900	177 000	32 000	(10 000)	22 000	199 000
Data processing services	24 088	24 000	2 000	4 000	6 000	30 000
TOTAL	973 970	1 211 000	148 100 12.2%	61 900 5.1%	210 000 17.3%	1 421 000
Laboratory services		248 000	38 000	(21 000)	17 000	265 000

SUMMARY OF MANPOWER

Table E.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	4	4	4	1	5
P-4	6	6	6	-	6
P-3	1	1	1	-	1
P-2	1	1	1	-	1
P-1	1	1	1	(1)	-
Sub-total	14	14	14	-	14
GS	10	10	10	-	10
TOTAL	24	24	24	-	24

CHANGES IN COSTS AND MANPOWER

Costs

E.1. As will be seen from Table E.1 above, it is expected that the cost of this programme will increase by \$210 000 in 1976, of which \$148 100 will be required to cover salary and other price increases and \$61 900 will be a programme increase.

E.2. The programme increase of \$50 400 in respect of salaries for established posts and common staff costs is due mainly to the addition of a P-5 post and partly to a reduction in the savings achieved through delays in filling vacant posts. The elimination of a P-1 post has no financial implications since no funds were provided for this post in the 1975 budget.

E.3. The programme increase of \$11 000 in respect of consultants relates mainly to the use of nuclear techniques in gastrointestinal absorption studies, under the "Medical applications" sub-programme, and to the use of radiation in preparing bacterial and viral vaccines and diagnostic antigens, under the "Radiation biology" sub-programme. The engaging of consultants on these subjects is planned with a view to saving the higher cost of convening advisory group meetings; a programme decrease of \$4000 in respect of technical committees and advisory groups is foreseen.

E.4. The programme increase of \$9300 in respect of scientific and technical contracts is due mainly to the establishment, under the "Radiation biology" sub-programme, of a programme component dealing with nuclear methods in environmental research. The programme increases in respect of temporary assistance and data processing services are offset by a programme decrease in respect of printing and publishing services.

Manpower

E.5. As will be seen from Table E.2 above, one additional P-5 post is foreseen for 1976. A biologist with experience in the application of nuclear methods will be required for the new programme component dealing with nuclear methods in environmental research (see paras E.17 and 18 below).

E.6. The deletion of a P-1 post relates to the "Radiation biology" sub-programme.

THE PROGRAMME

Objective

E.7. The objective is to foster the development of methods and techniques for the application of radioisotopes in medicine and biology, special emphasis being placed on meeting the needs of developing countries. This programme has been the subject of consultation with WHO and will be periodically reviewed under the arrangements for joint consultation between the Agency and WHO. It is the continuing policy of the Agency to hand over to WHO at the appropriate time those activities in the programme which relate to procedures whose application has become routine.

Changes in the original programme

E.8. Detailed information on the activities planned for 1976 is provided in 526/E.2 to E.108. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen.

Medical applications (526/E.12 to E.39)

E.9. It is proposed to add a new programme component (Table E.4) dealing with instrumentation requirements in nuclear medicine for developing countries. The objective is to determine, within the overall medical context of the developing countries, what applications of radioisotopes in medicine should have the highest priority, and what the requirements are with respect to design and maintenance for instrumentation employed in these applications. This component would bring into focus several lines of activity previously carried out in this sub-programme. The manifest importance of specific nuclear medicine applications in meeting the medical needs of developing countries has always influenced the emphasis given under this sub-programme to alternative applications. A registry has been compiled of nuclear medicine staff, fields of investigation and available equipment in about 250 nuclear medicine laboratories in developing countries. The performance of instruments (especially whole-body counters) and components of instruments (especially collimators for scanners and for thyroid uptake probes) has been studied in the Medical Applications Section of the Laboratory with the objective of encouraging the introduction of simple but effective design. The studies are financially supported by a contribution of \$68 500 for a two-year period starting 1 June 1975 under contractual arrangements with the United States Energy Research and Development Administration.

E.10. A study will be initiated in 1975 in close co-operation with WHO and with the advice of IIASA and consultants, on the potential importance of the numerous techniques of nuclear medicine in improving health care and medical investigation in the developing countries. It is planned to complete this study in 1976. Concurrently, possibilities for improving or simplifying the design of instruments appropriate to the selected applications, and for assuring their maintenance, will be explored with the assistance of experts experienced in instrument design and in instrument use in developing countries. Communications will be established with the World Federation of Nuclear Medicine and Biology. The recommendations of the Joint WHO/IAEA Expert Committee on the Use of Ionizing Radiation and Radioisotopes for Medical Purposes (Nuclear medicine), which is scheduled to convene in Geneva in October 1975, will be taken into account. A detailed concept and a time-table of the entire project will be formulated by the end of 1975.

E.11. Based on the findings of the above-mentioned study and on the recommendations of the Expert Committee, a working group will probably be set up at a later stage to formulate proposals concerning the development and maintenance of appropriate instrumentation for solving specific major health problems of developing countries. In this same area a co-ordinated research programme which will include field testing of new designs is envisaged. The expected outcome of this work, which will be completed by 1980, is a positive set of recommendations which can be passed on to manufacturers of nuclear instrumentation for medical purposes, as well as to nuclear medicine units in the developing countries.

Radiation biology
(526/E.72 to E.108)

E.12. It is proposed to add a new programme component (Table E.6) dealing with nuclear methods in environmental research. The basic goals of this new component are:

- (a) To disseminate detailed information on nuclear methods and especially on advanced activation analysis systems for the purpose of studying and monitoring non-radioactive pollutants in the environment and in man himself;
- (b) To foster inter-disciplinary co-operation between groups concerned with environmental problems and nuclear laboratories, especially those using immovable installations, specifically nuclear reactors; and,
- (c) To promote the application of better nuclear techniques for solving the problems of non-radioactive environmental pollution.

In carrying out these activities close co-ordination with UNEP is essential.

E.13. The Agency's activities in the field of environmental research have always been mainly concerned with radioactive and other contaminants connected with nuclear installations.

E.14. Increased concern about the protection of the environment has led to the development of nuclear methods in national laboratories to deal with non-radioactive contaminants, e.g. tracer techniques (radioactive and stable tracers, including activable ones), neutron activation and photo-activation analysis, X-ray fluorescence, mass-spectrometry, natural isotope ratio techniques, etc. However, these methods could be used to a much greater extent than they are being used, even in the developed countries, especially for analyses of biological objects. Some activities relating to the development of these nuclear methods and the dissemination of the relevant information have been included in recent years in the programmes of the Division of Life Sciences, the Joint FAO/IAEA Division and the Division of Research and Laboratories.

E.15. The Council of the UNESCO Man and Biosphere Programme adopted a resolution in September 1974 recommending to the General Conference of UNESCO that a new man and biosphere project be instituted relating to research on environmental pollution and its effects on the biosphere, that an ad hoc task force be convened and that UNEP, FAO, WHO, WMO, IAEA, ICSU and the International Union for Conservation of Nature and National Resources should be invited to designate experts as members of the task group. In response to this resolution it is proposed to add the new component, which should serve as a contribution of the Agency to UNEP's programme.

E.16. The first project under this component, started in 1975, concerns neutron activation analysis of pollutants in human hair, using research reactors. The aim of this project is to contribute to the assessment of the environmental situation in various areas of the earth, using the chemical composition of human hair as an indicator. If the parties to the Regional Co-operative Agreement for Research, Development and Training

related to Nuclear Science and Technology [E.1] are keenly interested in the project, the work planned will be adjusted in the light of conditions in the countries of Asia and the Pacific. The Agency will co-ordinate the work, process the information produced, provide advice if required, and in some cases conclude research contracts.

E.17. One biologist at the P-5 level with experience in the application of nuclear methods will be required to work on this new component. The main responsibility of this staff member will be the co-ordination of other activities in the Department of Research and Isotopes concerning propagation of nuclear methods in environmental research.

E.18. It is planned to expand the work at a later stage to deal with other objects (human tissues, fluids and excreta, food, drinking water and inhaled air) and with other methods (X-ray fluorescence analysis and photonuclear activation analysis involving the use of accelerators).

E.19. The work under this component is intended to be carried out with substantial financial assistance from and in close co-operation with UNEP. Information on the objectives and detailed plans of the component have been transmitted to UNEP. Close co-operation will also be maintained with other United Nations organizations concerned with environmental health, including UNESCO, WHO, WMO and FAO.

E.20. The seminar on the use of nuclear techniques in medical and veterinary parasitology planned in collaboration with the Joint FAO/IAEA Division, mentioned in 526/E.94, will not be held in 1976.

[E.1] The text of the agreement is reproduced in document INFCIRC/167.

SUB-PROGRAMMES

Summary of manpower and costs by sub-programme

Table E.3

Sub-programme	1975 Adjusted budget			1976 Estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs
Medical applications	3.4	3.4	467 000	3.4	3.4	539 700
Dosimetry for international radiation applications	4.3	4.3	287 000	4.3	4.3	331 400
Radiation biology	6.3	2.3	457 000	6.3	2.3	549 900
TOTAL	14.0	10.0	1 211 000	14.0	10.0	1 421 000

Medical applications

Summary by programme components

Table E.4

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Applications in nutrition studies	0.4 ^{a/}	0.4	24 100	-	20 000	1 800	45 900
Applications of activation analysis	0.4 ^{a/}	0.8	27 600	-	40 000	1 600	69 200
Application of in vitro assay techniques	1.3	0.9	61 100	8 000	95 000	1 300	165 400
In vivo clinical procedures with radioactive agents	1.3	0.9	61 100	30 000	20 000	3 000	114 100
Instrumentation requirements in nuclear medicine for developing countries	- ^{a/}	0.4	6 100	-	20 000	1 000	27 100
Linguistic, printing and publishing services	-	-	-	-	-	97 000	97 000
Data processing services	-	-	-	-	-	21 000	21 000
TOTAL	3.4	3.4	180 000	38 000	195 000	126 700	539 700

^{a/} In addition altogether one professional man-year by laboratory staff.

Dosimetry for intentional radiation applications

Summary by programme components

Table E.5

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Postal dose inter-comparison service	1.1	1.6	60 200	-	10 000	2 100	72 300
Secondary standards dosimetry laboratories	1.1	1.1	57 600	17 000	15 000	3 300	92 900
Computer systems in dosimetry	1.1	0.6	51 500	-	7 000	1 000	59 500
Neutron dosimetry for radiobiological and medical applications	1.0	1.0	52 700	-	8 000	1 000	61 700
Linguistic, printing and publishing services	-	-	-	-	-	36 000	36 000
Data processing services	-	-	-	-	-	9 000	9 000
TOTAL	4.3	4.3	222 000	17 000	40 000	52 400	331 400

Radiation biology

Summary by programme components

Table E.6

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Radiation sterilization of medical products and biological tissues	1.0	0.4	32 500	19 000	23 000	1 500	76 000
Radiation genetics applied for improvement of industrial microorganisms	1.0	0.4	31 100	-	-	1 000	32 100
Radiation attenuation of infective agents for the preparation of vaccines and diagnostic antigens	1.1	0.5	43 000	-	22 000	1 200	66 200
Modification of radiosensitivity	1.1	0.5	39 600	28 000	24 000	3 000	94 600
Environmental radiation biology	1.1	0.5	71 300	-	40 000	-	111 300
Nuclear methods in environmental research	1.0	-	52 400	-	15 000	2 300	69 700
Linguistic, printing and publishing services	-	-	-	-	-	100 000	100 000
TOTAL	6.3	2.3	269 900	47 000	124 000	109 000	549 900

F. PHYSICAL SCIENCES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table F.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	580 646	690 000	92 000	28 000	120 000	810 000
Consultants	19 798	39 000	5 000	-	5 000	44 000
Overtime	140	-	-	-	-	-
Temporary assistance	2 506	-	-	1 000	1 000	1 000
Sub-total	603 090	729 000	97 000	29 000	126 000	855 000
Common staff costs	175 963	208 600	19 200	8 000	27 200	235 800
Travel	29 932	39 400	5 200	(2 600)	2 600	42 000
Meetings						
Conferences, symposia, seminars	55 644	61 000	20 000	35 000	55 000	116 000
Technical committees, advisory groups	58 035	82 000	13 000	(12 000)	1 000	83 000
Representation and hospitality	2 770	5 500	600	1 100	1 700	7 200
Scientific and technical contracts	91 679	172 000	8 600	8 400	17 000	189 000
Scientific supplies and equipment	6 767	19 500	4 500	-	4 500	24 000
Common services, supplies and equipment	5 141	7 000	-	(7 000)	(7 000)	-
Other items of expenditure						
Linguistic services	67 722	64 000	8 000	-	8 000	72 000
Printing and publishing services	210 379	334 000	57 000	(69 000)	(12 000)	322 000
Data processing services	86 173	80 000	6 000	14 000	20 000	100 000
TOTAL	1 393 295	1 802 000	239 100 13.3%	4 900 0.2%	244 000 13.5%	2 046 000
Laboratory services		916 000	160 000	42 000	202 000	1 118 000

SUMMARY OF MANPOWER

Table F.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	5	5	5	-	5
P-4	6	10	10	-	10
P-3	8	5	5	-	5
P-2	2	2	2	-	2
P-1	1	1	1	-	1
Sub-total	23	24	24	-	24
GS	16	16	16	-	16
TOTAL	39	40	40	-	40

CHANGES IN COSTS

F.1. As will be seen from Table F.1 above, it is expected that the cost of this programme will increase by \$244 000, of which \$239 100 will be required to cover salary and other price increases and \$4900 will be a programme increase.

F.2. A programme increase of \$36 000 in respect of salaries for established posts and common staff costs reflects the intention of filling manning table posts which will have remained unfilled for some months in 1975 due to unavoidable or intentional delays in recruitment. It is planned to hold two symposia, a conference and two seminars in 1976 as compared with the symposium and three seminars provided for in the 1975 budget. The cost of the additional meeting and a financial contribution of \$9000 which the Agency plans to make in respect of a EURATOM symposium on research materials for nuclear measurements constitute a programme increase of \$35 000. The programme decrease of \$12 000 in respect of technical committees and advisory groups was achieved by substituting consultants for an advisory group on radiopharmaceutical quality control. As regards temporary assistance for which no provision was made in the 1975 budget, the amount of \$1000 shown in Table F.1 is for meeting the cost of assistance with nuclear data compilation and processing.

F.3. Small programme increases are foreseen in respect of scientific and technical contracts and of representation and hospitality, and also one of \$14 000 in respect of data processing services for the "Isotope hydrology" sub-programme. Since it is planned to provide in-house photocomposition for the publication of CINDA, the \$7000 previously required for contractual photocomposition can be saved. The programme decrease of \$69 000 in respect of printing and publishing services reflects the fact that initial 1975 estimates have proved to be too high.

THE PROGRAMME

Objective

F.4. The objective is to stimulate research, to foster information and data exchange and to co-ordinate the efforts of scientists from different countries in physics, industrial applications of isotopes, chemistry, nuclear data and isotope hydrology. Special attention will be paid to the needs of developing countries in the fields mentioned above and to education and training in nuclear science and techniques.

Changes in the original programme

F.5. Detailed information on the activities planned for 1976 is provided in 526/F.3 to F.116. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen for 1976.

Physics (526/F.12 to F.41)

F.6. The symposium mentioned in 526/F.24 has been postponed.

F.7. A conference on plasma physics and controlled nuclear fusion research (526/F.30) will be organized in 1976, and every two years thereafter. The programme of the conference will show an increased emphasis on fusion reactor engineering, safety, and environmental effects.

Isotope hydrology (526/F.71 to F.95)

F.8. A panel held in Vienna in 1966 recommended the preparation and distribution of new water isotopic standards to be used as a basis for intercomparison of results. These standards have been distributed by the Agency since 1969 to a considerable number of laboratories in the world. The results already available show the existence of some discrepancy as between different laboratories. It is therefore proposed to carry out in 1976 a review of the intercomparison results and to make recommendations for the isotopic values to be attributed to the existing water standards. A review will also be made of the Agency's activity in the preparation and distribution of standards for isotope hydrology.

Nuclear data (526/F.96 to F.116)

F.9. Following the recommendations of the International Fusion Research Council that compilation and dissemination of atomic and molecular data for fusion and plasma research and fusion reactor design be included in the nuclear data sub-programme, a survey of existing atomic data banks and compilation activities is being prepared. In 1976 it is planned to make, with the help of an advisory group, a detailed study of the work that will be required.

SUB-PROGRAMMES

Summary of manpower and costs by sub-programme

Table F.3

Sub-programme	1975 Adjusted budget			1976 Estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs
Physics	3.3	2.3	372 000	3.3	2.3	485 200
Industrial applications and chemistry	5.2	2.2	461 000	5.2	2.2	489 600
Isotope hydrology	4.2	3.2	365 000	4.2	3.2	460 200
Nuclear data	11.3	8.3	604 000	11.3	8.3	611 000
TOTAL	24.0	16.0	1 802 000	24.0	16.0	2 046 000

Physics

Summary by programme components

Table F.4

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Nuclear physics	1.6	1.1	76 000	10 700	20 000	4 600	111 300
Plasma and controlled fusion physics	1.1	0.6	67 100	39 500	10 000	4 300	120 900
Research reactor utilization	0.6	0.6	47 700	25 500	45 000	3 800	122 000
Linguistic, printing and publishing services	-	-	-	-	-	131 000	131 000
TOTAL	3.3	2.3	190 800	75 700	75 000	143 700	485 200

Industrial applications and chemistry

Summary by programme components

Table F.5

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Materials analysis	2.6	1.1	112 700	38 200	20 000	5 200	176 100
Production and utilization of isotopes	1.1	0.6	53 200	28 000	30 000	4 000	115 200
Chemistry	1.5	0.5	65 100	9 000	12 000	4 200	90 300
Linguistic, printing and publishing services	-	-	-	-	-	108 000	108 000
TOTAL	5.2	2.2	231 000	75 200	62 000	121 400	489 600

Isotope hydrology

Summary by programme components

Table F.6

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Isotope hydrology	4.2	3.2	207 000	13 200	52 000	12 000	284 200
Linguistic, printing and publishing services	-	-	-	-	-	76 000	76 000
Data processing services	-	-	-	-	-	100 000	100 000
TOTAL	4.2	3.2	207 000	13 200	52 000	188 000	460 200

Nuclear data

Summary by programme components

Table F.7

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Neutron nuclear data	5.2	4.7	216 600	-	-	4 200	220 800
Non-neutron nuclear data	2.1	0.5	80 900	13 000	-	2 600	96 500
Data review and measurement	4.0	3.1	164 500	13 500	-	28 300	206 300
Cost of meetings not attributable to an individual programme component	-	-	-	8 400	-	-	8 400
Linguistic, printing and publishing services	-	-	-	-	-	79 000	79 000
TOTAL	11.3	8.3	462 000	34 900	-	114 100	611 000

G. THE LABORATORY

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table G.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase of (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 135 404	1 370 000	245 000	74 000	319 000	1 689 000
Consultants	13 123	-	-	-	-	-
Overtime	2 555	4 200	400	(600)	(200)	4 000
Temporary assistance	8 010	1 300	100	(400)	(300)	1 000
Sub-total	1 159 092	1 375 500	245 500	73 000	318 500	1 694 000
Common staff costs	344 082	414 000	56 500	21 000	77 500	491 500
Travel	5 114	4 200	300	-	300	4 500
Scientific and technical contracts	40 980	11 300	3 700	-	3 700	15 000
Scientific supplies and equipment	186 308	215 000	21 000	(10 000)	11 000	226 000
Common services, supplies and equipment	224 113	286 000	40 000	(32 000)	8 000	294 000
Other items of expenditure						
Linguistic services	123	-	-	-	-	-
Printing and publishing services	1 700	-	-	2 000	2 000	2 000
Data processing services	1 928	3 000	-	2 000	2 000	5 000
Transfer to Safeguards	(350 970)	(386 000)	(40 000)	(70 000)	(110 000)	(496 000)
Other	(56 843) ^{a/}	-	-	-	-	-
TOTAL	1 555 627	1 923 000	327 000 17.0%	(14 000) (0.7)%	313 000 16.3%	2 236 000

^{a/} Co-operative agreement in respect of tsetse fly control.

SUMMARY OF MANPOWER

Table G.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
P-5	5	5	5	-	5
P-4	12	12	13	1	14
P-3	6	6	5	-	5
P-2	5	5	5	-	5
P-1	2	2	2	-	2
Sub-total	30	30	30	1	31
GS	52	55	55	4	59
M&O	21	22	22	2	24
TOTAL	103	107	107	7	114

CHANGES IN COSTS AND MANPOWER

Costs

G. 1. As will be seen from Table G.1 above, it is expected that the cost of this programme will increase by \$313 000 as a net result of price increases of \$327 000 partly offset by a programme decrease of \$14 000.

G. 2. A programme increase of \$95 000 is foreseen in respect of salaries for established posts and common staff costs due to the addition of one P-4, four GS and two M&O posts and to a reduction in the savings achieved through delays in filling vacant posts. The new posts, with the exception of one GS post for the "Isotope hydrology" sub-programme, are required for the Safeguards Analytical Laboratory (SAL).

G. 3. A programme decrease of \$32 000 is foreseen in respect of common services, supplies and equipment despite an increase in the requirements of SAL. A programme reduction, of \$10 000, is also foreseen in respect of scientific supplies and equipment, and it is hoped that further savings will be effected under this item to the extent that gifts of equipment are received from Member States in response to an appeal by the Director General.

G. 4. The \$70 000 programme increase component of the amount to be charged to the "Safeguards" programme, which reflects the cost of additional staff and of common services, supplies and equipment for SAL, leaves the remaining sub-programmes of the Laboratory with a net programme decrease of \$14 000.

Manpower

G. 5. As will be seen from Table G.2 above, the addition of one Professional, four GS and two M&O posts is foreseen for 1976.

G. 6. Four Professional, 11 GS and three M&O posts are required for the adequate staffing of SAL. As described in 526/G.3, three additional GS posts and one additional

M&O post were included for SAL in the 1975 budget. At that time, it was considered that three Professional and six GS posts could be transferred to SAL from other Laboratory sub-programmes, so that the 1975 budget showed a total SAL complement of three Professional and nine GS posts.

G.7. In the course of the preparations for the operation of SAL, in 1974 and early 1975, it became apparent that three Professional and only five GS posts could be transferred to SAL from other sub-programmes, namely those posts which had previously been assigned to the Laboratory's "Chemistry" sub-programme; the GS post which was to be transferred from "Electronics and workshop services" will continue to be needed in the Electronics Workshop.

G.8. In order to reach the total complement required for SAL, it is therefore necessary to provide for the addition in 1976 of one P-4, three GS and two M&O posts. In view of the desired accuracy of the analytical work to be performed and of the fact that, during the initial stage of the operation of SAL, requests will not be restricted to routine analyses of samples but will involve the setting-up of systems and development work, four scientific Professionals will have to be at the disposal of SAL.

G.9. Of the GS staff in SAL, three will be required for mass-spectrometry, one for emission spectrography, one for radiometric analysis, one for the reception and storage of samples and supervision of the balance room, two for plutonium analysis and three for uranium analysis. The three M&O staff members will be required for general maintenance and cleaning.

G.10. One additional GS post is required for a technician who will serve the "Isotope hydrology" sub-programme and whose duties will involve the routine operation of most of the relevant equipment within the flexible scheme of rotation which enables the Laboratory to maintain maximum efficiency. The additional GS staff member will help in increasing the number of deuterium and oxygen-18 analyses performed to cope with the demand.

THE PROGRAMME

Objective

G.11. The objective of the Laboratory is to provide support for the various technical programmes, such as analytical services, calibration of radionuclides and development of techniques involved in the Agency's activities, including safeguards work.

The original programme

G.12. Detailed information on the activities planned for 1976 is provided in 526/G.4 to G.56. A review of the Laboratory's activities was carried out in September 1974 by an ad hoc group of consultants. In its report to the Director General the group concluded that the programme of the Laboratory was appropriate. Accordingly no changes in the 1976 programme are proposed.

Summary of manpower and costs by sub-programme

Table G.3

Sub-programme	1975 Costs				1976 Estimate			
	P	Man-years GS	M&O	Costs	P	Man-years GS	M&O	Costs
Metrology	4.0	5.0	-	190 000	4.0	5.0	-	222 000
Chemistry	6.0	6.0	-	316 000	6.0	6.0	-	341 000
Isotope hydrology	4.0	8.0	1.0	240 000	4.0	9.0	1.0	308 000
Medical applications and dosimetry	2.0	5.0	-	170 000	2.0	5.0	-	185 000
Agriculture	8.0	8.0	1.0	390 000	8.0	8.0	1.0	457 000
Electronics and workshop services	2.0	8.0	-	200 000	2.0	9.0	-	238 000
Safeguards analytical laboratory ^{a/}	3.0	9.0	1.0	312 000	4.0	11.0	3.0	441 000
Administration, library and general services	1.0	6.0	19.0	491 000	1.0	6.0	19.0	540 000
TOTAL	30.0	55.0	22.0	2 309 000	31.0	59.0	24.0	2 732 000

^{a/} SAL only, excluding electronics and workshop services.

Distribution of total costs by major programmes

Table G.4

	1975 Adjusted budget	1976 Estimate
Food and agriculture	759 000	853 000
Life sciences	248 000	265 000
Physical sciences	916 000	1 118 000
Safeguards	386 000	496 000 ^{a/}
TOTAL	2 309 000	2 732 000

^{a/} Including electronics and workshop services.

H. INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table H.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	200 632	224 000	34 000	-	34 000	258 000
Consultants	17 393	16 800	1 400	(2 000)	(600)	16 200
Overtime	10 709	6 000	800	1 200	2 000	8 000
Temporary assistance	24 637	20 000	2 000	(2 000)	-	20 000
Sub-total	253 371	266 800	38 200	(2 800)	35 400	302 200
Common staff costs	52 262	67 200	7 700	-	7 700	74 900
Travel	3 608	5 000	700	(700)	-	5 000
Meetings						
Conferences, symposia, seminars	264 325	492 000	59 000	(34 000)	25 000	517 000
Technical committees, advisory groups	7 427	5 500	700	(700)	-	5 500
Representation and hospitality	4 346	4 500	500	1 500	2 000	6 500
Common services, supplies and equipment	210 671	170 000	19 000	-	19 000	189 000
Other items of expenditure						
Printing and publishing services	87 000	-	-	75 000	75 000	75 000
Other:						
Fellowships	23 624	40 000	3 000	(18 000)	(15 000)	25 000
Visiting scientists and lecturers	94 670	90 000	10 000	12 000	22 000	112 000
Associate members	58 109	104 000	10 000	(11 100)	(1 100)	102 900
Federated institutions	24 599	26 000	3 000	4 000	7 000	33 000
Sub-total	201 002	260 000	26 000	(13 100)	12 900	272 900
TOTAL	1 084 012	1 271 000	151 800 11.9%	25 200 2.0%	177 000 13.9%	1 448 000
Source of funds:						
Regular Budget	287 000	220 000	85 000 38.6%	-	85 000 38.6%	305 000
Operating Fund I	797 012	1 051 000	66 800	25 200	92 000	1 143 000
TOTAL	1 084 012	1 271 000	151 800 11.9%	25 200 2.0%	177 000 13.9%	1 448 000

SUMMARY OF MANPOWER

Table H.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
P-5	1	1	1	-	1
P-4	1	1	1	-	1
P-3	3	3	3	-	3
Sub-total	5	5	5	-	5
GS	17	17	17	-	17
TOTAL	22	22	22	-	22

CHANGES IN COSTS

H.1. As will be seen from Table H.1 above, the total cost of this programme is expected to increase by \$177 000, of which \$151 800 will be required to cover salary and other price increases and \$25 200 represents a programme increase.

H.2. Although there will be programme decreases in respect of meetings and of fellowships and associate members, based on the expected availability of funds in 1976, the apportionment of the costs of printing and publishing seminar, symposium and conference proceedings to the relevant programmes has resulted in a programme increase for the Centre as a whole.

H.3. UNESCO has agreed to make a total contribution of \$450 000 over the period 1975-76. Its contribution for 1976 is shown in the tabulation below as \$230 000 to coincide with the Agency's planned basic contribution for that year, which compares with \$220 000 for 1975. In order to cover the printing and publishing costs apportioned to the Centre, the Agency's basic contribution has been increased by \$75 000, so that the Agency's total contribution from the Regular Budget is \$305 000. UNESCO has been approached with a view to its contributing to the Centre's printing and publishing costs on equal terms with the Agency as of the beginning of 1977.

H.4. The small programme increase in respect of hospitality is intended to cover the organization of activities for the participants in training courses, seminars and other scientific meetings in view of the relative isolation of the Centre and the language problems encountered.

H. 5. It is assumed that the activities of the Centre will be financed in 1976 from the following sources:

Regular Budget:			
Basic contribution		230 000	
Contribution to meet printing and publishing costs		75 000	305 000
		<hr/>	
Operational Budget:			
Italian Government		350 000	
UNESCO		230 000	
SIDA		308 000	
UNDP: Solid state physics	80 000		
Teaching of physics	30 000		
Mathematics	100 000	210 000	
	<hr/>		
Other		45 000	1 143 000
		<hr/>	
			1 448 000
			<hr/>

THE PROGRAMME

Objective

H. 6. The objective is to foster, through research and training, the advancement of theoretical physics with special regard to the needs of developing countries so as to encourage theoretical physicists from those countries to continue and expand their research work.

The original programme

H. 7. Detailed information on the activities planned for 1976 is provided in 526/H. 5 to H. 36.

H. 8. In accordance with the recommendations resulting from a meeting in November 1973 of the Scientific Council of the Trieste Centre, an Ad Hoc Consultative Committee was set up by the Directors General of the Agency and UNESCO to suggest possible ways and means of strengthening the programme activities of the Centre with respect to the scientific aspects and their relevance to the developing countries. This Committee, which met on 19-20 November 1974, recommended the continuation of work on major subjects in the Centre's programme and made a number of suggestions including some on budgetary matters which it is intended to submit in a special report to the Board of Governors. In the meantime no changes in the 1976 programme are proposed; consultations with UNESCO will be initiated concerning implementation of certain suggestions in 1977.

Summary of cost by activity and major source of funds

Table H.3

Scientific and administrative expenditures in 1976	Trieste Centre Funds	SIDA Funds	UNDP Funds	Total
Scientific staff and activities				
Scientific staff	81 000	-	-	81 000
Fellowships	25 000	-	-	25 000
Scientific visitors	112 000	-	-	112 000
Consultants	16 200	-	-	16 200
Other scientific activities				
Associates	25 000	75 000	-	100 000
Junior associates	2 900	-	-	2 900
Federated institutions	33 000	-	-	33 000
Seminars and workshops				
Solid state Winter College	10 000	33 000	50 000	93 000
Solid state workshop	20 000	-	30 000	50 000
Plasma physics	30 000	-	-	30 000
Mathematics	-	-	100 000	100 000
Science teaching (teaching of physics)	-	150 000	30 000	180 000
Astrophysics	10 000	-	-	10 000
Regional course	-	50 000	-	50 000
High energy topical meeting (2)	4 000	-	-	4 000
Other scientific and technical experts				
Scientific Council	5 500	-	-	5 500
Publications	75 000	-	-	75 000
Library	40 000	-	-	40 000
Duty travel	5 000	-	-	5 000
Scientific administration	195 400	-	-	195 400
Administration and overheads	240 000	-	-	240 000
TOTAL	930 000	308 000	210 000	1 448 000

I. NUCLEAR POWER AND REACTORS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table I.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	625 183	890 000	103 000	-	103 000	993 000
Consultants	24 664	64 000	8 300	7 700	16 000	80 000
Overtime	68	700	100	200	300	1 000
Temporary assistance	-	1 900	200	(100)	100	2 000
Sub-total	649 915	956 600	111 600	7 800	119 400	1 076 000
Common staff costs	189 460	269 000	20 500	-	20 500	289 500
Travel	37 194	46 500	6 000	(2 500)	3 500	50 000
Meetings						
Conferences, symposia, seminars	56 850	86 400	20 000	(49 400)	(29 400)	57 000
Technical committees, advisory groups	49 966	145 600	22 400	24 000	46 400	192 000
Representation and hospitality	4 105	7 600	800	(1 400)	(600)	7 000
Scientific and technical contracts	89 055	98 000	5 000	(5 000)	-	98 000
Scientific supplies and equipment	-	500	-	(500)	(500)	-
Common services, supplies and equipment	8 786	2 800	500	2 200	2 700	5 500
Other items of expenditure						
Linguistic services	57 957	82 000	10 000	-	10 000	92 000
Printing and publishing services	95 000	191 000	36 000	30 000	66 000	257 000
Data processing services	90 330	80 000	6 000	14 000	20 000	100 000
TOTAL	1 328 618	1 966 000	238 800 12.1%	19 200 1.0%	258 000 13.1%	2 224 000

SUMMARY OF MANPOWER

Table I.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	11	11	11	-	11
P-4	6	12	12	-	12
P-3	3	3	3	-	3
P-2	2	2	2	-	2
Sub-total	23	29	29	-	29
GS	14	14	14	-	14
TOTAL	37	43	43	-	43

CHANGES IN COSTS

I. 1. As will be seen from Table I.1 above, it is expected that the total cost of this programme will increase by \$258 000 in 1976, of which \$238 800 will be required to cover salary and other price increases and \$19 200 represents a programme increase.

I. 2. It is planned to hold one symposium and a seminar in 1976, as compared with the two symposia and three seminars provided for in the 1975 budget. The resulting programme decrease is partly offset by the financial impact of plans for a larger number of technical committees and advisory groups and a programme increase in respect of consultants.

I. 3. Small programme decreases are foreseen in respect of travel, hospitality and scientific and technical contracts. No provision is made for scientific supplies and equipment in 1976, but funds for common services, supplies and equipment will have to be increased to cover the expanding demand for special calculating equipment supplies and the maintenance requirements of the calculating equipment.

I. 4. A programme increase of \$30 000 is foreseen in respect of printing and publishing services to cover the costs of manuals and symposium proceedings, mainly in connection with the expanded nuclear power programme. The \$14 000 programme increase in respect of data processing services relates to an increase in the number of power planning studies and to some changes in the format of the annual publication on operating experience with nuclear power stations in Member States. In addition, electronic data processing services will be required for the new programme component dealing with the study of regional nuclear fuel centres.

THE PROGRAMME

Objective

I. 5. The objective is to provide integrated assistance to Member States in the planning and implementation of nuclear power programmes for electricity generation and other purposes by:

- (a) Assisting them directly through the technical and economic assessment of programmes, the execution of reactor projects and the supply of nuclear materials;
- (b) Collecting and disseminating evaluated and systematized information on nuclear power programme requirements and on proven and newer nuclear technologies; and
- (c) Assessing the future role of nuclear power in meeting world energy demands within the constraints imposed by environmental factors and the availability of financial resources.

Changes in the original programme

I. 6. Detailed information on the activities planned for 1976 is provided in 526/I. 4 to I. 121. The following additions to, or changes in, activities under the programme and under the sub-programmes and the component indicated below are foreseen.

The programme (526/I. 4 to I. 16)

I. 7. The emerging status of nuclear power as a major industry as well as the specific features of nuclear power and the potential constraints on its accelerated introduction, among which one of the most severe is the close interdependency of the many parts of the nuclear fuel cycle, justify the holding of an IAEA major international conference on nuclear power and its fuel cycle in 1977. It is anticipated that the programme and the overall organization of this conference will be finalized in 1975, leaving the final preparatory work to be completed in 1976.

Energy forecasts and power economics (526/I. 17 to I. 25)

I. 8. The use of consultants in 1975-1976 is considered the most efficient way of performing the tasks outlined in 526/I. 19. Accordingly, the advisory group meetings mentioned in 526/I. 20 will not be held in 1975 and 1976.

I. 9. In order to conduct the survey of new methods of economic appraisal and comparison mentioned in 526/I. 21, consultants' meetings are planned for 1976 as well as 1975.

Nuclear materials resources, supply and demand (526/I. 26 to I. 53)

I. 10. The consultants' meeting on the survey of uranium costs, prices and contracts mentioned in 526/I. 31 will be held in 1976.

I. 11. One technical committee meeting (with six sub-working groups) will be convened in 1976 as a follow-up of the recommendations of the symposium on the formation of uranium ore deposits held in 1974 which is mentioned in 526/I. 34.

I. 12. A consultants' meeting on permian sandstone uranium deposits is planned for 1976 owing to the general interest shown during a symposium held in Athens in 1974 in this important type of uranium ore deposit.

I. 13. To supplement the two UNDP-financed training courses - one on uranium exploration (India, 1974) and one on geochemical prospecting methods (Austria, 1975) - two interregional training courses which it is proposed should be financed under UNDP are planned for 1976. Specialists from all regions will be invited to participate in both these courses. The first will cover uranium exploration and evaluation methods for the regions of Africa, Europe and the Middle East and the second one the processing of uranium ores.

I. 14. In addition to the advisory group meeting on uranium ore processing held in 1975, it is proposed to hold further consultants' meetings in 1976.

I. 15. In connection with a co-ordinated research programme on geological indicator methods to locate uranium deposits in sedimentary basins initiated in 1975, it is proposed to initiate in 1976 a co-ordinated research programme on on-site geochemical measurement as a uranium indicator.

Fuel technology
(526/I. 54 to I. 67)

I. 16. It is proposed to add a new programme component (Table I. 6) dealing with the study of regional nuclear fuel centres. The objective is to study and evaluate, on the basis of nuclear power growth projections and considering the complex technological, economic and other closely related issues, the soundness of the concept of regional nuclear fuel centres which would mainly deal with fuel reprocessing, waste processing and disposal, and possibly with nuclear fuel fabrication.

I. 17. On the basis of the up-dated Market Survey for Nuclear Power in Developing Countries, 1974 edition, [I. 1], all steps of the fuel cycle, including fuel manufacturing, spent fuel storage and transport, spent fuel reprocessing, waste treatment and disposal have been reviewed in order to evaluate through different parameters of the above stages whether the best way to solve the complex and interrelated problems involved would be through international co-operation on a regional basis.

I. 18. In line with the objective set forth above, it is proposed to develop models for studying the economics of the overall fuel cycle. The information to be processed will be based on the nuclear power forecasts in the developing countries and on related aspects with regard to fuel supply, fuel reprocessing and waste management requirements, taking into account the options which are open in the various regions involved and the possible environmental impacts.

I. 19. Work under this component will be jointly carried out by the Division of Nuclear Power and Reactors and the Division of Nuclear Safety and Environmental Protection. An advisory group meeting will be held in 1976 in direct support of the study.

I. 20. The study will be continued at a later stage, using the methodologies outlined above and should form the basis for a detailed report assessing the economic and technical features of regional fuel cycle facilities. This work will be completed and its results reported around 1977.

Fuel element technology
(526/I. 56 to I. 62)

I. 21. With reference to the activities mentioned in 526/I. 60 and I. 61 under the fuel element technology component, it is planned to establish a *standing working group on fuel technology performance* for present and future reactor types. This working group will review,

[I. 1] Agency publication STI/PUB/395.

through annual technical committee meetings from 1976 onwards, the performance and behaviour of fuel and recommend specific steps to be taken by the Agency for information exchange, for instance through specialist meetings, co-ordination of research and development work, as well as in the field of quality assurance.

I. 22. Taking into account the holding of an international conference, sponsored by the British Nuclear Energy Society, on enrichment including advanced fuel enrichment techniques in 1975, it is proposed to cancel the advisory group meeting planned for 1976 on the same topic (526/I. 61).

Fuel reprocessing and recycling
(526/I. 63 to I. 67)

I. 23. It is proposed to defer the symposium on enrichment and reprocessing experience and prospects planned for 1976 (526/I. 66). Instead, a small group of consultants might be convened in 1976 to advise the Agency on its programme in the field of design, construction and operation of nuclear fuel reprocessing plants from the point of view of improved reliability. Safety aspects may also be considered.

Nuclear power plant technology and operational reliability
(526/I. 84 to I. 107)

I. 24. As a result of the review of the activities of the existing working groups, i. e. standing working groups on pressure vessels and on control and instrumentation mentioned in 526/I. 95, it is proposed that their activities should be given a new direction, emphasizing engineering aspects in their specific fields of quality control with the aim of increasing nuclear power plant reliability. The groups should be supplemented and their work co-ordinated by a new standing working group on quality assurance established in 1975 which will have the task of promulgating and reviewing recommendations for the overall Division programme on quality assurance. The work of these groups will also be co-ordinated with the safety standards programme.

I. 25. One technical committee meeting will accordingly be planned each year, from 1975 onwards, for each one of those working groups and a number of specialists' meetings will be held as necessary to support the work.

I. 26. Following the symposium proposed for 1975 in 526/I. 99, it is planned to convene in 1976 an advisory group on gas-turbine applications for high-temperature reactors owing to the growing interest in those reactor types.

I. 27. It is planned to convene a technical committee meeting on capital cost estimates for liquid-metal fast breeder reactors in 1976 instead of the symposium mentioned in document 526/I. 100, and several specialists' meetings might be convened in 1976 for the preparation of the symposium on operating experience with liquid-metal fast breeder reactors to be held in 1977 in accordance with the recommendations made in 1975 by the International Working Group on Fast Reactors at its annual meeting.

I. 28. With regard to 526/I. 105, it is to be noted that the IAEA International Conference on Nuclear Power and its Fuel Cycle is planned to take place in 1977.

I. 29. In addition to the activities mentioned in 526/I. 105, an advisory group on reactors for the production of industrial process heat is planned for 1976. This type of reactor offers a potential basis for development of small and medium-sized power reactors. Owing to the great interest expressed among Member States in urban district heating, an advisory group meeting on this topic is planned for 1976 as a follow-up to the study group meeting held in 1974 on utilization of nuclear reactors for industrial processes, district heating and desalting. The seminar on multipurpose applications planned for 1976 will be deferred.

Reactor physics and advanced nuclear power technology
(526/I.108 to I.121)

I. 30. With regard to fusion reactor technology (526/I.112), it is proposed to hold in 1976 the advisory group meeting on high-intensity neutron sources for research on fusion reactor materials and not to hold the seminar planned for that year owing to the fact that the highly specialized matters to be dealt with cannot be considered as having an educational character.

I. 31. It is proposed to replace the seminar planned for 1976 on power-coolant mismatch analysis, i. e. analysis of thermal transients in reactor cooling (526/I.120), by an advisory group meeting on the same topic to be held in 1977.

I. 32. A technical committee meeting will be convened annually from 1976 onwards under the auspices of the International Working Group on Reactor Radiation Measurements.

SUB-PROGRAMMES

Summary of manpower and costs by sub-programme

Table I.3

Sub-programme	1975 Adjusted budget			1976 Estimate		
	Man-years P	GS	Costs	Man-years P	GS	Costs
Energy forecasts and power economics	4.7	2.5	290 000	4.7	2.5	301 700
Nuclear materials resources, supply and demand	5.6	3.6	385 000	5.6	3.6	402 400
Fuel technology	3.6	1.6	225 000	3.6	1.6	310 600
Nuclear power project implementation	6.6	2.4	390 000	6.6	2.4	454 400
Nuclear power plant technology and operational reliability	5.4	2.5	380 000	5.4	2.5	506 900
Reactor physics and advanced nuclear power technology	3.1	1.4	296 000	3.1	1.4	248 000
TOTAL	29.0	14.0	1 966 000	29.0	14.0	2 224 000

Energy forecasts and power economics

Summary by programme components

Table I.4

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Energy forecasts and power economics	4.7	2.5	227 000	13 400	-	7 100	247 700
Linguistic, printing and publishing services	-	-	-	-	-	45 000	45 000
Data processing services	-	-	-	-	-	9 000	9 000
TOTAL	4.7	2.5	227 200	13 400	-	61 100	301 700

Nuclear materials resources, supply and demand

Summary by programme components

Table I.5

Programme component	Man-years P GS		1976 Cost estimates				
			Staff	Meetings	Contracts	Other	Total
Uranium and thorium resources, production and demand	2.5	1.4	114 900	46 300	-	4 400	165 600
Uranium exploration, development and ore processing	2.0	1.2	90 300	-	34 000	2 800	127 100
Nuclear materials supply	1.1	1.0	54 700	-	-	-	54 700
Linguistic, printing and publishing services	-	-	-	-	-	55 000	55 000
TOTAL	5.6	3.6	259 900	46 300	34 000	62 200	402 400

Fuel technology

Summary by programme components

Table I.6

Programme component	Man-years P GS		1976 Cost estimates				
			Staff	Meetings	Contracts	Other	Total
Fuel element technology	2.0	1.0	94 300	41 000	-	3 800	139 100
Fuel reprocessing and recycling	1.0	0.4	45 800	12 500	-	2 200	60 500
Study of regional nuclear fuel centers	0.6	0.2	27 000	22 000	-	-	49 000
Linguistic, printing and publishing services	-	-	-	-	-	55 000	55 000
Data processing services	-	-	-	-	-	7 000	7 000
TOTAL	3.6	1.6	167 100	75 500	-	68 000	310 600

Nuclear power project implementation

Summary by programme components

Table I.7

Programme component	Man-years P GS		1976 Cost estimates				
			Staff	Meetings	Contracts	Other	Total
Nuclear power market survey	2.3	0.8	106 700	9 400	-	7 800	123 900
Assistance in nuclear power planning	4.3	1.6	205 000	-	-	14 500	219 500
Linguistic, printing and publishing services	-	-	-	-	-	80 000	80 000
Data processing services	-	-	-	-	-	31 000	31 000
TOTAL	6.6	2.4	311 700	9 400	-	133 300	454 400

Nuclear power plant technology and operational reliability

Summary by programme components

Table I.8

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Nuclear power plant operating experience	0.8	0.7	40 700	-	-	2 200	42 900
Nuclear power plant reliability	2.5	0.8	121 300	59 600	18 000	8 600	207 500
New power reactor technology	1.5	0.6	69 800	21 300	2 000	1 200	94 300
Multipurpose applications	0.6	0.4	30 200	7 500	-	1 500	39 200
Linguistic, printing and publishing services	-	-	-	-	-	70 000	70 000
Data processing services	-	-	-	-	-	53 000	53 000
TOTAL	5.4	2.5	262 000	88 400	20 000	136 500	506 900

Reactor physics and advanced nuclear power technology

Summary by programme components

Table I.9

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Advanced reactor concepts	1.1	0.4	47 200	7 600	-	3 200	58 000
Advanced energy conversion	1.0	0.5	45 200	4 200	8 000	1 500	58 900
Reactor physics and computations	1.0	0.5	45 200	4 200	36 000	1 700	87 100
Linguistic, printing and publishing services	-	-	-	-	-	44 000	44 000
TOTAL	3.1	1.4	137 600	16 000	44 000	50 400	248 000

J. NUCLEAR SAFETY AND ENVIRONMENTAL PROTECTION

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table J.1

Item of expenditure	1974 Actual obligations	1975 Adjusted Budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	522 047	857 000	128 000	160 000	288 000	1 145 000
Consultants	14 509	126 000	16 000	-	16 000	142 000
Overtime	166	-	-	-	-	-
Temporary assistance	49	1 200	100	1 000	1 100	2 300
Sub-total	536 771	984 200	144 100	161 000	305 100	1 289 300
Common staff costs	158 208	259 300	26 600	48 000	74 600	333 900
Travel	39 145	112 500	14 900	-	14 900	127 400
Meetings						
References, symposia, seminars	66 462	79 700	19 300	(7 000)	12 300	92 000
Technical committees, advisory groups	135 307	374 000	65 000	-	65 000	439 000
Representation and hospitality	3 414	8 800	900	700	1 600	10 400
Scientific and technical contracts	165 638	272 000	13 000	26 000	39 000	311 000
Scientific supplies and equipment	14 030	18 500	1 900	(2 400)	(500)	18 000
Common services, supplies and equipment	3 331	20 000	2 000	(5 000)	(3 000)	17 000
Other items of expenditure						
Linguistic services	110 515	117 000	12 000	10 000	22 000	139 000
Printing and publishing services	295 500	304 000	55 000	11 000	66 000	370 000
Transfer to other programmes for direct support: PNE	-	(23 000)	(3 000)	-	(3 000)	(26 000)
TOTAL	1 528 321	2 527 000	351 700 13.9%	242 300 9.6%	594 000 23.5%	3 121 000

SUMMARY OF MANPOWER

Table J.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	9	14	14	2	16
P-4	8	11	10	1	11
P-3	3	4	4	-	4
Sub-total	21	30	29	3	32
GS	13	18	18	6	24
TOTAL	34	48	47	9	56

CHANGES IN COSTS AND MANPOWER

Costs

J.1. As will be seen from Table J.1 above, it is expected that the cost of this programme will increase by \$594 000 in 1976, of which \$351 700 will be required to cover salary and other price increases and \$242 300 is a programme increase.

J.2. The programme increase of \$208 000 in respect of salaries for established posts and common staff costs is due mainly to the addition of three Professional and six GS posts and partly to a reduction in the savings achieved through delays in recruitment.

J.3. The programme increases of \$10 000 in respect of linguistic services and \$11 000 in respect of printing and publishing services are attributable to the work on nuclear safety codes and guides.

J.4. Of the funds foreseen for common services, supplies and equipment, \$15 000 will be required for the production of a film on the safe transport of radioactive materials and \$2000 for the maintenance of special equipment employed in the nuclear safety standards project; a programme decrease of \$5000 will be possible.

J.5. A programme decrease in respect of scientific supplies and equipment relates to the "Radiological safety" sub-programme.

J.6. The programme increase of \$26 000 in respect of scientific and technical contracts is the result of a programme increase relating to radioactive waste treatment and disposal under the "Waste management" sub-programme partly offset by a decrease relating to transport under the "Radiological safety standards" component of the "Radiological safety" sub-programme.

J.7. Provision has been made in the 1975 Adjusted budget and in the 1976 estimates for the cost of half a man-year of Professional staff support to be charged to the "Nuclear explosions for peaceful purposes" programme.

Manpower

J.8. As will be seen from Table J.2 above, the addition of three Professional and six GS posts is foreseen for 1976.

J.9. The addition of one P-5 post, for a senior radiation protection specialist or a nuclear engineer with extensive experience in the radiological safety aspects of the nuclear fuel cycle, and three GS posts will be required for the "Radiological safety" sub-programme, from which one Professional staff member has been transferred to the "Nuclear explosions for peaceful purposes" programme and which is also supporting this programme to the extent of half a Professional man-year. The workload under the "Radiological safety" sub-programme has increased considerably owing to the acceleration and expansion of nuclear safety and environmental protection activities and nuclear power programmes, to the expansion of training programmes and to the need to provide radiological protection services for the Safeguards Analytical Laboratory and for the growing number of safeguards inspectors and other staff members who may be exposed to radiation in the course of their work.

J.10. Two additional GS posts will be needed in 1976 to provide further secretarial and clerical support for the joint IAEA/IIASA project (526/J.51), which is being supported under the "Radiological safety" sub-programme (see para. J.23 below).

J.11. The third GS post is for a record-keeper to assist in the periodic surveys of staff and facilities at the Laboratory and of other staff who may be exposed to radiation.

J.12. The addition of one P-5, one P-4 and one GS post will be required for the "Waste management" sub-programme to accommodate the increased needs in respect of radioactive (especially high-level) waste management arising out of the expansion of activities relating to nuclear power programmes in developing countries (see paras J.25 and 26 below).

J.13. The additional GS post will be required for secretarial support to the "Waste management" sub-programme.

J.14. Two additional GS posts will be required for the "Nuclear safety" sub-programme to provide secretarial support during the drafting and revision of the nuclear safety codes and guides and their review by the technical review committees and the senior advisory group (GC(XVIII)/526/Mod.1) - see para. J.37 below.

THE PROGRAMME

Objective

J.15. The objective is to ensure the safe utilization of nuclear energy and the protection of man and his environment from the harmful effects of nuclear radiation and radioactive and non-radioactive releases from nuclear facilities.

Changes in the original programme

J.16. Detailed information on the activities planned for 1976 is provided in 526/J.9 to J.154. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen for 1976.

Radiological safety (526/J.17 to J.76)

J.17. With regard to the transport regulations (526/J.29), a technical committee will be organized to prepare the first revision of the manual on advisory material for the application of the IAEA transport regulations. This manual was first published in 1973

with the understanding that it would be reviewed and brought up to date at intervals of about two-and-a-half years. It is also proposed to have a new film on the safe transport of radioactive materials produced. The last film was completed about 1964 and is reported to have been a very useful training aid in a number of countries. It is, however, out of date and does not correspond to the newest IAEA regulations.

J.18. It is planned to co-operate with the Legal Division in expanding the programme concerning the transport of fissionable materials to include physical protection measures.

J.19. The seminar on radiological safety problems in the handling of transuranium elements referred to in 526/J.35 will be combined with the symposium on the design and equipment of "hot" laboratories mentioned in 526/J.59. This symposium will review present experience in the design and equipment of laboratories for handling materials of high activity and high radiotoxicity, together with various aspects of radiological protection in the handling of transuranium elements, including the special problems introduced by the use of plutonium as a reactor fuel.

J.20. The seminars on the economic aspects of radiation protection programmes and on the application of computers in radiation protection practice and in the storage and retrieval of records, referred to in 526/J.39, will be postponed to a later year.

J.21. The advisory group on effective environmental monitoring methods for selected radioactive contaminants, referred to in 526/J.47, will not be held in 1976. An advisory group may be convened for this purpose at a later date or guidance on the subject may be prepared with the help of consultants.

J.22. The regional seminars referred to in 526/J.40 and J.52 will be directed towards the assistance of Member States which are embarking on nuclear power programmes.

J.23. In 1975 the interest of Member States in the joint IAEA/IIASA project (526/J.51) continued to increase and, by August 1975, a total of seven scientists were seconded by six Member States, free of charge to the Agency. Three staff members were assigned to it by IIASA and one staff member (project leader) by the Agency. Under the 1975 budget two GS posts had to be allotted full time to provide services to these 11 professionals and additional help proved necessary. The project is a long-term one and indications are that the interest of Member States will not diminish. Two additional GS posts are required in the manning table for 1976.

J.24. With regard to the radiological safety features of nuclear facilities, a second meeting of the advisory group referred to in 526/J.59 is foreseen in 1976 to consider the establishment of containment criteria for laboratory enclosures in which radionuclides of different levels of toxicity and activity are to be handled. The advisory group on the design, construction, maintenance and testing of ventilation and air filtering systems, referred to in 526/J.60, will be postponed to 1977.

Waste management (526/J.77 to J.125)

J.25. In December 1974, the Agency convened a meeting of senior advisers to review and advise on the part of the "Waste management" sub-programme concerning the technology for the treatment, storage and disposal of radioactive waste from the nuclear industry. The advisers recommended expansion of the sub-programme directed in particular to the waste management technologies relating to nuclear power plants, reprocessing facilities, waste storage and disposal, and fuel fabrication (with special emphasis on plutonium waste). They supported the proposal that the Agency study the concept of regional nuclear fuel centres in the light of nuclear power growth forecasts, with attention being paid initially to fuel reprocessing and waste management alternatives based on technological and economic considerations; waste management activities were considered inseparable from fuel reprocessing. They expressed the opinion that the availability of ultimate waste disposal facilities would be an important element in decisions concerning the establishment of

regional reprocessing centres. In particular, the advisers were concerned about the availability of adequate staff and the overall work load involved. More generally, they recommended that every effort be made to assist Member States well in advance of their embarking on nuclear power programmes or expanding existing ones, so that those countries would be aware of and fully equipped to handle the associated waste management problems.

J.26. In accordance with the experts' advice, it is planned to expand the "Waste management" sub-programme in regard to nuclear power plant operation, irradiated fuel reprocessing, nuclear fuel fabrication, waste disposal (including the disposal of radioactive waste to aquatic environments), environmental impact assessments, and cost/risk/benefit analyses. These additional activities will make it necessary to add one P-5 post, one P-4 post and one GS post in the Waste Management Section.

J.27. It is proposed that, instead of holding a symposium in 1976 on the influence of design, process and operational considerations on minimizing radioactive waste quantities (see 526/J.89), the subject should be reviewed by a technical committee.

J.28. The seminar on the application of cost/risk/benefit analyses to the establishment of national and global waste management standards (526/J.89), previously planned for 1976, has been deferred to 1977 in order to permit full advantage to be taken of the results of an advisory group meeting scheduled for late 1975 to develop guidance on the subject.

J.29. With regard to the programme component dealing with the fulfilment by the Agency of its responsibilities under the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention) (526/J.105 to J.107 and J.111), an advisory group, convened in 1975 to consider revision of the provisional definition and recommendations relating to the Convention, will hold a second meeting in 1976 to complete work on the first revision of the definition and recommendations.

J.30. The advisory group meeting to review, up-date and consolidate guidance on disposal of radioactive wastes into the sea (526/J.112) has been deferred to 1976 to take advantage of related work undertaken in 1975.

J.31. The work on developing and establishing international registries of radionuclide releases, storage and disposals (526/J.113) will be performed as two separate efforts. Since the quantities of radionuclides committed to storage and disposal and methods of recording such actions are closely related to the activities of the technical committee (working group) on high-level and alpha-bearing wastes (526/J.90), a sub-committee of that technical committee, convened in 1975 to examine the feasibility of establishing such a register, will hold a second meeting in 1976. The Secretariat will, assuming financial support is received from UNEP, establish a technical committee in 1976 to initiate development of guidelines for establishing and operating a register of radionuclide releases.

J.32. The effort to develop the methodology for assessment of radioactive, non-radioactive and thermal discharges and disposals from nuclear industry on a regional and global basis (526/J.110) will be initiated by a technical committee in 1976 rather than by an advisory group as previously planned, since this will provide a better means of ensuring that the services of the same experts continue to be used.

J.33. The advisory group meeting to consider environmental capacity and its relationship to national waste management programmes (526/J.113) will be deferred to 1977.

J.34. The Division will jointly implement with the Division of Nuclear Power and Reactors the new programme component dealing with the study of regional nuclear fuel centres referred to in paragraphs I.16 to I.20 above.

J.35. Because the amount of experience that is available in relation to the decommissioning of nuclear facilities is still limited, it is planned to initiate studies through the establishment of a working group or similar body instead of organizing a symposium on this subject in 1976 as proposed in 526/J.123.

Nuclear safety
(526/J.126 to J.149, 526/Mod.1)

J.36. The symposium proposed for 1976 on the safety aspects of fast reactors, referred to in 526/J.148, will be postponed.

J.37. At its first meeting in October 1974, the Senior Advisory Group on the Agency's Plans for Establishing Safety Codes and Guides for Nuclear Power Plants recommended that work be initiated in respect of a certain number of codes and guides in each of the five main fields identified in Annex VII in document GC(XVIII)/526/Mod.1. It also recommended detailed procedures for the collation, preparation and review of these standards through appropriate working groups and technical committees. In 1975 the work thus proceeded simultaneously in the five main fields, each under the responsibility of a scientific secretary. The procedures decided upon subsequent to the meeting of the Senior Advisory Group were significantly more complex than those originally envisaged. In view of the large amount of work required for the preparation of the documents and the number of experts' meetings involved and in order to ensure efficiency, it was necessary in the course of 1975 to provide each scientific secretary with clerical assistance. Two additional GS posts had therefore to be provisionally allotted under this programme. The work load will increase further in 1976 and these two additional posts should now be included in the manning table.

The use of nuclear explosions for peaceful purposes
(526/J.150 to J.154)

J.38. Owing to the great interest shown by Member States, this sub-programme has been made an independent programme with the title "Nuclear explosions for peaceful purposes" (part M of this document).

SUB-PROGRAMMES

Summary of manpower and costs by sub-programme

Table J.3

Sub-programme	1975 Budget			1976 Estimate		
	Man-years		Costs	Man-years		Costs
	P	GS		P	GS	
Radiological safety	10.4	8.5	917 000	11.4	11.5	1 028 500
Waste management	8.3	4.0	873 000	10.3	5.0	948 300
Nuclear safety	10.3	5.5	737 000	10.3	7.5	1 144 200
TOTAL	29.0	18.0	2 527 000	32.0	24.0	3 121 000

Radiological safety

Summary by programme components

Table J.4

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Radiological safety standards	1.0	0.8	45 200	34 300	15 000	21 000	115 500
Radiological protection of workers	2.3 ^{a/}	1.7	101 800	14 300	43 000	5 200	164 300
Radiological protection of the general public and the environment	2.2 ^{a/}	3.2	115 500	52 800	62 000	4 800	235 100
Radiological safety features of nuclear facilities	2.3	1.8	105 500	69 900	-	14 600	190 000
Radiological protection services for the Agency's staff and laboratories	2.6	3.2	129 900	-	-	3 000	132 900
Emergency assistance in the event of radiation accidents	1.0	0.8	45 700	-	-	6 000	51 700
Linguistic, printing and publishing services	-	-	-	-	-	165 000	165 000
Transfers to other programmes for direct support	-	-	-	-	-	(26 000)	(26 000)
TOTAL	11.4	11.5	543 600	171 300	120 000	193 600	1 028 500

^{a/} 0.25 man-years each will be made available to the PNE programme.

Waste management

Summary by programme components

Table J.5

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Treatment and disposal of radioactive wastes	5.1	1.9	227 600	35 800	106 000	16 700	386 100
Nuclear energy and environmental impact	4.5	2.4	212 400	45 800	85 000	13 200	356 400
Decommissioning of nuclear facilities	0.7	0.7	36 200	8 800	-	800	45 800
Linguistic, printing and publishing services	-	-	-	-	-	160 000	160 000
TOTAL	10.3	5.0	476 200	90 400	191 000	190 700	948 300

Nuclear safety

Summary by programme components

Table J.6

Programme component	Man-years		1976 Cost estimates				
	P	GS	Staff	Meetings	Contracts	Other	Total
Advisory missions and safety evaluations of nuclear reactors including nuclear merchant ships	4.0	2.0	200 400	-	-	5 000	205 400
Standards for nuclear safety	4.2	4.0	306 100	269 300	-	80 500	655 900
Exchange of information and training	2.1	1.5	96 900	-	-	2 000	98 900
Linguistic, printing and publishing services	-	-	-	-	-	184 000	184 000
TOTAL	10.3	7.5	603 400	269 300	-	271 500	1 144 200

K. INTERNATIONAL LABORATORY OF
MARINE RADIOACTIVITY

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table K.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	244 761	319 000	40 000	20 000	60 000	379 000
Consultants	175	4 200	300	-	300	4 500
Sub-total	244 936	323 200	40 300	20 000	60 300	383 500
Common staff costs	74 174	96 500	8 000	6 000	14 000	110 500
Travel	4 481	4 200	500	300	800	5 000
Representation and hospitality	229	900	100	-	100	1 000
Scientific supplies and equipment	49 045	36 000	5 000	8 000	13 000	49 000
Common services, supplies and equipment	16 847	16 200	3 800	4 000	7 800	24 000
Other items of expenditure						
Linguistic services	-	-	-	1 000	1 000	1 000
Printing and publishing services	3 000	-	-	3 000	3 000	3 000
TOTAL	392 712	477 000	57 700 12.1%	42 300 8.9%	100 000 21.0%	577 000
<u>Source of funds:</u>						
Regular Budget	327 362	407 000	49 700 12.2%	41 300 10.2%	91 000 22.4%	498 000
Operating Fund I	65 350	70 000	8 000	1 000	9 000	79 000
TOTAL	392 712	477 000	57 700 12.1%	42 300 8.9%	100 000 21.0%	577 000

SUMMARY OF MANPOWER

Table K.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Changed	1976
P-5	1	1	2	-	2
P-4	3	3	2	1	3
P-3	1	1	1	-	1
P-1	3	3	3	-	3
Sub-total	8	8	8	1	9
GS	11	13	13	-	13
TOTAL	19	21	21	1	22

CHANGES IN COSTS AND MANPOWER

Costs

K. 1. As will be seen from Table K.1 above, it is expected that the cost of this programme will increase by \$100 000 in 1976, of which \$57 700 will be required to cover salary and other price increases and \$42 300 will be a programme increase.

K. 2. A programme increase of \$26 000 in respect of salaries for established posts and common staff costs is foreseen to cover the addition of a P-4 post. UNEP has been approached with a view to its providing financial support.

K. 3. Programme increases of \$8000 in respect of scientific supplies and equipment and \$4000 in respect of common services, supplies and equipment are foreseen. Provision has also to be made for linguistic services and for printing and publishing services, for which no funds were allotted in the 1975 budget.

K. 4. Of the total increase of \$100 000, an amount of \$91 000 will be provided from the Regular Budget and \$9000 from the Operational Budget. In addition to the contribution from the Monegasque Government, \$10 000 will be contributed by UNESCO under a contractual arrangement; the balance will be covered by miscellaneous income.

K. 5. With regard to Table K. 3, the reduction in the "Radiochemistry" sub-programme and the increase in the "Radiobiology" sub-programme are due to differences between the manpower components of the two sub-programmes.

Manpower

K. 6. As will be seen from Table K.2 above, one additional P-4 post will be required in 1976 (see paragraph K.8 below).

THE PROGRAMME

Objective

K. 7. The objective is to promote the intercomparability of radioactivity measurements made in national laboratories and institutes for marine radioactivity studies, to develop reference analytical methods and techniques for investigating the behaviour of radioactivity in the oceans and to obtain the scientific information needed to assess the impact of waste disposal and nuclear power generation on the marine environment.

Changes in the original programme

K. 8. Detailed information on the activities planned for 1976 is provided in 526/K. 4 to K. 23. The following addition to the programme is foreseen. It is envisaged that the Monaco Laboratory will participate under UNEP sponsorship in an enlarged baseline measurement programme in the Mediterranean Sea concerning heavy metals, DDT, polychlorinated biphenyls and other chlorinated hydrocarbons. The Monaco Laboratory will play a leading part in the intercalibration of analytical methodology to be applied by all national laboratories expected to participate in the programme. An additional post at the P-4 level will be required for a chemist to carry out the work involved.

Summary of manpower and costs by sub-programme

Table K.3

Sub-programme	1975 Adjusted budget			1976 Estimate				
	Man-years		Costs	Man-years		Costs		
	P	GS		P	GS	Staff	Other	Total
Radiochemistry	2.5	5.0	212 000	2.5	5.0	157 500	37 500	195 000
Radiosedimentology	3.0	3.0	137 000	4.0	3.0	174 500	27 500	202 000
Radiobiology	2.5	5.0	128 000	2.5	5.0	162 000	18 000	180 000
TOTAL	8.0	13.0	477 000	9.0	13.0	494 000	83 000	577 000

L. INFORMATION AND TECHNICAL SERVICES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table L.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	945 586	1 239 000	168 000	55 000	223 000	1 462 000
Consultants	2 671	10 200	1 300	(1 000)	300	10 500
Overtime	9 857	12 500	1 300	(500)	800	13 300
Temporary assistance	12 240	21 000	2 100	(1 400)	700	21 700
Sub-total	970 354	1 282 700	172 700	52 100	224 800	1 507 500
Common staff costs	286 558	375 000	34 700	16 800	51 500	426 500
Travel	13 166	22 400	2 900	(800)	2 100	24 500
Meetings						
Conferences, symposia, seminars	23 583	9 000	1 100	(2 100)	(1 000)	8 000
Technical committees, advisory groups	24 669	27 000	3 200	(1 200)	2 000	29 000
Representation and hospitality	1 283	1 900	200	(100)	100	2 000
Scientific and technical contracts	18 157	49 000	2 800	(15 800)	(13 000)	36 000
Common services, supplies and equipment	1 107 743	1 168 000	63 800	(78 300)	(14 500)	1 153 500
Other items of expenditure						
Linguistic services	79 728	109 000	14 000	(14 000)	-	109 000
Printing and publishing services	259 703	321 000	35 000	80 000	115 000	436 000
Data processing services	(737 576)	(674 000)	(53 000)	(114 000)	(167 000)	(841 000)
TOTAL	2 047 368	2 691 000	277 400 10.3%	(77 400) (2.9)%	200 000 7.4%	2 891 000

SUMMARY OF MANPOWER

Table L.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	3	3	3	-	3
P-4	8	9	9	1	10
P-3	7	7	7	1	8
P-2	7	7	7	(1)	6
P-1	7	6	6	(1)	5
Sub-total	33	33	33	-	33
GS	62	66	66	6	72
M&O	1	1	1	(1)	-
TOTAL	96	100	100	5	105

CHANGES IN COSTS AND MANPOWER

Costs

L. 1. As will be seen from Table L.1 above, it is expected that the cost of this programme will increase by \$200 000 as a net result of price increases of \$277 400 partly offset by a programme decrease of \$77 400.

L. 2. The programme increase of \$71 800 in respect of salaries for established posts and common staff costs is due to the addition of one P-4 post (for a senior systems programmer) and three GS posts in the Computer Section and to the addition of two GS posts under the "INIS" sub-programme.

L. 3. Small programme decreases are expected in respect of consultants, overtime and temporary assistance for the "INIS" and "Computer services" sub-programmes and in respect of travel for the "Library services" and "Computer services" sub-programmes. A programme reduction of \$7300 in respect of meetings and one of \$17 000 in respect of contractual services are foreseen under the "INIS" sub-programme; on the other hand, a programme increase of \$1200 in respect of authorship contracts for the Agency's scientific journals and one of \$4000 in respect of a meeting to plan the development of Agency journals will be required.

L. 4. The programme decrease of \$78 300 in respect of common services, supplies and equipment relates mainly to the "INIS" sub-programme and is due primarily to the replacement of external photocomposition by in-house work.

L. 5. In line with the recommendations of the INIS Advisory Committee, provision is made for the inclusion in INIS of abstracts in machine-readable form. The addition of abstracts and the normal growth of INIS, which is expected to reach a level of 80 000 items a year in 1976, will result in a programme increase of \$109 000 in respect of printing and publishing services.

L.6. With ATOMINDEX gradually becoming an abstracting journal, it will be necessary to increase the annual subscription fee. It is expected that INIS income will increase by \$140 000 to \$250 000 in 1976.

L.7. A decrease in respect of linguistic services and printing and publishing services for the Agency's scientific journals is expected since the initial estimates for 1975 were somewhat too high.

L.8. After a breakdown of the costs of data processing services was attempted for the first time in the budget estimates for 1975, the costs of these services have actually been apportioned to individual programmes in the 1975 Adjusted budget and the 1976 estimates. The cost of data processing services amounts to \$1 713 000 in 1976, of which \$841 000 are charged to other programmes. Data processing services for INIS and the Library, and also reimbursable services, remain as a charge against the "Information and technical services" programme. It is expected that reimbursable data processing services for UNIDO and AGRIS will cost \$400 000 in 1976.

Manpower

L.9. As will be seen from Table L.2 above, the addition of one P-4, one P-3 and six GS posts and a reduction by one P-2, one P-1 and one M&O post are foreseen.

L.10. The addition of one P-4 post and three GS posts is required for the "Computer services" sub-programme. The Professional post is needed for a senior systems programmer, who will be responsible for ensuring that the Agency's data communications network functions with maximum cost-effectiveness. Extensive experience in the operation of such networks will be required for the design or selection of the combination of equipment, software and task allocation which will meet the needs of the Agency's information activities. It is expected that the new Professional staff member will fulfil an essential role in the co-ordination of data processing and communications technology on one hand and programmer applications and user operations on the other.

L.11. The up-grading of one P-2 programmer post to the P-3 level, for a systems programmer, has been recommended following a job survey.

L.12. Two additional GS posts will be required for junior programmers to set up and schedule computer jobs, co-ordinate the flow of input and output, develop the more routine user programmes and assist systems programmers in the task of preparing programme and systems documentation.

L.13. One additional GS post will be required for an operator of photocomposition equipment in the Computer Section, replacing - at lower cost - services hitherto provided externally.

L.14. Two additional GS posts will be required for the "INIS" sub-programme. One additional GS staff member is needed for handling the increase - due to normal growth - in the number of items processed and the conversion of data submitted by Member States (which are unable to submit abstracts in machine-readable form) arising out of the inclusion in INIS of machine-readable abstracts. One additional GS staff member is needed for processing photographic film produced by the photocomposition equipment, the costs of running which will be more than offset by savings on contractual photocomposition.

L.15. The deletion of a vacant P-1 post in the Library is foreseen. A GS post is to be substituted for a M&O post following a job survey since the work is of a clerical nature and requires a good knowledge of English, typing ability and the capacity to assist or replace library clerks as the need arises.

THE PROGRAMME

Objective

L.16. The objective is to foster the exchange of scientific and technical information on peaceful uses of atomic energy. The Division of Scientific and Technical Information pursues this objective by assembling such information and disseminating it to scientific bodies in Member States, interested international organizations, the Agency's staff, etc. The Division's main functions consist of:

- (a) Planning and managing INIS so that it is
 - (i) Responsive to the information needs of all Member States,
 - (ii) In harmony with national and other international information systems,
 - (iii) Economical compared to other means of providing similar services,
 - (iv) Capable of meeting new needs and taking advantage of technological innovations, and
 - (v) Constructive in the sense of supporting the development of strong national and regional infrastructures in the information field and promoting the interconnection and compatibility of information systems;
- (b) Providing efficient computer services in support of technical information, management and various other activities of the Agency and UNIDO;
- (c) Providing efficient library services for the Agency and - to a more limited extent - for Member States and organizing the exchange of specialized scientific and technical information with other international bodies; and
- (d) Managing the Agency's two scientific journals - Nuclear Fusion and Atomic Energy Review.

Changes in the original programme

L.17. Detailed information on the activities planned for 1976 is provided in 526/L.7 to L.34. In respect of the Agency's scientific journals it is planned to hold a technical committee meeting in 1976 to plan the development of their publication. The following additions to, or changes in, activities under the sub-programme indicated below are foreseen for 1976.

INIS

L.18. As recommended by the INIS Advisory Committee, the Agency, in co-operation with Member States, during 1975 began processing abstracts in machine-readable form and carried out preparatory work for the production of a printed abstracting journal to commence publication in 1976.

L.19. The functions of the INIS clearing-house will be broadened to facilitate access by scientists and engineers to a wider range of primary documents. The transfer to the Secretariat of all the photocomposition work for INIS ATOMINDEX, which was started in 1975, will be completed during 1976. Meetings planned for 1976 include a consultative meeting of INIS tape users, a meeting of the Thesaurus Working Group, a further meeting in the series of annual consultative meetings of INIS Liaison Officers and a further INIS Training Seminar. In the training of staff of INIS Centres it is planned to place considerably more emphasis on ways and means of improving national infrastructures for information

handling to permit them to make the best use of INIS output products and the services provided by other major international systems. To this end a consultant will be employed to advise the Agency on the design of the syllabus, teaching materials and training methods for both formal and informal training.

L. 20. All expenses involved in the operation of the AGRIS Input Unit are borne by FAO, which also provides two Professional staff members.

Summary of total costs by organization unit

Table L.3

Organization unit	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Office of the Director	313 904	465 400	51 600	(110 900)	(59 300)	406 100
INIS Section	1 117 074	1 416 600	169 800	47 600	217 400	1 634 000
Library	350 350	385 000	29 000	36 900	65 900	450 900
Computer Section	266 040	424 000	27 000	(51 000)	(24 000)	400 000
TOTAL	2 047 368	2 691 000	277 400	(77 400)	200 000	2 891 000

Summary of manpower by organization unit and category

Table L.4

Organization unit	1974 Adjusted budget				1975 Adjusted budget				1976 Estimate			
	P	GS	M&O	Total	P	GS	M&O	Total	P	GS	M&O	Total
Office of the Director	2	2	-	4	2	3	-	5	2	3	-	5
INIS Section	14	19	-	33	14	21	-	35	14	23	-	37
Library	5	11	1	17	5	10	1	16	4	11	-	15
Computer Section	12	30	-	42	12	32	-	44	13	35	-	48
TOTAL	33	62	1	96	33	66	1	100	33	72	-	105

Cost of INIS activities

Table L.5

.... Item of expenditure	1974 Actual obligations	1975 Adjusted budget	1976 Estimate
Salaries and wages			
Established posts	345 114	450 000	540 000
Consultants	873	7 000	7 000
Overtime	-	700	700
Temporary assistance	8 178	10 800	11 800
Sub-total	354 165	468 500	559 500
Common staff costs	104 586	136 200	158 100
Travel	5 153	9 800	11 000
Meetings			
Conferences, symposia, seminars	23 583	9 000	8 000
Technical committees, advisory groups	24 669	27 000	25 000
Representation and hospitality	1 117	1 300	1 400
Scientific and technical contracts	1 472	33 000	18 000
Common services, supplies and equipment	140 354	247 600	204 000
Other items of expenditure			
Linguistic services	14 107	-	8 000
Printing and publishing services	86 303	84 200	206 000
Data processing services	361 565	400 000	435 000
TOTAL	1 117 074	1 416 600	1 634 000

Computer Section: Breakdown of costs by programme

Table L.6

Programme	1974 Actual obligations	1975 Adjusted budget	1976 Estimate
Technical assistance	812	1 000	2 000
Food and agriculture	14 230	15 000	19 000
Life sciences	24 088	24 000	30 000
Physical sciences	86 173	80 000	100 000
Laboratory	1 928	3 000	5 000
Nuclear power and reactors	90 330	80 000	100 000
Safeguards	62 885	45 000	125 000
Administration	410 701	384 000	414 000
General services	23 207	20 000	22 000
Printing and publishing services	23 222	22 000	24 000
INIS and Library	390 029	430 900	472 000
Reimbursable services	266 040	424 000	400 000
TOTAL	1 393 645	1 528 900	1 713 000

M. NUCLEAR EXPLOSIONS FOR
PEACEFUL PURPOSES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table M.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	-	27 000	3 000	7 000	10 000	37 000
Consultants	-	-	-	15 000	15 000	15 000
Sub-total	-	27 000	3 000	22 000	25 000	52 000
Common staff costs	-	8 200	900	2 000	2 900	11 100
Travel	-	-	-	2 000	2 000	2 000
Meetings						
Technical committees, advisory groups	-	- ^{a/}	-	35 000	35 000	35 000
Representation and hospitality	-	800	100	-	100	900
Other items of expenditure						
Linguistic services	-	-	-	28 000	28 000	28 000
Printing and publishing services	-	-	-	25 000	25 000	25 000
Transfers from other programmes for direct support	-	48 000	6 000	-	6 000	54 000
TOTAL	-	84 000	10 000 11.9%	114 000 135.7%	124 000 147.6%	208 000

^{a/} A Technical Committee on Peaceful Uses of Nuclear Explosives was convened in January 1975, for which no provision was made in the 1975 budget. The total cost of this meeting was approximately \$17 000, which was met from savings under the Nuclear Safety and Environmental Protection programme.

SUMMARY OF MANPOWER

Table M.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
P-5	-	-	-	1	1
P-4	-	-	1	(1)	-
Sub-total	-	-	1	-	1
GS	-	-	-	1	1
TOTAL	-	-	1	1	2

CHANGES IN COSTS AND MANPOWER

Costs

M.1. As will be seen from Table M.1 above, it is expected that the cost of this programme will increase by \$124 000 in 1976, of which \$10 000 will be required to cover salary and other price increases and \$114 000 represents a programme increase.

M.2. The programme increase of \$9000 in respect of salaries for established posts and common staff costs is due to the addition of one GS post. The programme increase of \$35 000 in respect of technical committees and advisory groups represents the cost of holding two meetings.

M.3. The 1976 estimate of \$48 100 in respect of salaries for established posts and common staff costs relates to one P-5 post and one GS post. Support of the programme by staff engaged in other programmes is indicated under "Transfers from other programmes for direct support"; it consists of half a Professional man-year provided under the "Nuclear safety and environmental protection" programme and half a Professional man-year of legal and external relations services under the "Administration" programme.

Manpower

M.4. As will be seen from Table M.2 above, the post of the Head of the Unit for Peaceful Nuclear Explosions Services will be up-graded from the P-4 to the P-5 level. One GS post is added for secretarial and clerical support; apart from the normal functions of a secretary, the staff member in question will be responsible for making arrangements for compiling and publishing a PNE glossary in Russian and English, for scanning and summarizing the literature on PNE and for preparing bibliographies.

THE PROGRAMME

Objective

M.5. The objective is to promote the exchange of information on the peaceful uses of nuclear explosions, to develop procedures for their use, to study the economics and health and safety aspects involved and to respond to requests for PNE-related services. The activities constituting this programme were hitherto carried out under the sub-programme dealing with the use of nuclear explosions for peaceful purposes (see para. J.38 above). They have been substantially expanded and, in order to ensure their efficient performance, the Director General established, with effect from mid-January 1975, a Unit for Peaceful Nuclear Explosions Services under the Deputy Director General for Technical Operations.

Plans for 1976

M.6. Owing to increased interest in PNE technology, a fifth technical committee meeting is planned for 1976. A consultants' meeting is planned for early 1976 to evaluate the comparative economics of PNE and alternative technologies.

M.7. With the aid of consultants, where necessary, it is planned to issue periodic status reports on various aspects of PNE such as health and safety, feasibility, utility and economics.

M.8. The last bibliography on PNE was issued in 1970. This will be up-dated in 1976 by means of a thorough survey of the literature with the assistance of INIS.

M.9. Work will be resumed on the Russian-English glossary of PNE terms and publication is planned for 1976.

M.10. The holding of an introductory-level training course on PNE is being considered for 1976 or 1977. The material prepared for this course would be compiled to form an introductory textbook on the uses and limitations of the PNE technology.

M.11. Upon request from Member States, the Secretariat will be prepared to make preliminary evaluations of planned PNE projects and to provide advice and information on PNE.

N. SAFEGUARDS

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table N.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 689 845	2 571 000	339 000	248 000	587 000	3 158 000
Consultants	12 375	18 600	2 400	-	2 400	21 000
Overtime	278	900	100	-	100	1 000
Temporary assistance	120	-	-	-	-	-
Sub-total	1 702 618	2 590 500	341 500	248 000	589 500	3 180 000
Common staff costs	512 105	778 500	66 500	72 000	138 500	917 000
Travel	295 164	340 000	70 000	-	70 000	410 000
Meetings						
Conferences, symposia, seminars		22 000	-	(22 000)	(22 000)	-
Technical committees, advisory groups	14 950	55 000	12 000	-	12 000	67 000
Representation and hospitality	5 916	8 000	500	(500)	-	8 000
Scientific and technical contracts	121 119	320 000	18 000	152 000	170 000	490 000
Scientific supplies and equipment	527 300	485 000	48 500	(23 500)	25 000	510 000
Common services, supplies and equipment	17 428	-	-	-	-	-
Other items of expenditure						
Linguistic services	65 343	68 000	7 000	-	7 000	75 000
Printing and publishing services	29 100	9 000	2 000	58 000	60 000	69 000
Data processing services	62 885	45 000	4 000	76 000	80 000	125 000
Laboratory services	350 970	386 000	40 000	70 000	110 000	496 000
Legal services	92 973	103 000	11 000	(18 000)	(7 000)	96 000
TOTAL	3 797 871	5 210 000	621 000 11.9%	612 000 11.8%	1 233 000 23.7%	6 443 000

SUMMARY OF MANPOWER

Table N.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
DDG/IG	1	1	1	-	1
D	2	2	2	1	3
P-5	19	19	19	5	24
P-4	31	33	33	3	36
P-3	33	35	35	(2)	33
P-2	15	11	11	(6)	5
Sub-total	101	101	101	1	102
GS	35	35	35	1	36
TOTAL	136	136	136	2	138

CHANGES IN COSTS AND MANPOWER

Costs

N.1. As will be seen from Table N.1 above, it is expected that the cost of this programme will increase by \$1 233 000 in 1976, of which \$621 000 will be required to cover salary and other price increases and \$612 000 will be a programme increase.

N.2. The programme increase of \$320 000 in respect of salaries for established posts and common staff costs is due mainly to the addition of one Director's post and one GS post and to the replacement of six P-2 posts and two P-3 posts by three P-4 posts and five P-5 posts; the increase is also partly due to a reduction in the savings achieved through delays in recruitment.

N.3. The main programme increase, in the amount of \$152 000, is for additional analytical services requested under contract with laboratories in Member States. The expansion in analytical requirements is due to the fact that more and more determinations are having to be carried out on nuclear material in bulk form.

N.4. A programme decrease will be possible in respect of conferences, symposia and seminars, for which no provision is made in the 1976 estimates, and in respect of scientific supplies and equipment.

N. 5. As regards printing and publishing services, the programme increase of \$58 000 is based mainly on the expectation that the proceedings of the Symposium on the Safeguarding of Nuclear Materials, to be held in 1975, will be published in 1976. The programme increase of \$70 000 in respect of laboratory services is for the recruitment of additional staff (one P-4, three GS and two M&O) for the Safeguards Analytical Laboratory.

Manpower

N. 6. As will be seen from Table N.2 above, one additional Director's post and one additional GS post are foreseen for 1976. In addition, it is planned to replace six P-2 posts and two P-3 posts by three P-4 posts and five P-5 posts.

N. 7. The inspection workload in 1976 is expected to include the application of safeguards under the agreement with EURATOM and Member States of EURATOM during the entire year.

N. 8. The implementation of safeguards pursuant to the voluntary offers of the United Kingdom and the United States is expected to start in the course of 1976, but the ten Professional officers designated for this task will have to commence training at the beginning of the year.

N. 9. The impact of the increasing throughput of reprocessing and fuel fabrication plants and of the start-up of eight new power plants has been assessed in detail, and it is foreseen that all posts will be fully utilized to meet the operational requirements.

N. 10. The manpower in the Division of Operations available for operational activities will accordingly consist of 75 Professional and 21 GS staff members; these would constitute the largest technical Division in the Secretariat if they were kept together as one Division. At the same time, it is important - for economic reasons - to ensure the optimum planning of safeguards implementation and also to reduce the number of inspections per unit of safeguarded nuclear material while maintaining the level of effectiveness through higher quality of evaluation.

N. 11. It is therefore proposed that one post at the Director level be added to permit the functional restructuring of safeguards implementation through the creation of a second Division for operational activities as soon as the workload justifies such a move, thus facilitating closer managerial control. The proposed upgradings will allow the recruitment of highly qualified group leaders at the P-5 level and the recruitment of personnel at the P-4 level who are appropriately qualified and experienced for applying safeguards at the more complex nuclear facilities handling special fissionable material in bulk form.

N. 12. The additional GS post is required for clerical support.

THE PROGRAMME

Objective

N. 13. The objective is to apply safeguards under agreements to which the Agency is a party. This involves the establishment of safeguards practices, the implementation of established safeguards procedures and the co-ordination and furtherance of development leading to the maximum effectiveness of safeguards combined with the most efficient use of available resources.

Changes in the original programme

N. 14. Detailed information on the activities planned for 1976 is provided in 526/M.7 to M.39. The following additions to, or changes in, activities under the sub-programmes indicated below are foreseen for 1976.

Safeguards operations
(526/M.12 to M.23)

N.15. The coming into force of the agreement with EURATOM and Member States of EURATOM has been delayed; its full implementation during 1976 is, however, foreseen. The total number of States in which safeguards agreements have to be implemented will increase by two between 1975 and 1976. Most of the increase in the inspection workload is attributable to higher throughputs in facilities where special fissionable material, particularly plutonium, is handled in bulk form.

N.16. Steps have been taken during the last few years to avoid a growth of the inspection effort proportional to the increase in nuclear activities subject to safeguards. This policy will be maintained during the coming period of expansion of nuclear power production and the consequential increase in the nuclear material flow and inventory. It will be implemented by the use of more sophisticated methods and instruments, more intensive preparation and evaluation work at Headquarters, the provision of continuous technical support by the Division of Development and closer managerial control of the safeguards implementation work.

N.17. Table N.3 below shows the type and number of facilities in which nuclear material subject to safeguards has to be inspected and replaces Table M.5 in document GC(XVIII)/526. The total of 523 facilities does not, however, include those covered by agreements pursuant to the voluntary offers of the United Kingdom and the United States of America, as details of the type and the number in question are not yet known.

Facilities subject to safeguards
1974 - 1976

Table N.3

Type of facility	1974		1975		1976		1976 Total
	Transfer and project agreements	NPT agreements	Transfer and project agreements	NPT agreements	Transfer and project agreements	NPT agreements	
Power plants	24	12	24	47	12	67	79
Conversion plants	1	1	3	2	-	5	5
Fuel fabrication plants	6	3	6	18	1	23	24
Reprocessing plants	1	-	2	3	1	4	5
Pilot fuel fabrication plants	8	3	7	3	3	7	10
Pilot reprocessing plants	4	-	3	-	3	-	3
Research reactors	47	38	44	105	30	119	149
Critical facilities	14	11	11	14	1	24	25
Subcritical facilities	-	6	-	6	-	6	6
Research and development facilities	15	11	16	41	3	55	58
Other locations	73	12	77	82	12	147	159
TOTAL	193	97	193	321	66	457	523

Safeguards development
(526/M. 24 to M. 35)

N.18. In continuing the activities outlined in 526/M.29, emphasis will be placed on providing technical support to Member States in establishing their systems of nuclear material accountancy and control and of physical protection of nuclear materials and facilities, as well as on co-ordinating the Agency's safeguards activities with related States' activities.

Summary of manpower and costs by sub-programme

Table N.4

Sub-programme	1975 Budget			1976 Estimate		
	Man-years		Costs	Man-years		Costs
	P	GS		P	GS	
Programme co-ordination	2.0	2.0	654 000	2.0	2.0	677 100
Safeguards development	22.0	9.0	1 732 000	22.0	9.0	2 177 700
Safeguards operations	74.0	20.0	2 677 000	75.0	21.0	3 424 500
Standardization	3.0	4.0	147 000	3.0	4.0	163 700
TOTAL	101.0	35.0	5 210 000	102.0	36.0	6 443 000

Table N.5

	Man-years		1976 Cost estimate				
	P	GS	Staff	Meetings	Contracts	Other	Total
Programme co-ordination	2.0	2.0	144 600	-	-	532 500	677 100
Safeguards development	22.0	9.0	978 400	67 000	490 000	642 300	2 177 700
Safeguards operations	75.0	21.0	2 815 500	-	-	609 000	3 424 500
Standardization	3.0	4.0	158 500	-	-	5 200	163 700
TOTAL	102.0	36.0	4 097 000	67 000	490 000	1 789 000	6 443 000

O. ADMINISTRATION

COSTS OF THE PROGRAMME

Summary of items of expenditure: Table O.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 853 410	2 125 000	283 000	41 000	324 000	2 449 000
Consultants	4 455	600	100	600	700	1 300
Overtime	1 303	4 000	400	(700)	(300)	3 700
Temporary assistance	14 534	12 100	1 200	(1 700)	(500)	11 600
Sub-total	1 873 702	2 141 700	284 700	39 200	323 900	2 465 600
Common staff costs	561 668	643 000	59 300	12 900	72 200	715 200
Travel	33 778	31 000	4 000	-	4 000	35 000
Meetings						
Conferences, symposia, seminars	18 915	-	-	-	-	-
Technical committees, advisory groups	4 707	13 300	-	(13 300)	(13 300)	-
Representation and hospitality	7 516	12 000	400	-	400	12 400
Scientific and technical contracts	20	-	-	-	-	-
Common services, supplies and equipment	203 588	160 000	28 800	(3 000)	25 800	185 800
Other items of expenditure						
Linguistic services	203 672	263 000	36 000	-	36 000	299 000
Printing and publishing services	256 497	179 000	37 000	(16 000)	21 000	200 000
Data processing services	410 701	384 000	30 000	-	30 000	414 000
Other	33 212	64 000	6 000	20 000	26 000	90 000
Transfer to other programmes for direct support:						
Peaceful nuclear explosions	-	(25 000)	(3 000)	-	(3 000)	(28 000)
Safeguards	(92 973)	(103 000)	(11 000)	18 000	7 000	(96 000)
TOTAL	3 515 003	3 763 000	472 200 12.6%	57 800 1.5%	530 000 14.1%	4 293 000

SUMMARY OF MANPOWER

Table O.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
DDG	1	1	1	-	1
D	6	6	6	-	6
P-5	14	14	14	-	14
P-4	14	14	12	-	12
P-3	10	10	11	-	11
P-2	8	9	9	-	9
P-1	7	6	5	-	5
Sub-total	60	60	58	-	58
GS	84	85	86	2	88
TOTAL	144	145	144	2	146

CHANGES IN COSTS AND MANPOWER

Costs

O.1. As will be seen from Table O.1 above, it is expected that the cost of this programme will increase by \$ 530 000 in 1976, of which \$ 472 200 will be required to cover salary and other price increases and \$ 57 800 will be a programme increase.

O.2. The programme increase of \$ 53 900 in respect of salaries for established posts and common staff costs is due mainly to the addition of two GS posts, one for the Division of Budget and Finance and one for the Division of Personnel, and to the transfer to the Division of Personnel (for the recruitment of a personnel officer in 1976) of a vacant P-3 post for which no funds are provided in 1975; it is also due partly to a reduction in the savings achieved through delays in recruitment.

O.3. The programme decrease of \$ 13 300 in respect of technical committees and advisory groups reflects the fact that no provision has been made for meetings under the "Legal services" sub-programme in 1976.

O.4. The small programme decreases in respect of overtime and temporary assistance relate to "Budget and finance services" and "Personnel services". The programme decrease of \$ 3000 in respect of common services, supplies and equipment results from a programme increase of \$ 12 500 in respect of medical services, supplies and equipment more than offset by a reduction in the provision for exchange losses. The \$ 16 000 programme decrease in respect of printing and publishing services relates to "Legal services". Since it is expected that the International Civil Service Commission will be fully operational in 1976, a programme increase of \$ 20 000 is foreseen under "Other" in respect of contributions to inter-agency activities.

O.5. The figure of \$18 000 against "Transfer to other programmes for direct support: Safeguards" represents a programme decrease in respect of the legal services to be rendered to the "Safeguards" programme, it being foreseen that in 1976 only about two man-years of Professional and 1.3 man-years of secretarial support will be required.

O.6. With the establishment of a separate "Nuclear explosions for peaceful purposes" programme it is expected that approximately 0.25 of a man-year each of legal and external relations support will be required under the "1975 Adjusted budget" and in 1976.

O.7. It is expected that the income from reimbursable services provided under the joint medical service arrangements with UNIDO will amount to \$100 000.

Manpower

O.8. As will be seen from Table O.2 above, two additional GS posts are foreseen for 1976.

O.9. One of these posts is required in the Division of Budget and Finance owing to the expansion of technical assistance activities, the number of obligation documents and payment vouchers to be processed increasing in proportion to increases in numbers of expert assignments, in the acquisition of equipment and in the number of fellowships granted.

O.10. In the Division of Personnel, an additional GS post is required for the Medical Service, where the work load (administrative work, consultations and examinations) - on behalf of both the Agency and UNIDO - has increased steadily over the years. Since this trend is expected to continue, in view of the accelerated recruitment of experts, an additional nurse will be required in 1976.

THE PROGRAMME

Objective

O.11. The objective is to ensure the effective functioning of the Agency's administrative activities. The Office of the Deputy Director General for Administration is responsible for the overall direction and supervision of the internal audit and management, budget and finance, personnel, legal and external relations services, in addition to the services provided for the policy-making organs (see 526/A.5 and A.6), the linguistic services (see 526/P.5 and P.7) and the general services programme (see 526/O.4).

The original programme

O.12. In 1976 the activities under this programme will continue as outlined in 526/N.4 to N.31.

Summary of total costs by organization unit

Table O.3

Organization unit	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Office of the Deputy Director General for Administration	130 721	167 800	22 600	40 900	63 500	231 300
Office of Internal Audit	163 380	181 600	17 400	22 100	39 500	221 100
Division of Budget and Finance	1 151 409	1 236 500	145 500	(10 500)	135 000	1 371 500
Division of External Relations	1 003 457	1 069 900	157 000	(35 800)	121 200	1 191 100
Legal Division	293 172	341 800	42 900	(8 300)	34 600	376 400
Division of Personnel	772 864	765 400	86 800	49 400	136 200	901 600
TOTAL	3 515 003	3 763 000	472 200	57 800	530 000	4 293 000

Summary of manpower by organization unit and category

Table O.4

Organization unit	1974 Adjusted budget				1975 Adjusted budget				1976 Estimate			
	P	GS	M&O	Total	P	GS	M&O	Total	P	GS	M&O	Total
Office of the Deputy Director General for Administration	3	2	-	5	3	2	-	5	3	2	-	5
Office of Internal Audit	5	4	-	9	5	4	-	9	5	4	-	9
Division of Budget and Finance	16	30	-	46	16	30	-	46	16	31	-	47
Division of External Relations	19	20	-	39	16	21	-	37	16 ^{a/}	21	-	37
Legal Division	8	5	-	13	8	5	-	13	8 ^{a/}	5	-	13
Division of Personnel	9	23	-	32	10	24	-	34	10	25	-	35
TOTAL	60	84	-	144	58	86	-	144	58	88	-	146

^{a/} 0.25 man-years each of direct support for PNE programme.

P. GENERAL SERVICES

COSTS OF THE PROGRAMME

Summary by items of expenditure: Table P.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 210 520	1 485 000	259 000	(8 000)	251 000	1 736 000
Overtime	18 330	19 300	1 900	7 800	9 700	29 000
Temporary assistance	2 078	4 000	400	4 600	5 000	9 000
Sub-total	1 230 928	1 508 300	261 300	4 400	265 700	1 774 000
Common staff costs	366 846	450 100	56 600	(2 300)	54 300	504 400
Travel	1 029	500	100	(100)	-	500
Representation and hospitality	65	100	-	-	-	100
Scientific and technical contracts	1 715	35 000	1 800	13 200	15 000	50 000
Common services, supplies and equipment	858 026	920 000	246 000	58 000	304 000	1 224 000
Other items of expenditure						
Linguistic services	12 792	17 000	2 000	-	2 000	19 000
Printing and publishing services	87 460	196 000	28 000	(138 000)	(110 000)	86 000
Data processing services	23 207	20 000	2 000	-	2 000	22 000
TOTAL	2 582 068	3 147 000	597 800 19.0%	(64 800) (2.1)%	533 000 16.9%	3 680 000

SUMMARY OF MANPOWER

Table P.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	1	1	1	-	1
P-4	2	2	2	-	2
P-3	4	4	4	-	4
P-2	1	1	1	-	1
Sub-total	9	9	9	-	9
GS	58	68	68	2	70
M&O	118	120	120	(4)	116
TOTAL	185	197	197	(2)	195

CHANGES IN COSTS AND MANPOWER

Costs

P.1. As will be seen from Table P.1 above, it is expected that the cost of this programme will increase by \$533 000 as a net result of price increases of \$597 800 partly offset by a programme decrease of \$64 800.

P.2. The programme decrease of \$10 300 in respect of salaries and wages for established posts and common staff costs, foreseen as a result of replacing four M&O posts by two GS posts, is offset by a programme increase of \$12 400 in respect of temporary assistance and overtime.

P.3. The programme increase of \$13 200 in respect of scientific and technical contracts relates to contractual services which may be required for the planning of the permanent headquarters. The programme increase of \$58 000 in respect of common services, supplies and equipment is attributable to an arrangement whereby UNIDO will provide and be reimbursed by the Agency for maintenance and other services at the new premises in the Wasagasse, where additional office space has been made available to the two organizations until they move to their permanent headquarters.

P.4. The programme decrease of \$138 000 in respect of printing and publishing services reflects the expectation that, with greater experience in charging individual programmes for their printing and publishing requirements, there will be less printing work charged to the "General services" programme.

P.5. It is expected that income from UNIDO in connection with joint procurement services will amount to \$60 000 and that the sale of surplus property will yield \$8000.

Manpower

P.6. As will be seen from Table P.2 above, a reduction by two posts in 1976 is foreseen.

P.7. This reduction is the result of the fact that four approved manning table posts at the M&O level will not be required, since UNIDO is assuming responsibility for maintenance and other services at the new premises in the Wasagasse, while two additional GS posts will be needed for dealing with the increase in preparatory work relating to the permanent headquarters.

Costs of common services, supplies and equipment

Table P.3

Item of Expenditure	1974 Actual obligations	1975 Adjusted budget	1976 Estimate
<u>Division of General Services</u>			
Services			
Communications	214 059	245 000	277 000
Freight and transportation	25 186	30 000	37 000
Utilities	229 352	291 000	404 000
Rental and maintenance of premises	59 238	64 000	133 000
Rental and maintenance of furniture and equipment	91 967	110 000	125 000
Sub-total	619 802	740 000	976 000 ^{a/}
Supplies			
Office supplies	57 865	51 000	67 000
Workshop supplies	67 958	52 000	93 000
Petty cash	4 275	3 000	4 000
Building supplies	29 911	33 000	40 000
Sub-total	160 009	139 000	204 000
Equipment	78 215	41 000	44 000
TOTAL	858 026	920 000	1 224 000

^{a/} In addition, contractual services for the planning of new Headquarters are shown under the item Scientific and technical contracts.

THE PROGRAMME

Objective

P.8. The objective is to provide engineering, architectural and maintenance services for the Headquarters building, the Seibersdorf Laboratory, the Monaco Laboratory and the Trieste Centre, registry and messenger services (including operation of the archives), purchasing and supply services, transportation services, security services, and housing and other staff services, to operate the Agency's commissary and restaurant, and to participate in the planning of the Agency's permanent headquarters.

The original programme

P.9. The Division of General Services will continue to provide the services and perform the functions set forth in the previous paragraph. In connection with the planning of the Agency's permanent headquarters, it will establish requirements and prepare cost estimates. In 1975, additional office space for about 60 Agency staff members has been made available in the Wasagasse, where the temporary premises are shared with UNIDO. It is foreseen that further office space for about 50 staff members will be required, pending the move to the Agency's permanent headquarters, which is scheduled to take place in 1978.

Q. SERVICE ACTIVITIES

THE PROGRAMME

Q. 1. This programme consists of two sub-programmes - "Linguistic services" and "Printing and publishing services" - which are dealt with separately below.

SUB-PROGRAMMES

Linguistic services

Costs of the sub-programme

Summary by items of expenditure: Table Q.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 233 234	1 528 000	173 000	16 000	189 000	1 717 000
Overtime	9 272	5 100	900	5 000	5 900	11 000
Temporary assistance	221 380	212 000	244 500	106 000	350 500	562 500
Sub-total	1 463 886	1 745 100	418 400	127 000	545 400	2 290 500
Common staff costs	373 729	462 600	30 600	6 200	36 800	499 400
Travel	248	300	-	800	800	1 100
Scientific and technical contracts	1 200	-	-	26 000	26 000	26 000
Other items of expenditure						
Linguistic services	(1 839 063)	(2 208 000)	(449 000)	(160 000)	(609 000)	(2 817 000)
TOTAL	-	-	-	-	-	-

Summary of manpower

Table Q.2

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	7	7	6	-	6
P-4	15	15	17	-	17
P-3	24	24	24	-	24
P-2	1	1	1	-	1
Sub-total	48	48	49	-	49
GS	38	38	38	-	38
M&O	1	1	1	-	1
TOTAL	87	87	88	-	88

Summary of costs by programme component

Table Q.3

Programme component	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Interpretation services	360 830	490 000	250 000	106 000	356 000	846 000
Translation and records services	1 478 233	1 718 000	199 000	54 000	253 000	1 971 000
Sub-total	1 839 063	2 208 000	449 000	160 000	609 000	2 817 000
<u>Less:</u>						
Transfer to other programmes	(1 839 063)	(2 208 000)	(449 000)	(160 000)	(609 000)	(2 817 000)
TOTAL	-	-	-	-	-	-

CHANGES IN COSTS

Q. 2. As will be seen from Table Q. 1 above, the cost of linguistic services is apportioned to the programmes for which they are provided. The total cost of linguistic services is expected to increase by \$609 000, of which \$449 000 will be required to cover salary and other price increases and \$160 000 represents a programme increase.

Q. 3. The programme increase of \$22 200 in respect of salaries for established posts and common staff costs is due to the transfer from another programme (for the recruitment of a translator in 1976) of a vacant P-4 post for which no funds are provided in 1975.

Q.4. The programme increase of \$106 000 in respect of temporary assistance reflects the need for additional freelance interpreters for meetings. The translation and records services will require a programme increase of \$5000 in respect of overtime in 1976, to permit overtime on roughly the same scale as in 1974, and one of \$26 000 in respect of scientific and technical contracts, to cover the cost of translations which have to be done externally as a result of the expected increase in work load due, for example, to work on nuclear safety codes and guides and to the publication of material on PNE.

Q.5. As can be seen from Table Q.3, the price increase in respect of interpretation services is particularly high. This reflects not only an increase in the cost per man-day of interpretation but also an increase in the number of interpreters required for a meeting in accordance with the agreement between CCAQ and the Association Internationale des Interprètes de Conférence.

Printing and publishing services

Costs of the sub-programme

Summary of items of expenditure: Table Q.4

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Salaries and wages						
Established posts	1 106 087	1 294 000	214 000	(26 000)	188 000	1 482 000
Overtime	18 582	34 000	4 000	(3 000)	1 000	35 000
Temporary assistance	24 420	77 000	9 700	6 300	16 000	93 000
Sub-total	1 149 089	1 405 000	227 700	(22 700)	205 000	1 610 000
Common staff costs	335 198	391 700	43 600	(5 000)	38 600	430 300
Travel	557	1 100	200	1 200	1 400	2 500
Representation and hospitality	3	200	-	-	-	200
Scientific and technical contracts	2 923	11 000	500	(8 500)	(8 000)	3 000
Common services, supplies and equipment	380 589	448 000	108 000	64 000	172 000	620 000
Other items of expenditure						
Linguistic services	738	8 000	1 000	-	1 000	9 000
Printing and publishing services	(1 788 456)	(2 158 000)	(367 000)	(34 000)	(401 000)	(2 559 000)
Data processing services	23 222	22 000	2 000	-	2 000	24 000
TOTAL	103 863	129 000	16 000 12.4%	(5 000) (3.9)%	11 000 8.5%	140 000

Summary of manpower

Table Q.5

Grade of post	Number of established posts				
	1974 Adjusted	1975	1975 Adjusted	Change	1976
D	1	1	1	-	1
P-5	1	1	1	-	1
P-4	1	1	1	-	1
P-3	5	5	5	-	5
P-2	4	4	4	-	4
P-1	4	4	4	-	4
Sub-total	16	16	16	-	16
GS	87	89	89	12	101
M&O	26	26	26	(12)	14
TOTAL	129	131	131	-	131

Summary of costs by programme component

Table Q.6

	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Printing services	1 090 094	1 312 700	220 000	94 300	314 300	1 627 000
Publishing services	802 225	974 300	163 000	(65 300)	97 700	1 072 000
Sub-total	1 892 319	2 287 000	383 000	29 000	412 000	2 699 000
<u>Less:</u>						
Transfer to other programmes	(1 788 456)	(2 158 000)	(367 000)	(34 000)	(401 000)	(2 559 000)
Reimbursable services rendered to UNIDO	103 863	129 000	16 000	(5 000)	11 000	140 000

CHANGES IN COSTS AND MANPOWER

Costs

Q. 6. As will be seen from Table Q. 4 above, the cost of printing and publishing services is apportioned to the programmes for which they are provided. The balance remaining under this programme represents the cost of reimbursable services rendered to UNIDO under contractual arrangements. It is expected that income from UNIDO for printing services will amount to \$140 000 in 1976, which in view of expected price increases represents a programme reduction of \$5000.

Q. 7. The total cost of printing and publishing services is expected to increase by \$412 000 in 1976, of which \$383 000 will be required to cover salary and other price increases and \$29 000 will be a programme increase.

Q. 8. A programme decrease of \$31 000 in respect of salaries for established posts and common staff costs is expected through delays in recruitment. It is also foreseen that small programme decreases will be possible in respect of overtime and scientific and technical contracts (in this case contractual publication services); they will be only partly offset by a programme increase in respect of temporary assistance.

Q. 9. The programme increase of \$64 000 in respect of common services, supplies and equipment reflects the additional paper and printing supplies requirements for INIS publications, which in 1976 will include abstracts.

Q. 10. As can be seen from Table Q. 6, it is expected that there will be a programme shift from publishing to printing. This is due mainly to the fact that the above-mentioned savings through delays in recruitment are expected in the editorial service while the expansion in respect of INIS publications is reflected under "Printing services".

Q. 11. It is expected that income from the sale of Agency publications, not including INIS publications and CINDA, will amount to \$380 000 in 1976.

Manpower

Q. 12. With reference to Table Q. 5 above, following a job survey it has been recommended that 12 M&O posts (for bookbinders) be reclassified and placed in the GS category.

R. ADJUSTMENT OF PROGRAMME COST ESTIMATES

ADJUSTMENT OF PROGRAMME COST ESTIMATES

Table R.1

Item of expenditure	1974 Actual obligations	1975 Adjusted budget	Increase or (decrease) from 1975			1976 Estimate
			Price	Programme	Total	
Adjustment of programme cost estimates	-	-	2 212 000	88 000	2 300 000	2 300 000
Proposed supplementary appropriation ^{a/}	-	2 500 000	(2 500 000)	-	(2 500 000)	-

^{a/} See document GC(XIX)/548.

CHANGES IN COSTS

R.1. The cost estimates made in the earlier part of this programme budget are based on a rate of exchange of 18.50 Austrian schillings to the United States dollar. However, in the light of the current uncertainty about the future exchange rate and with a view to avoiding an eventual supplementary budgetary appropriation, an amount which is likely to provide for any necessary increase in those cost estimates is provided for under this heading. The estimate of \$2.3 million accordingly made in Table R.1 above is based on an exchange rate of 17 schillings to the dollar, the rate prevailing when the cost estimates were being prepared. The Board emphasizes that those funds are to be used only with its prior approval.

ANNEX I

CONFERENCES, SYMPOSIA AND SEMINARS

Within the limits of the appropriations and subject to the requirements of the individual programmes as outlined for 1976, it is planned to hold the meetings listed below. Those meetings considered of particular importance by the Scientific Advisory Committee are indicated by an asterisk; the reference following each meeting is to the relevant paragraph in the programme in document GC(XVIII)/526.

Food and agriculture

- | | | |
|-----|--|------|
| *1. | Symposium on isotopes and radiation in soil organic matter studies | D.14 |
| 2. | Symposium on nuclear techniques in animal production and health
(postponed from 1975) | D.63 |

Life sciences

- | | | |
|-----|--|------|
| *3. | Symposium on medical radionuclide imaging | E.38 |
| *4. | Symposium on radiobiological research needed for
improving radiotherapy | E.99 |

Physical sciences

- | | | |
|-----|---|------------|
| *5. | Sixth conference on plasma physics and controlled nuclear
fusion research | F.30 |
| *6. | Symposium on stable isotopes production, measurement and
utilization | F.60 |
| *7. | Symposium on nuclear based techniques for pollution
monitoring and control | F.53 |
| *8. | Regional seminar on selected topics in research reactor
utilization in South East Asia | F.39 |
| *9. | Seminar on international file of evaluated nuclear structure
and decay data | F.107, 108 |

International Centre for Theoretical Physics

- | | | |
|-----|---|--|
| 10. | Solid State Winter College
Solid State Workshop | |
| 11. | Course on mathematics and functional analysis | |
| 12. | Workshop on group theoretical methods in atomic, molecular
and solid state physics | |
| 13. | Meeting on biophysics | |
| 14. | Meeting on astrophysics and relativity | |

- 15. High-energy topical meetings (2)
- 16. Teaching of physics
- 17. Meeting on plasma physics
- 18. Regional course

Nuclear power and reactors

- *19. Symposium on exploration of uranium ore deposits I. 35
- *20. Seminar on fuel element quality control I. 60

Nuclear safety and environmental protection

- *21. Seminar on the design, construction and testing of packaging for the safe transport of radioactive materials J. 29
- 22. Symposium on the design and equipment of "hot" laboratories J. 59
- *23. Regional seminar on radiological and environmental protection J. 52
- *24. Symposium on management of radioactive wastes from the nuclear fuel cycle J. 89

Information and technical services.

- *25. Seminar on the International Nuclear Information System L. 18

ANNEX II

TECHNICAL COMMITTEES AND ADVISORY GROUPS

Within the limits of the appropriations and subject to the requirements of the individual programmes as outlined for 1976, it is planned to hold the meetings listed below. The reference following each meeting is to the relevant paragraph in the programme in documents GC(XVIII)/526 and 526/Mod.1. In the case of new meetings, no reference is given to the relevant paragraph in the present document.

Executive management and technical programme planning

- | | | |
|----|-------------------------------|-----|
| 1. | Scientific Advisory Committee | B.3 |
|----|-------------------------------|-----|

Food and agriculture

- | | | |
|----|---|------------|
| 2. | Advisory group on isotopes and radiation in animal parasitology and immunology | D.63, 76 |
| 3. | Advisory group on mutation breeding for resistance to insects | D.101 |
| 4. | Advisory group on the problems of availability and supply of isotopically labelled compounds of importance for the study of food, agriculture and fisheries contamination | D.107, 113 |
| 5. | FAO/IAEA/WHO experts' committee meeting | D.125, 138 |

Life sciences

- | | | |
|----|---|------|
| 6. | Advisory group on applications of radioactive tracers in microbial immunology | E.34 |
| 7. | Advisory group on intercomparison and standardization procedures in dosimetry | E.44 |
| 8. | Advisory group on the effects of sterilizing radiation doses upon the antigenic properties of proteins and biological tissues | E.81 |
| 9. | Advisory group on applications of nuclear methods in environmental research | - |

Physical sciences

- | | | |
|-----|--|------|
| 10. | Advisory group on small-scale fusion-related plasma physics research | F.32 |
| 11. | Advisory group on small computers for nuclear research | F.25 |
| 12. | Technical committee: International Fusion Research Council | F.32 |
| 13. | Technical committee: Joint NEA/IAEA Thermionic Liaison Group | F.33 |
| 14. | Advisory group on neutron scattering for molecular studies | F.39 |

15.	Advisory group on nuclear-based techniques applied to materials analysis	F.53
16.	Technical committee on International Hydrological Programme	F.80
17.	Advisory group on the use of nuclear techniques in water pollution studies; or Advisory group on the application of nuclear techniques in mining hydrology and related problems of liquid mine waste	F.79
18.	Advisory group on nuclear standards reference data	F.113
19.	Technical committee: International Nuclear Data Committee	F.92
20.	Advisory group on atomic and molecular data for fusion and plasma research and fusion reactor design	-

International Centre for Theoretical Physics

21.	Scientific Council	-
-----	--------------------	---

Nuclear power and reactors

22.	Advisory group on improved modelling of electric systems	I.21
23.	Advisory group on sources and methods of financing nuclear power projects in developing countries	I.22
24.	Advisory group on uranium prospecting instrumentation	I.35
25.	Advisory group on fuel reprocessing and recycling techniques	I.65
26.	Advisory group on regional centres for fuel cycle	-
27.	Advisory group on power reactors of interest for developing countries	I.72
28.	Advisory group on reliability specifications for nuclear power systems and components	I.92
29.	Advisory group on quality assurance	I.93
30.	Advisory group on gas turbines for high-temperature reactors	-
31.	Advisory group on urban district heating and industrial process heat	-
32.	Advisory group on high intensity neutron sources for research on fusion reactor materials	I.112
33.	Technical committee on uranium geology	I.34
34.	Technical committee on nuclear power plant reliability (fuel performance)	-
35.	Technical committee on nuclear power plant reliability (control and instrumentation)	-

36.	Technical committee on nuclear power plant reliability (pressure components)	-
37.	Technical committee on quality assurance	-
38.	Technical committee: International Working Group on Fast Reactors	I.100
39.	Technical committee on MHD electricity generation	I.116
40.	Technical committee on reactor radiation measurements	I.119
41.	Technical committee on capital cost estimates for liquid metal fast breeder reactors.	I.100

Nuclear safety and environmental protection

42.	Advisory group on containment criteria for enclosures in which radionuclides of high radioactivity are handled (2nd meeting)	-
43.	Advisory group on emergency planning for nuclear facilities	J.60
44.	Technical committee on review and up-dating of advisory material on the application of IAEA transport regulations	-
45.	Advisory group to study questions of mutual co-operation between countries in the Danube area (2nd meeting)	J.48
46.	Advisory group on procedures to be followed in the event of accidental release of radioactivity during transport of radioactive materials (with Legal Division's support)	J.49
47.	Technical committee on technologies and practices in managing high-level and alpha-bearing wastes	J.90
48.	Technical sub-committee on international register of radionuclides committed to storage and disposal ^{a/}	J.113
49.	Technical committee on methodology for assessment of radioactive, non-radioactive and thermal discharges and disposals from nuclear industry on a regional and global basis	J.110
50.	Advisory group on safety requirements for fuel fabrication	J.37
51.	Advisory group on public acceptance of nuclear programmes	J.50
52.	Advisory group on monitoring of radioactive, gaseous and liquid effluents (2nd meeting)	J.60
53.	Technical committee on decommissioning of nuclear facilities	J.123
54.	Advisory group on concrete pressure vessels standards	-
55.	Advisory group on single failure criteria	-
56.	Technical committee on international register of radionuclides released to the biosphere ^{a/}	-

^{a/} Proposal for financing by UNEP submitted.

57.	Advisory group on disposal of radioactive wastes into the sea (deferred from 1975)	J.112
58.	Advisory group on revision of the provisional definition and recommendations for the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter	-
59.	Senior advisory group meetings on safety codes and guides (8-9 weeks)	526/Mod.1
60.	Technical review committee meetings on safety codes and guides (17-18 weeks)	526/Mod.1

Information and technical services

61.	Technical committee to plan development of IAEA journals	-
62.	Technical committee: Annual consultative meeting of INIS liaison officers	L.18
63.	Technical committee: INIS Thesaurus	L.18
64.	Technical committee: INIS tape users	-

Peaceful nuclear explosions

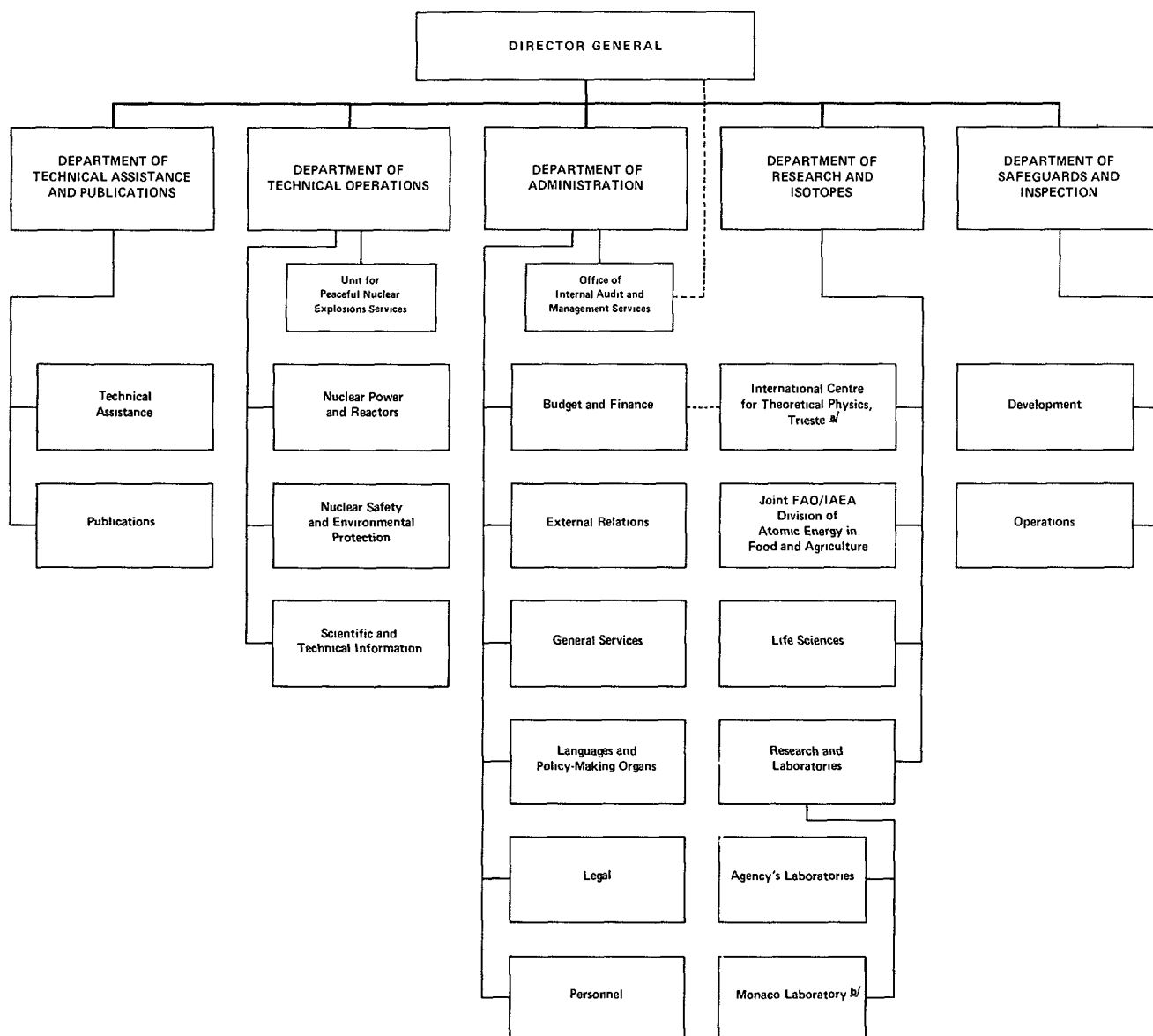
65.	Advisory group: Fifth technical meeting on peaceful nuclear explosions	J.152
66.	Technical committee on the economic aspects of peaceful nuclear explosions and alternative techniques	-

Safeguards

67.	Advisory group on evaluation of safeguards effectiveness	M.32
68.	Advisory group on review of the objectives of the IAEA safeguards activities under agreements pursuant to document INFCIRC/66/Rev.2	M.32
69.	Advisory group on physical protection of nuclear material and facilities	M.32
70.	Advisory group on control of the quality of the non-destructive analysis of nuclear materials in safeguards verification activities and physical standards	M.32
71.	Advisory group on experience on the control of the quality of analytical services for safeguards verification activities	M.32

ANNEX III

ORGANIZATIONAL CHART



^{a/} Jointly operated by the Agency and UNESCO.

^{b/} With the increasing participation of UNESCO and UNEP.

ANNEX IV

THE MANNING TABLE

Changes in 1975

Table 1

	DG	DDG or IG	D	P-5	P-4	P-3	P-2	P-1	Sub- total	GS	M&O	Total
Office of the Director General	-	-	-	-	-	-	-	1	1	(1)	-	-
Department of Administration	-	-	-	-	-	-	1	(1)	-	-	-	-
Division of External Relations	-	-	-	-	(2)	-	-	(1)	(3)	1	-	(2)
Division of Languages and Policy-making Organs	-	-	-	(1)	2	-	-	-	1	-	-	1
Division of Personnel	-	-	-	-	-	1	(1)	1	1	-	-	1
Department of Research and Isotopes												
The Agency's Laboratory	-	-	-	-	1	(1)	-	-	-	-	-	-
The Monaco Laboratory	-	-	-	1	(1)	-	-	-	-	-	-	-
Department of Safeguards and Inspection	-	-	-	-	-	-	-	-	-	1	-	1
Division of Development	-	-	-	-	1	(1)	-	-	-	-	-	-
Division of Operations	-	-	-	-	(1)	1	-	-	-	(1)	-	(1)
Department of Technical Assistance and Publications	-	-	-	-	1	-	-	-	1	-	-	1
Division of Technical Assistance	-	-	-	-	(1)	-	-	-	(1)	-	-	(1)
Department of Technical Operations												
Unit for Peaceful Nuclear Explosions Services	-	-	-	-	1	-	-	-	1	-	-	1
Division of Nuclear Safety and Environmental Protection	-	-	-	-	(1)	-	-	-	(1)	-	-	(1)
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-

1975 Adjusted

Table 2

	DG	DDG or IG	D	P-5	P-4	P-3	P-2	P-1	Sub- total	GS	M&O	Total
Office of the Director General	1	-	2	-	-	-	1	1	5	3	-	8
Department of Administration	-	1	-	1	-	-	1	-	3	2	-	5
Office of Internal Audit and Management	-	-	1	-	1	2	1	-	5	4	-	9
Division of Budget and Finance	-	-	1	3	3	2	3	4	16	30	-	46
Division of General Services	-	-	1	1	2	4	1	-	9	68	120	197
Division of External Relations	-	-	2	6	2	3	3	-	16	21	-	37
Division of Languages and Policy-making Organs	-	-	1	6	19	24	1	-	51	41	1	93
Legal Division	-	-	1	2	3	1	1	-	8	5	-	13
Division of Personnel	-	-	1	2	3	3	-	1	10	24	-	34
Department of Research and Isotopes	-	1	-	1	-	-	1	-	3	2	-	5
Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture	-	-	-	6	6	1	-	-	13	8	-	21
Division of Life Sciences	-	-	1	4	6	1	1	1	14	10	-	24
Division of Research and Laboratories	-	-	1	5	10	5	2	1	24	16	-	40
The Agency's Laboratory	-	-	-	5	13	5	5	2	30	55	22	107
The Monaco Laboratory	-	-	-	2	2	1	-	3	8	13	-	21
International Centre for Theoretical Physics	-	-	-	1	1	3	-	-	5	17	-	22
Department of Safeguards and Inspection	-	1	-	1	2	1	-	-	5	6	-	11
Division of Development	-	-	1	7	11	2	1	-	22	9	-	31
Division of Operations	-	-	1	11	20	32	10	-	74	21	-	94
Department of Technical Assistance and Publications	-	1	-	-	1	1	1	-	4	7	-	11
Division of Technical Assistance	-	-	1	7	8	2	1	-	19	30	-	49
Division of Publications	-	-	1	1	1	5	4	4	16	89	26	131
Department of Technical Operations	-	1	-	-	-	1	-	1	3	2	-	5
Unit for Peaceful Nuclear Explosions Services	-	-	-	-	1	-	-	-	1	-	-	1
Division of Nuclear Safety and Environmental Protection	-	-	1	14	10	4	-	-	29	18	-	47
Division of Nuclear Power and Reactors	-	-	1	11	12	3	2	-	29	14	-	43
Division of Scientific and Technical Information	-	-	1	3	9	7	7	6	33	66	1	100
TOTAL	1	5	19	100	146	113	47	24	455	580	170	1205

Changes for 1976

Table 3

	DG	DDG or IG	D	P-5	P-4	P-3	P-2	P-1	Sub- total	GS	M&O	Total
Department of Administration												
Division of Budget and Finance	-	-	-	-	-	-	-	-	-	1	-	1
Division of General Services	-	-	-	-	-	-	-	-	-	2	(4)	(2)
Division of Personnel	-	-	-	-	-	-	-	-	-	1	-	1
Department of Research and Isotopes												
Division of Life Sciences	-	-	-	1	-	-	-	(1)	-	-	-	-
The Agency's Laboratory	-	-	-	-	1	-	-	-	1	4	2	7
The Monaco Laboratory	-	-	-	-	1	-	-	-	1	-	-	1
Department of Safeguards and Inspections												
Division of Operations	-	-	1	5	3	(2)	(6)	-	1	1	-	2
Department of Technical Assistance and Publications												
Division of Technical Assistance	-	-	-	-	1	-	1	-	2	-	-	2
Division of Publications	-	-	-	-	-	-	-	-	-	12	(12)	-
Department of Technical Operations												
Unit for Peaceful Nuclear Explosions Services	-	-	-	1	(1)	-	-	-	-	1	-	1
Division of Nuclear Safety and Environmental Protection	-	-	-	2	1	-	-	-	3	6	-	9
Division of Scientific and Technical Information	-	-	-	-	1	1	(1)	(1)	-	6	(1)	5
TOTAL	-	-	1	9	7	(1)	(6)	(2)	8	34	(15)	27

1976

Table 4

	DG	DDG or IG	D	P-5	P-4	P-3	P-2	P-1	Sub- total	GS	M&O	Total
Office of the Director General	1	-	2	-	-	-	1	1	5	3	-	8
Department of Administration	-	1	-	1	-	-	1	-	3	2	-	5
Office of Internal Audit and Management	-	-	1	-	1	2	1	-	5	4	-	9
Division of Budget and Finance	-	-	1	3	3	2	3	4	16	31	-	47
Division of General Services	-	-	1	1	2	4	1	-	9	70	116	195
Division of External Relations	-	-	2	6	2	3	3	-	16	21	-	37
Division of Languages and Policy-making Organs	-	-	1	6	19	24	1	-	51	41	1	93
Legal Division	-	-	1	2	3	1	1	-	8	5	-	13
Division of Personnel	-	-	1	2	3	3	-	1	10	25	-	35
Department of Research and Isotopes	-	1	-	1	-	-	1	-	3	2	-	5
Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture	-	-	-	6	6	1	-	-	13	8	-	21
Division of Life Sciences	-	-	1	5	6	1	1	-	14	10	-	24
Division of Research and Laboratories	-	-	1	5	10	5	2	1	24	16	-	40
The Agency's Laboratory	-	-	-	5	14	5	5	2	31	59	24	114
The Monaco Laboratory	-	-	-	2	3	1	-	3	9	13	-	22
International Centre for Theoretical Physics	-	-	-	1	1	3	-	-	5	17	-	22
Department of Safeguards and Inspection	-	1	-	1	2	1	-	-	5	6	-	11
Division of Development	-	-	1	7	11	2	1	-	22	9	-	31
Division of Operations	-	-	2	16	23	30	4	-	75	21	-	96
Department of Technical Assistance and Publications	-	1	-	-	1	1	1	-	4	7	-	11
Division of Technical Assistance	-	-	1	7	9	2	2	-	21	30	-	51
Division of Publications	-	-	1	1	1	5	4	4	16	101	14	131
Department of Technical Operations	-	1	-	-	-	1	-	1	3	2	-	5
Unit for Peaceful Nuclear Explosions Services	-	-	-	1	-	-	-	-	1	1	-	2
Division of Nuclear Safety and Environmental Protection	-	-	1	16	11	4	-	-	32	24	-	56
Division of Nuclear Power and Reactors	-	-	1	11	12	3	2	-	29	14	-	43
Division of Scientific and Technical Information	-	-	1	3	10	8	6	5	33	72	-	105
TOTAL	1	5	20	109	153	112	41	22	463	614	155	1 232

ANNEX V

Draft resolutions

A. REGULAR BUDGET APPROPRIATIONS FOR 1976

The General Conference,

Accepting the recommendations of the Board of Governors relating to the Regular Budget of the Agency for 1976 [1],

1. Appropriates an amount of \$37 002 000 for the Regular Budget expenses of the Agency in 1976, as follows:

	<u>Section</u>	<u>United States dollars</u>
1.	Policy-making organs	1 262 000
2.	Executive management and administration [2]	5 262 000
3.	General services	3 680 000
4.	Technical assistance and training	1 669 000
5.	Research and isotopes [3]	4 903 000
6.	Operational facilities [4]	3 039 000
7.	Technical operations [5]	8 444 000
8.	Safeguards	6 443 000
9.	Adjustment of programme cost estimates	2 300 000
	TOTAL	<u>37 002 000</u>

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

- (a) \$2 765 000 from miscellaneous income; and
- (b) \$34 237 000 from contributions by Member States on the basis of the scale of assessment fixed by the General Conference in Resolution GC(XIX)/RES/.....;

3. Decides further that the funds appropriated for Section 9 in paragraph 1 above shall be used only with the prior approval of the Board of Governors; and

4. Authorizes the Director General:

- (a) In respect of services provided to Member States or international organizations, to incur expenditures additional to those for which provision is made in the Regular Budget for 1976, provided that the relevant emoluments of any staff involved and all other costs are entirely financed from revenues arising out of sales, work performed for Member States or international organizations,

research grants, special contributions or other sources extraneous to the Regular and Operational Budgets for 1976; and

- (b) With the prior approval of the Board of Governors, to make transfers between any of the Sections listed in paragraph 1 above.

-
- [1] See document GC(XIX)/550, Table 2.
- [2] For the financing of Executive management and technical programme planning, Administration and Service activities.
- [3] For the financing of Food and agriculture, Life sciences and Physical sciences.
- [4] For the financing of the Laboratory, the International Centre for Theoretical Physics (in part) and the International Laboratory of Marine Radioactivity (in part).
- [5] For the financing of Nuclear power and reactors, Nuclear safety and environmental protection, Information and technical services and Nuclear explosions for peaceful purposes.

B. OPERATIONAL BUDGET ALLOCATIONS FOR 1976

The General Conference,

(a) Accepting the recommendations of the Board of Governors relating to the Agency's operational programme for 1976 [1], and

(b) Noting that funds from various sources, estimated at \$1 572 000, are expected to be available for that programme,

1. Decides that for 1976 the target for voluntary contributions to the General Fund shall be \$5.5 million;
2. Urges all Member States to make voluntary contributions to the General Fund for 1976 in accordance with Article XIV.F of the Statute, with paragraph 2 of its Resolution GC(V)/RES/100 as amended by Resolution GC(XV)/RES/286 or with paragraph 3 of the former Resolution, as appropriate, so that this target may be reached;
3. Allocates the following sums for the Agency's operational programme for 1976:

	<u>United States dollars</u>
Operating Fund I	1 222 000
Operating Fund II	5 850 000
	<hr/> 7 072 000

4. Authorizes the Director General to incur expenditures for the International Laboratory of Marine Radioactivity or for the International Centre for Theoretical Physics in addition to those for which provision is made in the Operational Budget for 1976, provided that the relevant emoluments of any staff involved and all other costs are entirely financed from revenues arising out of work performed for Member States or international organizations, research grants, special contributions or other sources extraneous to the Regular and Operational Budgets for 1976.

[1] See document GC(XIX)/550, Table 3.

C. THE WORKING CAPITAL FUND IN 1976

The General Conference,

Accepting the recommendations of the Board of Governors relating to the Agency's Working Capital Fund in 1976 [1],

1. Approves a level of \$2 million for the Agency's Working Capital Fund in 1976;
2. Decides that the Fund shall be financed, administered and used in 1976 in accordance with the relevant provisions of the Agency's Financial Regulations [2];
3. Authorizes the Director General to make advances from the Fund:
 - (a) Not exceeding \$25 000 at any time, to finance temporarily projects or activities of a strictly self-liquidating character which will not necessitate an increase in the Fund in future years; and
 - (b) With the prior approval of the Board of Governors, unless in his opinion the situation requires immediate action before such approval can be obtained, to meet the cost incurred by the Agency in organizing and rendering emergency assistance to Member States in connection with radiation accidents, up to \$50 000 in each case; and
4. Requests the Director General to submit to the Board statements of advances made from the Fund under the authority given in paragraph 3 above.

[1] See document GC(XIX)/550, para. 26.

[2] INFCIRC/8/Rev.1 and Mod.1.

ANNEX VI

IAEA/UNEP COLLABORATION - STATUS ON 1 JULY 1975

Number assigned by UNEP	Title of project	UNEP contribution proposed by the Agency				UNEP allocation received by the Agency			
		1974	1975	1976	1977	1974	1975	1976	1977
0800-73-007	Intercalibration programme for the measurement of chlorinated hydrocarbons (Monaco Laboratory)	30 000	100 000			30 000	100 000		
0501-73-009	Evaluation of releases of radio-nuclides into aquatic environments (Nuclear safety and environmental protection (NSEP))	8 000	10 000		12 000	8 000			
0102-74-001	Studies of the radiation doses to the population from the peaceful use of atomic energy, including nuclear industry (NSEP)	16 800		24 000 ^{a/}	83 000 ^{a/}	16 800			
0800-74-002	Studies on the development of environmental surveillance programmes related to the release of radioactive and other contaminants (NSEP)	4 000				4 000			
Proposal 297	Studies on the development of environmental surveillance programmes related to the release of radioactive and other contaminants (NSEP)		70 500	95 000	135 000				
0102-74-002	Studies of the measures to be taken in international co-operation in the long-term management of high-level and alpha-bearing radioactive wastes (NSEP)	10 400	43 700	65 700		10 400	43 700	65 700	
Proposal 298	Study of the feasibility of developing a register of releases of significant quantities of radioactive materials to the biosphere (NSEP)		36 250	84 750	48 250				
TOTAL		69 200	260 450	269 450 ^{a/}	278 250 ^{a/}	69 200	143 700	65 700	

^{a/} Tentative figure.

Additional co-operative projects planned

1. Regional centres for nuclear fuel cycle
2. Neutron activation analysis of pollutants in human hair using research reactors
3. Mediterranean co-ordinated pollution monitoring and research programme (Monaco Laboratory)

